

Pre-release consumer buzz

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Abstract “Buzz” during the period leading up to commercial release is commonly cited as a critical success factor for new products. But what exactly *is* buzz? Based on an extensive literature review and findings from a theories-in-use study (consumer depth interviews and focus groups), the authors argue that pre-release consumer buzz (PRCB) is not just a catchword or a synonym for “word of mouth” but is a distinct construct for which a precise, shared conceptual understanding is notably absent. The authors define PRCB as the aggregation of observable expressions of anticipation by consumers for a forthcoming new product; they conceptualize the construct as being manifested in three distinct types of behaviors (communication, search, and participation in experiential activities) along two dimensions (amount and pervasiveness). PRCB is unique because prior to, versus after, a product’s release, (1) differing information is available, (2) differing mental processes occur, and (3) consumers’ behaviors have differing effects on other consumers, affecting diffusion differently. A quantitative study using secondary data for 254

new products illustrates the performance of the theory-based conceptualization.

Keywords Buzz · Theories-in-use · Word of mouth · New product success · Partial least squares · Secondary data · Communication · Search · Movies · Video games

“Failure to create the right buzz beforehand [i.e., product launch] meant less anticipation and ultimately fewer ticket purchases. [...] Thus, as projecting the right social media buzz has become more critical, getting that strategy wrong has become even more costly.”

Freedman (2015)

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Introduction

For every new product, tangible or intangible, adoption by consumers is crucial for success, and extensive research has studied the drivers of new product adoption (e.g., Muller et al. 2009). Many scholars name the consumer “buzz” leading up to release (hereafter, pre-release consumer buzz, or PRCB) as a critical success factor for early adoption of a new product, and they stress its particular importance for products that have exponentially decaying lifecycles, such as entertainment, media, and fashion products (e.g., Karniouchina 2011a; Xiong and Bharadwaj 2014; Campbell et al. 2017). The popular press also notes buzz prior to a new product’s release as an important success driver (e.g., blockbuster movies, Freedman 2015; initial public offerings of corporate stocks, *The Street* 2012)—or associate failure with the lack of such buzz. For example, in September 2017, journalists predicted soft demand for the Apple iPhone 8, based on opening-day line length: “But instead of queues winding down the street there were fewer than 30 people lining up before the store opened on Friday” (Gibbs 2017). Gibbs also noted that mentions of the new iPhone on

Weibo, China's popular Twitter-style platform, were significantly lower than they were for earlier iPhone models.

When the 2015 action movie *San Andreas*, which was initially predicted to flop, eventually generated a profitable \$184 million at the domestic box office, this was attributed to the notably strong and highly visible engagement of fans of the film's lead actor on social media; tracking metrics increased by 700% in the weeks prior to the film's release Martin (2015). Entertainment experts argue that a successful new product launch now ultimately depends on these kinds of pre-release reactions by consumers, with "buzz [being] stronger than the studio's marketing muscle behind it" (D'Alessandro 2015), i.e., buzz having its own value. This suggests that marketing scholars' ongoing interest in developing a richer understanding of pre-release consumer responses, to both explain and manage their outcomes, is well-placed. In response, we focus our paper on the construct of *pre-release consumer buzz* (PRCB), which we, based on the theory-development process laid out in this article, define as *the aggregation of observable expressions of anticipation by consumers for a forthcoming new product*.

Specifically, this article makes four contributions to the study of consumer buzz, each of which should be useful to scholars who work in the domain and to managers who rely on buzz for the success of their new products. First, we distinguish pre-release consumer buzz (i.e., PRCB, the buzz that occurs prior to commercial release of a new product) from other constructs. This distinction matters because PRCB drives the initial adoptions by Innovators that are essential for the eventual diffusion of new products throughout the market (Bass 1969). Research often does not systematically distinguish consumer behaviors that express *anticipation* for a forthcoming product (which are the essence of PRCB) from other types of consumer behaviors that express interest in an already-available product or share experiences with it (e.g., word of mouth; recommendations). We argue that the information embedded in anticipation-based PRCB behaviors differs from the information that is contained in consumers' experience-based, post-release behaviors; it triggers different behaviors, the understanding of which can be enhanced by separating PRCB from other constructs.

Second, we conduct and report an extensive review of the academic literature, concluding that scientific progress regarding PRCB is limited by a lack of a shared and precise definition of the construct. The variety of definitions (and subsequent empirical proxies) has left the field somewhat confused. Some scholars have used variations of the term "buzz" as a catchphrase (e.g., Wiles and Danielova 2009) without attempting to define it precisely, and others have used it as a construct, but employ "buzz" as a synonym for "word of mouth" (e.g., Campbell et al. 2017). However, a third group has used it in ways that provide intriguing hints that PRCB is a much richer construct, but conceptualizations have generally remained vague and heterogeneous. When studies address the nature of PRCB, it is referred to, among other uses, as the

amount of interest in a new product (e.g., expressed by search volume; Ho et al. 2009), the contagiousness of a product (e.g., via recommendations; Biemans et al. 2010), and also a person's probability of knowing about a new product (Broekhuizen et al. 2011). In sum, we review the extant literature on the buzz phenomenon, identify key studies regarding buzz, and synthesize useful insights from them.

For our third contribution, we conduct a theories-in-use investigation with consumers who participate in PRCB in order to offer a precise and useful definition and conceptualization of PRCB that future research can use to build knowledge more systematically. Further, because managers often track and manage buzz, precise definitions have practical utility for guiding accurate measurement and interventions. Specifically, we conduct a theories-in-use investigation of PRCB (i.e., forty depth interviews and three focus groups with consumers) (Zaltman et al. 1982) and integrate our findings with insights from the systematic review of the literature regarding buzz into our definition. Consumers' perspectives are relevant because they are the parties whose behaviors constitute PRCB and are affected by it. Beyond the core definition of PRCB as the aggregation of observable expressions of anticipation by consumers for a forthcoming new product, we further develop from our investigation a conceptualization that views PRCB as being manifested in three types of behaviors (communication, search, and participation in experiential activities) along two dimensions (amount and pervasiveness across the population).

Fourth, we use our conceptualization to derive implications for the measurement of PRCB. Specifically, we argue that PRCB should be measured in ways that capture (1) its multi-behavioral nature and (2) not only its amount, but its pervasiveness, i.e., the degree to which the PRCB behaviors are spread across the population of interest rather than being confined to only a niche of enthusiasts. By adopting a common definition and by employing richer operationalizations, we believe that scholarship surrounding PRCB can advance systematically and that managers can more precisely measure (and manage) PRCB for their new products. We demonstrate the value of the implications with an illustrative quantitative study in which we compile measures of the different PRCB behaviors (to tap the construct's multi-behavioral nature) across niche and broad channels (to assess the role of pervasiveness) and connect these measures to the initial commercial success of 254 wide-release movies. Findings are supportive of the power of a multi-behavior conceptualization and the relevance of pervasiveness to both theory and practice.

Contrasting pre-release and post-release contexts

A clear distinction between pre-release and post-release contexts is a first step to providing conceptual clarity regarding what PRCB is. We argue that any conceptualization of PRCB

(which occurs prior to a new product's release) should differ from constructs that exist after release. We make this assertion for three reasons: (1) differing information is available to consumers prior to, versus after, a product's release, (2) differing mental processes (anticipation-based versus experience-based) drive consumers' behaviors prior to, versus after, a product's release, and (3) differing effects of consumers' behaviors on other consumers exist prior to, versus after, a product's release (i.e., creating Innovators versus Imitators).

These three reasons demonstrate the uniqueness of the pre-release period in which no consumers have experienced the product. To facilitate our discussion, we offer Fig. 1, which illustrates the different nature and consequences of product-related consumer buzz behaviors that occur before (i.e., pre-release region), versus after, a new product's release (i.e., post-release region). The top part of the figure illustrates the point of release and the behaviors of three example consumers. Prior to release, the period in which PRCB exists, all behaviors are anticipatory; in the figure, Consumer A engages in PRCB prior to product release and adopts the new product shortly after release. After release, two different groups of consumers will engage in product-related communication and other behaviors. One group of consumers, such as Consumer B, who have already adopted the product, will engage in experience-based word of mouth and other behaviors *afterwards*. The second group is comprised of those consumers (e.g., Consumer C) who, despite its availability, have *yet* to adopt the product (but who at this point engage in anticipatory post-release, pre-consumption behaviors that we name *post-release buzz*).

PRCB differs from other concepts in terms of psychological and emotional states as well as its underlying motivations. Specifically, different information sources exist before versus after release: prior to release, the only types of information available to potential adopters are signals of quality (inferred *from* producer and distributor actions), speculations regarding quality shared by media, critics, and other consumers, and signals of the social salience of the product provided by PRCB and by the intensity of media coverage. After release, these signals still exist, but they begin to lose their power, as "true" quality information (Kirmani and Rao 2000) becomes available from (1) the word of mouth of adopters who offer personal experiences and (2) "success-breeds-success" signals from early sales or adoption results from which consumers draw quality inferences (Elberse and Eliashberg 2003).

Further, prior to consumption, a consumer's behaviors regarding a new product are purely based on anticipation (i.e., an individual's state of felt expectation, visualizing the future possession and/or consumption of a product), which spurs a unique set of appraisals, emotions, and decision processes. After consumption, behaviors are instead determined by

experience with the product, with evaluation-based appraisals, consumption-driven emotions, and associated responses. When a consumer cannot consume a product because it is not yet available, anticipatory responses create persistent longings that cannot be fulfilled—a state of enjoyable discomfort (Campbell 1987). It is this state that underlies buzz behaviors; it triggers "emotional, cognitive, self-perception, and social appraisals" (Bagozzi et al. 2003, p. 276). These responses motivate a consumer's pursuit of vicarious experiences that may provide temporary fulfillment (cf. Hirschman 1980). Anticipation is accompanied by a range of emotions toward future consumption, which range from hope (MacInnis and de Mello 2005) to anxiety (Luce 1998) and suspense (with its mix of hope and fear, cf. Moulard et al. 2012). Intense emotions, and subsequent behavioral responses, are more prevalent when the anticipated products are hedonic or experiential (Hirschman and Holbrook 1982). Because the psychological processes (e.g., emotions, appraisals, etc.) that comprise anticipation are unique, the nomological network for PRCB, as an anticipation-based construct, is equally unique.

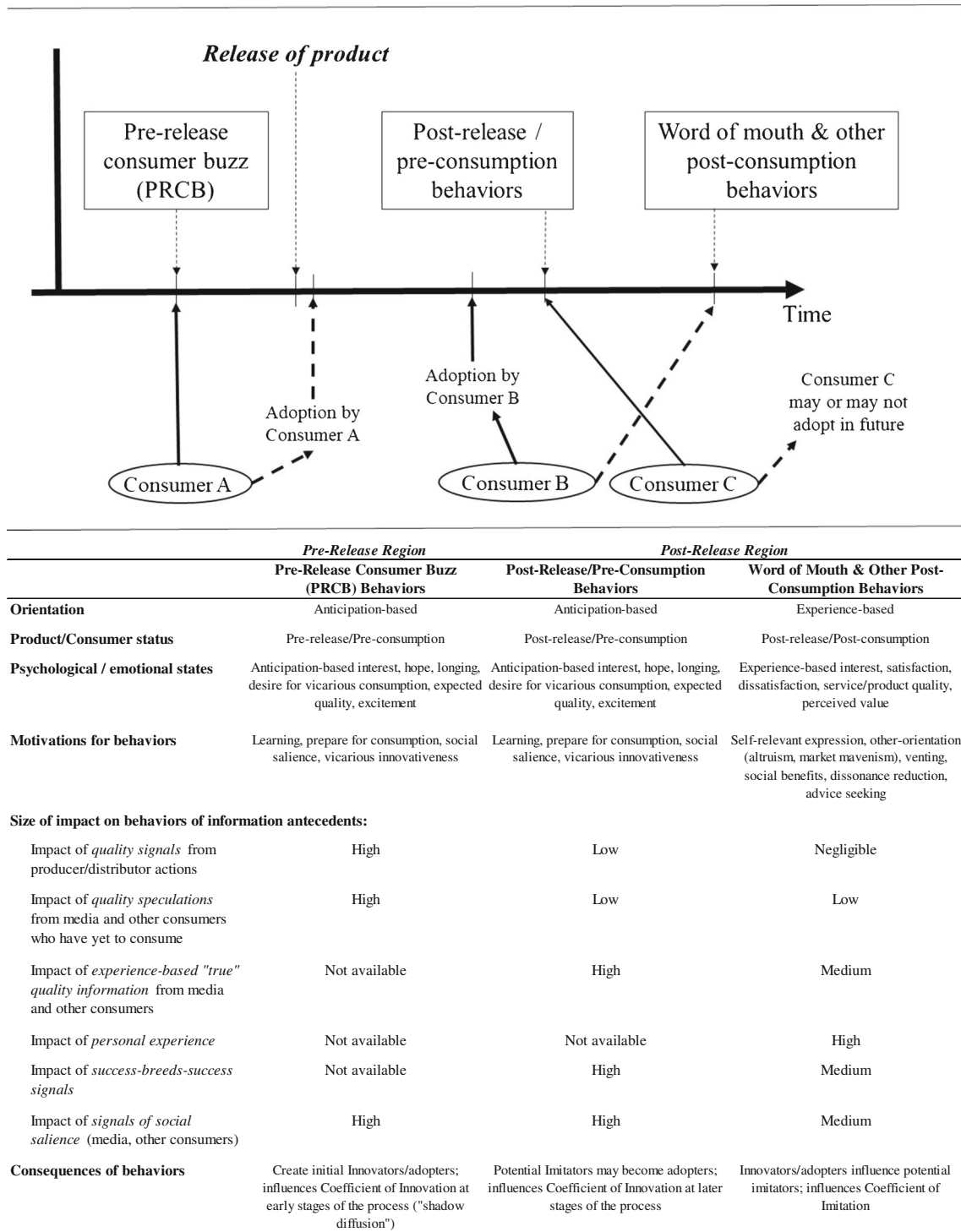
Third, consumer behaviors that occur pre- versus post-release trigger differing consequences in terms of the diffusion process. Drawing on Bass' (1969) classic model, PRCB influences the tendency of Innovators to adopt the forthcoming product once it becomes available, increasing the model's Coefficient of Innovation. In contrast, experience-based information shared via word of mouth impacts not the Coefficient of Innovation, but the Coefficient of Imitation, which has also been labeled the word-of-mouth parameter. Accordingly, the segment of consumers that is affected by word of mouth are Imitators, not Innovators. Some scholars have referred to pre-release processes in the diffusion context as "shadow diffusion," in which adoption decisions are essentially made before a product is available (Peres et al. 2010); PRCB combines with advertising and other company measures to exert a major influence on such shadow processes. According to Peres, Muller, and Mahajan, the concept of shadow diffusion "lacks thorough treatment" in the literature (2010, p. 103); our work on PRCB could contribute to a richer development of the idea.

In what follows, we will now explain how we developed a definition and conceptualization of PRCB, based on extant literature and an extensive qualitative empirical study. We then apply the emergent findings in an illustrative quantitative study that uses movie data.

Conceptualizing and defining pre-release consumer buzz

Insights from the extant literature on buzz

We conducted an extensive search for scientific articles that use the word "buzz" in the context of new product



Sources: Dichter 1966; Engle, Blackwell & Miniard 1993; Hennig-Thurau et al. 2004; Hennig-Thurau, Houston, and Sridhar 2006; Hirschman 1980; Muller, Perez, and Mahajan 2009; Richins 1983; Sundaram, Mitra, and Webster 1998.

Fig. 1 The conceptual uniqueness of pre-release consumer buzz (PRCB)

adoption. Specifically, we reviewed all articles in the leading academic journals across marketing, advertising,

consumer behavior, innovation, and management that were published between January 1971 and March

2017.¹ Many articles mention “buzz” purely as a catchphrase (e.g., Wiles and Danielova 2009, p. 55: “film placements ... can create buzz and top-line consumer demand”), while others use the term as a synonym for word of mouth (e.g., Liu 2006). The latter studies usually link the term “buzz” to the *volume* of word of mouth for a new product (e.g., Dhar and Chang 2009; Tang et al. 2014); often these studies focus on online posts by consumers (e.g., Meenaghan et al. 2013).

Of primary interest to us are studies that treat buzz as a distinct construct, not a catchphrase or word-of-mouth synonym. Table 1 describes 18 key studies that fall into this category. These studies use buzz as a focal construct (e.g., Divakaran et al. 2017; Xiong and Bharadwaj 2014), as a part of their theoretical model (e.g., Biemans et al. 2010; Holbrook and Addis 2008), or as an important mechanism for new product success (e.g., Griskevicius et al. 2009; Okazaki 2009).

We do not limit Table 1 to studies that analyze *pre-release consumer* buzz, but also include studies regarding buzz that occurs post-release to broaden our understanding. In line with our preceding discussion, we explicitly categorize and sort the articles based on product (pre- versus post-release) and consumer (pre- versus post-consumption) status. In the table, PRCB studies are Group 1, post-release, pre-consumption buzz are Group 2, and post-release, post-consumption behaviors are Group 3. In addition, Group 4 contains studies that intermix the types of behaviors from Groups 1, 2, and/or 3.

The table shows that, among scholars who address buzz as a unique construct, definitions differ substantially between studies. Most of these studies assert the importance of buzz without clearly explicating their conceptual perspective of buzz, either describing it rather vaguely or using empirical definitions without discussing the theoretical nature of buzz. Still, we identified a number of common themes and elements that can serve as a starting point for our quest for a coherent conceptualization of the PRCB construct. Specifically, looking across the studies that treat buzz as a distinct construct, we find the following characteristics to be associated with buzz.

Forward-looking Several scholars stress that buzz has a forward-looking, speculative nature. For example, Xiong and Bharadwaj (2014) argue that buzz reflects the “interest” of consumers, “rather than product evaluation” (p. 401). Divakaran et al. (2017) note that buzz is based on predictions about “future consumptions” (p. 15), and Hennig-Thurau et al. (2012) highlight buzz as a signal of interest by people who have yet to experience a product (see also Ho et al. 2009).

¹ Our review included: *AMJ*, *AMR*, *Advances in Consumer Research*, *Business Horizons*, *IJRM*, *Journal of Advertising*, *Journal of Advertising Research*, *JCR*, *Journal of Cultural Economics*, *Journal of Interactive Marketing*, *JM*, *JMR*, *Journal of Popular Culture*, *JPIM*, *JPP&M*, *Journal of Retailing*, *JAMS*, *Management Science*, *Marketing Letters*, *Marketing Science*, *MIS Quarterly*, *Public Relations Quarterly*, and *QME*.

Broekhuizen et al. (2011) consider buzz as the degree of knowledge people have about a new product’s *existence*, instead of about its quality.

Although not all scholars restrict buzz to anticipation, we believe that this forward-looking characteristic is crucial for distinguishing PRCB from word of mouth and other constructs, because word-of-mouth theory is based on the assumption that consumers have personally experienced a product. This is illustrated by the major antecedents examined in word-of-mouth studies (i.e., consumer satisfaction, loyalty, service quality, trust, perceived value; de Matos and Rossi 2008a). Also, diffusion theory, as noted earlier, views word of mouth as coming exclusively from Innovators who have adopted a new product themselves (Muller et al. 2009).

Behaviors Scholars agree that buzz comprises behaviors, but we find differences across studies regarding the *kinds* of behaviors. Communication is the primary buzz measure, but other behaviors are also identified. Karniouchina (2011a) adds search behavior to communication to define buzz (Karniouchina 2011b and Ho et al. 2009 consider *only* searches when measuring buzz). Divakaran et al. (2017), in addition to comments, tap behaviors that express awareness, expectations, and adoption intentions. Craig et al. (2015) argue that buzz for an upcoming movie comprises comments about its trailer, the number of trailer views, and the percentage of people who intend to see the movie in a theater. Further buzz behaviors named by scholars include viewing online content (Siefert et al. 2009), sharing music streams through social media (Dewan and Ramaprasad 2014), and high citations of journal articles (Biemans et al. 2010). This means that whereas word-of-mouth theory focuses solely on communication, buzz has been associated with many different behaviors, but no agreement exists *which* behaviors comprise buzz and whether the different behaviors tap different parts of buzz—or are substitutes that equally reflect the underlying construct.

Aggregate versus individual level Scholars largely agree that buzz is an aggregate-level construct comprised of behaviors of individual consumers. In this vein, several scholars refer to buzz as the market-level “amount” of some activity (Holbrook and Addis 2008, p. 87: “of attention”; Ho et al. 2009, p. 174: “of interest”), and others use aggregate-level terms such as “momentum” (Elberse and Eliashberg 2003, p. 331) and “popularity” (Mizik and Jacobson 2008, p. 30). Consistent with this observation, empirical buzz measures are usually aggregates of some kind and reflect the market-level nature of buzz, such as Griskevicius et al. 2009, p. 391) use of the words “everyone” and “millions” in their experimental stimuli. Word of mouth, in contrast, is a message-level phenomenon, although often analyzed in aggregated form.

Table 1 Key articles on buzz

Authors	Definition/ description of buzz construct	Role of buzz in article	Operationalization	Buzz-related theory or argument	Data and methodology	Context and industry	Buzz-related findings
Group 1: Pre-release consumer buzz							
Chen et al. (2017)	Buzz can be measured with pre-release reviews	Buzz as a moderator of delaying digital releases of books	Number of pre-print-release Amazon reviews	•Consumer awareness	•Secondary data •Regression	•Digital distribution •Books	The decrease in ebook sales due to a delay is stronger for books with less buzz; buzz is predictive of book sales
Craig et al. (2015)	Buzz refers to the behaviors of a multitude of individuals before product launch such as their website visits, engagement on social media, and expressed purchase intentions	Buzz as a determinant of movie sales; predictors of movie buzz	Number of trailer views, number of pre-release comments, percentage of Fandango users indicating they “can’t wait” to see the upcoming movie	•Consumer awareness	•Secondary data •Regression	•Success predictions, buzz predictions •Movies	Buzz is a strong predictor of movie success over and above previously known success factors
Divakaran et al. (2017)	Buzz is a single, latent construct which combines different pre-release, complementary consumer behaviors	Buzz as a predictor of movies’ initial success	Number of members participating in pre-release movie activities, number of pre-release comments, average pre-release rating, percentage of positive votes (Fandango)	•Wisdom of crowds	•Secondary data •Structural equation modeling	•Success predictions •Movies	Buzz is a latent construct which predicts movies’ initial success and mediates the effect of generic predictor variables
Hennig-Thurau et al. (2012)	(Popular) Buzz is “the level of anticipation present among consumers before they see the film”	Buzz as a contingency factor	Residual of search behavior (IMDb MovieMeter) being regressed on advertising spending	•Information cascades	•Secondary data •Regression	•Information signals •Movies	Buzz reduces the influence of other information cues (i.e., critical evaluations)
Ho et al. (2009)	Buzz is “the amount of [pre-launch] interest in the movie on the IMDb website”	Buzz as a driver of movie success	Amount of weekly search behavior (IMDb MovieMeter)	•Peer influence / awareness, exposure, and quality signal	•Secondary data •Regression	•Advertising / communication •Movies	Ambiguous results whether or not buzz has a significant impact on sales
Xiong and Bharadwaj (2014)	Buzz is “online blog and forum postings about products before their release, i.e., pre-release buzz, which reflects their interest in the forthcoming products”	Antecedents and consequences of buzz	Online blog and forum postings (e.g., MySpace, Blogger); additional use of search intensity (Google Trends)	•Momentum / bandwagon effects •Persuasive argumentation and cognitive response theory	•Secondary data •Functional data analysis, regression	•New product development / success predictions •Video games	Buzz improves sales forecast accuracy; is reflected in stock price movements and reduces post-release stock price correction
Group 2: Post-release pre-consumption buzz							
Griskevicius et al. (2009)	Buzz is part of “attitudinal social proof,” along with excitement, describing a constellation where “everybody’s talking about [a phenomenon]”	Authors test context effects of how buzz influences ad effectiveness	Experimental stimuli: “The museum that millions are talking about” and “See what everyone is talking about”	•Social proof	•Primary data •ANOVA	•Advertising / communication •Museum, city	Romantic desire can lead buzz appeals to be counter-persuasive when used in advertising
Group 3: Post-release post-consumption buzz							
Biermans et al. (2010)	Buzz consists of multiple facets and different behaviors: being highly cited/used, talked about, recognized by the press,	Buzz as a dimension of an academic paper that is regarded as a “classic”	Six-item scale			•New product development / network analysis •Scientific publications	Creating buzz among academics and practitioners

Table 1 (continued)

Authors	Definition/ description of buzz construct	Role of buzz in article	Operationalization	Buzz-related theory or argument	Data and methodology	Context and industry	Buzz-related findings
Dewan and Ramaprasad (2014)	recognized as a classic, recommended to others Buzz includes sharing information about music through blog posts and sharing music on social media	Buzz as determinant of music sales	(Blog) buzz, as a proxy for social media buzz, is equated with volume of online postings (Google/Blogs)	•Social influence •Free online consumption	•Secondary data •Vector autoregression	•Social media research •Music	is associated with a paper being regarded as a classic (Blog) Buzz has a negative effect on song sales and no significant impact on album sales
Holbrook and Addis (2008)	(Popular) Buzz is the “amount of attention, word of mouth, or click of mouse,” associated with the “tendency of ... recommending it”	Determinants of buzz and effects on market performance	Volume of media coverage, word of mouth, or click-of-mouse; measured as number of reviews on several platforms (IMDb, Yahoo!, Rotten Tomatoes)	•Emotional responses	•Secondary data •Regression	•Information signals •Movies	(Popular) Buzz is driven by marketing clout; it positively influences sales
Siefert et al. (2009)	Buzz is “the number of times an advertisement was commented on and the number of times it was viewed online”	Buzz as DVs (split views and comments as separate regressions)	Amount of views and advertisement on MySpace	•Emotional responses	•Primary and secondary data •Regression	•Advertising / communication •Super Bowl	More emotionally engaging content leads to more buzz
Group 4: Overlapping product region and/or consumer status							
Broekhuizen et al. (2011)	Buzz is defined as the probability that a consumer knows about a new movie	Buzz as social influence on market share	Proxied by pre-release advertising and post-release box office success	•Social influence	•Primary and secondary data •Agent-based model, simulation •ANOVA •Secondary data •Regression	•Distribution simulations / new product development •Movies	Buzz as a form of social influence explains the dispersion of new movies
Elberse and Eliashberg (2003)	Buzz is comparable to a momentum of a product that reflects consumers pre-release expectations and that takes the form of, for example, word of mouth or media exposure	Buzz as a link between different special (movie) markets	Proxied by revenues per screen in the previous week	•Success-breeds-success, cascades, and bandwagon effects	•Secondary data •Regression	•Distribution patterns / supply and demand •Movies	Buzz for a movie underlies dynamic patterns, i.e. it is perishable and fades over time
Hewett et al. (2016)	Consumer-generated buzz emerges through their “online WOM, attitudes, and behaviors”	Buzz as a key driver in the echovse	Percentage of consumers who heard or saw something positive or negative about the product	•Quality signal	•Secondary data •Vector autoregression	•Social media research / communication •Financial services	Buzz reverberates and echoes within the social media environment (“echovse”)
Kamiouchina (2011a)	Buzz is “the consumer excitement, interest and communication around a project or a participating star that is capable of increasing their visibility with both moviegoers and movie industry participants”	Antecedents and consequences of buzz	Search intensity (IMDb StanMeter, IMDb MovieMeter) and word of mouth intensity (number of Yahoo! posts for post-release movie buzz)	•Information conspicuousness	•Secondary data •Regression	•Social media research •Movies	Star buzz drives anticipatory movie buzz; both types of buzz impact exhibitor decisions and positively affect sales
Kamiouchina (2011b)	Buzz is characterized by high visibility (buzzed celebrities as “highly visible stars”)	Buzz as a determinant of movie success in an analysis of virtual stock markets	Search intensity (IMDb StanMeter)	•Information conspicuousness	•Secondary data •Regression	•Success predictions / new product developments •Movies	In the case of limited information, buzz tends to be overvalued by observers (i.e., stock traders)
Mizik and Jacobson (2008)	Buzz for a brand exists when the brand is “gaining in popularity” among consumers	Part of post-hoc analysis, used to explain stock returns of brands	Survey scale asking a panel of consumers whether the focal brand is “gaining in popularity,”	•Secondary data •Regression	•Secondary data •Regression	•Brand management, market performance •Financial markets	Buzz is different than future-oriented brand energy; buzz is insignificant in

Table 1 (continued)

Authors	Definition/ description of buzz construct	Role of buzz in article	Operationalization	Buzz-related theory or argument	Data and methodology	Context and industry	Buzz-related findings
Okazaki (2009)	Buzz is “contagious commentary about products, services, brands, and ideas” in which consumers engage “to be a part of their peer community”	Buzz as a mechanism to explain consumers’ attitude toward ad campaigns	buzz is the percentage of positive answers None	<ul style="list-style-type: none"> •Consumer socialization theory 	<ul style="list-style-type: none"> •Primary data •Structural equation model 	<ul style="list-style-type: none"> •Consumer behavior, advertising/ communication •Hair care products 	stock return response model if both are included Buzz is the reason to share an experience; buzz is spread in a structural manner and can reinforce the contagious effect of brand trials

Observability Another buzz characteristic implied by scholars is that buzz is visible and is perceived by consumers through social observation (Karniouchina 2011a, Karniouchina 2011b), whereas word of mouth is exchanged solely via communication among consumers (either one-to-one or one-to-many via technology). Such visibility enables buzz to influence product success by triggering action-based cascades (e.g., see Hennig-Thurau et al.’s 2012, p. 262, argument that consumers can be interested in a new product “primarily for its buzz;” see also Okazaki 2009). Griskevicius et al. (2009) that the visibility of buzz offers consumers “attitudinal social proof” of the product’s attractiveness.

Positivity Related to its forward-looking character, buzz is often seen as being positively valenced, with limited exceptions (one example is Hewett et al. 2016). This positivity is implicit in definitions of buzz as “interest” and its role as “social proof” for a new product (Griskevicius et al. 2009). It becomes more explicit in studies describing buzz as “excitement” (Karniouchina 2011a) or linking buzz with a brand’s popularity (Mizik and Jacobson 2008). Divakaran et al. (2017) include an “affective expectation-rating” in their buzz measure that reflects anticipated “enjoyment value” of the future consumption. The positivity of buzz contrasts with word of mouth, which encompasses the complete range of assessments, from referrals based on positive experiences to warnings based on negative ones, i.e., word-of-mouth valence (e.g., Liu 2006).

Dynamic Finally, scholars also stress that buzz is dynamic. Elberse and Eliashberg (2003), for example, refer to its perishable nature (“may quickly fade,” p. 351) and Okazaki (2009) refers to buzz’s “contagious” character. However, it is not clear whether such dynamics are part of the construct itself or only describe its development and underlying mechanisms; Mizik and Jacobson (2008) highlight the “current-term” orientation of buzz, in contrast to constructs like energy, that are inherently dynamic. Hewett et al. (2016), furthermore, argue that buzz plays a key role in the social-media embedded echoverse in which it “reverberates” and “echoes.”

In sum, our literature review supports the view that buzz is more than a catchphrase and is conceptually distinct from other constructs, such as word of mouth. Moreover, we extracted a number of characteristics from existing studies which might be considered as elements, components, or facets of buzz. However, despite some overlap between studies regarding these characteristics, we also learned that conceptual understandings of the term “buzz” are not consistent. Scholars stress different aspects and use different definitions; when discussing the conceptual nature of the construct, authors often do not fully elaborate their view of buzz. Few scholars include an explicit definition, and those who do mostly describe the empirical operationalizations that they employ but

do not delineate the nature of the construct. Thus, whereas research suggests that buzz is a distinct construct, its exact nature remains unclear, something that applies equally to the kind of buzz on which we focus in this manuscript, namely pre-release consumer buzz.

Insights from consumers' theories-in-use on pre-release consumer buzz

Given the need for clarity regarding the nature of the PRCB construct and the divergence in extant literature, we follow the advice of MacInnis (2011) and turn to consumers, i.e., the actors whom extant research has identified as crucial for the existence of PRCB, and whose decisions are impacted by it. Specifically, we probe consumers' "theories-in-use" regarding PRCB (e.g., discovering what a consumer means when stating "there is a lot of buzz about the latest *Avengers* sequel"). Zaltman et al. (1982), p. 118 suggest using a theories-in-use approach to generate unique insights into a phenomenon compared to traditional deductive approaches to theory building: "If knowledge is the mapping of experienced reality, an important way of uncovering knowledge is to learn about the maps that are held by people with appropriate experiences." In short, theory is inducted from the theories (e.g., if-then relationships) held in the minds of individuals who engage in the phenomenon of interest. The approach is particularly relevant for substantive phenomena, having been successfully used in marketing to investigate constructs (Tuli et al. 2007) and processes (Bendapudi and Leone 2002). In this research, we uncover theories-in-use regarding PRCB based on depth interviews with consumers who engage in the under-theorized phenomenon (MacInnis 2011). We also run three separate focus groups to test our emerging understandings and to probe the domain of the construct.

Samples of consumers

For the interviews, we sampled consumers likely to have experienced PRCB ("enthusiasts") because our goal was to understand the phenomenon to develop theory, not to estimate frequency within a population. To enhance generalizability, we sampled across enthusiasts in one of five different product categories (automobiles, mobile phones, movies, performing arts—*theater and dance*, and video games). These categories range from hedonic to utilitarian benefits for which consumer involvement and decision processes differ (Voss et al. 2003).²

² Movies, video games, and performing arts represent hedonic product categories that mainly provide distraction, entertainment, and social benefits (Hirschman and Holbrook 1982). Automobiles and mobile phones are more utilitarian, providing functional benefits of transportation and communication; certain cars and phones also provide hedonic benefits (e.g., driving pleasure). Hirschman and Holbrook (1982) observe that experiences differ when consuming hedonic products in the fine arts realm versus from popular culture; thus, we included performing arts.

To discover diverse perspectives (McCracken 1988), both genders and some variation in ages and geographic regions within the U.S. were represented in each category. A national research firm screened potential participants by product and demographic criteria; of 44 who qualified, 40 (91%) agreed to participate (sample details in Appendix). The depth interviews ranged from 20 to 75 min (average: 50); each participant received \$50. For the focus groups, we sampled adult consumers of both genders and various ages, regardless of product enthusiasm. Participants were MBA students ($n = 15$, $n = 16$ and $n = 8$, respectively; ages 22 to 55) from an urban U.S. university and employed in different industries. Focus groups lasted about 60 min each.

Data collection and analysis

We structured the depth interviews along guidelines from McCracken (1988) and Thompson et al. (1989). The interviewer's role was reflective, asking generally-worded questions to avoid leading the participant and then, in the flow of conversation, using the participant's phrasing to articulate probes to uncover personal meanings. We began each interview with a "grand tour" question to orient the participant and build rapport, asking if there was a recently released product in the participant's category of enthusiasm that created "a lot of buzz," without defining or explaining the expression. We then asked participants to describe activities or behaviors that they observed that, in their view, characterized buzz for a new product. If a participant did not offer an explicit definition in his or her response, the interviewer asked him or her to explain what it meant to say that there is buzz for a new product.

To understand the context in which PRCB exists and to unpack the dual role of consumers (as receivers of and contributors to PRCB), we then asked the participant to think of a recent new product with "strong buzz" to which he or she personally contributed, where he or she first learned of the product, how interest was stimulated, and about specific behaviors in which he or she engaged. The focus groups were conducted after the interviews so that we could probe emergent findings and explore the boundaries of the domain of PRCB with non-enthusiasts. To not interfere with consumers' theories-in-use, we did not set any upfront restrictions that limited answers to pre-release occurrences, but guided the participants accordingly in those cases where he or she was referring to pre-consumption actions that occurred after product release. The clear majority of responses, regardless, were about pre-release phenomena, in line with our focus.

Interviews were recorded and transcribed; detailed notes were taken during focus groups. The authors reviewed these records, discussed emerging ideas, and developed an understanding of PRCB. Analyses were iterative, going back and forth between reading transcripts and evaluating conclusions; we made modifications via induction (Thompson 1997). To

evaluate method rigor and shed light on whether the findings were open to alternative interpretations, we followed Tuli et al. (2007) and gave two independent judges—not authors—the transcripts and (1) the list of specific PRCB behaviors we identified and (2) descriptions of the three types of behaviors (communication, search, and participation) into which we categorized the specific behaviors (e.g., doing a *The Dark Knight* scavenger hunt counted as a participatory behavior). We asked the judges to read each transcript, document any new types of behavior they believed necessary to capture the data, and categorize specific behaviors into the behavior types. The judges identified no new insights; inter-judge reliability was high (agreement between the two judges and the authors' original coding was 100% on the presence of specific behaviors and 96% on the classification of behaviors into types). Disagreements were resolved by discussion.

Results: consumers' view on pre-release consumer buzz

Across the interviews and focus groups, participants consistently treated PRCB as a phenomenon that is anticipatory in nature, i.e., involves expressions of anticipation for a new product. It also became clear from the data that PRCB is an aggregate-level phenomenon that involves two dimensions, namely the amount of observable PRCB behaviors (i.e., their quantity), as well as the behaviors' dispersion across consumer segments in society, which we term “pervasiveness.” Further, participants described these dimensions of amount and pervasiveness of PRCB as being manifested across three types of observable behaviors: communication, search, and participation in experiential activities.

Insights into the anticipatory nature of PRCB Anticipation was a fundamental element underlying almost all participants' descriptions of PRCB. This anticipatory nature combined two aspects: PRCB was perceived as forward-looking (for something yet to happen versus something that has happened) and that, except in limited circumstances, it involves positive (or hope-tinged) emotions (versus purely negative emotions). For example, Uriel stated that PRCB means that she and other people “can't wait to play” the console game *Marvel Ultimate Alliance*; theater buff Pat B said that PRCB exists when people are “obviously excited about that [a new play is] coming.” Similarly, Pamela referred to the announcement of a new *Star Trek* movie when asked about a situation with “strong buzz,” and stated that this gave her and her movie friends “chills.”

Dustin, a car enthusiast, linked anticipatory interest explicitly to PRCB when stating that PRCB means “different people's anticipation of a new car coming out.” Brenda, highly engaged in the smartphone category, even compared the PRCB for a new model of the Apple iPhone with the

anticipatory longing and preparation that women experience in pregnancy:

Brenda: Well I mean all I could compare [the buzz for the iPhone] to being pregnant and waiting for the baby to come. When I was pregnant I would go on websites to read about what other women had gone through at that stage of the pregnancy and it's like okay the countdown begins, ten more days until the phone comes out, that was like something on Facebook.

Although generally associated with positive anticipatory emotions, some participants mentioned that PRCB can, under certain circumstances, also involve negatively-valenced feelings, such as when consumers are anxious that an anticipated new product might disappoint. Julie and John recalled that they were among many *Terminator* fans who discussed worries that a sequel film might not live up to expectations. Similarly, Jim G described a mix of desire and fear for a new Chevrolet Camaro model—hoping it would be “authentic,” but being concerned that it would not be. Note that participants did not link PRCB to negative affect *in isolation*—negative feelings, when mentioned, were always mixed with positive anticipatory interest in a product.

Observable product-related behaviors Participants revealed that PRCB encompasses three different types of anticipatory consumer behaviors that can be observed in the marketplace: communication, search, and participation in experiential activities.

It became evident that the communication about a new product is an essential element of PRCB. Specifically, we find that the consumer communication that our participants observe is salient for their perception of PRCB. Jayme, a video game enthusiast, illustrates this:

Interviewer: What is happening that to you indicates that there is “a lot of buzz” for a new game?

Jayme: A lot of people talk about buying it and getting into it. In person, online, over the internet, via e-mail, or possible text from friends, on the phone. For it to be buzz, there's a lot of talk.

Anticipatory communication that our participants see as a part of PRCB can be “anywhere from the internet to face-to-face” (Elliot); it includes communication with acquaintances (e.g., Shawna G's auto enthusiast club) and with anonymous consumers (e.g., the majority of participants post on internet discussion boards). Participants also noted anticipatory comments posted on general (e.g., Yahoo!, Amazon.com) and

category-specific websites (e.g., video game enthusiasts note GameStop.com) as being part of PRCB. Participants also named quantitative social media indices, particularly Twitter's "trending topics" lists, as indicators of PRCB.

However, and consistent with what we learned from the literature review, communication was clearly not the only behavior that participants identified as PRCB. Participants also considered other consumers' search activity as an element of PRCB; it was interpreted as a signal of consumers' interest in and anticipation for a forthcoming product. Although search is often seen as a "private" activity, participants noted that the internet, in general, and Google, in particular, have turned search into an action that others can observe. For example, car-enthusiast Dustin noticed the search intensity of other consumers and perceived it as part of the buzz for a new car:

Dustin: If you do a Google search and you search for different things, you pull up how many people have searched for the certain topic and things like that ... a lot of the websites will track how many people have searched there. [I]t's exciting to "hear" the buzz....

Several participants reported the use of specific search rankings that reveal the intensity of other consumers' search behavior for a product. Rankings mentioned revealing whether a new product has "a lot of buzz" included the MovieMeter and StarMeter rankings by the IMDb, results from Google Trends (or searchenginewatch.com), and the Yahoo! Buzz index (for categories such as movies, sports, etc.) that list the most searched stories on a range of topics.

Finally, in addition to observable communication and search activities by others, participants described consumers' participation in a broad range of experiential activities as a behavioral element of PRCB. Such participatory activities were often constructed and controlled outside of the new product firm; these behaviors expressed anticipation for the new product. As an example of such anticipatory participation, Julie described how she interpreted a spike in rentals of *Terminator* films prior to the release of its newest sequel (which she read about in a newspaper article weeks before) as evidence of PRCB for the upcoming movie. Related activities included watching movie trailers (as reflected by high view numbers and ranks on YouTube, noted by Fernando) and the reading of books in preparation for a movie adaptation (as made observable through a book re-entering a bestseller list, suggested by a focus group participant).

Sample members also mentioned playful and/or social activities as participatory behavior. Adam interpreted people's involvement in *Star Trek* quiz games on "random quiz sites" as PRCB for an upcoming *Star Trek* movie, and a focus group member noted that his involvement with stock trading games for an upcoming film on the virtual Hollywood Stock Exchange gave him "a feel for the amount of buzz for it."

Melisa took part in a *The Dark Knight* scavenger hunt and noted the huge crowd of fellow participants as PRCB for an upcoming *Batman* movie. Some attended social events which they closely associated with PRCB, such as James visiting the Comic-Con convention (an event for comic and science fiction aficionados) and Shawna G participating in a Mustang-owners' "cruise night" in anticipation of a new model announcement. Related, what happens within social communities around a new product also was indicative of PRCB; participants mentioned fan clubs (e.g., Melisa for *Star Trek*) and Facebook sites.

Two dimensions of PRCB The PRCB behaviors above illustrate that the *amount* of behaviors that consumers observed in the marketplace was crucial for sensing PRCB. For all three behaviors, the level of PRCB our participants perceived was a function of the amount of behaviors they noticed, with more talk (e.g., Twitter's "trending topics" lists), more search activities (e.g., high rankings on IMDb's MovieMeter), and more participation (e.g., many movie trailer views on YouTube) being interpreted as stronger PRCB.

At the same time, it became clear that the amount of behavior was not the sole information that the participants used to form perceptions of PRCB. Instead, that the *pervasiveness* of these behaviors across segments of the population also influenced the participants' view of PRCB. This second dimension of PRCB, which reflects its spread or dispersion across consumer segments, was mentioned in the context of each of the three PRCB behaviors. Specifically, in the case of communication, strong PRCB was associated with a sense that the anticipatory communication about a new product was pervasive across the population and not limited to narrow consumer groups or channels. In other words, participants considered as important for PRCB not only how much communication takes place, but also to what extent this communication permeates potential audiences and, more broadly, society.

Pervasiveness was reflected by the dispersion of PRCB across segments of consumers. These segments were often defined in terms of age; for example, Patrick (theater) used the term "cross-generational" involvement as an element of strong PRCB. Another salient, but less clearly distinguishable group boundary that, if exceeded, was interpreted as a signal of strong PRCB, was experts versus laymen. Pat B, referring to the PRCB in anticipation of a new play, noted that "everybody was talking about it. I mean all of my friends, including people who usually don't go to the theater." Deanna (theater enthusiast) and Adam (movie buff) shared this view, stressing the importance of the involvement of non-experts for strong PRCB to exist:

Deanna: I have a lot of friends who are like art teachers and people that would be expected to follow [the theater landscape]. But when it goes outside that group, the people that work for the Fringe Festival, people that

are, you know, a lot of sort of film and artsy kind of people. So once it gets outside of that, I think it's getting pretty popular. Then there is a lot of buzz.

Adam: I know [that there is buzz] if ... you'll have onliners [talking about that sort of thing] — not just the big ones but you'll have people with their own websites producing that sort of thing. So if you google ... [the new Pixar movie] for instance, you scroll down to the 20th thing that pops up and you'll start to get to people on personal websites that really have nothing to do with Pixar or anything like that, and you'll see them talking about the movie.

Pervasiveness was also named by participants in the context of search. For example, some who mentioned Google Trends noted the “general” (i.e., not limited to certain groups) character of the search measure, which might be interpreted as a proxy for PRCB pervasiveness: “Everybody googles, so if it's hot there, it has to be hot everywhere” (focus group participant).

Finally, participants' sense of PRCB was also influenced by the pervasiveness of participatory activities. Specifically, several participants referred to the pervasiveness of participation across groups (e.g., “not just hard-core gamers,” Nathan). Others stressed the signaling function of participation dispersion across *types* of activities: Rachel, for example, argued that high PRCB for movies exists when “[people are playing] lots of different quiz and trivia games.”

Findings and discussion of the theories-in-use study

Definition and conceptualization of PRCB Based on our examination of consumers' theories-in-use, we define PRCB as *the aggregation of observable expressions of anticipation by consumers for a forthcoming new product*. We conceptualize PRCB as being manifested in three types of behaviors: anticipatory communication, search and participation in experiential activities. These three behavioral manifestations can each be characterized along two dimensions: their amount and the degree to which they are pervasive (i.e., diffused widely) across the population (versus being confined to a niche).

Boundary conditions In the focus groups, we probed for boundary conditions of our definition and conceptualization of the PRCB construct. We learned that the understanding of PRCB does not seem to differ between enthusiasts and “ordinary consumers.” While the non-enthusiast focus group participants, in general, offered less rich and differentiated insights on PRCB, they confirmed the findings we gathered from the interviews with enthusiasts regarding the nature of buzz, the behaviors, and the dimensions. Moreover, as the more utilitarian product categories from our interviews

(automobiles and mobile phones) may also provide consumers with hedonic benefits (e.g., prestige, enjoyment), we pushed to discover whether PRCB also existed for starkly utilitarian products. The discussion confirmed that anticipation was clearly less prominent in utilitarian contexts, indicating a close link of anticipation to consumers' desired psychological and social benefits (versus functional benefits). However, anticipation can exist for new utilitarian products *if* those products promise to solve key consumer problems via strong functional benefits. One example from a focus group participant of a utilitarian product that generated strong PRCB was a new housecleaning product that would “easily dust ceiling fan blades” due to a novel material and a lightweight extender that eliminated the use of a ladder.

Integration with insights from extant literature Several of the findings from our theories-in-use approach are consistent with ideas regarding the buzz phenomenon that are implied in extant research. Our conceptualization of PRCB confirms the important role of *anticipatory* communication for buzz (in contrast to experience-based word of mouth). Also, our finding that consumer anticipation is at the core of PRCB supports those scholars who have treated buzz as a forward-looking and positive phenomenon. Our findings on PRCB are also in line with the aggregate-level perspective and the observable character of buzz articulated by scholars.

At the same time, our findings provide clarity and depth regarding PRCB's conceptual characteristics that can shed light on existing contradictions between studies. The three types of anticipatory consumer behaviors, i.e., communication, search, and participation, are the first detailed and comprehensive typology of PRCB behaviors; they substantially refine previous suggestions that buzz might involve multiple behaviors. Whereas all three behaviors have been mentioned in extant research, the majority of scholars have operationalized buzz with a single behavior, and the kind of specific behavior has also differed between studies. Related, the identification of participation in experiential activities as behavioral category helps to classify the various PRCB behaviors beyond communication and search that were associated with buzz in previous studies (e.g., sharing music, citing articles, or watching trailers).

Further, our finding that PRCB goes beyond a single dimension (i.e., amount), to include a second dimension (i.e., pervasiveness), is largely untapped territory. We are the first to call for its systematic inclusion in operationalizations of PRCB; a *measure* of pervasiveness has been included in two word-of-mouth studies, but the dimension has never been conceptualized.³ The only study that foreshadows our findings on pervasiveness to a certain degree is Biemans et al.

³ Godes and Mayzlin (2004) have looked at dispersion of word of mouth across internet discussion groups and Dellarocas et al. (2007) between age groups.

(2010), who argue, for “classic” journal articles, that strong (post-release) buzz requires corresponding behaviors across stakeholder groups (e.g., scholars, practitioners, the press) and across mediums (e.g., journals, conferences, practitioner meetings). Finally, our interviews suggest that dynamism is a mechanism in the *development* of PRCB over time, rather than being part of the construct itself.

Implications for measurement Our conceptualization of PRCB raises questions regarding its measurement. The multi-dimensional and multi-behavioral nature of the construct suggests that studies that employ single-behavior (e.g., communication) and single-dimension (e.g., amount) measures leave out parts of the construct’s domain (“[o]mitting an indicator is omitting part of the construct,” Bollen and Lennox 1991, p. 308), which could influence empirical results on the role of PRCB. This is relevant, as the majority of PRCB research has focused on such a single behavioral element (communication, e.g., Liu 2006, or search, Ho et al. 2009) from a single enthusiast-targeted channel (e.g., IMDb) and has not captured pervasiveness.

Limitations and next steps A limitation of any theories-in-use study is that the perspectives of consumers are necessarily self-focused and may not fully appreciate the complex nature of the focal phenomenon. Thus, it was critical to integrate theories-in-use findings with insights from extant research in defining PRCB and describing its character. Further, our approach could not reveal whether overlap exists between the PRCB behaviors (i.e., what do scholars or managers miss if they only monitor a single behavior?). The same applies to pervasiveness—what difference does it make if PRCB measures do not account for pervasiveness? We shed initial light on this question in the next section, using quantitative data from the film industry.

A quantitative illustration of pre-release consumer buzz

A key insight of our literature review and theories-in-use study is that PRCB encompasses different types of observable consumer behaviors (communication, search, and participation in experiential activities) along two dimensions (amount and pervasiveness). Significant work remains to establish specific guidelines for operationalizing these behaviors and dimensions. Nevertheless, to illustrate the utility of our conceptualization of PRCB, we compiled a dataset of 254 new product launches (movies) featuring different measures of PRCB and linked them to initial product success. Our goal was to provide a preliminary demonstration of our conceptualization—an initial “proof-of-concept”—not to argue that the specific measures we use are the only, or even the best, measures to use.

We study movies because previous studies have assigned a critical role to PRCB for initial movie success and different

PRCB measures have been used (e.g., Ho et al. 2009; Karniouchina 2011a). We build a partial least squares structural equation model that includes well-established drivers of movie success, in addition to the measures of PRCB (see also Divakaran et al. 2017). Specifically, to provide suggestive evidence of the potential usefulness of our new multi-behavior/multi-dimension conceptualization, we (1) take an initial look at the incremental contribution of PRCB within a framework of established movie success factors, and (2) compare our operationalization to alternative specifications of PRCB.

Data and PRCB measures

Our dataset consists of all 254 movies that received a wide release in North American movie theaters (i.e., at least 800 theaters) from January 2010 to December 2011. To show that PRCB can be measured without primary data, we used online sources to construct example measures for each behavior. To incorporate pervasiveness, we contrasted sources that reflect behaviors of a broad cross-section of the population with those that contain information only about the behaviors of a niche. The latter measures do not account for the role of PRCB pervasiveness because they do not contain any information about whether PRCB exists among large parts of the population (only a niche). Our measures that account for pervasiveness, in contrast, reflect the extent to which anticipation exists across consumer groups. For all measures, we include only behaviors that occur *before* product release to insure that our measures consist exclusively of anticipatory activities and are not confounded by experience-based word of mouth.

Together, the following three measures illustrate an operationalization of PRCB that aligns with our conceptualization, accounting for the role of pervasiveness. To tap anticipatory communication behaviors across the general population, we capture the number of tweets about a movie posted on Twitter within the week before a movie’s release. With 313 million monthly active users (Twitter 2017), it is able to reflect the pervasiveness of communication across the broad population. The search volume for a movie in the week before its release on Google serves as our broad search measure because it captures the search activities of a broad swath of the population. Google search registers trillions of annual searches (Google 2014), making it the most pervasive existing measure for search activities. As our measure for a broad participatory behavior, we collect the number of page likes of the official movie Facebook page before a movie’s release. This purposive action is the method for actively joining an official group or community surrounding a new product. With more than 2 billion monthly active users (Facebook 2017), Facebook captures consumers’ engagement across a broad swath of segments.

Our alternate measures of PRCB, which do not account for pervasiveness, draw data from niche sources used only by product-category enthusiasts. Specifically, we use the number

of posts about a movie on the online movie forum JoBlo (joblo.com) that were made until the day before movie release as a niche measure of PRCB communication. According to the website, its network represents the “ultimate social network for movie fans [that] is packed with geeks” (Movie Fan Central 2017). The 99,698 registered forum members (JoBlo 2017), so-called “Schmoes,” make this website a useful source for communication behaviors of niche enthusiasts.

As our measure of niche search, we employ the MovieMeter of the Internet Movie Database (IMDb; see IMDb.com). This “mecca for movie buffs” (Wise 2013) is a website to which movie enthusiasts turn when searching for movie information, and its MovieMeter metric reflects registered users’ search behavior within IMDb. The metric ranks movies based on weekly search volumes; we used a movie’s MovieMeter rank in the week before its release and inverted the score so that higher values reflect a higher number of searches (to make results more intuitive).

Finally, to measure niche participatory behavior, we employ the number of *edits* made by authorized Wikipedia users on a movie’s Wikipedia page prior to release. While Wikipedia itself is certainly used by the broad mass of consumers, *contributing* to a movie’s entry requires a deep level of interest and enthusiasm for the movie category and novel information about the movie in question. In practice, only a small fragment of the site’s visitors actually write and edit pages; those so-called “Wikipedians” represent less than 1 % of users (currently 70,000 active contributors compared to 374 million unique visitors monthly; Wikipedia 2017).

Table 2 describes data sources for all six PRCB measures (broad/pervasive and niche/not pervasive for each behavior) and measures for the other constructs of the nomological network.

Model and methodology

To illustrate the performance of our conceptualization, we place PRCB in a nomological network of constructs and determine its role through partial least squares structural equation modeling (see Divakaran et al. 2017 for a similar approach; see Hair et al. 2012 for general applications in marketing).⁴ Our nomological network is based on extant research on movie success drivers. We therein link PRCB to the box office revenues that a movie generates on its first weekend of release (“initial success”), our focal outcome variable that corresponds with our choice to include only *pre-release* behaviors and analyze their effect on initial adoption behaviors.

As drivers of movie success, in addition to PRCB, we account for the actions of the producing studio and the quality of the film itself, as suggested by extant research (e.g., Hennig-

Thureau et al. 2006). Studio actions provide information signals to consumers; we specify the variable as a formative construct that combines the film’s production budget, type of distribution strategy, age-restriction rating, whether the movie was a sequel, remake, and/or bestseller adaptation, and the presence of a star actor/actress. The quality variable reflects critics’ perceptions of the movie, which is the only quality information available to consumers prior to consumption. In this model, we link studio actions, quality, and PRCB to the initial success of the new product, assigning PRCB a mediating role between the effects of studio actions and quality on initial success.

We calibrate the network for our full operationalization of PRCB and compare the results with those for alternative PRCB operationalizations (e.g., niche measures; single behaviors), thereby probing the relevance of the different PRCB dimensions and behaviors. We follow previous movie research and log-transform the production budget, the PRCB measures, and box office revenues. We use SmartPLS3 to estimate our models, with 5000 bootstrapping samples (no sign change, bias-corrected and accelerated bootstrap, two-tailed) to assess statistical significance. When comparing alternative PRCB specifications, we focus on the amount of explained variance of initial success (measured by the adjusted R^2), the prediction error (via the Root Mean Square Error [RMSE]), and the Mean Absolute Percentage Error [MAPE]).

Results

Model-free evidence Table 3 lists bivariate correlations between the PRCB measures. All measures relate significantly to one another (at $p < .01$), consistent with our view that they tap the same construct. At the same time, the correlations are far from perfect, ranging from .19 (broad participation—Facebook and niche communication—JoBlo) to .65 (broad participation—Facebook and broad communication—Twitter); the measures are not interchangeable substitutes, but capture different aspects of PRCB. The table also includes correlations between PRCB measures and the movies’ initial box office; all six correlate positively with initial success.

Testing the measurement model and structural model

Following our conceptualization, we specify the PRCB construct as formative, consisting of all three behaviors with their amount measured via broadly-used channels that capture pervasiveness (i.e., via Twitter, Google, and Facebook measures). To assess the formative measurement model, we check for (1) potential multicollinearity concerns, (2) the performance of indicator weights, and (3) convergent validity (see Hair et al. 2017); each criteria is met; all formative indicators exhibit VIF values of below 3 and significant outer weights for each indicator (see Fig. 2). Testing convergent validity of a formative construct with secondary data is difficult due to the lack of a

⁴ This methodological choice is also consistent with our interest in the predictive performance of PRCB and its formative specification (Hair et al. 2011).

Table 2 Empirical measures and data sources used in the quantitative analysis

Construct	Empirical measure	Data source	Examples of similar measures
<i>Pre-release Consumer Buzz (PRCB)</i>			
PRCB communication (broad)	Number of tweets about a movie that were posted on Twitter within the week before release	Twitter, compiled by BoxOffice	Hennig-Thurau et al. (2015); Tweets
PRCB search (broad)	Volume of Google searches for a movie in the week before release. Scores range from 0 to 100 and were normalized, using the movie with the highest score (= 100) as benchmark when drawing data for all other movies in the dataset. To determine the search volume for a specific movie, its title together with the word “movie” was used; results were limited to the pre-defined category “Arts & Entertainment” and U.S. users	Google, compiled through Google Trends by us	Xiong and Bharadwaj (2014); Google Trends
PRCB participatory behavior (broad)	The number of Facebook likes of the official movie page on Facebook before a movie’s release	Facebook, compiled from PageData by us	Srinivasan et al. (2015); Facebook likes
PRCB communication (niche)	Number of posts about a movie in a thread on JoBlo.com that were made until the day before release	JoBlo, compiled by us	Godes and Mayzlin (2004); Threads on Usenet
PRCB search (niche)	1 if divided by a movie’s MovieMeter rank in the week before its release	IMDb, compiled and transformed by us	Ho et al. (2009); MovieMeter
PRCB participatory behavior (niche)	The number of edits that were made on a movie’s Wikipedia page by authorized Wikipedia users before a movie’s release. We use the “Toolserver” offered by Wikimedia to gather the cumulated number of edits that were made to a specific movie’s Wikipedia page before movie release	Wikipedia, compiled through the “Toolserver” (Wikimedia) by us	Mestyán et al. (2013); Wikipedia edits
<i>Studio Actions</i>			
Budget	U.S. dollar amount of production costs in million	IMDb, BoxOfficeMojo	Chen et al. (2012)
Distribution strategy	1 if the studio followed a general blockbuster release strategy (i.e., 1 if number of opening theaters in North America is > sample median); note that the exact number of theaters is not available to consumers prior to release	BoxOfficeMojo	Dellarocas et al. (2007)
Age restriction	Age-restriction rating by the Motion Picture Association of America; G = 1, PG = 2, PG-13 = 3, R = 4	MPAA	Clement et al. (2014)
Sequel	1 if a movie was listed as a sequel to a previous movie	IMDb	Hennig-Thurau et al. (2009)
Remake	1 if a movie was listed as a remake to a previous movie	IMDb	Bohnenkamp et al. (2015)
Bestseller adaptation	1 if the movie was the adaptation of a book that was listed on the “USA Today” bestseller list at least once until 3 months before the movie was released	IMDb, <i>USAToday</i>	Bohnenkamp et al. (2015)
Star	1 if a movie contained a star actor or actress that previously appeared at least once on Quigley’s annual list of the top 10 moneymaking stars	Quigley Publishing	Hennig-Thurau et al. (2015)
<i>Quality</i>			
Critics	Average quality rating of a movie by up to 40 major North American professional critics	Metacritic	Chen et al. (2012)
<i>Initial Success</i>			
Opening weekend box office revenues	US-\$ amount of box office revenues in millions generated in North American theaters on the opening weekend	BoxOfficeMojo	Ho et al. (2009)

The natural logarithm is taken for the PRCB measures, budget, and success

Table 3 Correlations between PRCB indicators and initial success

		(1)	(2)	(3)	(4)	(5)	Initial success
Low pervasiveness	(1) PRCB communication						.45
	(2) PRCB search	.42					.44
	(3) PRCB participatory behavior	.52	.50				.63
High pervasiveness	(4) PRCB communication	.44	.49	.60			.69
	(5) PRCB search	.37	.40	.52	.54		.64
	(6) PRCB participatory behavior	.19	.33	.51	.65	.41	.52

The natural logarithm is taken for the PRCB measures and success. All correlations are significant at $p < .01$

“true” global measure for PRCB; we instead use the pre-release expectations of consumers about each movie’s future success (from insidekino.com). As PRCB expresses consumers’ anticipation for a new product, it should be linked with their expectations about how many will adopt the product once released (i.e., their expectation of the new product’s success). A path coefficient of .70 from PRCB to consumers’ pre-release success expectations in a separate model suggests convergent validity.

In Figure 2, we report the path coefficients for the model featuring our theory-based PRCB operationalization. Model performance is satisfactory, with all VIF values below 3, significant paths between all constructs, and an adjusted R^2 of .70 for initial success. The Stone-Geisser’s Q^2 of .67 indicates a strong predictive relevance for the outcome variable. Studio actions and quality perform in a manner that is consistent with previous research; both show a positive link with initial success, with the effect of studio action being stronger, consistent with our conceptual discussion of information signals in the pre-release region and results reported in Hennig-Thurau et al. (2006), both in terms of significance and relative size.⁵

Regarding PRCB itself, we find that the standardized coefficient linking PRCB and initial success is sizable ($b = .49$) and significant ($p < .01$). Compared to a baseline model that includes all studio actions and quality measures but no measure of PRCB, the adjusted R^2 of initial success strongly increases from .56 (base model) to .70 (PRCB model), or 25%, thus supporting the assertion that PRCB is an important driver of new product success. Concerning the predictive relevance for initial success, we find a large q^2 of .45, a criterion which shows that a sizable part of the model’s predictive relevance can be attributed to PRCB (Hair et al. 2017). PRCB acts as a partial mediator of the effects of both studio actions and quality on initial success; both influence PRCB significantly. The Variance Accounted For (VAF) furthermore indicates that 39% of the total effect of studio actions (SA) and 39% of the total effect of quality (Q) on initial success are explained by

PRCB ($\text{IndirectEffect}_{SA} = .27, [.208, .342]$; $\text{TotalEffect}_{SA} = .69, [.622, .743]$; $\text{IndirectEffect}_Q = .08, [.030, .132]$; $\text{TotalEffect}_Q = .19, [.115, .275]$; bias corrected 95% confidence intervals reported).

Comparing our PRCB specification with alternative specifications

We next compare our theory-based PRCB measure to four alternative specifications: a model for each PRCB behavior alone (communication, search, participatory behaviors) and one model that contains all three behaviors measured via niche channels (i.e., not accounting for pervasiveness). Comparisons to the first three models test the usefulness of a multi-behavioral conceptualization, whereas the fourth sheds light on the role of PRCB pervasiveness for explaining initial success.

When comparing the single-behavior specifications to our PRCB model, we find that the theory-based, multi-behavior PRCB model outperforms all three single-behavior models on all criteria. Specifically, the explained variance and both measures of prediction error favor the theory-based PRCB model over models that feature only communication ($\Delta R^2_{adj.} = .06$; $\Delta \text{RMSE} = -.05$; $\Delta \text{MAPE} = -1.88$), only search ($\Delta R^2_{adj.} = .02$; $\Delta \text{RMSE} = -.02$; $\Delta \text{MAPE} = -1.80$), and only participatory behavior ($\Delta R^2_{adj.} = .15$; $\Delta \text{RMSE} = -.13$; $\Delta \text{MAPE} = -7.93$). This finding suggests that our multi-behavioral conceptualization is advantageous for explaining and predicting initial success of new products. The improvements are sizable, with prediction accuracy measured via MAPE, for example, showing improvements from 8% (versus communication only and versus search only) up to 27% (versus participatory behavior only).

Finally, when we operationalize PRCB with all three behaviors, but measured via *niche* channels that only tap the activities of enthusiasts versus the population at large (JoBlo posts, IMDb searches, Wikipedia edits), we find that this niche PRCB model also has a weaker performance than our theory-based PRCB model which accounts for the pervasiveness dimension of the construct. Specifically, the explained variance ($\Delta R^2_{adj.} = .12$) and prediction accuracy ($\Delta \text{RMSE} = -.10$; $\Delta \text{MAPE} = -6.47$) of the theory-based PRCB model are clearly superior to the niche model. These findings lend support to the notion that it is important to not only consider the amount

⁵ Out of the different studio action indicators, budget, distribution strategy, sequel, and bestseller adaptation all have positive significant outer weights to studio actions; age-restriction, star, and remake do not (see e.g., Clement et al. 2014, Divakaran et al. 2017, Bohnenkamp et al. 2015 for similar results patterns).

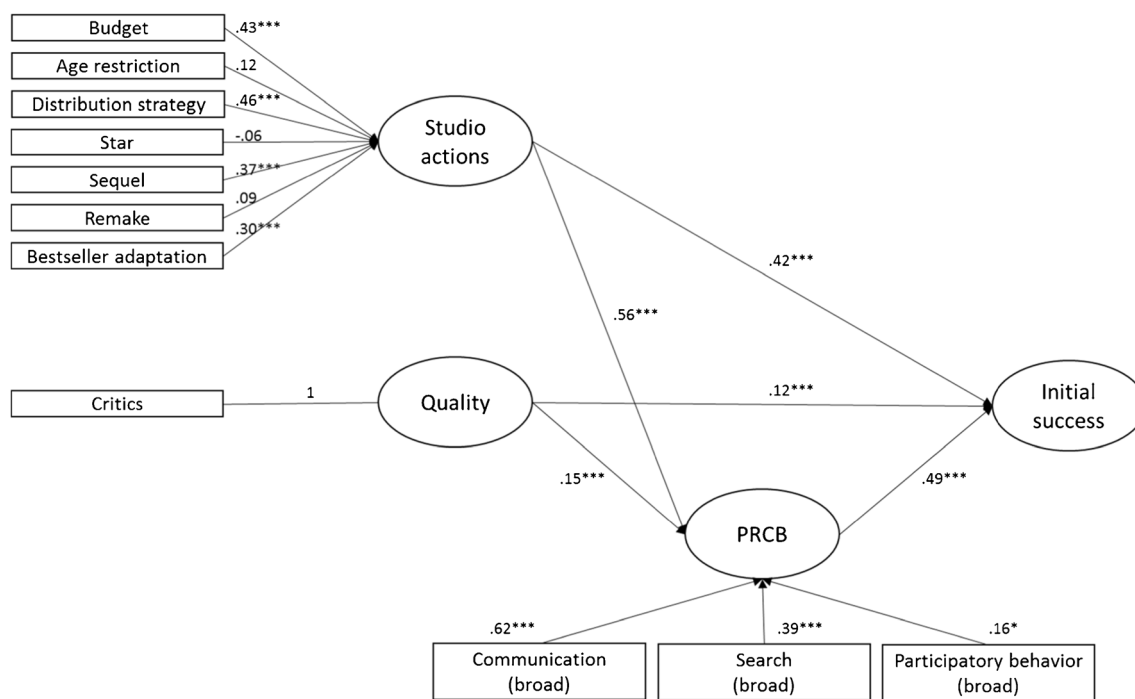


Fig. 2 Pre-release consumer buzz (PRCB) as mediator of the effects of studio actions and quality on initial success. Notes: ***significant at $p < .01$, **significant at $p < .05$, *significant at $p < .10$

of the different PRCB behaviors, but to also take into account their pervasiveness in the population when measuring PRCB.

Discussion of quantitative analysis

Although our evidence is of an illustrative nature, results suggests that the theory-based multi-behavioral conceptualization of PRCB outperforms single-behavior specifications in terms of explained success and prediction accuracy. Also, the far-from-perfect correlations between the different PRCB behaviors suggest that these PRCB behaviors differ conceptually and are not interchangeable proxies. In other words, anticipatory communication, search, and participatory behavior explain different facets of the initial success of new products. The model with all three PRCB behaviors outperforms models with single-behavior specifications.

Our findings also highlight the crucial role of PRCB pervasiveness. Results suggest that niche PRCB behaviors (i.e., activities by enthusiasts) provide only incremental information when compared to broad PRCB information (i.e., activities performed across the population). This is an important insight because niche segments are easier to track for managers and scholars; however, such convenience may come at the price of limiting one’s abilities to explain or predict the initial success of new products. Managers should be cautious about predicting the success potential of a new product from niche PRCB, but to look for broader PRCB measures that are

able to reflect PRCB pervasiveness (or, on the level of the individual product, its absence).

Clearly, some new products are targeted to highly-specific niches, and PRCB beyond the core niche might not be needed. However, for products targeted at mainstream consumers (as is the case for the wide-release films in our data set), high PRCB among niche enthusiasts only (if not shared by the masses) might mislead managers. Some examples of product flops that had strong PRCB might be explained by this conclusion. For example, for the movie *Scott Pilgrim vs. the World* (which received “enormous buzz” at the Comic-Con fair prior to its release but failed at the box office), Kaye (2010) observed in hindsight that “only nerds like movies about nerds.” Observing a comparable pattern for the hyper-violent comic book adaptation *Kick-Ass* which did not generate substantive revenues at the box office, Kaye (2010) argued that “general audiences” did not “understand the tone” of the movie—contrary to the enthusiasts at Comic-Con.

Limitations We do not directly measure pervasiveness, but instead compare measures that tap broad cross sections of consumers to measures that reflect niche segments. Although it would be appealing to measure PRCB separately for each segment of the population and then calculate pervasiveness directly, useful data sources are not available and accessible for every segment. Next, the time horizons of our measures are not perfectly aligned. Whereas tweets and searches can be conducted repeatedly, a Facebook page can only be liked once, which might affect our results. Last, we do not measure *offline*

PRCB. In reality, PRCB is not limited to the internet, but includes real-world behaviors such as asking tech-savvy friends at the bar for information about the upcoming iPhone or chatting with strangers on a train about the next Adele album. Using PRCB behaviors that are traceable online, however, enables us to measure the amount and approximate the pervasiveness of the three different behavioral elements needed for generating insights via empirical models of PRCB. Further, absent strong evidence to the contrary, we expect that the magnitudes of online and offline PRCB behaviors are highly correlated.

Integrative discussion and implications

Through an exploration of existing literature, consumers' theories-in-use regarding PRCB, and a quantitative analysis, we conclude that PRCB should be treated by managers and scholars as a distinct construct, consisting of three types of observable, anticipatory consumer behaviors regarding a forthcoming new product that are pervasive across the target population. We provide evidence that our conceptualization is of theoretical, empirical, and managerial value. Findings show that a multi-behavior PRCB operationalization can produce results which differ from those generated with a single PRCB measure. Whereas all PRCB behaviors significantly relate to each other (which makes sense because they belong to a common construct) and also to initial success, each behavior also captures unique aspects of PRCB.

While previous studies equate PRCB with search (e.g., Ho et al. 2009) or communication (e.g., Liu 2006), we argue that the overarching concept is more encompassing than any single element. Also, a model that captures the pervasiveness of PRCB across the population appears to be best suited for future research. Non-pervasive niche measures provide little value, in comparison. One exception in which using the niche measure might actually be preferable could be for products targeted explicitly to a niche of enthusiasts, rather than to the population at large. Future research could probe this issue.

We further emphasize that the different data sources used in this study were solely selected as exemplary measures to illustrate the performance of our PRCB conceptualizations in our movie-specific context. Whereas some (e.g., Google searches, Twitter tweets) will likely apply to all settings, future studies and practical applications will need to adapt (especially niche measures) to their respective products and industries, as enthusiasts' channels are highly context-dependent.

Managerial implications Our findings are not only valuable for scholarly research; the discovery of the different behaviors and dimensions of PRCB suggests actionable insights for managers. We highlight five. First, for firms not already doing so, tracking the PRCB for a forthcoming new product provides predictive insights into the future success of the product. Although our quantitative analysis was only illustrative, our

findings suggest that existing forecasting models by which managers predict the initial sales of a new product based on product characteristics and marketing investments can be improved by the inclusion of PRCB.

Second, measuring PRCB does not require costly primary data collection. We have illustrated how usable proxies for PRCB can be constructed from readily-available secondary data. Careful thought is required to select indicators that capture desired behaviors and reflect pervasiveness, but success can be achieved with investments of time and effort instead of financial resources.

Third, because the two-dimensional/multi-behavioral approach improves explanations and predictions of initial new product success, managers should (1) track more than one PRCB behavior and (2) do so in a pervasive channel in order to gain a more precise outlook for a new product's market potential. Time- and budget-pressed managers may be tempted to track only the most convenient niche indicator of PRCB that may reflect only a single type of anticipatory behavior of a narrow group of known enthusiasts, which implies serious limitations. Managers of products targeted to broader audiences are well-advised to select and track different behaviors in channels reflecting the activities of a broad swath of the population.

Fourth, attention to pervasiveness could also give managers insights about whether a new product has even the *potential* to appeal to broader audiences. For example, if high amounts of PRCB are evident only in niche PRCB sources (but not in broad sources despite efforts to spark mainstream PRCB), managers might tailor their marketing campaigns to these respective niche targets. Investing in consumer segments that have no interest could be wasting scarce resources.

Finally, consideration of PRCB may have implications for distribution strategies for new products that may actually contribute to or harness PRCB. For example, Apple's iPhone was initially available only to AT&T customers because of a five-year exclusive-distribution arrangement. Because this restriction was announced well before the iPhone's launch, the strategy may have created PRCB among competitors' customers whose interest in the iPhone would only be heightened by pseudo-scarcity (to be solved by switching to AT&T). The temporal exclusivity may also have spurred additional post-release anticipatory buzz among consumers who were bound to their current carrier and could not yet adopt the iPhone.

We believe these implications are highly valuable to managers. This assessment is supported by the emergence of firms and market offerings that aim to monetize these types of insights. For example, *BuzzMetrics* and *Buzzrank* are businesses built on the measurement of buzz. The *Adobe Digital Index* tracks some form of online PRCB to generate pre-release predictions about which movies will be blockbusters or failures (Fahey 2015). Advancing scientific knowledge on which PRCB behaviors to track and across which channels is therefore of strong managerial value.

Interest in such buzz measurements and predictions is not limited to research firms or strategy analysts, but is shared by journalists and consumers. Published rankings, such as “most buzzed-about movies” that are provided by *Fandango* and *MTV*, among others, are popular. These rankings are shared widely across consumers’ social networks and can reinforce emerging waves of positive PRCB for a forthcoming product (or doom the product, when ignored) before its release. As buzz can be better measured, it becomes more concrete to managers and its impact on new product success clearer; thus, buzz can become more focal in ongoing strategy discussions.

A research agenda for the overall buzz phenomenon

Our conceptualization here lays the foundation for developing a general theory of buzz. In this manuscript, we focus on a unique and important type of buzz, but PRCB is only one element within the broader phenomenon. Our contributions offer a significant step forward, but we still need to learn more about how PRCB is initiated, develops over time, and affects outcomes beyond initial success. Even less is known regarding post-release consumer behaviors that extend beyond traditional experience-based word of mouth. We thus suggest a future research agenda for (1) PRCB, (2) post-release consumer buzz, and (3) other types of buzz with the hope to spur new studies and scientific insights on the overarching buzz phenomenon.

Pre-release consumer buzz

For a comprehensive theory of PRCB, we need to learn more about its antecedents, processes, and outcomes. With PRCB as an important success factor, managers crave strategic levers they can utilize to start and grow PRCB. Scattered insights exist on potential drivers of some behavioral facets of PRCB (Karniouchina 2011a; Xiong and Bharadwaj 2014; Craig et al. 2015), and our empirical illustration also shows that studio actions and product quality can help to generate PRCB; however, a systematic and comprehensive understanding of its drivers is missing.

Even less is known by scholars about the dynamics of PRCB once it is initiated. Xiong and Bharadwaj (2014) provide a notable exception by tracking the evolution of PRCB via a functional data analysis, using the identified shapes of PRCB to predict new product success. Building on this, we encourage scholars to further investigate how and why PRCB evolves over time. For example, how do PRCB activities of enthusiasts and the broad population differ in their evolution and relate to each other’s dynamics? Why do some PRCB waves initiated by a confined niche of fanboys grow into a population-pervasive movement while most do not?

Our results are supportive of a general positive effect of PRCB on initial sales, a notion that is well accepted among managers, but it would be of high interest to discover whether

there is also a ‘dark side’ of PRCB. Can extremely high expectations and overexposure due to strong PRCB backfire? In a post-hoc analysis, we find a marginally-significant negative quadratic effect of PRCB on initial sales ($PRCB = .49, p < .01$; $PRCB_SQR = -.03, p < .10$), suggesting a satiation point of PRCB. Digging deeper into this intriguing finding offers an exciting avenue for future research, especially when future studies also include post-release processes.

Post-release consumer buzz

There are important differences between PRCB and post-release consumer behaviors as PRCB exists when there is no word of mouth based on prior consumption experience. *After* release, some consumers engage in experience-based word of mouth and other post-release buzz behaviors (e.g., search and participation), but with different motivations; other factors, beyond those that drove PRCB, become influential. Resulting differences can guide future research. Consider valence: we conclude that PRCB is inherently positive but can be intermingled with negativity (e.g., the anticipated product may not live up to its promise). This notion fits with Divakaran et al. (2017) who found that pre-release product quality “ratings” did not significantly relate to their PRCB measure. Perhaps PRCB is not subject to a conventional valence scale. For post-release consumer buzz, however, experienced-based evaluations provide *new* signals to consumers, as do bestseller rankings, which should alter the role of buzz valence.

Evolutionary processes will also differ between PRCB and post-release consumer buzz. For example, Hewett et al. (2016, p. 18) suggest the notion of the “echoverse,” in which, for brands already in the marketplace, consumer buzz, news media, and company communications “reverberate and echo.” Disentangling these different processes, thereby understanding how a mixture of speculative pre-consumption buzz and evaluative word of mouth affect each other and consumer decisions, would be of major interest for both researchers and managers.

Consumers’ (dis)satisfaction and dissonance may be especially key for better understanding buzz processes and their effects on outcomes in the post-release phase. If negative feedback enters the market after product release, strong buzz might speed product death (Mlodinow 2006 suggests a similar process). But, also, overly-positive excitement might decrease product interest for some consumers and thus dampen sales, in line with our earlier argument that a satiation point might exist when PRCB is too “big.” This idea was colorfully illustrated by a participant in our qualitative study who broached the realm of post-release consumer buzz:

Anna: I never went to see *NAPOLEON DYNAMITE* because everyone kept telling me “you’ll never expect it,” “it’s absolutely hilarious,” “you’ll totally love it.” So I didn’t watch that movie until two or three years after it

came out. I totally did love it, but I just didn't want to—all the buzz annoyed me and so I never went to the theater.

Thus, while our study on PRCB focused on initial sales of a new product directly after launch, future research on post-release consumer buzz needs to center on *long-term* success. Both the bright and the potential dark side of buzz offer exciting avenues for further research.

Further, does having engaged in PRCB behaviors for a new product also *affect consumer perceptions of the actual consumption experience*? Chun et al. (2017) find that when consumers “savor” an upcoming experience (i.e., engage in elaborated cognitive processes in anticipation), their subsequent enjoyment of the experience is improved, as is their later “remembered enjoyment.” Various behaviors that comprise PRCB likely would spur elaborated cognition in the mind of the consumer regarding the anticipated new product. Thus, the impact of PRCB behaviors on individual experiences and evaluations—not just on aggregate product sales—becomes an exciting avenue for future work at the level of the individual consumer.

Other types of buzz

Lastly, this article is explicitly centered on *consumer buzz*. There is large agreement among scholars that it is the activities and perceptions of consumers that are essential for buzz to exist and spread. Our qualitative study aligns with extant research that buzz is indeed a consumer phenomenon. Some scholars, however, separate consumer buzz from other kinds of “buzz,” such as

Hewett et al. (2016) who mention consumer buzz next to “social media buzz” that can be fueled by news coverage; Holbrook and Addis (2008) speak of “critical buzz.” Are expressions of interest in a new product by external actors, such as firms and the media, unique types of buzz or do they simply function as antecedents that initiate and energize consumer buzz? Investigating these additional types of actors is a possible direction for future research.

Conclusion

In summary, PRCB is more than a “buzzword” and deserves serious attention from marketing scholars and managers; it should not be equated with (experience-based) word of mouth. Our research highlights the critical role of consumers’ observable anticipation for something new and points to the consumer behaviors that constitute PRCB, namely communication, search, and participatory experiences. Although the volume of PRCB is important, its pervasiveness, a new dimension, also matters. Are we only observing the actions of a niche of enthusiasts, or is the forthcoming product anticipated across consumer segments? We offer a research agenda on PRCB and the larger buzz phenomenon to stimulate and structure future research.

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Appendix

Table 4 Sample characteristics

ID	Name	Product Category	Category Enthusiasm Rating ^a	U.S. Geographic Region ^b	Age Range	Gender
1	Marcus S.	Automobiles	10	Eastern	30–39	Male
2	Barry W.	Automobiles	10	Mountain	50–59	Male
3	Dustin O.	Automobiles	8	Central	21–29	Male
4	Shawna G.	Automobiles	10	Eastern	30–39	Female
5	Jim G.	Automobiles	9	Central	50–59	Male
6	Jared T.	Mobile Phones	10	Eastern	21–29	Male
7	Michael C.	Mobile Phones	10	Eastern	21–29	Male
8	Brenda C.	Mobile Phones	8	Central	40–49	Female
9	Gabriella J.	Mobile Phones	10	Eastern	30–39	Female
10	Cindy B.	Mobile Phones	9	Central	50–59	Female
11	James D.	Movies	10	Central	30–39	Male
12	Adam A.	Movies	9	Central	21–29	Male
13	Yvonne W.	Movies	10	Eastern	40–49	Female
14	Melisa S.	Movies	10	Central	21–29	Female
15	Pamela L.	Movies	10	Eastern	40–49	Female
16	Lana L.	Movies	10	Central	30–39	Female
17	Anna K.	Movies	8	Central	30–39	Female

Table 4 (continued)

ID	Name	Product Category	Category Enthusiasm Rating ^a	U.S. Geographic Region ^b	Age Range	Gender
18	Angelo N.	Movies	10	Eastern	21–29	Male
19	Brandon B.	Movies	8	Pacific	30–39	Male
20	Rachael S.	Movies	8	Eastern	21–29	Female
21	Julie B.	Movies	8	Pacific	50–59	Female
22	Carla D.	Movies	8	Eastern	50–59	Female
23	Jim B.	Movies	8	Pacific	40–49	Male
24	Fernando G.	Movies	8	Eastern	21–29	Male
25	Karina P.	Movies	8	Central	21–29	Female
26	Delfina A.	Movies	9	Pacific	50–59	Female
27	John H.	Movies	8	Eastern	50–59	Male
28	Dan A.	Movies	8	Pacific	40–49	Male
29	Shawn D.	Movies	10	Eastern	40–49	Male
30	Elizabeth C.	Movies	8	Central	30–39	Female
31	Pat B.	Performing Arts	8	Central	40–49	Female
32	Deanna M.	Performing Arts	9	Eastern	30–39	Female
33	Doralee S.	Performing Arts	8	Central	50–59	Female
34	Elliot M.	Performing Arts	8	Pacific	50–59	Male
35	Patrick J.	Performing Arts	10	Eastern	21–29	Male
36	Beverly G.	Video Games	9	Central	50–59	Female
37	Uriel L.	Video Games	10	Eastern	30–39	Male
38	Jayne D.	Video Games	9	Eastern	21–29	Male
39	Nathan K.	Video Games	10	Pacific	40–49	Male
40	Michelle E.	Video Games	9	Central	21–29	Female

^a Screening Question 1: On a scale of 1–10, with 10 being really enthusiastic, how enthusiastic are you about keeping up with the newest releases in each of the following product categories?

^b U.S. time zone

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