

Humor, Comedy, and Consumer Behavior

CALEB WARREN

ADAM BARSKY

A. PETER MCGRAW

(Forthcoming at the *Journal of Consumer Research*)

*Caleb Warren is an Assistant Professor of Marketing at the Eller College of Management, University of Arizona, 1130 E. Helen St., P.O. Box 210108, Tucson, AZ, 85721-0108 (calebwarren@arizona.edu). Adam Barsky is an Associate Professor at the University of Melbourne, 198 Berkeley St, Calton, VIC 3056 Australia (abarsky@unimelb.edu.au). Peter McGraw is an Associate Professor of Marketing and Psychology at the Leeds School of Business, University of Colorado Boulder, UCB 419, Boulder, CO 80309 (peter.mcgraw@colorado.edu). The authors thank Lawrence Williams, Manjit Yadav, Sidney Levy, Marvin Goldberg, Matthew Farmer, John Yi, the Humor Research Lab (HuRL), and the review team at JCR for feedback on the article. Correspondence should be addressed to Caleb Warren, 1130 E. Helen St., P.O. Box 210108, Tucson, AZ, 85721-0108 (calebwarren@arizona.edu).

Humor, Comedy, and Consumer Behavior

ABSTRACT

Consumers regularly experience humor while buying and using products, procuring services, and engaging in various consumption experiences, whether watching a movie or dining with colleagues. Despite an expansive literature on how humor influences advertisers' communication goals, far less is known about how humor appreciation and comedy production influence the likelihood of attaining various consumption goals, from experiencing pleasure and making better decisions to staying healthy and building relationships. Drawing on a wide range of findings from multiple disciplines, we develop a framework for understanding and investigating the different ways in which experiencing and creating laughter and amusement help—and sometimes hurt—consumers reach their goals. The framework provides key insights into the nuanced role of humor and comedy in consumer welfare.

Keywords: Humor, Comedy, Emotion, Goals, Consumer Welfare

Humor is widely believed to be beneficial. Business periodicals prescribe humor as key to effective performance in the workplace (Beard 2014). Gurus and the popular press preach the wonders of laughter as a medical cure-all (Cousins 1979; Martin 2001). The website for the African country of Eritrea describes humor as “a tremendous resource for surmounting problems, enhancing your relationships, and supporting both physical and emotional health” (Berhane 2013). An extensive literature examines how humor influences marketers’ ability to communicate with consumers. Yet, this literature reveals that the effects of humor are not uniformly positive. Although humorous advertisements attract attention, for example, they often fail to achieve other objectives, such as improve brand attitudes or increase sales (Gulas and Weinberger 2006; Scott, Klein, and Bryant 1990; Warren and McGraw 2016a). In the same way that prior inquiries examine factors that affect whether or not marketers reach their goals, we examine whether or not humor helps consumers reach their goals.

Goal attainment is a critical area of study for consumer researchers (Holbrook 1987; Mick 2006). People use products (brands, objects, services, activities, ideas, etc.) as a means of pursuing an array of consumption goals (Bagozzi and Warshaw 1990; Holbrook 1987; Van Osselaer and Janiszewski 2012). Consumers join Tinder to find a date, purchase study guides to pass a test, and mega-dose Vitamin C to cure a cold. Consumer researchers, however, know relatively little about how humor influences consumers’ goal attainment. Can creating a humorous (vs. humorless) dating profile help attract a mate (or at least a date)? Will reading an amusing (vs. serious) textbook improve performance on a test? Will laughter help vitamins cure a cold? We examine a topic that has yet to be addressed systematically in the literature: how and when does experiencing more laughter and amusement help consumers reach their goals.

To investigate the effects of humor on consumers’ goal attainment, we integrate disparate

findings, drawing on advertising research and complementary fields of psychology, sociology, anthropology, linguistics, medicine, and neuroscience. Our review suggests that humor's effectiveness depends on the type of comedy that triggers the laugh (i.e., humor style), the efficacy of the humor attempt (i.e., success vs. failure), and whether the consumer's goal is focused on hedonic (i.e., increased pleasure and pain reduction), utilitarian (i.e., better health and improved decision-making), or social (i.e., enhanced relationship quality and quantity) outcomes.

Although humor typically helps make otherwise negative consumption experiences (e.g., waiting in line) more enjoyable, we propose that its effects on utilitarian and social goals are more nuanced than often portrayed. Humor can both enhance and detract from consumers' decision quality and persistence toward long-term goals. Likewise, humor is not a cure-all—though some forms of comedy help consumers struggling with some mental health issues (e.g., depression, anxiety disorders). Finally, humor's effects on social outcomes, such as being liked or loved, depend on both the situation and the person's sense of humor.

FRAMEWORK

Our article offers a revised perspective by shifting the focus from how humor helps marketers reach their goals to focus on how humor helps consumers reach their goals (MacInnis 2011). We contribute to the literature in three ways. First, we define and differentiate between constructs related to humor that the literature has conceptualized imprecisely and inconsistently, including comedy, comedy production, humor appreciation, and sense of humor. Second, we integrate findings from disparate domains to provide a framework that summarizes current knowledge about humor and builds on this knowledge to delineate a set of propositions that help explain how and when humor appreciation and comedy production help consumers reach their

goals. Collectively the propositions offer a novel integrative framework for interpreting and building on the humor literature—though individually some propositions summarize well-documented areas of research. Finally, by identifying the effects of humor on consumers' goal attainment, our framework (a) reveals inconsistencies in the literature, (b) suggests opportunities for future research, and (c) helps consumers and policy-makers understand how, and when, to leverage humor as means to help goal attainment.

Figure 1.

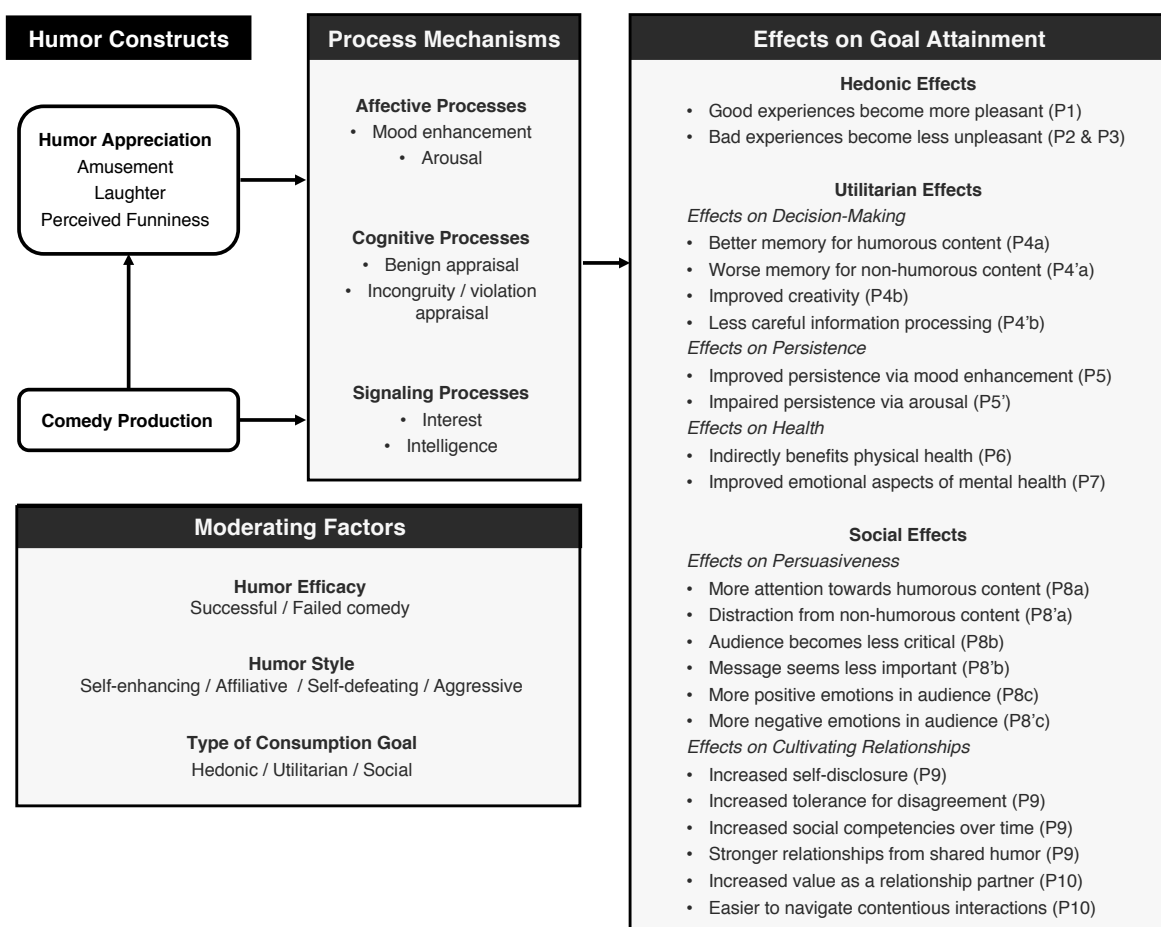


Figure 1 illustrates our framework for understanding the relationship between humor and consumption goals. In the next three sections, we briefly describe each part of the framework including the conceptualization of humor, the processes through which the appreciation and

production of humor relate to consumption goal attainment, and the boundary conditions that moderate the effects on consumption goals. We then integrate findings from existing literature within complementary research disciplines into ten propositions that (a) synthesize existing knowledge regarding how and when humor influences the attainment of consumption goals, and (b) provide a foundation for future research. To this end, we also highlight gaps in the literature and speculate on processes that drive the effects of humor.

CONCEPTUALIZING HUMOR

A challenge with integrating literature on humor is that humor is an umbrella term that describes multiple, related yet conceptually distinct constructs (Gulas and Weinberger 2006; Martin 2001, 2007; Sternthal and Craig 1973). Humor can refer to (1) a stimulus that elicits laughter and amusement (e.g., a joke); (2) a psychological state associated with laughter and amusement (e.g., a response to a joke); (3) the act of creating something funny (e.g., telling a joke); and (4) an individual difference in the tendency to laugh or to amuse others (i.e., a disposition to tell or laugh at jokes). To address this ambiguity, we use four labels that denote constructs related to humor, which we respectively refer to as comedy, humor appreciation, comedy production, and sense of humor (table 1). By using distinct construct labels, we can more easily interpret a literature that inconsistently defines, manipulates, and measures humor.

Humor can refer to something that is, or is intended to be, funny (Martin 2007; Sternthal and Craig 1973). Following Stern (1996), we refer to the stimuli (gestures, sayings, behaviors, sounds, images, videos, etc.) that elicit or are intended to elicit laughter, amusement, or the perception that something is funny as *comedy*. Comedy is not limited to jokes, but includes a wide range of behaviors: soliloquies, cartoons, facial expressions, and tickle attacks, which can

be communicated face-to-face or via print, traditional media, or increasingly, social media.

Others describe humor not as a stimulus, but as a psychological response or reaction to a stimulus (McGraw and Warren 2010; Veatch 1998; Wyer and Collins 1992). The literature suggests that amusement, laughter, and perceived funniness are the prototypical emotional, behavioral, and cognitive responses related to humor (Martin 2007; McGraw and Warren 2010; Veatch 1998; Warren and McGraw 2015). To distinguish the response to comedy from comedy itself, we use *humor appreciation* to denote a psychological state characterized by amusement, the tendency to laugh, and the perception that something is funny. A greater intensity of any of the three components (i.e., laughter, amusement, or perceived funniness) indicates a greater degree of humor appreciation. A customer who is highly amused by a salesperson's joke, for example, experiences greater humor appreciation than a customer who is only mildly amused. Although there are instances in which people laugh without finding something funny or feel amused without laughing (Provine 2000), the emotional, behavioral, and cognitive components of humor appreciation tend to co-occur (Fuller and Sheehy-Skeffington 1974; Herring et al. 2011; Ruch 1997; Yamao et al. 2015).

Comedy typically involves an agent who creates the stimulus (i.e., a producer) and people who perceive and react to the stimulus (i.e., an audience). *Comedy production* refers to the act of creating a comedic stimulus, such as writing a funny screenplay, telling a joke to a friend, or slipping on a banana peel. Note that comedy can be produced either intentionally (e.g., a stand-up bit) or unintentionally (e.g., bloopers; Martin 2007; Wyer and Collins 1992). Like most literature, our inquiry focuses on consequences of intentional comedy production. (Comedy production can also fail to spur humor appreciation, a distinction we discuss in a later section.)

Finally, humor can refer to a stable individual difference or personality trait (Greengross

and Miller 2009; Hehl and Ruch 1985). Some people are more easily amused and more likely to generate laughs than others. We refer to stable differences in the tendency to appreciate humor and produce comedy as a *sense of humor* (Hehl and Ruch 1985; Martin 2007).

Table 1. Construct Definitions

Construct	Definition	Example	
Comedy	A stimulus that elicits or is intended to elicit humor appreciation	A Yelp review of a restaurant that amuses readers	
Comedy production	Creating a stimulus that generates laughter, amusement, or is perceived to be funny	A consumer writes a Yelp review of a restaurant that amuses readers	
Humor appreciation	A psychological response characterized by amusement, the tendency to laugh, and the perception that something is funny	A consumer is amused while reading Yelp reviews	
Sense of humor	Stable individual differences in the extent to or manner in which people produce and consume comedy	Consumer A tends to be more amused by Yelp reviews than Consumer B	
Humor Styles (Martin et al. 2003)	Affiliative	Positive comedy intended to improve group cohesion	Laughing with friends about a recent restaurant experience
	Aggressive	Negative comedy that disparages others in attempt to improve personal well-being	Laughing about the incompetence or stupidity of a restaurant in a Yelp review
	Self-enhancing	Benevolent comedy intended to improve personal well-being	Laughing to yourself after reading a pun in a Yelp review
	Self-defeating	Self-disparaging comedy intended to earn approval or liking from others	Laughing about your own stupidity or incompetence with friends at a restaurant
Humor Efficacy	Successful comedy	A stimulus intended to elicit humor appreciation that does so	A Yelp review that readers perceive to be funny.
	Failed comedy	A stimulus intended to elicit humor appreciation but that fails to do so.	A Yelp review that is intended to be amusing but that readers think is stupid instead of funny.

PROCESS MECHANISMS

Humor influences the attainment of consumption goals by altering the way that consumers feel, think, or interact with one another. These affective, cognitive, and behavioral processes, in turn, influence consumers' goal attainment. Importantly, a comedic stimulus does not necessarily need to be related to a goal for humor to influence goal attainment. For example, for someone trying to lose weight, jokes about dieting would be substantively related to the weight loss goal, whereas jokes about a celebrity's incompetence would be unrelated to the weight loss goal. Nonetheless, hearing a joke about a celebrity may also influence the consumer's weight loss, if, for instance, she heard the joke during a run and the ensuing amusement caused her to run longer.

In the judgement and decision-making literature, researchers use the term *integral* to describe the effects of emotion generated by the object being judged, and the term *incidental* to describe the effects of emotion generated by stimuli that are irrelevant or unrelated to the object being judged (Cavanaugh et al. 2007; Han, Lerner, and Keltner 2007; Cohen, Pham, and Andrade 2008). Although we are interested in the effects of humor on goal attainment, rather than judgments or decisions, per se, we apply integral/incidental distinction to help differentiate the effects of humor that is substantively related or *integral* to a focal goal from effects of humor that is unrelated or *incidental* to the focal goal. The affective, cognitive, and signaling mechanisms discussed below can be integral or incidental to goal attainment.

Mechanisms Driving the Effects of Humor Appreciation

Affective Mechanisms. Humor appreciation involves amusement, an emotion characterized by positive valence and high arousal. Many of the effects of humor appreciation on goal attainment occur because of humor appreciation lifts consumers' *mood* or increases their *arousal*. Emotions, such as amusement, are typically brief experiences with identifiable

origins—such as the appreciation of a joke. Emotions, however, also produce ambient affective states (i.e., moods) and levels of arousal that have the potential to influence subsequent judgments and behaviors (Han et al. 2007; Schwarz and Clore 1983). Thus, these affective mechanisms can have both integral and incidental effects on goal attainment. For example, hearing a funny story on a date could boost the consumer's mood and level of arousal, which would influence her interest in her date and likelihood of going on a second date, effects which would be integral to her goal of finding a romantic partner. However, the mood and arousal from the date's funny story might also influence how much the consumer eats (Fedorikhin and Patrick 2010; Gardner et al. 2014), resulting in an incidental effect on a weight loss goal.

Cognitive Mechanisms. Emotions, including amusement, also influence judgments and decisions by altering how consumers appraise their environment and the stimuli they encounter (Han et al. 2007). An emerging literature suggests that humor appreciation is associated with two distinct appraisals: (a) something is incongruous, threatening, or wrong (i.e., a *violation appraisal*), and (b) things are safe, harmless, acceptable, non-serious, or okay, (i.e., a *benign appraisal*; Gervais and Wilson 2005; McGraw and Warren 2010; Ramachandran 1998; Warren and McGraw 2015; Warren and McGraw 2016b; Veatch 1998). A violation appraisal refers to a perception that something threatens one's sense of how things should be, whereas a benign appraisal occurs when everything seems normal, acceptable, or okay (McGraw and Warren 2010; Veatch 1998). Violations include the threat of harm (e.g., slapstick) as well as threats to a person's identity (e.g., insults), cultural norms (e.g., unusual clothing), communication norms (e.g., sarcasm), linguistic norms (e.g., wordplay), and logic (e.g., absurdities).

A benign violation perspective on humor suggests that humor appreciation can influence consumers by causing them to reappraise (a) an apparently normal situation as containing

something wrong (i.e., a violation appraisal), or (b) an apparently threatening situation as being okay (i.e., a benign appraisal). These appraisals can influence both reactions to the comedic stimulus itself (integral effects) and to unrelated behaviors (incidental effects). For example, listening to a funny story on a first date might help a consumer appraise her date as being less threatening, which might make her more comfortable when he flirts with her (an integral effect on a mating goal). Alternatively, hearing a funny story may make the prospect of breaking her diet by eating an unhealthy food seem harmless (an incidental effect on a weight loss goal).

Signaling Mechanisms. Finally, humor appreciation can signal information to others about our interests, intentions, attributes, and characteristics. In particular, laughter appears to signal (a) interest in continued social interaction (Gervais and Wilson 2005; Matsusaka 2004), and (b) ability to detect and understand the humor (Flamson and Barrett 2008). Thus, humor appreciation can also influence goal attainment by *signaling interest* or by *signaling intelligence*. As with the aforementioned affective and cognitive mechanisms, these effects can be integral or incidental to the consumer's focal goal. For example, a consumer who laughs at her date's story may implicitly indicate she is enjoying herself and suggests a second date is (still) a possibility, increasing the likelihood that the pair becomes a couple (an integral effect on a mating goal). Alternatively, by laughing at a movie, a consumer on a date may signal interest in the movie and having the intelligence to understand it, which could be a turn-on for her date, thereby increasing the likelihood that the pair becomes a couple (an incidental effect on the consumer's mating goal).

Mechanisms Driving the Effects of Comedy Production

Indirect Mechanisms. Successful comedy production often influences a consumer's goal attainment indirectly by eliciting humor appreciation, either in people with whom the consumer

is interacting (i.e., *other-amusement*) or in the consumer herself (i.e., *self-amusement*). For example, telling a funny story on a first date might help a consumer land a second date either by amusing her date (which would enhance the date's mood, increase his arousal, change his appraisals, etc.) or by amusing herself (which would enhance her mood, increase her arousal, etc.). In both cases, the effects of comedy production would be mediated by humor appreciation, either by the producer (self-amusement) or audience (other-amusement).

Signaling Mechanisms. Comedy production can also influence a consumer's goal attainment by conveying information about the producer. Comedy production, like humor appreciation, can signal *interest* in continued social interaction (Li et al. 2009), and also *intelligence* (Greengross and Miller 2011), which would likely help consumers attain a variety of objectives. For example, telling a funny story on a date could help a consumer land a second date both because it lets her partner know that she is interested and because it makes her seem more intelligent. It is possible that the signals that consumers send by producing comedy may influence their goal attainment directly, independent of any indirect effects through humor appreciation, although we are not aware of research that has tested this possibility.

MODERATING FACTORS

Our framework also identifies factors that moderate the effects of humor appreciation and comedy production on goal attainment. The first moderator, which we term *humor efficacy*, identifies how comedic stimuli such as jokes, quips, images, and videos vary dramatically in the extent to which they elicit laughter and amusement (Flaherty, Gulas, and Weinberger 2004; Gulas and Weinberger 2006). The second moderator, *comedy type*, identifies how comedy can take many different forms. Puns, knock-knock jokes, insults, sitcoms, cartoons, slapstick,

memes, mimes, and even public executions potentially provoke laughter and amusement (Provine 2000; Warren and McGraw 2015). The third moderating factor indicates that humor can have different effects depending on the type of consumption goal.

Humor Efficacy: Successful vs. Failed Comedy

As anyone who has ever bombed telling a joke can attest, attempts to produce comedy do not always go as planned. Successful comedy production requires that the audience laughs, feels amused, thinks something is funny, or, ideally, exhibits all three reactions. Yet jokes frequently fall flat, and attempts to be witty can trigger outrage instead of laughs. We use the term *failed comedy* to describe attempts to be funny that do not elicit humor appreciation in the audience.

The literature consistently finds that failed comedy production is less likely to facilitate goal attainment than successful comedy. Survey participants reported greater negative hedonic states and lower levels of self-esteem after recalling a failed attempt to produce comedy than after recalling a successful attempt (Williams and Emich 2014). Similarly, telling jokes that don't amuse an audience results in the joke-teller being seen as having lower competence compared to telling successful jokes (Bitterly, Brooks, and Schweitzer 2017). Moreover, communications attempting but failing to be funny are less likely to persuade the audience than communications that successfully elicit humor appreciation (Flaherty et al. 2004; Warren and McGraw 2013). Instead of helping consumers reach their goals, failed comedy prompts negative responses, including disgust, fear, or outrage (Bell 2009; Beard 2008; Smeltzer and Leap 1988). Thus, the positive effects of comedy production on goal attainment that we discuss later in the article are unlikely to occur if the attempt to produce comedy fails to actually amuse the audience.

Humor Styles: Aggressive, Self-Defeating, Self-Enhancing, and Affiliative

Another factor that moderates the effects of humor is the type of comedy that triggers laughter and amusement. There are many ways to categorize comedy (e.g., Kelly and Solomon 1975; Long and Graesser 1988; Speck 1987). One popular categorization is the taxonomy of humor styles, which describes different ways that people produce comedy and appreciate humor (Martin et al. 2003). On one dimension, people attempt to create comedy in order either to enhance themselves or to improve their relationships with others. Orthogonally, comedy can either be relatively uplifting (i.e., positive) or disparaging (i.e., negative).

Crossing the intended beneficiary with positivity/negativity yields four prototypical styles: aggressive, self-defeating, self-enhancing, and affiliative (Martin et al. 2003). Aggressive comedy refers to negative comedy designed to improve personal well-being by disparaging another person or group (e.g., teasing or laughing at someone else). Self-defeating comedy refers to self-disparaging comedy intended to earn approval or liking from others (e.g., telling an embarrassing story or laughing at oneself). Self-enhancing comedy refers to benevolent comedy aimed at improving personal well-being (e.g., jumbling an assortment of words into a poem or finding humor in the absurdities of life). Finally, affiliative comedy refers to positive comedy intended to improve group cohesion (e.g., creating a humorous hand-shake or laughing with others). As we document, producing and appreciating negative comedy (i.e., aggressive and self-defeating) often has different effects than producing and appreciating positive comedy (i.e., self-enhancing and affiliative; Samson and Gross 2012).

Consumption Goal

Consumers use products, procure services, and pursue activities to satisfy one or more goal (Bagozzi and Warshaw 1990; Van Osselaer and Janiszewski 2012). We define *goal* broadly as any source of motivation, regardless of whether it is short-term or long-term in focus, related

to approach or avoidance, conscious or unconscious, learned or innate, intrinsically rewarding or instrumental to reaching another goal (Huang and Bargh 2014; Kruglanski et al. 2002; Laran, Janiszewski, and Salerno 2016; Van Osselaer and Janiszewski 2012).

Just as humorous advertising helps marketers capture attention but may not affect sales (e.g., Eisend 2009; Gulas and Weinberger 2006), the effects of humor appreciation and comedy production on the outcome of a consumption experience similarly depend on the goal that the consumer is pursuing. Reading a humorous textbook may facilitate a student's goal to have fun, but impair her goal to comprehend a difficult chapter in the book. Similarly, telling jokes to the receptionist at a dentist's office might help a patient make a new friend, but do little to repair a cavity. Thus, understanding the effects of humor appreciation and comedy production requires a framework for categorizing the different types of consumption goals that consumers pursue.

Broadly speaking, people consume in attempt to satisfy three different types of goals: hedonic, utilitarian, and social. Scholars have used different labels for these three goal categories (Park et al. 1986; Park et al. 2013; Richins 1994; Sheth, Newman, and Gross 1991). *Hedonic* goals have been referred to as enticing, enjoyment, emotional, and experiential goals. *Utilitarian* goals have been referred to as enabling, functional, and instrumental goals. *Social* goals have been referred to as enriching, symbolic, interpersonal, and self-expressive goals. Although there exists no universally accepted taxonomy of consumer goals, our organization of goals into these three categories is consistent with agreement among scholars that consumers are motivated to maximize pleasure and minimize displeasure (i.e., hedonic goals), attain instrumentally beneficial outcomes (i.e., utilitarian goals), and successfully navigate relationships with others (i.e., social goals; Park et al. 1986; Park et al. 2013; Richins 1994; Sheth, Newman, and Gross 1991). In addition, consistent with goal research, these goal categories operate at different levels

of analysis (e.g., Chulef, Read and Walsh 2001), allowing us to make inferences about the effect of humor at the intra-individual, inter-individual, and group levels of analysis.

Hedonic Goals. One reason that consumers use products, purchase services, and pursue experiences is for simple pleasures (Park et al. 1986; Park et al. 2013). Hedonic goals refer to the desire to maximize pleasure and minimize pain (Alba and Williams 2013; Mellers 2000). Consumers eat cookies, listen to music, smoke cigarettes, and lounge on the beach in part because these experiences are pleasurable. Hedonic goals are guided by emotions and motivate the consumer to feel good (and avoid feeling bad) in the moment, with fewer concerns about long-term consequences (Chang and Pham 2013; Hoch and Loewenstein 1991). Put another way, by pursuing hedonic goals, individuals seek to change temporary emotional and experiential states, and therefore can be characterized as operating at the within-person level of analysis. We thus investigate the effects that humor appreciation and comedy production have on intra-individual changes in (a) the extent to which consumers experience positive emotions (including pleasure), and (b) the extent to which consumers experience negative emotions (including pain).

Utilitarian Goals. Focusing on immediate pleasure and pain can prevent consumers from optimizing long-term well-being (Baumeister 2002; Hoch and Loewenstein 1991). Consequently, consumers are motivated not only by altering relatively temporary hedonic states, but also by altering more stable elements of their lives (Dhar and Wertenbroch 2000; Hoch and Loewenstein 1991; Park et al. 2013). Consumers go to work, do yoga, and visit the dentist in part because these consumption experiences offer long-term, functional benefits to stable characteristics of the individual such as their health and their wealth. For example, dieters can pass over the pleasure of a tasty dessert in order to lose weight, just as smokers can resist the urge to smoke on a non-smoking flight in order to avoid a fine. Thus, in contrast to hedonic

goals, utilitarian goals can be characterized as operating at the individual level of analysis, whereby the purpose of the goal is to change levels of relatively stable characteristics of the person (as opposed to transient hedonic states).

In order to effectively reach long-term objectives, consumers need to solve marketplace problems effectively and resist the urge to succumb to an easier or more immediately pleasurable temptation rather than persisting towards their objective. Utilitarian goals help consumers reach outcomes that are desirable but that require planning, self-regulation, goal monitoring, and repeatedly performing goal-consistent behaviors over a period of time (Baumeister 2002; Campbell and Warren 2015; Carver and Scheier 1998). In the section on utilitarian goals, we thus investigate the effects of humor appreciation and comedy production on a number of factors that influence consumers' ability to (a) persist towards long-term goals, particularly within the domains of physical and mental health, and (b) effectively solve marketplace problems, including accurately remembering information, finding creative solutions, and carefully processing information.

Social Goals. Humans are social creatures; they depend on one another to survive and procreate. Consequently, consumers also pursue a range of social goals, including persuading others, forming alliances (i.e., affiliation), gaining status and esteem, and attracting lovers (Griskevicius, Haselton, and Ackerman 2015; Kenrick et al. 2010; Park et al. 2013). Consumers negotiate offers and flirt with night-club bouncers because they hope to convince other people to do something (e.g., receive a better price or let them into the club, respectively). They similarly join dating services, wear football jerseys, and post on Facebook in part because these consumption experiences help them forge an identity as well as form and maintain relationships.

Social goals share characteristics with both hedonic and utilitarian goals. One, attaining

social goals typically triggers positive emotions (e.g., love, pride, etc.), whereas failing to attain social goals typically triggers negative emotions (e.g., loneliness, shame). Two, social encounters, and their outcomes, influence both immediate and long-term pleasure and pain. In contrast to the other two goal types, however, these goals are distinctly related to changes within dyads and groups, such as an enhanced liking in a friendship or improved understanding in a workgroup. As such, social goals occur at a dyadic or group-level of analysis, whereby the purpose of the goal is to change either one's standing within a group or the standing of the group itself. We thus categorize social goals broadly to include a wide range of objectives conducive to (a) influencing others, (b) crafting a valued social identity, and (c) forming and maintaining different types of relationships, including forging partnerships, finding friends, attracting mates, retaining partners, and caring for family members (Anderson, Hildreth, and Howland 2015; Baumeister and Leary 1995; Griskevicius et al. 2015; Kenrick et al. 2010).

In the following sections, we apply the components of our framework to understanding the effects of humor on the attainment of hedonic, utilitarian, and social consumption goals. Unless otherwise noted, we expect that these effects can be either integral or incidental.

HUMOR EFFECTS ON HEDONIC GOALS

Hedonic goals influence a wide range of consumption behaviors, from what consumers eat to where they spend their vacation (Holbrook and Hirschman 1982). We review evidence that humor appreciation facilitates hedonic goal pursuit by enhancing positive feelings (e.g., excitement, happiness) and attenuating negative feelings (e.g., anxiety, pain) across a variety of contexts. Comedy production also facilitates hedonic goals, but effects depend on comedy style.

Humor Appreciation Shapes Affective Responses to Consumption

Research suggests three processes by which humor appreciation facilitates hedonic goals: (a) increasing positive emotions, (b) attenuating negative emotions, and (c) reducing pain.

Amusement, the affective component of humor appreciation, is a positive emotion (Martin 2007; McGraw and Warren 2010). Positive emotions directly enhance hedonic goals by triggering feelings of pleasure (Frijda 1993). Research in neuroscience confirms that exposure to humorous jokes, cartoons, and video clips activates brain regions associated with pleasure, including the mesolimbic dopaminergic reward system (Mobbs et al. 2003; Neely et al. 2012). For example, exposure to line drawings with funny descriptions (e.g., “Germs avoiding a friend who caught antibiotics”) triggered higher levels of activation in the medial prefrontal cortex (mPFC), an area associated with perceiving unexpected rewards, than exposure to the same drawings with neutral descriptions (e.g., “A plethora of dots surrounded concentrically around a single dot;” Neely et al. 2012). Similarly, lab participants reported an elevated positive mood after completing an exercise in which they were asked to “laugh hilariously for one minute” (Foley, Matheis, and Schaeffer 2002). Other studies find that merely hearing laughter can boost feelings of pleasure. For example, studies have found that adding a laugh track to a comedy show increases laughter (Furnham et al. 2011; but see Gillespie, Mulder, and Leib 2016).

Laughter and amusement also reduce the negativity of aversive experiences. For example, after a negative mood induction, listening to stand-up comedy helped participants return to a neutral, baseline mood more quickly than listening to a non-humorous lecture (Danzer, Dale, and Kliens 1990). Humor appreciation similarly expedites recovery from a range of psychological threats, such as the death of a spouse (Keltner and Bonanno 1997) or negative feedback about one’s intelligence (Geisler and Weber 2010). For example, participants who watched a humorous video after a stressful cognitive task (unsolvable anagrams) reported lower stress than

participants who watched a non-humorous video (Abel and Maxwell 2002).

Humor appreciation can even reduce pain. Participants could withstand higher levels of pressure around their arm after listening to an audio recording of stand-up comedy than after other activities, including listening to an Edger Allen Poe story (Cogan et al. 1987). Other studies have replicated the link between humor appreciation and pain tolerance using different humor manipulations and pain measures (Weaver and Zillmann 1994; Zillmann et al. 1993).

There are two processes by which humor appreciation could attenuate negative hedonic experiences. One is simply by enhancing the consumer's mood (Martin 2001). If positive mood were the sole process by which humor appreciation reduces negative hedonic experience, then the effect of humor appreciation should mimic the effects of other positive emotional experiences. However, research reveals that humor appreciation more effectively alleviates negative emotions and pain than other positive experiences. Watching humorous videos decreased lab participants' distress and anxiety compared to watching hopeful videos (Moran 1996; Szabo 2003). Similarly, participants reported less intense negative emotions after viewing unpleasant photographs from the International Affective Picture System (IAPS) if they later read humorous sentences (e.g., "two can live as cheaply as one, but it costs twice as much") than if they later read equally positive non-humorous sentences (e.g., "when two people are in love, they can live as cheaply as one;" Strick et al. 2009). Finally, surgery patients who watched four humorous movies subsequently consumed fewer minor analgesic products (e.g., aspirin) than patients who watched four entertaining but non-humorous movies (Rotton and Shats 1996).

Evidence that humor appreciation attenuates negative feelings and pain better than other positive experiences suggests that humor appreciation facilitates hedonic consumption goals via other processes in addition to mood enhancement. One possibility is that humor appreciation also

facilitates hedonic goals by helping consumers reappraise the experience as benign (Gervais and Wilson 2005; McGraw and Warren 2010; Rothbart 1973). Humor appreciation may thus attenuate negative hedonic experiences (distress, anxiety, pain, etc.) more than other positive emotions by helping consumers reappraise these aversive experiences as being less troublesome.

The above research suggests that pairing humor appreciation with consumption provides a tool for enhancing the positive hedonic aspects of a wide variety of consumption experiences. For instance, hearing a humorous story can trigger mPFC activation, thus making an already fun concert or dinner party even more enjoyable. A good joke or a laugh may also help consumers cope with dissatisfactory or otherwise unpleasant consumption experiences, such as a flat tire, air travel, or a rude salesperson (McGraw, Warren, and Kan 2015). Moreover, because consumers often find themselves in unpleasant or painful situations while trying to pursue their goals, humor appreciation could be an especially helpful way to improve the hedonic aspects of negative consumption experiences. Dieters feel pain due to hunger, athletes suffer from soreness, and medical patients endure painful symptoms and treatments. Consumers also subject themselves to discomfort to appear attractive (e.g., high heels, neckties) or be initiated into a new social order (e.g., bloodletting rituals of the Matusa tribe in Papua New Guinea; hazing rituals in a prototypical American fraternity). At least one study supports that amusement and laughter might reduce discomfort: students who scored higher on a sense of humor scale experienced less anxiety while taking a math test (Ford et al. 2004).

P1: Humor appreciation makes positive consumption experiences more pleasant by improving consumers' mood.

P2: Humor appreciation makes negative consumption experiences less unpleasant by (a) improving consumers' mood and (b) helping them reappraise the experience as

benign.

Comedy Production Shapes Affective Responses to Consumption Experiences

Comedy production can help mitigate negative emotional reactions to unpleasant experiences (Lefcourt and Martin 1986; Newman and Stone 1996). For example, participants who humorously narrated a silent video of a painful circumcision ritual reported less negative emotions and showed fewer signs of distress than participants who created a non-humorous narrative (Lefcourt and Martin 1986). Similarly, field studies report that emergency service professionals regularly joke about suffering and death in order to cope with the traumatic experiences that they encounter (Rowe and Regehr 2010). Comedy production also appears to ameliorate pain. Participants who humorously narrated a silent video about industrial safety felt less tension and showed reduced psychophysiological reactivity than participants who created serious narration (Newman and Stone 1996). Similarly, participants instructed to humorously comment on a Mr. Bean film subsequently kept their hand submerged in ice water for longer than participants who watched the same video in silence (Zweyer, Velker, and Ruch 2004).

Not all comedy production is equally effective at improving hedonic states. People who produce positive (i.e., affiliative or self-enhancing) comedy tend to report higher levels of cheerfulness and fewer negative moods, whereas a tendency to produce aggressive comedy is unrelated to hedonic states (Martin et al. 2003). Moreover, a tendency to produce self-defeating comedy correlates with more intense bad moods, which suggests that some types of comedy production may thwart hedonic goals (Martin et al. 2003). Frequent use of self-defeating and aggressive comedy (but not a positive comedy style) increased the extent to which romantic couples felt negative emotions such as embarrassment (Hall 2011). Experiments manipulating comedy style reveal similar results. Participants instructed to produce positive comedy while

viewing aversive IAPS images reported more positive emotions and fewer negative emotions than participants who produced negative comedy while viewing the images (Samson and Gross 2012).

We suggest three processes by which comedy production could facilitate hedonic consumption goals. One process is that comedy production, like humor appreciation, could directly improve the mood of the consumer. However, the lack of evidence that comedy production improves positive experiences, casts doubt upon a simple mood enhancement mechanism. A second process is that producing positive comedy could help consumers reappraise a negative experience as less bad (Samson and Gross 2012). Making absurd jokes about waiting in line for hours (i.e., self-enhancing comedy) to buy a new iPhone could improve the experience, whereas joking about how dumb it is not to order the phone online (i.e., self-defeating comedy) could increase frustration. A third process is that comedy production could influence hedonic goals indirectly by altering the way that other people interact with the comedy producing consumer. Sending a funny valentine, for example, may make the receiver more affectionate, which could make the sender feel better.

In sum, existing research suggests that producing affiliative and self-enhancing comedy makes negative consumption experiences more tolerable. Yet, the processes driving this effect remain unclear. Nonetheless, the implications are clear: if consumers produce positive comedy, then sending a humorous tweet or funny selfie may help stave off boredom at a dull party, just as cracking a witty joke may attenuate anxiety and fear while waiting for medical test results.

P3: The production of affiliative and self-enhancing comedy makes negative consumption experiences less unpleasant.

HUMOR EFFECTS ON UTILITARIAN GOALS

Utilitarian goals, such as passing an exam or fighting disease, motivate a range of consumption behaviors, from buying textbooks to working out (Baumeister 2002; Baumgartner and Pieters 2008). The literature suggests that humor appreciation and comedy production influence the attainment of three types of utilitarian goals: making good decisions, persisting towards long-term objectives, and improving health. Although research suggests various mechanisms by which humor influences decision-making, persistence and health, whether (and when) humor appreciation ultimately helps or hurts decision-making, persistence, and health is less clear. Thus, we identify countervailing propositions about how humor appreciation and comedy production can either enhance or inhibit consumers' attainment of utilitarian goals.

Humor Appreciation Influences Decision-Making

Humor appreciation affects decision-making by altering (a) memory, (b) information processing, and (c) creativity.

Memory. Remembering marketplace information, such as where to find an honest mechanic, the cost of a laptop, or which ice cream is tastiest, helps consumers make decisions without searching for more information (Alba and Hutchinson 1987; Brucks 1985). Humorous stimuli are easier to remember than non-humorous stimuli (Carlson 2011; Eisend 2009; Schmidt 1994; Strick et al. 2010). In a field study, consumers were more likely to recall print advertisements for liquor brands when the advertisements were humorous (Madden and Weinberger 1982). Other research reveals that humorous content similarly increases the likelihood that consumers remember radio (Cantor and Venus 1980) and television ads (Murphy, Cunningham, and Wilcox 1979). In all of these cases, the effect of humor appreciation is integral, or related to, the marketplace stimulus that the consumer wants to remember.

Interestingly, the improved memory for humorous information comes at the expense of

memory for non-humorous content in the same environment—presumably because humorous stimuli attract attention away from non-humorous stimuli. For example, experimental participants were more likely to remember humorous sentences than non-humorous sentences when both types of sentences were in the same list (Schmidt 1994). Another study consistently found that although ads themselves are easier to remember when they are humorous, consumers were less likely to remember the product in humorous ads than in non-humorous ads (Hansen et al. 2009). In sum, although integral humor appreciation improves memory, incidental humor appreciation tends to hurt memory by distracting consumers from non-humorous information.

Humor appreciation affects memory through both affective and cognitive mechanisms. Comedy is emotionally arousing (Martin 2007; Rothbart 1973). For example, cartoons that participants considered funnier were more likely to trigger physiological indicators of arousal, including heart rate and skin conductance (Langevin and Day 1972). Moreover, arousing stimuli are remembered better than less arousing stimuli (Bradley et al. 1992; Dunsmoor et al. 2015; Kensinger and Corkin 2004). Humor appreciation is thus similar to other arousing emotional experiences (e.g., fear) in that it directs consumers' attention towards emotionally arousing stimuli (jokes, predators, etc.) at the expense of less arousing stimuli. Most comedy is also perceived to be incongruous, and incongruous stimuli are more likely to attract attention than expected stimuli (Hastie and Kumar 1979; Strick et al. 2010). In most situations, these affective and cognitive mechanisms go together because appraising something as being incongruous (i.e., violation appraisal) increases arousal (Alden, Muckerjee, and Hoyer 2000; Rothbart 1973).

Although humor appreciation may not improve memory in general, consumers could improve their memory by associating selective information with something humorous. Mnemonic devices often do just this by forming humorous sentences to help people remember

information, such as the notes on a six-string guitar (e.g., **Every Acid Dealer Gets Busted Eventually**) or unreliable car brands (e.g., **Fixed Or Repaired Daily; Failed Italian Automotive Technology**). On the other hand, humor appreciation might instead impair decision-making by shifting consumers' memory away from more serious marketplace information, like the details of a product warranty or health warning, towards more amusing but less diagnostic information, such as an endorser (e.g., Amex's Tina Fey) or tagline (e.g., "Nothing runs like a Deere").

Information Processing. Consumers make better choices when they base their decision on diagnostic rather than irrelevant information (Lynch, Marmorstein, and Weigold 1988). Studies suggest that humor appreciation can reduce the extent to which consumers scrutinize and use diagnostic information (Griskevicius, Shiota, and Neufeld 2010; Moyer-Gusé, Mahood, and Brookes 2011; Strick et al. 2012). For example, participants were more persuaded by weak arguments for a proposed policy change after writing about an amusing memory than after writing about a neutral, awe inspiring, or loving memory (Griskevicius et al. 2010). One reason why amusement reduces careful information processing could be because humor appreciation is associated with high levels of arousal (Martin 2007; Rothbart 1973), and consumers are more likely to rely on heuristics or low-level processing when positively aroused (Sanbonmatsu and Kardes 1988). Humor appreciation could also reduce careful information processing by triggering a positive mood, which tends to decrease effortful information processing (Bless et al. 1990). The finding that participants who were amused processed arguments in a communication less carefully than participants who experienced awe (which is a serious appraisal yet high arousal/positive valence; Griskevicius et al. 2010) suggests a third possible process. Humor appreciation causes consumers to appraise the situation as non-serious (i.e., benign) and thus as not requiring careful scrutiny. Regardless of why humor appreciation decreases scrutiny, the

implication remains the same: a tendency to be less careful when appreciating humor may lead to bad choices. For instance, a humorous phishing attempt may cause a consumer to unintentionally click on an unsafe email link without considering the likelihood of malicious content.

Creativity. Creative problem solving can help consumers make better decisions, especially when consumers face constraints that inhibit conventional solutions (Burroughs and Mick 2004; Dahl and Moreau 2007; Moreau and Dahl 2005). Amusement improves consumers' mood, which in turn facilitates novel and flexible thought patterns (Fredrickson 1998; Isen, Daubman, and Nowicki 1987; Isen et al. 1985). Studies regularly report a positive relationship between humor appreciation and creativity. Teenagers who listened to a humorous record performed better on the Torrance Test of Creative Thinking than a control group (Ziv 1976). Similarly, employees reported performing better on innovative and creative tasks when their supervisor or team leader more frequently made them laugh (Pundt 2015). Humor appreciation, however, does not always boost creativity; its effect appears to depend on humor style. Although hearing a comedian tell an aggressive joke improved people's performance on the Torrance Test of Creative Thinking, neither watching a humorous cartoon nor hearing a comedian tell a self-defeating joke improved test performance (Boyle and Stack 2014; Janes and Olson 2015). More research is needed to better specify for what types of comedy and in what types of situations humor appreciation improves creativity. However, initial evidence suggests that tuning into a humorous podcast or scrolling through a comedic website may help consumers discover new ways to locate a high-quality service, replace a broken product, or balance their budget.

P4: Humor appreciation can help consumer decision-making by (a) enhancing memory for humorous marketplace information, and (b) helping people find creative solutions to consumption-related problems.

P4': Humor appreciation can hinder consumer decision-making by (a) reducing memory of non-humorous marketplace information, and (b) reducing careful information processing.

Humor Appreciation Influences Persistence

In order to reach a long-term, utilitarian goal, consumers must persist towards their desired end state while avoiding temptations (Baumeister 2002). As previously discussed, humor appreciation is associated with high levels of arousal (Martin 2007; Rothbart 1973). By increasing arousal, humor appreciation may interfere with consumers' ability to resist pleasurable but goal-inconsistent temptations (Fedorikhin and Patrick 2010). Consistently, one study found that women who were trying to stick to a diet ate more while watching a comedy clip than while watching a travelogue clip (Cools, Schotte, and McNally 1992).

Also, as discussed in the section on hedonic goals, humor appreciation improves consumers' mood and makes consumption experiences more enjoyable. Because enjoyable tasks are less likely to deplete resources required for self-control (Laran and Janiszewski 2011), experiencing humor may, in some situations, increase persistence. Consistently, participants in one experiment worked longer to solve geometric puzzles and math problems if the experimenters presented a comedic video between a depleting language exercise and the problem-solving task (Cheng and Wang 2015). Similarly, students in a statistics class performed better on their final exams if the instructor interjected jokes throughout the lectures than if the instructor delivered the material in a humorless manner (Ziv 1988). Management scholars contend that including more comedy in the workplace can improve productivity (Romero and Cruthirds 2006; Lyttle 2007). Consistent with the notion that humor appreciation can improve workplace performance, one study found that humor appreciation in work meetings at a German

manufacturing company was positively associated with employee performance, a link that was strongest for employees with less job security. (Lehmann-Willenbrock and Allen 2014). Another study similarly found that employees are more engaged with work when their bosses have a better sense of humor (Yam et al. 2017).

In sum, although humor appreciation can facilitate persistence towards utilitarian consumption goals by making the experience more enjoyable, humor appreciation can also decrease persistence by increasing arousal. The literature, however, has yet to identify the variables that determine when each of these processes will prevail.

P5: Humor appreciation can increase persistence towards long-term consumption goals by making goal pursuit more enjoyable and less depleting.

P5': Humor appreciation can decrease persistence towards long-term consumption goals by increasing arousal.

Effects of Humor Appreciation and Comedy Production on Health

An important utilitarian consumption goal is improving (or at least maintaining) one's health. Humor has long been speculated to improve health—an idea that has proliferated in the past four decades (Goldstein 1982). Books, articles, and even a professional association (American Association for Therapeutic Humor) tout the health benefits of laughter and amusement (Martin 2001). The implications of this claim are substantial: if humor appreciation and comedy production facilitate health, then laughter and amusement would provide an inexpensive way to improve healthcare, speed recovery from ailments, and enhance wellness.

Physical Health. Scholars have suggested that humor benefits physical health by boosting immune functioning (Dillon, Minchoff and Baker 1986; Ruch 1993), reducing blood pressure (McGhee 1999), and even prolonging life (Svebak, Romundstad, and Holmen 2010; Romundstad

et al. 2016). Studies have reported significant positive correlations between sense of humor and (a) secretory immunoglobulin-A (S-IgA), a chemical associated with healthy immune functioning (Dillon et al. 1986), (b) recovery from cardiovascular disease (Lockwood and Yoshumira 2014) and (c) survival rates for Norwegians (Svebak, Romundstad, and Holmen 2010) and patients with renal failure (Svebak, Kristoffersen, and Aasarød 2006). Yet, other studies have failed to find a relationship between sense of humor and the frequency or severity of colds (McClelland and Cheriff 1997), levels of S-IgA (Lefcourt et al. 1990), and blood pressure (Lefcourt et al. 1997). Some studies even report negative correlations between sense of humor and life expectancy (Friedman et al. 1993; Martin et al. 2002).

There are several plausible explanations for the inconsistent correlational results. One is that comedy type likely moderates the effects of humor appreciation and comedy production on physical health. We expect that appreciating and producing self-enhancing and affiliative comedy is more likely to boost physical health than appreciating and producing aggressive and self-defeating comedy, although we are not aware of studies that have measured physical health after experimentally manipulating humor style.

Another reason for the inconsistent results is that humor's effects on physical health are likely indirect. For instance, humor appreciation may indirectly boost health by improving mood, which in turn tends to enhance the immune function (Stone et al. 1987), mitigate depressive symptoms (Chang and Farrehi 2001; Diener and Seligman 2002), reduce the intensity of felt pain (Bruehl et al. 1993), and speed cardiovascular recovery from stressors (Fredrickson and Levenson 1998). Humor appreciation and comedy production may also enhance health by helping consumers build healthy relationships and other valuable social resources (Martin 2007), a possibility that we discuss in the section on social goals. Pending further research, the only

conclusion that currently seems warranted is that adding humor to consumption experiences can indirectly benefit physical health by increasing positive emotions and social support.

P6. Humor appreciation can indirectly improve consumers' physical health by increasing (a) positive emotions and (b) social support.

Mental Health. Evidence of how humor appreciation and comedy production influence mental health is equivocal. Some studies report benefits of comedy production. For example, training patients in comedy production improved rehabilitation for schizophrenic patients (Cai et al. 2014) and improved self-esteem for patients with a variety of mental illnesses (Rudnick et al. 2014). But other studies fail to find effects of humorous interventions (e.g., funny movies, laughter-inducing exercises) on the mental health of undergraduate students (White and Camarena 1989), elderly residents in a long-term care facility (Adams and McGuire 1986), or orthopedic surgery patients (Rotton and Shats 1996). Correlational studies assessing the relationship between sense of humor and mental health report inconsistent results; sense of humor is correlated with some measures of mental health but not others (Martin 2001; 2007).

The inconsistent relationship between humor and mental health is partially due to different types of comedy having different effects on mental health. Although trait measures of affiliative and self-enhancing humor styles are associated with lower levels of anxiety and depression, trait measures of a self-defeating humor style are associated with worse mental health (Martin et al. 2003; Kuiper et al. 2004; Saroglou and Scariot 2002; Frewen et al. 2008).

Humor appreciation and comedy production also influence some aspects of mental health more than others. Sense of humor is more closely linked to self-esteem and depression, which have strong emotional component, than dementia or autism (Kuiper and Martin 1993; Martin 2007). Additionally, and consistent with humor appreciation helping consumers reappraise

negative experiences as being benign, having a good sense of humor is associated with feeling less anxiety and stress after traumatic experiences (e.g., Henman 2001; Monahan 2015). For example, bereaved people who regularly laugh experience less grief, lower levels of distress, and increased enjoyment compared to bereaved people who appreciate humor less frequently (Keltner and Bonanno 1997; Lund et al. 2009). Similarly, laughter therapy significantly decreased mood disturbances and increased the self-esteem of cancer patients (Kim et al. 2015) and increased the life satisfaction of depressed women (Shahidi et al 2011).

In sum, humor doesn't unilaterally improve mental health, but there is evidence that appreciating and producing positive styles of comedy boost aspects of mental health that are closely tied to coping and emotional functioning. Thus, consumers suffering from depression, low self-esteem, or temporary stressors may benefit from joking and laughing in a light-hearted, affiliative manner. However, consumers seeking mental health benefits should stick to comedy that is relatively benevolent and pro-social (e.g., puns, cat memes) rather than edgy or disparaging (e.g., teasing, yo' mama jokes). Because existing studies cannot determine whether positive comedy boosts mental health or if mentally healthy people are simply more likely to produce and appreciate positive styles of comedy, experimental research is needed to test whether producing and appreciating positive comedy causes improvements in mental health. Despite the limitations of existing research, evidence points towards an intriguing possibility: self-enhancing and affiliative comedy might complement Prozac, spiritual quests, therapy sessions, and other mental-health-enhancing products that help stave off depression and anxiety.

P7: Humor appreciation and comedy production are more likely to benefit mental health when consumers (a) are struggling with disorders that have a strong emotional component (e.g., depression, anxiety disorders, and low self-esteem but not psychosis

or dementia) and (b) have a self-enhancing or affiliative (but not aggressive or self-defeating) humor style.

HUMOR EFFECTS ON SOCIAL GOALS

Consumers buy, use, and display a constellation of products in an attempt to influence others, gain status, secure friendships, attract mates, raise children, and attain a range of other social goals (Burnkrant and Cousineau 1975; Durante et al. 2011; Griskevicius, Tybur, Van den Bergh 2010; Kornrich and Furstenberg 2013). Consumers are far more likely to produce comedy and appreciate humor when accompanied by relatives, friends, acquaintances, or even strangers than when alone (Martin and Kuiper 1999; Martin 2007; Provine 2000). Given the social nature of humor, it is unsurprising that comedy production influences consumers ability to persuade others, and that both humor appreciation and comedy production influence consumers' ability to form, build, and maintain relationships. The literature suggests a number of ways in which comedy production influences persuasion goals, but whether and when inspiring laughter helps consumers influence others remains unclear. The literature on when and how humor helps consumers navigate social relationships is more consistent, thereby suggesting that humor can potentially influence the effectiveness of products (clothing, watches, flowers, etc.), services (restaurants, country clubs, dating apps, etc.), and activities (sports, music, travel, etc.) that consumers use to bond with others, craft an identity, impress a romantic partner, build a family, or attain other social goals.

Comedy Production Influences Communication Effectiveness

Although most research on humorous persuasive attempts is in the area of advertising (see Eisend 2009; Gulas and Weinberger 2006), consumers are not simply passive recipients of

comedic messages articulated by others. Consumers cajole friends to go out on the town and coax salespeople into giving them a better deal. The growth of social media allows consumers to communicate not just with one another (e.g., blogs, Reddit) but to provide feedback, requests, and gripes to purveyors of products and services. In all of these examples, consumers want to persuade others. To do so, they generally need to construct messages that (a) attract attention, (b) are believable, (c) seem important, and (d) evoke positive rather than negative emotions. Because there is less research related to how or when humor appreciation influences others, our discussion focuses only on the effects of a comedy production on persuasion.

Attracting Attention. Consumers can produce comedy in order to attract attention to their communications. Indeed, consumer complaints are more likely to be shared on Facebook and rated as helpful on Amazon when the complaint is humorous rather than serious (McGraw, Warren, and Kan 2015). Humorous stimuli attract attention, both because they are arousing and because they are incongruous (proposition 4a; Madden and Weinberger 1982; Gulas and Weinberger 2006; Strick et al. 2010). Importantly, however, just as humor appreciation improves memory for humorous stimuli at the expense of non-humorous stimuli (Schmidt 1994), comedy production is likely to attract attention only towards the humorous aspects of a communication (Strick et al. 2010). Thus, comedy production will only help consumers craft effective communications when the comedy is integral, or related to the focal message the consumer hopes to communicate, not when the comedy is incidental to the focal message. For example, a blogger who wants to tell others about a great new band may attract readers by beginning a blog entry with a hilarious cat meme, but such unrelated comedy won't draw attention to the band.

Message Acceptance. Literature suggests that the audience of a message is more likely to believe (and less likely to counter-argue) humorous than non-humorous claims (Mukherjee and

Dubé 2012; Strick et al. 2012). As previously discussed, amused audiences are more likely to appraise a situation as benign and as requiring less scrutiny (Griskevicius et al. 2010; McGraw and Warren 2010). Thus, by making the audience more open to and less critical of information, producing comedic messages can be an especially useful way to get an audience to accept information that they might otherwise find too threatening (Conway and Dubé 2002; Nabi, Moyer-Gusé and Byrne 2007; Yoon 2015). For example, participants reported more positive attitudes towards sunscreen after viewing an ad highlighting the risks of skin cancer when the ad also included a humorous cartoon (Mukherjee and Dubé 2012). Similarly, participants were less likely to counter-argue a program presenting the risks of unplanned pregnancy when the program included humorous content than when the humorous content was removed (Moyer-Gusé et al. 2011). Thus, consumers who want to criticize or give negative feedback might find their audience more accepting of this potentially threatening information if it is funny (an integral effect of comedy production). It is also possible that joking about something before delivering the negative information could make the audience more likely to accept the message by triggering a general benign appraisal, but there is little evidence on whether or not incidental comedy production increases acceptance.

Perceived Importance. In addition to attracting attention and being accepted, effective communications must seem important. Because amusement triggers an appraisal that a stimulus is benign, comedy production can prevent an audience from taking a message seriously (McGraw, Schiro, and Fernbach 2015). Although an audience was less likely to counter-argue messages on drug legalization, gun control, and unplanned pregnancy, it also rated these issues as being less relevant and serious when the messages included humorous content (Moyer-Gusé et al. 2011; Nabi et al. 2007). Similarly, problems addressed by public service announcements

(PSA) seemed less important for funny versions of the PSA (McGraw, Schiro, and Fernbach 2015), just as complaints about a product or service seemed less urgent when the complaints were humorous rather than serious (McGraw, Warren, and Kan 2015). The finding that humorous information seems less serious suggests that integral comedy production may trivialize a topic. Because amusement evokes a benign appraisal, it is possible that joking about something unrelated to the focal message (i.e., incidental comedy production) similarly decreases the extent to which any information seems important, but evidence thus far is limited to integral effects.

Emotional Reactions. Communications tend to be more persuasive when they evoke more positive emotions and less negative emotions (Holbrook and Batra 1987; Pham, Geuens, and Pelsmacker 2013). Humorous messages increase positive emotional reactions in the audience (i.e., mood enhancement), which enhances persuasion (Eisend 2011)—especially for an audience unable or unwilling to carefully process information (Zhang 1996; Zhang and Zinkhan 2006). However, research suggests that humorous stimuli may simultaneously evoke negative emotions in addition to laughter and amusement (Hemenover and Schimmack 2007; McGraw and Warren 2010; Warren and McGraw 2016a). Humor appreciation is linked not only to the relatively positive appraisal that something non-serious or benign, but also to the potentially negative appraisal that something is incongruous or even threatening (Alden et al. 2000; McGraw et al. 2012; Warren and McGraw 2016b). Consequently, consumers who joke in party invitation or a work email risk evoking discomfort or offense in addition to laughter and amusement (Warren and McGraw 2016a). For example, when trying to be funny rather than creative or persuasive, experimental participants wrote messages that caused readers to feel both more amusement and more negative feelings (Warren and McGraw 2013). Because the persuasiveness of the message depended more on the extent to which the audience experienced negative feelings than the extent

to which they felt amused, messages intended to be humorous were less effective than messages intended to be creative or persuasive (Warren and McGraw 2013).

Whether comedy production results in more persuasive messages that evoke strictly positive feelings or less persuasive messages that evoke both positive and negative feelings depends on the type of comedy produced (Warren and McGraw 2016a). For example, a humorous picture of a car accident led to more favorable attitudes towards the advertising brand when the ad's headline used affiliative comedy ("everybody drives like an idiot sometimes") than when it used aggressive, sexist comedy ("everyone drives like a woman sometimes"; Warren and McGraw 2016a). Thus, consumers should be mindful of how they craft funny messages, as disparaging comedy might amuse an audience but fail to persuade them.

P8: Comedy production can increase consumers' ability to persuade others by (a) attracting attention to the humorous parts of a communication, (b) reducing the likelihood of the audience critically evaluating the communication, and (c) inducing positive emotions in the audience.

P8': Comedy production can decrease consumers' ability to persuade others by (a) distracting the audience from the non-humorous parts of a communication, (b) making a message seem less important, and (c) inducing negative emotions in the audience.

Humor Appreciation, Social Skills, and Relationships

Research on play suggests a connection between humor appreciation and an ability to effectively interact with others. The most common sources of laughter in non-human animals and small children are playful activities, including mock fights, chasing games, and tickle attacks (Gervais and Wilson 2005; Martin 2007). Ethological studies demonstrate that chimpanzees

laugh during chasing games and rough-and-tumble play in order to sustain and prolong social activity with a playmate (Davila-Ross et al. 2011; Matsusaka 2004). Notably, animals that are denied the opportunity to appreciate humor in the form of play are more likely to become overly defensive when approached by another animal and have difficulty during both cooperative (e.g., sex) and competitive (e.g., defending a piece of meat) social interactions later in life (Pellegrini 1995; Pellis and Pellis 2007). Consistent with these findings, Weisfeld (1993) proposes that appreciating humor similarly gives humans an opportunity to practice social skills that they can later use to effectively explore socially taboo topics, engage in playful competition, and regulate the behavior of other group members, a hypothesis consistent with the “broaden and build” theory of positive emotion (Fredrickson 1998). Although both theory and preliminary findings suggest that humor appreciation helps consumers develop social competencies, the specific nature of these competencies is unclear. The literature has similarly not identified how humor appreciation improves social competencies or whether the effect depends on the type of comedy.

Researchers from a variety of fields suggest that shared humor appreciation builds and solidifies relationships. Enjoying one another’s jokes can help maintain social harmony and relationship stability (Radcliffe-Brown 1940). Laughter similarly helps adult humans bond by enabling communication in larger group sizes (Dezecache and Dunbar 2012) and reassuring reciprocal support, especially in the face of novel or potentially threatening situations (Shiota et al. 2004). Ethnographic studies of tourist experiences (e.g., touring a Civil War battlefield) conclude that joking and experiencing amusement during a shared activity increases a sense of community amongst consumers (Mitas, Yarnal, and Chick 2012). A diary study analogously revealed that people who report laughing more during a social interaction with others experienced greater intimacy and enjoyment in subsequent interactions with the same person

(Kashdan et al. 2014). Lab experiments similarly found that student participants liked and reported more romantic interest in one another after engaging in humorous tasks (e.g., discussing jokes, playing charades while speaking a nonsense language, etc.) rather than similarly pleasant but non-humorous tasks (e.g., discussing school, playing charades while speaking English; Treger et al. 2013). Finally, a field study found that shared appreciation of disparaging jokes helped solidify community and sense of togetherness for employees during a six-week executive development class (Terrion and Ashforth 2002).

There are several possible mechanisms by which humor appreciation could help consumers develop social skills and build relationships. Humor appreciation improves consumers' mood, which motivates the development of more relationships, more satisfying relationships, and more supportive relationships (Diener and Seligman 2002; Lyubomirsky, King, and Diener 2005). Consumers may thus be more likely to strike up conversation with strangers in line for a new iPhone if they hear an amusing song playing in the background because the funny song makes them feel better. A second mechanism by which humor appreciation could facilitate social goals is by signaling an interest in and openness to others. Laughter, the behavioral component of humor appreciation, communicates interest and invites continued interaction (Matsusaka 2004; Provine 2000). A child who laughs regularly during school recess will likely be approached by more classmates and engage in more frequent social interactions. The volume of interactions and potential partners would increase the number of relationships the child forms and his or her social competencies. A third mechanism is that humor appreciation helps consumers appraise the social environment as safe or benign, which could in turn increase self-disclosure, a critical determinant of relational development (Berscheid and Reis 1998). One experiment found that watching ten-minutes of stand-up comedy led

participants to disclose more intimate information to others than participants who watched a non-humorous video about golf (Gray, Parkinson, and Dunbar 2015). Relatedly, the safe or benign appraisal associated with humor appreciation may help consumers accept differences in opinions, beliefs, or values, thereby making it easier for people with different backgrounds and ideologies to get along (Mulkay 1988). The idea that humor appreciation makes consumers more accepting of social and ideological differences is consistent with the finding that humor makes consumers more accepting of persuasive arguments (Griskevicius et al. 2010; Mukherjee and Dubé 2012).

In sum, there are several plausible processes by which sharing an amusing story, watching a funny movie together, or simply observing a random comedic event (e.g., a flash mob) tends to help consumers build social competencies and stronger relationships, but additional research is needed to better identify when each of these processes occur.

P9: Humor appreciation can help consumers develop social competencies and strengthen relationships with others who share in the humorous experience by (a) motivating them to interact with others, (b) signaling interest in others, (c) increasing their willingness to disclose information about themselves, and (d) increasing their tolerance for disagreement.

Comedy Production and Social Goals

Research suggests that comedy production can improve consumers' social lives by making them more attractive relationship partners and helping navigate potentially contentious interactions, but the mechanisms and boundary conditions for these effects differ.

Relationship Attractiveness. A variety of evidence suggests that producing comedy tends to make consumers more attractive relationship partners. Comedy production is among the most important interpersonal characteristics people look for in others (Butzer and Kuiper 2008).

Consistently, consumers who successfully make others laugh have an easier time attracting friends and romantic partners (McGee and Shelvin 2009). In one study, participants who scored high on Humor Orientation (which measures people's inclination to produce comedy), reported being less lonely and were seen as more attractive by others (Wanzer, Booth-Butterfield, and Booth-Butterfield 1996). In other experiments, participants who told funny jokes earned more status and esteem than people who did not attempt to produce comedy (Bitterly, et al. 2017). Conversely, children rated by their peers as lacking a sense of humor were less respected and less likely to be invited to social events than children who regularly produce comedy (Sherman 1985). Field studies confirm that producing humor can be an effective way to cultivate different types of relationships. In one study, humorous invitations increased attendance at social events (e.g., a clambake) but not at business events (e.g., a zoning referendum; Scott et al. 1990). In a different study, a male confederate had more success getting the phone number of women at a bar when the women overheard the confederate telling, rather than listening to, humorous jokes (Guéguen 2010). Another study found that when male and female strangers conversed for 10 to 12 minutes, the males' humor production was associated with the female partners' dating interest (Hall 2015). Collectively, research suggests that making others laugh during collective consumption experiences, such as dinner parties, dates, or even waiting in line at the supermarket, can boost a consumer's appeal as both a friend and mate.

There are several reasons why producing comedy makes consumers more attractive relationship partners. One mechanism is indirect; producing comedy triggers humor appreciation in the audience, which, as discussed in the previous section, makes the audience more interested in and open to forming a relationship with the comedy producer. Comedy production may also make a consumer more attractive by signaling interest in another person. For example, observers

thought that speed daters were more romantically interested in their partners when the dater initiated humorous, as opposed to engaging but non-humorous, conversation (Li et al. 2009). Finally, comedy production may increase attractiveness by signaling intelligence, a trait valued in relationship partners (Greengross and Miller 2011).

Whether telling a good joke or posting a humorous tweet helps make a consumer more attractive depends on the type of comedy produced. In general, producing affiliative and self-enhancing comedy is more likely to make a consumer attractive than producing negative comedy (Kuiper et al. 2004; Martin et al. 2003; Saroglou and Scariot 2002). The effects of producing negative comedy, on the other hand, may depend on the specific impression that the consumer wants to make on others. Because aggressive humor involves demeaning another person, telling disparaging jokes may be an effective way to signal dominance and status, but is less likely to help a consumer make friends. Conversely, making a self-defeating joke may help a consumer seem friendlier, but is less likely to boost the consumer's esteem or mate value.

Managing Conflict. In addition to making consumers more attractive relationship partners, producing comedy can also mitigate social conflict. Comedy production can help consumers save face and relieve tension during potentially embarrassing or contentious situations (Martin 2007), forge bonds with people who have shared a similar negative experience (Cooper 2005), and express criticism without seeming offensive or inappropriate (Smith, Harrington, and Neck 2000). For example, consumers who complain about a product are liked more when the complaint is humorous than when it uses a strictly negative tone (McGraw, Warren, and Kan 2015). Comedy production may also help consumers navigate contentious interactions, like negotiations (Kurtzberg, Naquin, and Belkin 2009). O'Quin and Aronoff (1981), for example, found that negotiation offers were more likely to be accepted when a

humorous comment (“I’ll throw in my pet frog”) accompanied the offer.

Several mechanisms suggest how comedy production could help consumers navigate conflict. Because humor appreciation involves an appraisal that the situation is safe or benign, producing comedy could help relax the audience as well as make them more open to working out a disagreement. Another possibility is that amusing others boosts the audience’s mood, which both makes them more likely to identify a creative solution that satisfies both parties and more interested in building a relationship with the person who made them laugh. More research is needed to identify the reason or reasons why making others laugh can help consumers deescalate an argument, bond over a shared tragedy, express criticism, and negotiate better outcomes.

A noteworthy boundary condition of these effects is that producing comedy is far more likely to help consumers navigate potentially contentious interactions when they produce positive rather than negative comedy (Kuiper et al. 2004; Martin et al. 2003; Saroglou and Scariot 2002). Whereas people who frequently produce affiliative comedy report having more effective social interactions (Miczo, Averbek, and Mariani 2009), an aggressive style of comedy production tends to reduce, rather than facilitate, social cohesion. Comedy production is common in ridicule and bullying (Keltner et al. 2001), and attempts to produce comedy—even well-meaning ones—can elicit negative responses ranging from mild annoyance to extreme outrage (Beard 2008; McGraw and Warner 2014; Smeltzer and Leap 1988). As a result, consumers who produce comedy, particularly of the aggressive variety, may find that they are unintentionally harming others (Martin 2007).

Comedy production can also be used to intentionally harm or condone the harming of members of an out-group or minority (Ford and Ferguson 2004). For example, a qualitative study found that Australian men used homophobic jokes to discourage homosexual behavior (McCann,

Plummer, and Minichiello 2010). This “cavalier humor style” may justify insensitive, derogatory, racist, or sexist comments by claiming that the comment is “just a joke” or that the victim lacks a sense of humor (Hodson, Rush, and MacInnis 2010). Not surprisingly, negative styles of comedy production also tend to be less successful at helping consumers cope with social conflict. For example, couples who produce more aggressive and less affiliative comedy during conflict-resolution discussions were less satisfied with relationships and felt further from one another (Campbell, Martin, and Ward 2008).

In sum, there is growing evidence that specific styles of comedy production help consumers attract relationship partners and manage social conflict, although research is needed to clarify the mechanisms driving the effects. This research has particular relevance to the vast online dating consumer segment, where a funny joke and a shared laugh can help daters attract successful matches and alleviate the uncertainty and discomfort associated with many first dates.

P10: Producing affiliative and self-enhancing comedy helps consumers (a) seem like more attractive and desirable relationship partners, and (b) cope with potentially stressful, contentious, and threatening social interactions.

FUTURE DIRECTIONS

By organizing research questions around the factors that are likely to mediate (mood vs. appraisal vs. signaling) and moderate (humor efficacy, humor style, goal type) the effects of humor appreciation and comedy production on consumers, our framework can help researchers explore new questions related to humor in other research domains. For example, how does humor appreciation influence consumers’ likelihood to take risks, how and when does producing comedy make consumers appear more trustworthy (e.g., Kurtzberg et al. 2009), do different

comedy styles signal different levels of interest or intention in forming relationships (e.g., Martin et al. 2003), and does appreciating humor alter whether consumers interpret their decisions as reflecting goal commitment or goal progress (e.g., Fishbach and Dhar 2005)?

Because humor appreciation and comedy production often help consumers reach their consumption goals, another important area for future research will be to investigate methods for enhancing humor appreciation and comedy production. Can consumers learn to laugh more easily? Can they become funnier? We are encouraged by evidence that positive psychological states (e.g., gratitude, mindfulness and curiosity) can be increased over time through cognitive reframing, reflection, experimentation, and practice (Brown and Ryan 2003; Lyubomirsky et al. 2011). We similarly suspect that the ability to produce humor can be acquired like other skills. For example, comedians typically become funnier as they learn their craft. There are few world-class 18-year-old comedians, yet plenty of 38-year-old ones. Comedy production, like most complex skills (e.g., music, mathematics, public speaking), takes time, practice, the motivation to perform, an opportunity to express oneself, and feedback (Kanfer and Ackerman 1989). However, skills tend to improve most when effective instruction complements experience.

We encourage researchers to develop interventions to help consumers better produce comedy and appreciate humor. We see at least three interrelated types of interventions. One type of intervention could attempt to increase consumers' motivation to be funny and to seek out humorous consumption experiences. For example, recording instances in which they laugh or make others laugh might increase the likelihood that consumers attend to humorous stimuli and, thus, appreciate humor in their everyday lives (see Gander, Proyer, Ruch, and Wyss 2013). A second type of intervention could attempt to increase consumers' knowledge and understanding of what makes things funny. For example, might lessons on different humor theories

(incongruity, superiority, arousal, benign violation, etc.) help consumers make others laugh? Given that appreciating and producing positive styles of comedy are more likely to help consumers reach their goals, third type of intervention could attempt to nudge consumers towards using affiliative and self-enhancing rather than aggressive or self-defeating comedy. For example, exercises that help consumers make light of shared misfortunes or general absurdities rather than misfortunes or flaws in themselves or specific others. Investigating the potential for enhancing humor appreciation and comedy production represents a new frontier for improving consumer welfare.

CONCLUSION

Building on the perspective that consumption is a process of goal pursuit (Holbrook 1987; Van Osselaer and Janiszewski 2012), we present ten propositions about how humor appreciation and comedy production influence the attainment of consumers' hedonic, utilitarian, and social goals. Our review suggests that humor appreciation and comedy production do not unilaterally benefit consumers, but, when wielded with care, can make certain consumption experiences more effective. Experiencing humor generally facilitates hedonic goals by boosting positive emotion and helping the consumer overcome stress and anxiety, makes utilitarian pursuits more enjoyable, boosts aspects of mental health, and helps consumers bond and strengthen relationships. There are also situations in which comedy production lifts emotions, reduces pain, and helps consumers build and maintain relationships. However, consumers need to be selective about how, when, and where they use humor, as the effects of humor appreciation and comedy production on goal pursuit depend on the consumer's goal and the type of comedy, not to mention a variety of contextual variables that the literature is only beginning to

understand. Playing an amusing board game like Pictionary or Cards Against Humanity may help consumers overcome excessive anxiety or low self-esteem, but no amount of laughter is going to heal a severed artery. Moreover, the ability of comedy production to help consumers hinges on the consumers' ability to successfully amuse their audience. In sum, humor appreciation and comedy production are understudied processes that, when leveraged in the right way, can help consumers reach their goals and, ultimately, improve their well-being.

REFERENCES

- Abel, Millicent H., and David Maxwell (2002), "Humor and affective consequences of a stressful task," *Journal of Social and Clinical Psychology* 21 (2), 165-90.
- Adams, Elizabeth R., and Francis A. McGuire (1986), "Is laughter the best medicine? A study of the effects of humor on perceived pain and affect of humor on perceived pain and affect," *Activities, Adaptation & Aging*, 8 (3-4), 157-75.
- Alba, Joseph W. and J. Wesley Hutchinson (1987) "Dimensions of consumer expertise," *Journal of consumer research*, 13 (4), 411-54.
- Alba, Joseph W., and Elanor F. Williams (2013), "Pleasure principles: A review of research on hedonic consumption," *Journal of Consumer Psychology*, 23 (1), 2-18.
- Alden, Dana L., Ashesh Mukherjee, and Wayne D. Hoyer (2000), "The effects of incongruity, surprise and positive moderators of perceived humor in television advertising," *Journal of Advertising*, 29 (Summer), 1-15.
- Anderson, Cameron, John Angus D. Hildreth, and Laura Howland (2015), "Is the desire for status a fundamental human motive? A review of the empirical literature." *Psychological Bulletin*, 141 (3), 574-601
- Bagozzi, Richard P. and Paul R. Warshaw (1990), "Trying to consume," *Journal of Consumer Research*, 17 (2), 127-40.
- Baumeister, Roy F. (2002), "Yielding to temptation: Self-control failure, impulsive purchasing, and consumer behavior," *Journal of Consumer Research*, 28 (March), 670-76.
- Baumeister, Roy F., and Mark R. Leary (1995), "The need to belong: Desire for interpersonal attachments as a fundamental human motivation," *Psychological Bulletin*, 117 (3), 497-

529.

- Baumgartner, Hans and Rik Pieters (2008), "Goal-directed consumer behavior: Motivation, volition, and affect," *Handbook of Consumer Psychology*, Ed. Curtis P. Haugtvedt, Paul M. Herr, and Frank R. Kardes, New York, NY: Lawrence Erlbaum, 367-92.
- Beard, Alison (2014), "Leading with humor," *Harvard Business Review* 92(5), 130-31.
- Beard, Fred.K (2008), "Advertising and audience offense: The role of intentional humor," *Journal of Marketing Communications*, 14 (1), 1-17.
- Bell, Nancy (2009), "Responses to failed humor," *Journal of Pragmatics*, 41, 1825-36.
- Berhane, Luwam (2013), "Humor: An important tool for happiness," published by the Ministry of Information of Eritrea on August 9, 2013; retrieved from <http://www.shabait.com/about-eritrea/art-a-sport/14337-humor-an-important-tool-for-happiness> on 1/21/2017.
- Berscheid, Ellen, and Harry T. Reis (1998), "Attraction and close relationships," *The Handbook of Social Psychology*, Vols. 1-2, 4th ed., New York, NY, US: McGraw-Hill, 193-281.
- Bitterly, T. Bradford, Alison Wood Brooks, and Maurice E. Schweitzer (2017), "Risky business: When humor increases and decreases status," *Journal of Personality and Social Psychology*, 112 (3), 431-55.
- Bless, Herbert, Gerd Bohner, Norbert Schwarz, and Fritz Strack (1990), "Mood and persuasion: A cognitive response analysis," *Personality and Social Psychology Bulletin*, 16 (2), 331-45.
- Boyle, Felicity, and Niamh Stack (2014), "An explorative study into the possible benefits of using humor in creative tasks with a class of primary five pupils," *Humor-International Journal of Humor Research*, 27 (2), 287-306.

- Bradley, Margaret M., Mark K. Greenwald, Margaret C. Petry, and Peter J. Lang (1992), "Remembering pictures: Pleasure and arousal in memory," *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 18 (2), 379-90.
- Brown, Kirk Warren, and Richard M. Ryan (2003), "The benefits of being present: Mindfulness and its role in psychological well-being," *Journal of Personality and Social Psychology*, 84, 822-848.
- Brucks, Merrie (1985), "The effects of product class knowledge on information search behavior," *Journal of Consumer Research*, 12 (1), 1-16.
- Bruehl, Stephen, Charles R. Carlson, and James A. McCubbin (1993), "Two brief interventions for acute pain," *Pain*, 54 (1), 29-36.
- Burnkrant, Robert E., and Alain Cousineau (1975), "Informational and normative social influence in buyer behavior," *Journal of Consumer Research*, 2 (3), 206-15.
- Burroughs, James E., and David Glen Mick (2004), "Exploring antecedents and consequences of consumer creativity in a problem-solving context," *Journal of Consumer Research*, 31 (2), 402-11.
- Butzer, Bethany, and Nicholas A. Kuiper (2008), "Humor use in romantic relationships: The effects of relationship satisfaction and pleasant versus conflict situations," *The Journal of Psychology*, 142 (3), 245-60.
- Cai, Chunfeng, Liping Yu, Lan Rong, and Hanling Zhong (2014), "Effectiveness of humor intervention for patients with schizophrenia: A randomized controlled trial," *Journal of Psychiatric Research*, 59, 174-78.
- Campbell, Lorne, Rod A. Martin, and Jennie R. Ward (2008), "An observational study of humor use while resolving conflict in dating couples," *Personal Relationships*, 15 (1), 41-55.

- Campbell, Margaret C. and Caleb Warren (2015), "Goal monitoring: When one step forward seems larger than one step back," *Journal of Consumer Research*, 41, 1316-31.
- Cantor, Joanne, and Pat Venus (1980), "The effect of humor on recall of a radio advertisement." *Journal of Broadcasting & Electronic Media*, 24 (1), 13-22.
- Carlson, Kieth A. (2011), "The impact of humor on memory: Is the humor effect about humor?" *Humor-International Journal of Humor Research*, 24 (1), 21-41.
- Carver, Charles S. and Michael F. Scheier (1998), *On the Self-Regulation of Behavior*, New York: Cambridge University Press.
- Cavanaugh, Lisa A., James R. Bettman, Mary Frances Luce, and John W. Payne (2007), "Appraising the appraisal-tendency framework," *Journal of Consumer Psychology*, 17, 169-73.
- Chang, Edward C., and Angela S. Farrehi (2001), "Optimism/pessimism and information-processing styles: can their influences be distinguished in predicting psychological adjustment?" *Personality and Individual Differences*, 31 (4), 555-62.
- Chang, Hannah H., and Michel Tuan Pham (2013), "Affect as a decision-making system of the present," *Journal of Consumer Research*, 40 (1), 42-63.
- Cheng, David, and Lu Wang (2015), "Examining the energizing effects of humor: The influence of humor on persistence behavior," *Journal of Business and Psychology*, 30 (4), 759-72.
- Chulef, Ada S., Stephen J. Read, and David A. Walsh (2001), "A hierarchical taxonomy of human goals," *Motivation and Emotion*, 25 (3), 191-232.
- Cline, Thomas W., Jame J. Kellaris, and Karen A. Machleit (2011), "Consumers' need for levity in advertising communications", *Journal of Marketing Communications*, 17 (1), 17-35.
- Cogan, Rosemary, Dennis Cogan, William Waltz and Melissa McCue (1987), "Effects of

- laughter and relaxation on discomfort thresholds,” *Journal of Behavioral Medicine*, 10 (2), 139-44.
- Cohen, Joel B., Michel T. Pham, and Eduardo Andrade (2008), “The nature and role of affect in consumer behavior,” *Handbook of Consumer Psychology*, Ed. Curt Haugtvedt, Frank Kardes, and Paul Herr. Mahwah, NJ: Erlbaum, 297-348.
- Conway, Michael, and Laurette Dubé (2002), “Humor in persuasion on threatening topics: Effectiveness is a function of audience sex role orientation,” *Personality and Social Psychology Bulletin*, 28 (7), 863-73.
- Cools, Joseph, David E. Schotte, and Richard J. McNally (1992), “Emotional arousal and overeating in restrained eaters,” *Journal of Abnormal Psychology*, 101 (2), 348-51.
- Cooper, Cecily D. (2005), “Just joking around? Employee humor expression as an ingratiation behavior,” *Academy of Management Review*, 30 (4), 765-76.
- Cousins, Norman (1979), *Anatomy of an Illness as Perceived by the Patient: Reflections on Healing and Regeneration*, New York: WW Norton & Company.
- Dahl, Darren W., and C. Page Moreau (2007), “Thinking inside the box: Why consumers enjoy constrained creative experiences,” *Journal of Marketing Research*, 44 (3), 357-69.
- Danzer, Amy, J. Alexander Dale, and Herbert L. Klions (1990), “Effect of exposure to humorous stimuli on induced depression.” *Psychological Reports*, 66 (3), 1027-36.
- Davila-Ross, Marina, Bethan Allcock, Chris Thomas, and Kim A. Bard (2011), “Aping expressions? Chimpanzees produce distinct laugh types when responding to laughter of others,” *Emotion*, 11 (5), 1013-20.
- Dezecache, Guillaume, and R. I. M. Dunbar (2012), “Sharing the joke: The size of natural laughter groups,” *Evolution and Human Behavior*, 33 (6), 775-79.

Dhar, Ravi, and Klaus Wertenbroch (2000) "Consumer choice between hedonic and utilitarian goods," *Journal of Marketing Research*, 37 (1), 60-71.

Diener, Ed, and Martin EP Seligman (2002), "Very happy people," *Psychological Science*, 13 (1), 81-4.

Dillon, Kathleen M., Brian Minchoff, and Katherine H. Baker (1986), "Positive emotional states and enhancement of the immune system," *The International Journal of Psychiatry in Medicine*, 15 (1), 13-18.

Duncan, Calvin P. (1979), "Humor in advertising: A behavioral perspective," *Journal of the Academy of Marketing Science*, 7 (4), 285-306.

Dunsmoor, Joseph E., Vishnu P. Murty, Lila Davachi, and Elizabeth A. Phelps (2015), "Emotional learning selectively and retroactively strengthens memories for related events," *Nature*, 520 (7547), 345-48.

Durante, Kristina M., Vladas Griskevicius, Sarah E. Hill, Carin Perilloux, and Norman P. Li (2011), "Ovulation, female competition, and product choice: Hormonal influences on consumer behavior," *Journal of Consumer Research*, 37 (6), 921-34.

Eisend, Martin (2009), "A meta-analysis of humor in advertising," *Journal of the Academy of Marketing Science*, 37 (Summer), 191-203.

Eisend, Martin (2011), "How humor in advertising works: A meta-analytic test of alternative models," *Marketing Letters*, 22 (2), 115-32.

Fedorikhin, Alexander, and Vanessa M. Patrick (2010), "Positive mood and resistance to temptation: The interfering influence of elevated arousal," *Journal of Consumer Research*, 37 (4), 698-711.

Fishbach, Ayelet and Ravi Dhar (2005), "Goals as excuses or guides: The liberating effect of

- perceived goal progress on choice," *Journal of Consumer Research*, 32, 370-377.
- Flaherty, Karen, Marc G. Weinberger, and Charles S. Gulas (2004), "The impact of perceived humor, product type, and humor style in radio advertising," *Journal of Current Issues & Research in Advertising*, 26 (1), 25-36.
- Flamson, Thomas, and H. Clark Barrett (2008), "The encryption theory of humor: A knowledge-based mechanism of honest signaling," *Journal of Evolutionary Psychology*, 6 (4), 261-281.
- Foley, Erin, Robert Matheis, and Charles Schaefer (2002), "Effect of forced laughter on mood," *Psychological Reports*, 90 (1), 184.
- Ford, Thomas E., and Mark A. Ferguson (2004), "Social consequences of disparagement humor: A prejudiced norm theory," *Personality and Social Psychology Review*, 8 (1), 79-94.
- Fredrickson, Barbara L. (1998), "What good are positive emotions?" *Review of General Psychology*, 2 (3), 300-19.
- Fredrickson, Barbara, and Robert W. Levenson (1998), "Positive emotions speed recovery from the cardiovascular sequelae of negative emotions," *Cognition & Emotion*, 12 (2), 191-220.
- Frewen, Paul A., Jaylene Brinker, Rod A. Martin, and David J.A. Dozois (2008), "Humor styles and personality-vulnerability to depression," *Humor- International Journal of Humor Research*, 21 (2), 179-95.
- Friedman, Howard S., Joan S. Tucker, Carol Tomlinson-Keasey, Joseph E. Schwartz, Deborah L. Wingard, and Michael H. Criqui (1993), "Does childhood personality predict longevity?" *Journal of Personality and Social Psychology*, 65 (1), 176-85.
- Frijda, Nico H. (1993), "Moods, emotion episodes, and emotions," *Handbook of Emotions*, Ed.

- Michael Lewis and Jeannette M. Haviland, New York: Guilford Press, 381-403.
- Fuller, Raymond GC, and Alan Sheehy-Skeffington (1974), "Effects of group laughter on responses to humorous material, a replication and extension," *Psychological Reports* 35 (1), 531-34.
- Furnham, Adrian, Ella Hutson, and Alastaire McClelland, (2011), "The effect of gender of canned laughter on television programme appreciation," *North American Journal of Psychology*, 13 (3), 391-402.
- Gander, Fabian, Rene T. Proyer, Willbald, Ruch, and Tobias Wyss (2013), "Strength-based positive interventions: Further evidence of their potential in enticing well-being and alleviating depression," *Journal of Happiness Studies*, 14, 1241-1259.
- Gardner, Meryl P., Brian Wansink, Junyong Kim, and Se-Bum Park (2014), "Better moods for better eating? How mood influences food choice," *Journal of Consumer Psychology*, 24 (3), 320-335.
- Geisler, Fay CM, and Hannelore Weber (2010) "Harm that does not hurt: Humour in coping with self-threat," *Motivation and Emotion*, 34 (4), 446-56.
- Gervais, Matthew and David S. Wilson (2005), "The evolution and functions of laughter and humor – A synthetic approach," *The Quarterly Review of Biology*, 80 (4), 395 – 430.
- Gillespie, Brian, Mark Mulder, and Manja Leib, (2016), "Who's laughing now? The effect of simulated laughter on consumer enjoyment of television comedies and the laugh-track paradox," *Journal of the Association for Consumer Research*, 1 (4), 592-606.
- Goldstein, Jeffrey H. (1982), "A laugh a day," *The Sciences*, 22 (6), 21-5.
- Gray, Alan W., Brian Parkinson, and Robin I. Dunbar (2015), "Laughter's influence on the intimacy of self-disclosure," *Human Nature*, 26 (1), 28-43.

- Greengross, Gil and Geoffrey F. Miller (2009), "The Big Five personality traits of professional comedians compared to amateur comedians, comedy writers, and college students," *Personality and Individual Differences*, 47, 79-83.
- Greengross, Gil, and Geoffrey Miller (2011), "Humor ability reveals intelligence, predicts mating success, and is higher in males," *Intelligence*, 39 (4), 188-92.
- Griskevicius, Vladas, Martie G. Haselton, and Joshua M. Ackerman (2015), "Evolution and close relationships," *APA Handbook of Personality and Social Psychology*, Volume 3: Interpersonal Relationships, Washington, DC: APA, 3-32. doi:10.1037/14344-001
- Griskevicius, Vladas, Michelle N. Shiota, and Samantha L. Neufeld (2010), "Influence of different positive emotions on persuasion processing: a functional evolutionary approach," *Emotion*, 10 (2), 190-206.
- Griskevicius, Vladas, Joshua M. Tybur, and Bram Van den Bergh, (2010), "Going green to be seen: Status, reputation, and conspicuous conservation," *Journal of Personality and Social Psychology*, 98 (3), 392-404.
- Guéguen, Nicolas (2010), "Men's sense of humor and women's responses to courtship solicitations: An experimental field study," *Psychological Reports*, 107 (1), 145-56.
- Gulas, Charles S. and Marc G. Weinberger (2006), *Humor in Advertising: A Comprehensive Analysis*, Armonk, NY: M.E. Sharpe Inc.
- Hall, Jeffrey A. (2011), "Is it something I said? Sense of humor and partner embarrassment," *Journal of Social and Personal Relationships*, 28 (3), 383-405.
- Hall, Jeffrey A. (2015), "Sexual selection and humor in courtship a case for warmth and extroversion," *Evolutionary Psychology*, 13 (3), 1-10.

- Han, Seunghee, Jennifer S. Lerner, and Dacher Keltner (2007), "Feelings and consumer decision making: The appraisal-tendency framework," *Journal of Consumer Psychology*, 17 (3), 158-68.
- Hansen, Jochim, Madelijn Strick, Rick B. van Baaren, Mirjam Hooghuis, and Daniel H. J. Wigboldus (2009), "Exploring memory for product names advertised with humour," *Journal of Consumer Behaviour*, 8 (2-3), 135-48.
- Hastie, Reid, and Purohit A. Kumar (1979), "Person memory: Personality traits as organizing principles in memory for behaviors," *Journal of Personality and Social Psychology*, 37 (1), 25-38.
- Hehl, Franz-Josef and Willibald Ruch (1985), "The location of sense of humor within comprehensive personality spaces: An exploratory study," *Personality and Individual Differences*, 6 (6), 703-15
- Hemenover, Scott H., and Ulrich Schimmack (2007), "That's disgusting!..., but very amusing: Mixed feelings of amusement and disgust," *Cognition and Emotion*, 21 (5), 1102-13.
- Henman, L.D. (2001), "Humor as a coping mechanism: Lessons from POWs," *Humor*, 14 (1), 83-94.
- Herring, David R., Mary H. Burleson, Nicole A. Roberts, and Michael J. Devine (2011), "Coherent with laughter: Subjective experience, behavior, and physiological responses during amusement and joy," *International Journal of Psychophysiology*, 79 (2), 211-18.
- Hoch, Stephen J., and George F. Loewenstein (1991), "Time-inconsistent preferences and consumer self-control," *Journal of Consumer Research*, 17 (4), 492-507.
- Hodson, Gordon, Jonathan Rush, and Cara C. MacInnis (2010), "A joke is just a joke (except when it isn't): Cavalier humor beliefs facilitate the expression of group dominance

- motives," *Journal of Personality and Social Psychology*, 99 (4), 660-82.
- Holbrook, Morris B. (1987), "What is consumer research?" *Journal of Consumer Research*, 14 (1), 128-32.
- Holbrook, Morris B., and Elizabeth C. Hirschman, (1982), "The experiential aspects of consumption: Consumer fantasies, feelings, and fun," *Journal of Consumer Research*, 9 (2), 132-40.
- Holbrook, Morris B., and Rajeev Batra (1987), "Assessing the role of emotions as mediators of consumer responses to advertising," *Journal of Consumer Research*, 14 (3), 404-20.
- Huang, Julie Y. and John A. Bargh (2014), "The selfish goal: Autonomously operating motivational structures as the proximate cause of human judgment and behavior," *Behavioral and Brain Sciences*, 37 (2), 121-35.
- Isen, Alice M., Johnson, M.M., Mertz, E. and Robinson, G.F. (1985), "The influence of positive affect on the unusualness of word associations," *Journal of Personality and Social Psychology*, 48 (6), 1413-26.
- Isen, Alice M., Kimberly A. Daubman, and Gary P. Nowicki (1987), "Positive affect facilitates creative problem solving," *Journal of Personality and Social Psychology*, 52 (6) 1122-31.
- Janes, Leslie, and James Olson (2015), "Humor as an abrasive or a lubricant in social situations: Martineau revisited," *Humor- International Journal of Humor Research*, 28 (2), 271-88.
- Jayanti, Rama K., and Alvin C. Burns (1998), "The antecedents of preventive health care behavior: An empirical study," *Journal of the Academy of Marketing Science*, 26, 6-15.
- Kanfer, Ruth, and Phillip L. Ackerman (1989), "Motivation and cognitive abilities: An integrative/aptitude-treatment interaction approach to skill acquisition," *Journal of Applied Psychology*, 74 (4), 657-

Kashdan, Todd B., Jessica Yarbrow, Patrick E. McKnight, and John B. Nezlek (2014), "Laughter with someone else leads to future social rewards: Temporal change using experience sampling methodology," *Personality and Individual Differences*, 58, 15-19.

Kelly, J. Patrick and Paul J. Solomon (1975), "Humor in Television Advertising," *Journal of Advertising*, 4 (3), 31-5.

Keltner, Dacher, Lisa Capps, Ann M. Kring, Randall C. Young, and Erin A. Heerey (2001), "Just teasing: A conceptual analysis and empirical review," *Psychological Bulletin*, 127 (2), 229 - 48.

Keltner, Dacher, and George A. Bonanno (1997), "A study of laughter and dissociation: Distinct correlates of laughter and smiling during bereavement," *Journal of Personality and Social Psychology*, 73 (4), 687-702.

Kenrick, Douglas T., Vladas Griskevicius, Steven L. Neuberg, and Mark Schaller (2010), "Renovating the pyramid of needs contemporary extensions built upon ancient foundations," *Perspectives on Psychological Science*, 5 (3), 292-314.

Kensinger, Elizabeth A., and Suzanne Corkin (2004), "Two routes to emotional memory: Distinct neural processes for valence and arousal," *Proceedings of the National Academy of Sciences (PNAS)*, 101 (9), 3310-15.

Kim, S. H., Y. H. Kim, and H. J. Kim (2015), "Laughter and stress relief in cancer patients: A pilot study," *Evidence-Based Complementary and Alternative Medicine*, 2015, Article ID 864739, 6 pages, doi:10.1155/2015/864739.

Kopetz, Catalina E., Arie W. Kruglanski, Zachary G. Arens, Jordan Etkin, and Heather M. Johnson (2012), "The dynamics of consumer behavior: A goal systemic perspective," *Journal of Consumer Psychology*, 22 (2), 208-23.

- Kornrich, Sabino, and Frank Furstenberg (2013), "Investing in children: Changes in parental spending on children, 1972–2007," *Demography*, 50 (1), 1-23.
- Kruglanski, Arie W., James Y. Shah, Ayelet Fishbach, Ron Friedman, and Woo Young Chun (2002), "A theory of goal systems," *Advances in experimental social psychology*, 34, 331-78.
- Kuiper, Nicholas A., and Rod A. Martin (1993), "Humor and self-concept," *Humor-International Journal of Humor Research*, 6 (3), 251-70.
- Kuiper, Nicolas A., Rod A. Martin, and L. Joan Olinger (1993), "Coping humour, stress, and cognitive appraisals," *Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du Comportement*, 25 (1), 81-96.
- Kuiper, Nicholas A., Melissa Grimshaw, Catherine Leite, and Gillian Kirsh (2004). "Humor is not always the best medicine: Specific components of sense of humor and psychological well-being," *Humor- International Journal of Humor Research*, 17 (1/2), 135-68.
- Kurtzberg, Terri R., Charles E. Naquin, and Liuba Y. Belkin (2009), "Humor as a relationship-building tool in online negotiations," *International Journal of Conflict Management*, 20 (4), 377-97.
- Langevin, Ronald, and H. Day (1972), "Physiological correlates of humor," *The Psychology of Humor: Theoretical Perspectives and Empirical Issues*, 129-42.
- Laran, Juliano, and Chris Janiszewski (2011), "Work or fun? How task construal and completion influence regulatory behavior," *Journal of Consumer Research*, 37 (6), 967-83.
- Laran, Juliano, Chris Janiszewski, and Anthony Salerno (2016), "Exploring the differences between conscious and unconscious goal pursuit," *Journal of Marketing Research*, 53 (3), 442-58.

- Lefcourt, Herbert M. and Rod A. Martin (1986), *Humor and life stress: Antidote to adversity*, New York: Springer-Verlag.
- Lefcourt, H. M., Davidson, K., Prkachin, K. M., & Mills, D. E. (1997), "Humor as a stress moderator in the prediction of blood pressure obtained during five stressful tasks," *Journal of Research in Personality*, 31, 523-42.
- Lefcourt, Herbert M., Karina Davidson-Katz, and Karen Kueneman (1990), "Humor and immune-system functioning," *Humor-International Journal of Humor Research*, 3 (3), 305-22.
- Lehmann-Willenbrock, Nale, and Joseph A. Allen (2014), "How fun are your meetings? Investigating the relationship between humor patterns in team interactions and team performance," *Journal of Applied Psychology*, 99(6), 1278-287.
- Li, Norman P., Vladas Griskevicius, Kristina M. Durante, Peter K. Jonason, Derek J. Pasisz, and Katherine Aumer (2009), "An evolutionary perspective on humor: Sexual selection or interest indication?" *Personality and Social Psychology Bulletin*, 35 (7), 923-36.
- Lockwood, Nicholas L., and Stephen M. Yoshimura (2014), "The heart of the matter: The effects of humor on well-being during recovery from cardiovascular disease," *Health Communication*, 29 (4), 410-20.
- Long, Debra L. and Arthur C. Graesser (1988), "Wit and humor in discourse processing," *Discourse Processes*, 11 (1), 35-60.
- Lund, Dale A., Rebecca Utz, Michael S. Caserta, and Brian De Vries (2009), "Humor, laughter, and happiness in the daily lives of recently bereaved spouses," *OMEGA-Journal of Death and Dying*, 58 (2), 87-105.
- Lynch, John G., Howard Marmorstein, and Michael F. Weigold (1988), "Choices from sets

- including remembered brands: Use of recalled attributes and prior overall evaluations,” *Journal of Consumer Research*, 15 (2), 169-84.
- Lyttle, Jim (2007), “The judicious use and management of humor in the workplace,” *Business Horizons*, 50 (3), 239-45.
- Lyubomirsky, Sonja, Rene Dickerhoof, Julia K. Boehm, and Kennon M. Sheldon (2011), “Becoming happier takes both a will and a proper way: An experimental longitudinal intervention to boost well-being,” *Emotion*, 11(2), 391-402.
- Lyubomirsky, Sonja, Laura King, and Ed Diener (2005), “The benefits of frequent positive affect: Does happiness lead to success?” *Psychological Bulletin*, 131 (6), 803-55.
- MacInnis, Deborah J, (2011), "A framework for conceptual contributions in marketing," *Journal of Marketing*, 75 (4), 136-154.
- Madden, Thomas and Mark G. Weinberger (1982), “The effects of humor on attention in magazine advertising,” *Journal of Advertising*, 11, 8-14.
- Martin, Leslie R., Howard S. Friedman, Joan S. Tucker, Carol Tomlinson-Keasey, Michael H. Criqui, and Joseph E. Schwartz (2002), "A life course perspective on childhood cheerfulness and its relation to mortality risk," *Personality and Social Psychology Bulletin*, 28 (9), 1155-65.
- Martin, Rod A. (2001), “Humor, laughter, and physical health: Methodological issues and research findings,” *Psychological Bulletin*, 127 (4), 504-19.
- Martin, Rod A. (2007), *The Psychology of Humor: An Integrative Approach*, Burlington, MA: Elsevier Academic Press.
- Martin, Rod A., and Herbert M. Lefcourt (1983), “Sense of humor as a moderator of the relation between stressors and moods,” *Journal of Personality and Social Psychology*, 45 (6),

1313-24.

Martin, Rod A., and Nicholas A. Kuiper (1999), "Daily occurrence of laughter: Relationships with age, gender, and Type A personality," *Humor*, 12 (4), 355-84.

Martin, Rod A., Patricia Puhlik-Doris, Gwen Larsen, Jeanette Gray and Kelly Weir (2003), "Individual differences in uses of humor and their relation to psychological well-being: Development of the Humor Styles Questionnaire," *Journal of Research in Personality*, 37, 48- 75.

Matusaka, Takahisa (2004), "When does play panting occur during social play in wild chimpanzees?" *Primates*, 45 (4), 221-9.

McCann, Pol Dominic, David Plummer, and Victor Minichiello (2010), "Being the butt of the joke: Homophobic humour, male identity, and its connection to emotional and physical violence for men," *Health Sociology Review*, 19 (4), 505-21.

McClelland, David C., and Adam D. Cheriff (1997), "The immunoenhancing effects of humor on secretory IgA and resistance to respiratory infections," *Psychology and Health*, 12 (3), 329-44.

McGee, Elizabeth, and Mark Shevlin (2009), "Effect of humor on interpersonal attraction and mate selection," *The Journal of Psychology*, 143 (1), 67-77.

McGhee, Paul E. (1999), *Health, healing and the amuse system: Humor as survival training*. Kendall/Hunt Pub.

McGraw, A. Peter and Caleb Warren (2010), "Benign violations: Making immoral behavior funny," *Psychological Science*, 21 (8), 1141-49.

McGraw, A. Peter, Caleb Warren, Lawrence Williams, and Bridget Leonard (2012), "Too Close for Comfort, or Too Far to Care? Finding humor in Distant Tragedies and Close

- Mishaps,” *Psychological Science*, 23 (10), 1215 - 223.
- McGraw, A. Peter and Joel Warner (2014), *The Humor Code: A Global Search for What Makes Things Funny*, New York, NY: Simon & Schuster.
- McGraw, A. Peter, Caleb Warren, and Christina Kan (2015), “Humorous complaining,” *Journal of Consumer Research*, 41 (5), 1153-71.
- McGraw, A. Peter, Julie L. Schiro, and Philip M. Fernbach (2015), “Not a problem: A downside of humorous appeals,” *Journal of Marketing Behavior*, 1 (2), 187-208.
- Mellers, Barbara A (2000), “Choice and the relative pleasure of consequences,” *Psychological Bulletin*, 126 (6), 910-924.
- Mick, David G. (2006), “Meaning and mattering through transformative consumer research,” *Advances in Consumer Research*, 33, 1-4.
- Miczo, Nathan, Joshua M. Averbek, and Theresa Mariani (2009), “Affiliative and aggressive humor, attachment dimensions, and interaction goals,” *Communication Studies*, 60 (5), 443-59.
- Mitas, Ondrej, Careen Yarnal, and Garry Chick (2012), “Jokes build community: Mature tourists’ positive emotions,” *Annals of Tourism Research*, 39 (4), 1884-905.
- Mobbs, Dean, Michael D. Greicius, Eiman Abdel-Azim, Vinrod Menon, and Allan L. Reiss (2003), “Humor modulates the mesolimbic reward centers,” *Neuron*, 40 (5), 1041-48.
- Monahan, Kathleen (2015), “The use of humor with older adults aging in place,” *Social Work in Mental Health*, 13 (1), 61-9.
- Moorman, Christine, and Erika Matulich (1993), “A model of consumers' preventive health behaviors: The role of health motivation and health ability,” *Journal of Consumer Research*, 20 (2), 208-28.

- Moran, Carmen C. (1996), "Short-term mood change, perceived funniness, and the effect of humor stimuli," *Behavioral Medicine*, 22 (1), 32-8.
- Morreall, John (1983), *Taking Laughter Seriously*, Albany, NY: SUNY Press.
- Moreau, C. Page and Darren W. Dahl (2005), "Designing the solution: The impact of constraints on consumers' creativity," *Journal of Consumer Research*, 32 (1), 13-22.
- Moyer-Gusé, Emily, Chad Mahood, and Sarah Brookes (2011), "Entertainment-education in the context of humor: Effects on safer sex intentions and risk perceptions," *Health Communication*, 26 (8), 765-74.
- Mukherjee, Ashesh, and Laurette Dubé (2012), "Mixing emotions: The use of humor in fear advertising," *Journal of Consumer Behaviour*, 11 (2), 147-61.
- Mulkay, Michael Joseph (1988), *On humor: Its nature and its place in modern society*, Polity Press.
- Murphy, John H., Isabella CM Cunningham, and Gary B. Wilcox (1979), "The impact of program environment on recall of humorous television commercials," *Journal of Advertising*, 8 (2), 17-21.
- Nabi, Robin L., Emily Moyer-Gusé, and Sahara Byrne (2007), "All joking aside: A serious investigation into the persuasive effect of funny social issue messages," *Communication Monographs*, 74 (1), 29-54.
- Neely, Michelle N., Elizabeth Walter, Jessica M. Black, and Allan L. Reiss (2012), "Neural correlates of humor detection and appreciation in children," *The Journal of Neuroscience*, 32 (5), 1784-90.
- Newman, Michelle Gayle, and Arthur A. Stone (1996), "Does humor moderate the effects of experimentally-induced stress?" *Annals of Behavioral Medicine*, 18 (2), 101-9.

- O'Quin, Karen and Joel Aronoff (1981), "Humor as a technique of social influence," *Social Psychology Quarterly*, 44, 349–57.
- Panksepp, Jaak, and Jeff Burgdorf (2003), "'Laughing' rats and the evolutionary antecedents of human joy?" *Physiology & Behavior*, 79 (3), 533-47.
- Park, C. Whan, Andreas B. Eisingerich, and Jason Whan Park, (2013), "Attachment–aversion (AA) model of customer–brand relationships," *Journal of Consumer Psychology*, 23 (2), 229-248.
- Park, C. Whan, Bernard J. Jaworski, and Deborah J. MacInnis (1986), "Strategic brand concept-image management," *The Journal of Marketing*, 50 (4), 135-145.
- Pellegrini, Anthony D. (1995), "A longitudinal study of boys' rough-and-tumble play and dominance during early adolescence," *Journal of Applied Developmental Psychology*, 16 (1), 77-93.
- Pellis, Sergio M., and Vivien C. Pellis (2007), "Rough-and-tumble play and the development of the social brain," *Current Directions in Psychological Science*, 16 (2), 95-8.
- Pham, Michel T., Maggie Geuens, and Patrick De Pelsmacker (2013), "The influence of ad-evoked feelings on brand evaluations: Empirical generalizations from consumer responses to more than 1000 TV commercials," *International Journal of Research in Marketing*, 30 (4), 383–94.
- Provine, Robert R. (2000), *Laughter: A Scientific Investigation*, New York: Viking.
- Pundt, Alexander (2015), "The relationship between humorous leadership and innovative behavior," *Journal of Managerial Psychology*, 30 (8), 878-93.
- Radcliffe-Brown, Alfred R. (1940), "On joking relationships," *Africa*, 13, 195–210.
- Ramachandran, Vilayanur S (1998), "The neurology and evolution of humor, laughter, and

- smiling: The false alarm theory," *Medical hypotheses*, 51 (4), 351-354.
- Richins, Marsha L. (1994), "Valuing things: The public and private meanings of possessions," *Journal of Consumer Research*, 21 (3), 504-521.
- Romundstad, Solfrid, Sven Svebak, Are Holen, and Jostein Holmen (2016), "A 15-year follow-up study of sense of humor and causes of mortality: The Nord-Trøndelag Health Study," *Psychosomatic Medicine*, 78 (3), 345-53.
- Romero, Eric J., and Kevin W. Cruthirds (2006), "The use of humor in the workplace," *The Academy of Management Perspectives*, 20 (2), 58-69.
- Ross, Marina Davila, Michael J. Owren, and Elke Zimmermann (2009), "Reconstructing the evolution of laughter in great apes and humans," *Current Biology*, 19 (13), 1106-11.
- Rothbart, Mary K. (1973), "Laughter in young children," *Psychological Bulletin*, 80 (3), 247-56.
- Rotton, James, and Mark Shats (1996), "Effects of state humor, expectancies, and choice on postsurgical mood and self-medication: a field experiment," *Journal of Applied Social Psychology*, 26 (20), 1775-94.
- Rowe, Alison, and Cheryl Regehr (2010), "Whatever gets you through today: An examination of cynical humor among emergency service professionals," *Journal of Loss and Trauma*, 15 (5), 448-64.
- Ruch, Willibald (1993), "Exhilaration and humor," *Handbook of Emotions*, 1, 605-16.
- Ruch, Willibald (1997), "State and trait cheerfulness and the induction of exhilaration," *European Psychologist*, 2 (4), 328-41.
- Rudnick, Abraham, Paul M. Kohn, Kim R. Edwards, David Podnar, Sara Caird, and Rod Martin (2014), "Humour-related interventions for people with mental illness: A randomized controlled pilot study," *Community Mental Health Journal*, 50 (6), 737-42.

- Sanbonmatsu, David M., and Frank R. Kardes (1988), "The effects of physiological arousal on information processing and persuasion," *Journal of Consumer Research*, 15 (3), 379-85.
- Samson, Andrea C., and James J. Gross (2012), "Humour as emotion regulation: The differential consequences of negative versus positive humour," *Cognition & Emotion*, 26, 375-84.
- Saroglou, Vassilis, and Christel Scariot (2002), "Humor Styles Questionnaire: Personality and educational correlates in Belgian high school and college students," *European Journal of Personality*, 16 (1), 43-54.
- Schmidt, Stephen R. (1994), "Effects of humor on sentence memory," *Journal of Experimental Psychology*, 20 (4), 953-67.
- Schwarz, Norbert, and Gerald L. Clore (1983), "Mood, misattribution, and judgments of well-being: Informative and directive functions of affective states," *Journal of Personality and Social Psychology*, 45 (3), 513-523.
- Scott, Cliff, David M. Klein, and Jennings Bryant (1990), "Consumer response to humor in advertising: A series of field studies using behavioral observation," *Journal of Consumer Research*, 16 (4), 498-501.
- Shahidi, Mahvash, Ali Mojtahed, Amirhossein Modabbernia, Mohammad Mojtahed, Abdollah Shafiabady, Ali Delavar, and Habib Honari (2011), "Laughter yoga versus group exercise program in elderly depressed women: A randomized controlled trial," *International Journal of Geriatric Psychiatry*, 26 (3), 322-7.
- Sherman, Lawrence W. (1985), "Humor and social distance," *Perceptual and Motor Skills*, 61, 1274.
- Sheth, Jagdish N., Bruce I. Newman, and Barbara L. Gross (1991), "Why we buy what we buy: A theory of consumption values," *Journal of Business Research*, 22 (2), 159-170.

- Shiota, Michelle N., Belinda Campos, Dacher Keltner, and Matthew J. Hertenstein (2004), "Positive emotion and the regulation of interpersonal relationships," *The Regulation of Emotion*, Ed. Pierre Philippot, Pierre Philippot, Robert S. Feldman, Mahwah, NJ: Lawrence Erlbaum Associates, 127–55.
- Smith, Wanda J., K. Vernard Harrington, and Christopher P. Neck (2000), "Resolving conflict with humor in a diversity context," *Journal of Managerial Psychology*, 15 (6), 606-25.
- Smeltzer, Larry R., and Terry L. Leap (1988), "An analysis of individual reactions to potentially offensive jokes in work settings," *Human Relations*, 41 (4), 295-304.
- Speck, Paul Sirgi (1987), *On Humor and Humor in Advertising*, Dissertation, Texas Tech University.
- Stern, Barbara B. (1996), "Advertising comedy in electronic drama: The construct, theory and taxonomy," *European Journal of Marketing*, 30 (9), 37-59.
- Sternthal, Brian and C. Samuel Craig (1973), "Humor in advertising," *Journal of Marketing*, 37 (4), 12-8.
- Stone, Arthur A., Donald S. Cox, Heiddis Valdimarsdottir, Lina Jandorf, and John M. Neal (1987), "Evidence that secretory IgA antibody is associated with daily mood," *Journal of Personality and Social Psychology*, 52 (5), 988-93.
- Strick, Madelijn, Rob W. Holland, Rick B. van Baaren, and A. D. Van Knippenberg (2009), "Finding comfort in a joke: consolatory effects of humor through cognitive distraction," *Emotion*, 9 (4), 574-8.
- Strick, Madelijn, Rob W. Holland, Rick B. Van Baaren, and A. D. Van Knippenberg (2010), "The puzzle of joking: Disentangling the cognitive and affective components of humorous distraction," *European Journal of Social Psychology*, 40 (1), 43-51.

- Strick, Madelijn, Rob W. Holland, Rick B. van Baaren, and Ad van Knippenberg (2012), "Those who laugh are defenseless: How humor breaks resistance to influence," *Journal of Experimental Psychology: Applied*, 18 (2), 213-23.
- Suls, Jerry (1972), "A two-stage model for the appreciation of jokes and cartoons: An information-processing analysis," in *The Psychology of Humor: Theoretical Perspectives and Empirical Issues*, Ed. Jeffrey. H. Goldstein and Paul. E. McGhee, New York: Academic Press, 81-100.
- Svebak, Sven, Bjørn Kristoffersen, and Knut Aasarød (2006), "Sense of humor and survival among a county cohort of patients with end-stage renal failure: a two-year prospective study," *The International Journal of Psychiatry in Medicine*, 36 (3), 269-81.
- Svebak, Sven, Solfrid Romundstad, and Jostein Holmen (2010), "A 7-year prospective study of sense of humor and mortality in an adult county population: The HUNT-2 study," *The International Journal of Psychiatry in Medicine*, 40 (2), 125-46.
- Szabo, Attila (2003), "The acute effects of humor and exercise on mood and anxiety," *Journal of Leisure Research*, 35(2), 152-62.
- Terrion, Jenepher L., and Blake E. Ashforth (2002), "From I to we: The role of putdown humor and identity in the development of a temporary group," *Human Relations*, 55, 55-88.
- Treger, Stanislav, Susan Sprecher, and Ralph Erber (2013), "Laughing and liking: Exploring the interpersonal effects of humor use in initial social interactions," *European Journal of Social Psychology*, 43 (6), 532-43.
- Van Osselaer, Stijn M. J. and Chris Janiszewski (2012), "A goal-based model of product evaluation and choice," *Journal of Consumer Research*, 39 (2), 260-92.
- Veatch, Thomas C. (1998), "A theory of humor," *Humor-International Journal of Humor*

- Research*, 11(May), 161-215.
- Wanzer, Melissa Bekelja, Melanie Booth-Butterfield, and Steve Booth-Butterfield (1996), "Are funny people popular? An examination of humor orientation, loneliness, and social attraction," *Communication Quarterly*, 44 (1), 42-52.
- Warren, Caleb and A. Peter McGraw (2013), "When humor backfires: Revisiting the relationship between humorous marketing and brand attitude," *Marketing Science Institute Reports*, 13-124.
- Warren, Caleb and A. Peter McGraw (2015), "Opinion: What makes things humorous," *Proceedings of the National Academy of Sciences*, 112 (June 9), 7105-6.
- Warren, Caleb and A. Peter McGraw (2016a), "When do humorous marketing communications hurt brands?" *Journal of Marketing Behavior*, 2, 39-67.
- Warren, Caleb and A. Peter McGraw (2016b), "Differentiating what is humorous from what is not," *Journal of Personality and Social Psychology*, 110, 407-30.
- Weaver, James and Dolf Zillmann (1994), "Effect of humor and tragedy on discomfort tolerance," *Perceptual and Motor Skills*, 78, 632-4.
- Weisfeld, Glenn E. (1993), "The adaptive value of humor and laughter," *Ethology and Sociobiology*, 14 (2), 141-69.
- White, Sabina, and Phame Camarena (1989), "Laughter as a stress reducer in small groups," *Humor: International Journal of Humor Research*, 2 (1), 73-9.
- Williams, Michele and Kyle J. Emich (2014), "The experience of failed humor: Implications for interpersonal affect regulation," *Journal of Business Psychology*, 29, 651-68.
- Wyer, Robert S., and James E. Collins (1992), "A theory of humor elicitation," *Psychological Review*, 99, 663-88.

- Yamao, Yukihiro, Riki Matsumoto, Takeharu Kunieda, Sumiya Shibata, Akihiro Shimotake, Takayuki Kikuchi, Takeshi Satow et al. (2015), "Neural correlates of mirth and laughter: a direct electrical cortical stimulation study," *Cortex*, 66, 134-40.
- Yam, Kai Chi, Michael Christian, Wu Wei, Zhenyu Liao, and Jared Nai (2017), "The mixed blessing of leader sense of humor: Examining costs and benefits," *Academy of Management Journal*, Forthcoming.
- Yoon, Hye Jin (2015), "Humor effects in shame-inducing health issue advertising: The moderating effects of fear of negative evaluation," *Journal of Advertising*, 44, 126-39.
- Zhang, Yong (1996), "Responses to humorous advertising: The moderating effect of need for cognition," *Journal of Advertising*, 25 (Spring), 15-32.
- Zhang, Yong, and George M. Zinkhan (2006), "Responses to humorous ads: Does audience involvement matter?" *Journal of Advertising*, 35 (4), 113-27.
- Zillmann, Dolf, Steve Rockwell, Karla Schweitzer, and S. Shyam Sundar (1993), "Does humor facilitate coping with physical discomfort?" *Motivation and Emotion*, 17 (1), 1-21.
- Ziv, Avner (1976), "Facilitating effects of humor on creativity," *Journal of Educational Psychology*, 68(3), 318.
- Ziv, Avner (1988), "Teaching and learning with humor: Experiment and replication," *The Journal of Experimental Education*, 57 (1), 4-15.
- Zweyer, Karen, Barbara Velker, and Willibald Ruch (2004), "Do cheerfulness, exhilaration, and humor production moderate pain tolerance? A FACS study," *Humor*, 17 (1/2), 85-120.

1) FRAMEWORK**1) CONCEPTUALIZING HUMOR****1) PROCESS MECHANISMS**

2) Mechanisms Driving the Effects of Humor Appreciation

3) *Affective Mechanisms*3) *Cognitive Mechanisms*3) *Signaling Mechanisms*

2) Mechanisms Driving the Effects of Comedy Production

3) *Indirect Mechanisms*3) *Signaling Mechanisms***1) MODERATING FACTORS**

2) Humor Efficacy: Successful vs. Failed Comedy

2) Humor Styles: Aggressive, Self-Defeating, Self-Enhancing, and Affiliative

2) Consumption Goal

3) *Hedonic Goals*3) *Utilitarian Goals*

3) Social Goals

1) HUMOR EFFECTS ON HEDONIC GOALS

2) Humor Appreciation Shapes Affective Responses to Consumption

2) Comedy Production Shapes Affective Responses to Consumption Experiences

1) HUMOR EFFECTS ON UTILITARIAN GOALS

2) Humor Appreciation Influences Decision-Making

3) *Memory*3) *Information Processing*3) *Creativity*

2) Humor Appreciation Influences Persistence

2) Effects of Humor Appreciation and Comedy Production on Health

3) *Physical Health*3) *Mental Health***1) HUMOR EFFECTS ON SOCIAL GOALS**

2) Comedy Production Influences Communication Effectiveness

3) *Attracting Attention*3) *Message Acceptance*3) *Perceived Importance*3) *Emotional Reactions*

2) Humor Appreciation, Social Skills, and Relationships

2) Comedy Production and Social Goals

3) *Relationship Attractiveness*3) *Managing Conflict***1) FUTURE DIRECTIONS****1) CONCLUSION****1) REFERENCES**