Craft Beer Consumption: The Roles of Motivation and Personal Involvement

INTRODUCTION

Since the 1990s (Choi & Stack, 2005), the craft beer industry has been one of the fastest-growing segments in the beverage industry and its growing popularity has influenced consumer preferences and consumption patterns (Aquilani et al., 2015). The impact of the craft beer industry is shown by statistics indicating that it contributes $79 billion a year to the US economy (Newhart, 2019), and this impact has continued to grow. According to a recent annual report from the Brewers Association (Brewers Association, 2019), the number of craft breweries increased by 92% between 2014 and 2018, with craft brewers claiming a 13.2% share in volume produced in 2018 with an estimated retail dollar value of $27.6 billion.

Craft beer has been defined in many ways. According to the Craft Beverage Modernization and Tax Reform Act of 2019, a craft brewery operates a beverage-production facility that produces less than six million barrels annually. A craft beer trade group, the Brewers Association (n.d.), amended the definition of a craft brewer at the end of 2018 to denote a "small . . . independent . . . brewer" (Brewers Association, 2019). This definition retains the six-million-barrel annual production volume but adds that, to be classified as an independent brewery, the brewers themselves must hold a 75% share of a company's ownership. The brewers should also obtain a Brewer's Notice issued by the Alcohol and Tobacco Tax and Trade Bureau (TTB) to make beer. Craft beer includes ale, stout, porter, and many other varieties of beer (Elzinga et al., 2015). It has been shown that, for their part, consumers associate craft beer with small breweries (Kleban & Nickerson, 2011).

The modern craft beer industry was initiated by the legendary Fredrick Louis Maytag, III (Fritz Maytag), the former owner of Anchor Brewing (Elzinga et al., 2015). Since 1965, when Anchor Brewing and Maytag invented early microbrewing techniques, the share of the craft beer market has been increasing, especially in recent years. As the market segment grows, craft beer has been gaining the attention of the alcoholic beverage industry. Nonetheless, while craft beer is a growing market, it is still lagging behind spirits and wine consumption in the US (Nielsen, 2020).

Consumers often perceive craft beer to be superior in quality to other commercial brands' beers (Aquilani et al., 2015). Moreover, consumers approach craft beer in a more personal way than they do commercial beer, as they consume craft beer for meaningfulness, identification, and uniqueness (Gómez-Corona et al., 2016). Kleban and Nickerson (2011) found in a study of the explicit behaviors of craft beer consumers they seek a "taste revolution" and are less sensitive to price than commercial beer consumers. The personal aspects and uniqueness-seeking behaviors observed in craft beer consumption behaviors justify separate investigations of these behaviors in the unique craft brewing context. Although a handful of studies explored the craft beer industry and consumer behavior, most of these studies have focused on international settings. Thus, this study proposes investigating the relationships among motivation, involvement, and consumption behavior within the context of craft beer in the US, adopting a recent causal model developed by Taylor et al. (2018). Since involvement can be defined as a construct that links a person to a thing, and personal involvement reflects a person's attachment to a product through needs, values and interests, we anticipate that personal involvement will have a relationship with internal and/or external factors leading to consumption (Chen & Tsai, 2008).

The goal of this study, then, is twofold. We first explore consumption behaviors and motivations of craft beer consumers in the United States and second, expand the utility of the instrument developed by Taylor et al. (2018) beyond wine consumption into other alcoholic beverage segments. We should note that the earlier study examined intrinsic motivational factors (e.g. personal attributes) – those that push the consumer toward wine products – and the extrinsic motivational product attributes (e.g. situational attributes) those that draw – or pull – the consumer toward wine products, providing an excellent foundation for the current study. Moreover, by understanding what internal and external factors along with personal involvement motivate consumption, marketing strategies can be focused on those motivators that directly relate to increased consumption behaviors. However, to date, there has been no such investigation with respect to craft beer consumption. Thus, a notable contribution of our work here is to expand Taylor et al's (2018) model of wine consumption to a distinct yet related product, and thus examine the generalizability of their model.

LITERATURE REVIEW

Alcoholic Beverage Research

During the twenty-first century, several major trends have emerged in beverage consumption (Popkin, 2010). One of these trends has been an increased interest by consumers in higher-quality artisanal beverages. Products such as coffee (Samoggia & Riedel, 2018) and liquors (Lyons, 2014) are now viewed in the same vein as wine (e.g. Rahman & Reynolds, 2015) in terms of their quality. Similar trends have also occurred in the craft beer market both in the US as well as internationally. In the following sections we review the research on craft beer consumption, to illustrate how consumers view craft beer. This is in line with the recommendations from Long, Todd, Velikova, and Scott-Haskell (2018); it also sets the stage for future research as we explain in the final section.

United States

In the US, the alcoholic beverage market is dominated by beer (Popkin, 2010). In particular, the surge in popularity of the beer segment has benefited from innovation, creativity, typicality, and authenticity, attributes that typify craft beer as the focal point of an experience that delivers pleasure, enjoyment, a sense of identity and belonging, self-fulfillment, social recognition, and sustainability **(**Aquilani et al., 2015; Berkhout et al., 2013; Gómez-Corona et al., 2016; Kraftchick et al., 2014; McLaughlin et al., 2014). Manzi (2012) found that the diffusion of craft beers has increased product diversity in terms of flavors and textures. Moreover, Aquilani et al. (2015) found that craft beer is selected by consumers because of its variety of flavors. The diverse flavors of craft beer have influenced the perception that craft beers are higher in quality than commercial beer (Aquilani et al., 2015). Thus, with these characteristics, craft beer might possibly attract new consumers who prefer diverse choices when contemplating the consumption of alcoholic beverages.

In a study by Hart and Alston, (2020), trends in alcoholic beverage consumption was studied in the US, focusing primarily on craft beer and wine consumption and the relationship between the two. The study found relationships between beer and wine consumption when examining ancestral alcohol consumption patterns

(ethnic origin habits transend to US consumers) and political affiliations (regions supporting Trump consumend more domestic beers and less of other alcoholic beverages). Additionally, an annual survey by Neilson called the Craft Beer Insights poll found that in the US more women are drinking craft beer, with 44% of women polled now consuming craft beer, which is an increase of 8% over the previous year (Infante, 2020). These studies suggest that craft beer is developing a following like other artisanal beverages, including wine.

International Craft Beer

The US ranks second only to China in consumption worldwide with Brazil third (Kirin, 2018). Given this fact, it is surprising that the majority of craft beer research has been done in countries other than the US. Next is an examination of the international research on craft beer. Again, this underscores the ubiquitous nature of the phenomenon studied here and the need for more international comparisons.

Brazil

There have been a number of studies on craft beer consumption in Brazil from varying perspectives, examining both characteristics of the beer as well as characteristics of the consumers. For example, Thomé et al. (2017) found that beer consumers are not homogenous and when examining consumption, different types of beer and behaivors need to be considered, since various types of beer cconsumers involve different behaviors, attitudes, and social interactions. With respect to personal characteristics related to craft beer consumption, Carvello et al. (2018) found that men outnumbered women in craft beer consumption and over 70% of the respondents consuming craft beer were college educated.

Europe

In a study in Italy, Donadini and Porretta (2017) found that consumers there valued the packaging and local ingredients that distinguished craft beer from offerings produced by large beer companies. Additionally, Donadini et al. (2016) found that consumers' perceptions of craft beers in Italy, Poland, and Spain differed. In the study, Italians' primary focus was on ingredients. However, the Spanish and Polish participants focused on price first and ingredients second.

Mexico

In a study by Gomez-Corona et al. (2016), they found that consumers of craft beer viewed consumption of the product as symbolic and experienced-based, focusing on a more unique and authentic product when compared to mass produced beer. Additionally, they found that men outnumbered women in craft beer consumption in the country, consistent with what studies found in other countries.

China

Although China is the largest consumer of craft beer, there still are relatively few studies on consumption. Many of these studies actually focus on consumption of European beers in China. One study by Wang et al. (2017) found that consumption of European beers was positively associated with the beer's origin, brand, color, and texture, whereas price and alcoholic content were viewed as negative attributes related to consumption. Interestingly, these findings are consistent with studies of wine consumption in China. In contrast, the owners of Bad Monkey (an Indian craft brewer), , found that the Chinese were sophisticated enough consumers to be willing to pay more for tastier, high quality beers (Berg, 2013). Wang (2018) also found that quality value, hedonistic value, and aesthetic value were positive drivers for craft beer consumption in China. Moreover, China is now home to many craft breweries and craft beer producers (Green, 2016).

Summary

The above research clearly demonstrates that consumers of craft beer are attuned to the various unique aspects of such beers, and in this respect, the appreciation of craft beer is not dissimilar from that of other artisanal beverages (e.g., wine). Indeed, it appears that appreciation of craft beer is not limited to one particular geographic region, and that there are a number of similarities in what consumers attend to in their beer consumption. Thus, even though the craft beer market has been growing, such positive developments do not, however, free craft brewers from considering consumers' expectations and preferences when designing and marketing their beers (Van Trijp & Van Kleef, 2008). Acknowledging the importance of identifying beverage consumption patterns and consumer preferences to expanding the beverage market and developing successful marketing strategies (Agnoli et al., 2018), many studies have sought to identify the attributes that influence beer consumption, such as demographic characteristics (Storey et al., 2006) and price (Burton & Pearse, 2003).

Nevertheless, research focusing on craft beer consumption in light of both internal and external motivations and/or personal involvement are scarce.

Motivation

Motivation involves a set of psychological or biological factors that influence an individual's behavior (Dann, 1981; Pearce, 1982) and has been widely adopted theoretically to explain consumption behaviors (Di Vita et al., 2019; Taylor et al., 2018; Truong & McColl, 2011; Van Dam & Van Trijp, 2016). Although there are a wide variety of motivation theories, one approach divides motivation into internal and external motivation. While internal (i.e., intrinsic) motives have been characterized as personal needs that can be physiological, social, or egocentric in nature (Kim et al., 2010), external (i.e., extrinsic) motives are linked to publicly accessible environmental, physical, and social factors (Iso-Ahola, 1989) and in some cases, branding (Orth et al., 2004).

Intrinsic and extrinsic motivation factors have been found to strongly influence the consumption of craft beer in the U.S. (Francioni & Byrd, 2012). In a study on the motivation to consume craft beer, Gómez-Corona et al. (2016) found that desire for more knowledge, new taste experiences, and avoidance of mass-produced beer were the main reasons to drink craft beer. From a consumer preference perspective, factors that influence beer choice generally involve either beer attributes or factors related to the purchase process (Aquilani et al., 2015). Four motivational factors associated with craft breweries that are identified by Francioni and Byrd (2012) are related to intrinsic and extrinsic motivation. Specifically, the craft brewery experience and beer consumption factors are related to extrinsic motivation and enjoyment and socialization factors are related to intrinsic motivation (Francioni & Byrd, 2012). Additional intrinsic and extrinsic motivational factors are discussed in the following sections.

Intrinsic motivation

Intrinsic motivation is generally defined as an "individual's desire to perform [a] task for its own sake" (Benabou & Tirole, 2003) or because he or she finds an activity inherently interesting (Feng et al., 2016). Intrinsic motivation is related to interest, enjoyment, and positive coping (Ryan & Deci, 2000). As such, intrinsic motives include escape from personal/social pressures, novelty/thrill, socialization/bonding, self-esteem, learning/discovery, social recognition/prestige, regression, and distancing oneself from crowds (Botha et al., 1999). An intrinsically motivated person acts for the sake of enjoyment or to embrace challenges rather than being compelled by external interests, pressures, or rewards (Ryan & Deci, 2000). Ryan and Deci (2000) also found that enjoyment is an intrinsic motivation for which people perform an activity. With respect to consumer behavior, intrinsic motivations such as satisfaction, dissatisfaction, vengeance, and customer loyalty have been found to influence word-of-mouth behavior that affects purchasing decisions (Anderson, 1998; Bowman & Narayandas, 2001; Sundaram et al., 1998). Intrinsic motivation also plays a role in alcoholic beverage consumption. For example, in a study by Crawford (1987), intrinsic reasons or hedonic aspects such as pleasure that are derived from alcohol consumption were found to play a role, along with extrinsic motivations, in alcohol consumption. Moreover, various studies have found that intrinsic motivation was a primary driver of wine purchasing and consumption (see Table 1 of Taylor et al., 2018, for a review). Such factors included enjoyment, a desire to increase wine knowledge, prestige, relaxation, health benefits, and interest in wine as a hobby. With respect to craft beer, Francioni and Byrd (2012) also identified the intrinsic motivation factors of enjoyment and socialization as motivational factors affecting craft beer tourism. Gómez-Corona et al. (2016) identified that intrinsic factors such as a desire for more knowledge, new taste experiences, and moving away from the mainstream beer consumption were the main reasons to drink craft beer.

Extrinsic motivation

In contrast to instrinsic motivation's focus on the internal experience of an activity, extrinsic motivation comes into play when an activity is performed "to attain some separable outcome" (White & Thompson, 2009, p. 565). From a marketing perspective, while intrinsic motivations drive internal purchasing decisions, extrinsic

factors include product characteristics that affect purchases (Taylor et al., 2018). Extrinsic factors can be seen as the external environment's opportunistic response to extrinsic psychological drivers (Dann, 1977, 1981).

Calvo-Porral and Levy-Mangin (2019) found that extrinsic factors such as perceived quality, value for the money, and product personality influence purchase intention. Galizzi and Garavaglia (2009) reported that consumer food and beverage choices are influenced by multiple contextual factors. Further, Galizzi and Garavaglia (2012) found that consumers are influenced more decisively by extrinsic factors than by intrinsic factors when making purchase decisions. Extrinsic factors also play a role in alcohol consumption (see Crawford, 1987). For example, several studies have examined the extrinsic variables that affect wine purchase (see Taylor et al., 2018, Table 1), including brand name, awards, origin, price, packaging, and information provided. Beer consumers are also influenced by similar extrinsic factors. When consumers purchase beer, they prioritize the use of local grains used in production and prefer bottled beer over beer in cans (Gómez-Corona et al., 2016; Donadini & Porretta, 2017). Sester et al. (2013) found that brand image affects consumers' beer perceptions and that consumer purchase decisions are influenced by the flavors, texture, or sensory reflections of the quality of beer. Consumers who have not tasted a product prior to purchase rely on information about the brand, the bottle, or the label when making buying decisions (Martinez et al., 2006).

Although intrinsic and extrinsic motivational factors have been found to influence purchase and consumption decisions, the degree to which the product is personally relevant or important to the purchaser/consumer is likely to also influence purchase and consumption. Craft beer drinkers that drink weekly consume more than just craft beer. The Neilson survey found that 68% of weekly craft beer drinkers consumed wine as well (Infante, 2020). This construct of personal involvement (discussed next) was found to affect wine consumption in Taylor et al.'s (2018) study and is also expected to affect craft beer consumption due to the overlap in many craft beer and wine consumers. Moreover, as will be discussed next, personal involvement has been identified as a particularly important predictor of consumer purchasing decisions.

Personal Involvement

Involvement can be defined as the "perceived relevance of an object or factor based on [a person's] inherent needs, values, and interests" (Zaichkowsky, 1985, p. 342). To the extent that involvement reflects how relevant an activity, related product, service, or experience is perceived to be (Gross & Brown, 2008; Zaichkowsky, 1985), it plays an important role in decision-making (Beldona et al., 2010; Kivela et al., 2000; Zaichkowsky, 1985) and has been considered a key concept in consumer purchasing behavior (Flynn & Goldsmith, 1993). Thus, involvement has been heavily utilized theoretically in various fields to explain situations related to consumer consumption phenomena (Beldona et al., 2010). Involvement has, for example, been used to explain the relationship between consumption behavior and consumer interest in a range of product categories, such as clothing (O'Cass, 2000), wine (Taylor et al., 2018), and food (Olsen, 2003). Moreover, Mitchell (1979) asserts that involvement is also an important factor in forming consumer responses to food products.

Brisoux and Cheron (1990), Celsi and Olson (1988), Lockshin et al. (2006), and O'Cass (2000) all found that involvement with a product influences behaviors, brand preferences, and perceptions. In addition, Beldona et al. (2010) and Olsen et al. (2015) report that consumer involvement influences motivations and behavioral intentions. According to Quester and Smart (1998) and Zaichkowsky (1988), the level of consumer involvement with wine affects the consideration of wine attributes, such as the region of origin and price, in the purchase decision-making process. Moreover, an individual's knowledge of wine has a significant effect on consumer involvement in wine purchase decisions and consumption (Lockshin et al., 1997). With respect to craft beer, Taylor and DiPietro (2017) demonstrated that involvement positively influences the willingness to pay more for craft beer.

Additionally, intrinsic and extrinsic motivation can be viewed as antecedents to personal involvement. Specifically, Zaichkowsky (1986) sorted antecedents of involvement into three categories, including personal factors, the physical characteristics of a stimulus (i.e., product), and situational variation. According to Zaichkowsky (1986), personal factors, including a person's inherent value system, play an important role in the formation of involvement with a particular product. These can be considered analogous to intrinsic motivators.

A product's physical characteristics (packaging, design, shape, etc.) as well as the contents of communication about the product (product information, promotional displays, etc.) also play a role in creating involvement and can be considered as extrinsic factors. In other words, both intrinsic and extrinsic factors affect a consumer's involvement with a product. Whereas previous studies or theories related to consumer consumption behavior were only focused on motivation and behavior, Zaichkowsky's perspective (1986) included involvement prior to behavior, suggesting that involvement mediates the influence of intrinsic and extrinsic factors on behavioral outcomes (see also Mitchell, 1979). In the context of wine consumption, Taylor et al. (2018) also posit a mediating role for involvement.

In addition, researchers over the years (e.g., Amabile, 1993) have proposed that intrinsic and extrinsic motivation might interact in the prediction of behaviors. With respect to wine consumption, Taylor et al. (2018) hypothesized that extrinsic and intrinsic motivation would interact in the prediction of personal involvement, thus explicitly testing propostions set forth by Palma et al. (2014) and Vieira and Serra (2010). When considering the joint role of intrinsic motivators and extrinsic motivators, there is likely to be a synergistic effect (Amabile, 1993; Taylor et al., 2018), such that the greatest personal involvement will occur when consumers perceive the product (here, craf beer) to be intrinsically valuable to them, and when the product is also extrinsically appealing. Thus, like previous research, we also propose that extrinsic motivation will interact with intrinsic motivation in the prediction of personal involvement.

Relationships among Motivation, Personal Involvement, and Craft Beer Consumption

This hypothesized mediating role of personal involvement between intrinsic and extrinsic motivation and consumer behavior was tested explicitly by Taylor et al. (2018) in the context of wine consumption. Their findings suggested that intrinsic motivation, extrinsic motivation, and personal involvement play critical roles in stimulating wine consumption behaviors. In particular, their study found a moderating role for extrinsic motivation that affects the impact of intrinsic motivation on personal involvement and a mediating role for personal involvement in stimulating consumption. Additionally, by examining the craft beer research, we noted that studies found attributes of personal involvement (pleasure, sense of identity, belonging, experience based,

symbolic, behaviors, attitudes, and social interactions), intrinsic (experience based, hedonistic value, and aesthetic value) and extrinsic motivational factors (beer types, packaging, ingredients, alcohol content, price influence consumption. While many studies on craft beer consumption focused on limited aspects of personal involvement, intrinsic, and/or extrinsic motivational factors, no single study examined a comprehensive framework of one or more of the three motivational factors. As Taylor et al. (2018) noted, the relationships among the variables in the wine study implies that there is more to consider when developing a marketing plan for promoting these beverages. One cannot simply either focus on intrinsic and extrinsic motivational factors alone or without considering the aspects of personal involvement and the reverse is true. However, to date, there has been no such investigation with respect to craft beer consumption. Because of the scarcity of comprehensive craft beer studies focusing directly on the three variables, the hypothesis tests of this study are exploratory in nature. Based on Taylor et al.'s (2018) study and our review of the literature, this study explores the relationships among motivation, involvement, and craft beer consumption. Specifically, based on the previous literature (e.g. Taylor et al.'s study), we proposed the following hypotheses:

H1: Extrinsic Motivation positively affects Intrinsic Motivation.

H2: Extrinsic Motivation positively affects Personal Involvement.

H3: Extrinsic Motivation positively affects Craft Beer Consumption.

H4: Intrinsic Motivation positively affects Personal Involvement.

H5: Intrinsic Motivation positively affects Craft Beer Consumption.

H6: Extrinsic Motivation positively moderates the impact of Intrinsic Motivation on Personal Involvement.

H7: Extrinsic Motivation positively moderates the impact of Intrinsic Motivation on Craft Beer Consumption.

H8: Personal Involvement mediates the impact of Intrinsic Motivation on Craft Beer Consumption.

H9: Personal Involvement mediates the impact of Extrinsic Motivation on Craft Beer Consumption.

H10: Intrinsic Motivation and Personal Involvement mediate the impact of Extrinsic Motivation on Craft Beer Consumption.

METHODOLOGY

Measurement

The survey used in the study was a modified version of the instrument developed by Taylor et al. (2018) for wine consumption reflecting differences between wine and beer.

Intrinsic motivation. Intrinsic motivation to purchase craft beer was measured using a 15-item scale adapted from Taylor et al. (2018). Respondents answered using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Extrinsic motivation. Extrinsic motivation to purchase a particular craft beer was measured using a 15-item scale adapted from Taylor et al. (2018). However, as the packaging of beer is very different from wine, two questions were changed. First, wine closures are very different from craft beer containers, so one question was changed to include the shape/style of a beer bottle. Second, unlike wine, beer is not evaluated by vintage, so a question pertaining to vintage was removed and replaced with a new question referring to the availability of purchase in a "growler," a large container with a screw top that is designed to store draft beer dispensed from a tap. Respondents answered using a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Personal involvement. Respondents' personal involvement with craft beer was assessed using Zaichkowsky's (1994) ten-item PII. We used "Craft beer to you is:" as an initial stem for all items, per Zaichkowsky's recommended method. For each item, respondents marked an "X" in one of the seven spaces between two adjectives to indicate how they feel about craft beer (e.g. "important" versus "unimportant").

Craft beer consumption. Respondents' consumption of craft beers was measured using a single item: "How many glasses of craft beer (approx. 12 oz. each) do you consume every day, on average?" with the following response scale: (1) less than one per day, (2) one per day, (3) two per day, (4) three per day and (5) four or more per day.

Demographics. The survey instrument also included demographic questions to determine respondents' gender, age, ethnicity, education, income, beer consumption experience, and beer consumption frequency.

Data Collection

Paper surveys were distributed at two craft beer festivals in the southeastern US the year prior to the COVID-19 pandemic. The festivals were selected for their focus on craft beer consumption. Respondents were screened to include only those who had purchased craft beer within the six months prior to administering the survey. This was done to isolate those attendees that were novice consumers or exploratory in craft beer at the events from those participants who attended the festival because they were already craft beer consumers. Participants in the study included festival attendees, brewers promoting their products, and exhibitors promoting food, beverages, and crafts. This is due to the structure of the festivals which included brewers promoting their craft beers, food and beverage vendors, and vendors selling various items including arts and crafts, beer memorabilia, and homebrewing supplies. Surveys were distributed by the authors with the goal to maximize participation, collecting a convenience sample of the festival participants. Because there was not a randomized systematic method for participant selection, this may be a limitation of the study.

Data Analytic Strategy

Statistical analyses were conducted using SPSS 25 and Mplus 8.3. The analytic procedures included several steps: descriptive statistics, reliability tests, confirmatory factor analysis (CFA), measurement invariance test, common method variance analysis and structural equation modeling (SEM). Descriptive statistics identified respondents' socio-demographics in frequencies and percentages. Cronbach's alpha and composite reliability scores were used to test the internal consistency of the measurements with commonly used thresholds of 0.70 for both scores (Fornell & Larcker, 1981). The hypothesis tests followed Anderson and Gerbing's (1988) two-step approach, which suggests the incorporation of CFA and SEM. The CFA not only tested composite reliability as well as convergent and discriminant validity, but it also determined composite scores for multi-item latent variables, including intrinsic motivation (INT), extrinsic motivation (EXT), and personal involvement (PI). We then used SEM to test proposed inter-construct relationships between INT, EXT, PI, and craft beer consumption (CBC). To estimate the moderating effects of EXT, the proposed model employed a

latent interaction term for INT and EXT. The moderation effect test followed Klein and Moosbrugger's (2000) two-step approach, using a latent moderated structural (LMS) equation. A mediation analysis was conducted to test the indirect effects of EXT and INT to confirm the mediating role of INT and PI in stimulating consumption behavior. Model fit indices and log-likelihood values were used to assess the goodness of fit of the proposed model.

RESULTS

Sample Profile

Of the 390 responses collected from two craft beer festivals in the southeastern United States, a total of 293 responses were used for further analyses after screening out incomplete surveys and outliers (see Table 1). Univariate outliers were removed based on box plots and multivariate outliers were removed using Mahalanobi's distances with an alpha level of .001. Even though the festivals focused on craft beer, the survey prescreened respondents by asking if they had purchased craft beer in the previous six months. Those who had not were asked not to complete the survey. A priori sample size estimation suggested that the minimum sample size to detect medium effects was 119, and a minimum of 123 was required for model structure when desired statistical power was .8 and probability level was .05 (Cohen, 1988; Westland, 2010). Thus, our final sample size for analysis had adequate power for our analyses.

The sample included 166 males (56.9%) and 127 females (43.1%), the majority of whom were 21 to 39 years old (76.5%) and white (86.0%). Respondents' education levels included some college (21.8%), bachelor's degrees (46.8%), and graduate degrees (24.9%). A large number of respondents were visitors (82.0%) to the beer festival where the survey was distributed and collected. The income levels of the majority of respondents (87.8%) were spread fairly evenly across a range running from under $30,000 to under $119,000.

Table 1. Respondent Profiles

Characteristics	Category	*n*	%
Gender	Male	166	56.7
	Female	127	43.3

Age	21–29 years	135	46.1
	30–39 years	89	30.4
	40–49 years	48	16.4
	Over 50 years	21	7.1
Ethnicity	Caucasian	252	86.0
	Hispanic	16	5.5
	African-American	11	3.8
	American Indian/Alaska Native	1	0.3
	Asian	8	2.7
	Native Hawaiian/Pacific Islander	3	1.0
	Other	2	0.7
Education	High school graduate	9	3.1
	Some college	64	21.8
	Bachelor's degree	137	46.8
	Some graduate education	10	3.4
	Graduate degree	73	24.9
Occupation	Hotel industry	35	11.9
	Restaurant industry	81	27.6
	Travel industry	10	3.4
	Education	32	10.9
	Non-hospitality industry	46	15.7
	Other	89	30.4
Household Income	Under $30,000	60	20.5
	$30,000–$59,999	73	24.9
	$60,000–$89,999	68	23.2
	$90,000–$119,999	57	19.5
	$120,000–$149,999	16	5.5
	$150,000 and over	19	6.5
Visitor Type	Exhibitor	50	17.1
	Visitor	240	81.9
	Brewer	3	1.0
Years drinking beer	1 to 4 years	50	17.1
	5 to 9 years	86	29.4
	10 to 14 years	70	23.9
	More than 15 years	87	29.7
Daily Craft Beer Consumption	Less than 1 per day	150	51.2
	1 per day	66	22.5
	2 per day	43	14.7
	3 per day	23	7.8
	4 or more per day	11	3.8

Prior Beer Festival Participation	0	126	43.0
	1 to 4	144	49.1
	6 to 10	16	5.5
	Over 10	7	2.4

Results of Reliability Test, CFA, and Measurement Invariance

The internal consistency of the measurements was tested through a reliability test and a CFA that yielded Cronbach's alpha and composite reliability scores, respectively. The CFA procedures left four items to measure EXT, six items to measure INT, and five items to measure PI. During the process of CFA, some of the items from the original measurement were removed to ensure acceptable goodness of model fit, discriminant validity, and convergent validity. Cronbach's alpha and composite reliability scores confirmed the internal consistency of the measurements, with scores ranging from 0.804 to 0.943 and 0.807 to 0.947, respectively, all of which are above the threshold of 0.70 (Fornell & Larcker, 1981). The sample variance-covariance matrix was tested using Mplus 8.3. The proposed model's goodness of fit was assessed with the standardized root mean residual (SRMR), the root mean square error of approximation (RMSEA) and its 90% confidence interval, the comparative fit index (CFI), and the Tucker-Lewis index (TLI). Overall, the index results suggested excellent goodness of fit with the model: $\chi^2_{(87)} = 186.704$, $p < 0.001$, $\chi^2/df = 2.146$, CFI = 0.964, TLI = 0.956, RMSEA = 0.063 (90%, CI: 0.050 – 0.075), and SRMR = 0.047. For convergent validity of the latent constructs, the average variance extracted (AVE) ranged from 0.513 to 0.782, which suggested an acceptable level of convergent validity (Anderson & Gerbing, 1988).

Table 2. Results of Reliability Tests and CFA

Construct Survey Items	α	CR[a]	AVE[b]	β[c]	Mean (SD)
Personal Involvement	.943	.947	.782		
Craft beer is to you:					
Important				.899	5.42 (1.414)
Relevant				.910	5.53 (1.374)
Valuable				.959	5.39 (1.457)
Fascinating				.781	5.36 (1.523)

Means a lot				.862	4.90 (1.765)
Intrinsic motivation	.858	.862	.514		
I buy craft beer because:					
I want to improve my quality of life.				.804	4.54 (1.688)
I want to enjoy life.				.835	5.12 (1.775)
It improves my social interaction.				.766	4.81 (1.670)
It is my hobby.				.625	3.94 (1.826)
I want an escape.				.648	4.07 (1.922)
I have had good experiences with it.				.587	5.35 (1.435)
Extrinsic Motivation	.804	.807	.513		
I buy a particular brand of craft beer because of:					
Information on the shelf & label.				.618	4.54 (1.434)
Attractive packaging & design.				.761	4.77 (1.469)
Promotional display.				.763	4.39 (1.390)
Shape/style of bottle.				.713	4.24 (1.510)

Note: $n = 293$, $\chi^2_{(87)} = 186.704$, $p < 0.001$, $\chi^2/df = 2.146$, Comparative Fit Index (CFI) = 0.964, Tucker Lewis Index (TLI) = 0.956, Root Mean Square Error of Approximation (RMSEA) = 0.063 (90%, CI: 0.050 – 0.075), Standardized Root Mean Square Residual (SRMR) = 0.047, [a] Composite Reliability, [b] Average Variance Extracted, [c] Standardized Regression Weight.

The discriminant validity of the latent variables was tested by comparing the root squared AVE values of all constructs with multiple correlations between them. All of the squared AVE values were higher than the correlation coefficients among the latent constructs, which implied the discriminant validity of the suggested constructs: PI, INT, and EXT.

Table 3. Discriminant validity

	PI	INT	EXT
PI	.884[a]		
INT	.451[b***]	.717	
EXT	.118	.490***	.716

Note: PI (Personal Involvement), INT (Intrinsic Motivation), EXT (Extrinsic Motivation), [a] Root squared average variance extracted, [b] multiple correlation, *** $p < .001$.

As the surveys were collected from two different festivals, a measurement invariance test was conducted across the two sets of responses from the festivals. The two sets of surveys consisted of 213 and 80 responses,

respectively. The chi-square difference test compared the configural model, metric model, and scalar model to identify measurement invariance. The fit of the configural model with two groups (festival 1 vs. festival 2) showed an adequate fit ($\chi^2_{(174)}$ = 320.765, CFI = .947, TLI = .936, RMSEA = .076, SRMR = .064). The chi-square difference results were indicative of evidence of metric invariance ($\Delta\chi^2$ = 6.101, Δdf = 12, p = .911) and scalar invariance ($\Delta\chi^2$ = 21.859, Δdf = 24, p = .588). Conclusively, two sets of data were not considered to be different from each other.

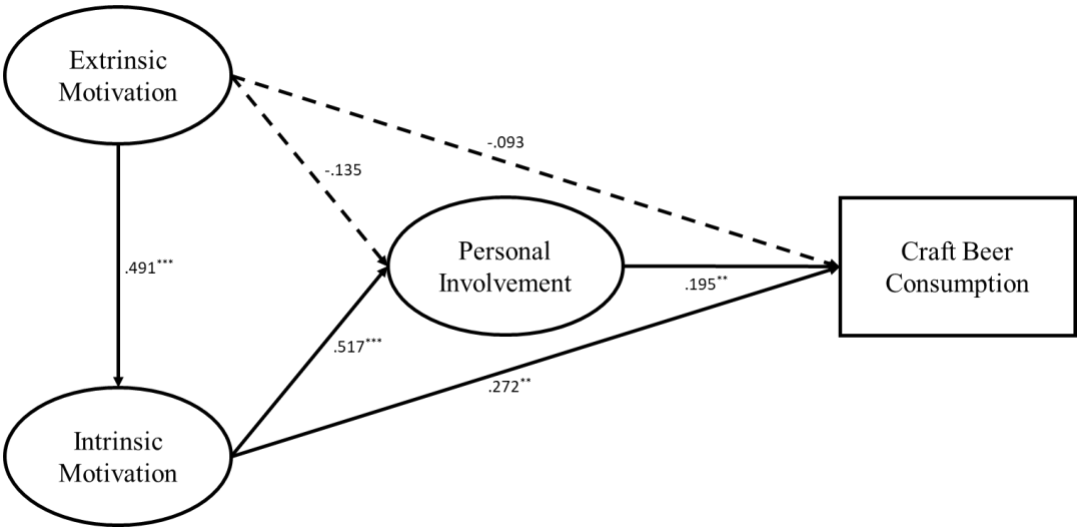
Common Method Variance (CMV) Analysis

Harman's single factor method and the common latent factor (CLF) technique were employed to detect and adjust, if needed, the common method bias. The common variance extracted by the single factor comprising all the observed variables converged at 35.31% of variance, which was below the suggested threshold of 50% (Harman, 1967). The CLF technique further examined the effect of common latent factor on the proposed measurement model's factor loadings. The decrease of the standardized regression weights ranged from .023 to .058, which concluded that the effect of CMV was negligible (Milfont & Fischer, 2010; Sass, 2011; Van de Schoot et al., 2012). Thus, further statistical procedures did not include a common latent factor.

Testing hypotheses using latent moderated structural (LMS) equations

After the validation of measurement, LMS was conducted to test the proposed relationships among variables. The distribution of craft beer consumption (CBC) showed skewness of 1.117 (SE = .141) and kurtosis of .281 (SE = .284), which suggested the non-normal distribution of craft beer consumption did not bias the parameter estimates (Gao et al., 2007; Muthén & Kaplan, 1985). The fit indices of Model 0 without the latent interaction variable (see Figure 1) indicated excellent model fit: $\chi^2_{(99)}$ = 211.140, $p < 0.001$, χ^2/df = 2.133, CFI = 0.960, TLI = 0.951, RMSEA = 0.062 (90%, CI: 0.051 – 0.074), SRMR = 0.046 (Browne & Cudeck, 1992, 1993; Little, 2013). The standardized path coefficients and significance of the proposed relationships are depicted in Figure 1. The results from Model 0 suggested that H1, H4, and H5 were supported while H2 and H3 were not supported. Specifically, the direct paths from EXT to INT, from INT to PI, and from INT to CBC were

all positive and significant. However, the direct paths from EXT to PI and from EXT to CBC were nonsignificant, suggesting that extrinsic motivation's effect on these variables may be moderated or mediated.



Note: $\chi^2_{(99)}$ = 211.140, p < 0.001, χ^2/df = 2.133, Comparative Fit Index (CFI) = 0.960, Tucker Lewis Index (TLI) = 0.951, Root Mean Square Error of Approximation (RMSEA) = 0.062 (90%, CI: 0.051 – 0.074), Standardized Root Mean Square Residual (SRMR) = 0.046, Straight line = significant, dashed line = not significant, ** p < .01, *** p < .001.

Figure 1. Model 0

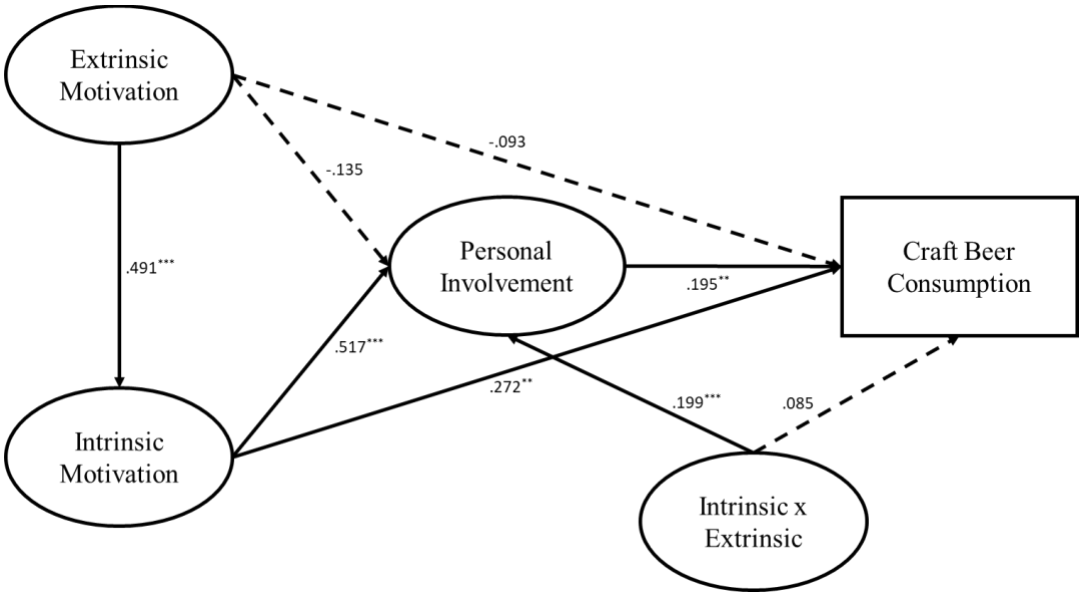
After confirming the goodness of fit of the base model (Model 0), a latent interaction term (i.e., EXT X INT) was added to Model 0 to test whether EXT moderated the effect of INT on PI, and whether EXT moderated the effect of INT on CBC. A log-likelihood ratio test was conducted to test the improvement in model fit of Model 1 over Model 0. The log likelihood value of Model 0 was found to be -7312.906 and that of Model 1 was found to be -7304.482. The log-likelihood ratio (D) was calculated using the following equation (Maslowsky et al., 2015):

D = –2 [(log likelihood for Model 0) – (log likelihood for Model 1)]

Insofar as the distribution of D resembles that of χ^2 and the degrees of freedom (determined as the difference between the numbers of free parameters in Model 0 and Model 1) is two in this case, the critical value at the α level of .001 was 13.816. The log-likelihood ratio (D) was calculated at 16.848 (p < .001), which indicated that Model 0 represented a significantly worse model fit for Model 0 as compared with Model 1.

Thus, it was concluded that Model 1 had a better fit than Model 0 (Satorra, 2000; Satorra & Bentler, 2010). The standardized path coefficients and significance of the proposed relationships are shown in Figure 2.

The application of SEM to Model 1 suggested significant effects of EXT on INT (β = .505, p < .001), of INT on PI (β = .553, p < .001), of INT on CBC (β = .303, p < .001), of PI on CBC (β = .164, p < .05), and of the latent interaction term on PI (β = .199, p < .001). The statistical significance of the effects of the interaction term on PI suggested that the effects of INT on PI were positively moderated by EXT.. In other words, as EXT strengthens, the effects of INT on PI also strengthen. However, the effect of the latent interaction term on CBC was nonsignificant (β = .085, p = .151), indicating that EXT did not moderate the effects of INT on CBC. Thus, the results indicated that H6 was supported but H7 was not supported.



***Note*:** Straight line (significant relationship), dashed line (non-significant relationship), * p < .05, ** p < .01, *** p < .001.

Figure 2. Model 1

Mediation of intrinsic motivation and personal involvement

The hypothesized mediation effects of INT and PI were tested by mediation analyses using Mplus 8.3 (Muthen & Asparouhov, 2015). The mediation analyses tested the indirect effects of INT and EXT on PI and CBC to confirm the mediating role of INT and PI. The results indicate that PI partially mediates the impact of

INT on CBC, and INT and PI completely mediate the impact of EXT on CBC. The results of the mediation analyses suggested that H8, H9, and H10 were supported.

Table 4. Standardized Specific Indirect Effects

Specific Indirect Effects	*β*	S.E.	*p*
Partial Mediation: INT → PI →CBC	.101	.035	.005
Full Mediation: EXT→ INT → CBC	.133	.042	.001
Full Mediation: EXT → INT → PI → CBC	.049	.020	.013

***Note*:** INT (intrinsic motivation), EXT (extrinsic motivation), PI (personal involvement), CBC (craft beer consumption)

Table 5. Summary of Results of the Hypothesis Tests

Hypothesis	Result
H1: Extrinsic Motivation positively affects Intrinsic Motivation.	Supported
H2: Extrinsic Motivation positively affects Personal Involvement.	Not Supported
H3: Extrinsic Motivation positively affects Craft Beer Consumption.	Not Supported
H4: Intrinsic Motivation positively affects Personal Involvement.	Supported
H5: Intrinsic Motivation positively affects Craft Beer Consumption.	Supported
H6: Extrinsic Motivation positively moderates the impact of Intrinsic Motivation on Personal Involvement.	Supported
H7: Extrinsic Motivation positively moderates the impact of Intrinsic Motivation on Craft Beer Consumption.	Not Supported
H8: Personal Involvement mediates the impact of Intrinsic Motivation on Craft Beer Consumption.	Supported
H9: Personal Involvement mediates the impact of Extrinsic Motivation on Craft Beer Consumption.	Supported

H10: Intrinsic Motivation and Personal Involvement mediate the impact of Extrinsic Motivation on Craft Beer Consumption.	Supported

DISCUSSION

Conclusions

Our findings suggest insights into the dynamics of craft beer consumption that are largely consistent with the findings of Taylor et al.'s (2018) wine study. The impact of intrinsic and extrinsic motivation on personal involvement and craft beer consumption behavior reveals the importance of promoting intrinsic and extrinsic factors associated with craft beer consumption. As with Taylor et al.'s wine study, our results suggest that marketers need to focus on individuals with high personal involvement, and target both intrinsic and extrinsic factors to reach high-impact craft beer consumers for the greatest impact from their promotional dollars.

The results of our statistical analyses indicated that H1, H4, and H5 were supported in the context of craft beer consumption. Specifically, we found that extrinsic motivation had a direct positive effect on intrinsic motivation, suggesting that the extrinsic factors of the craft beer (e.g., packaging, brand, price, etc.) are intertwined with the intrinsic factors (e.g., enjoyment, relaxation). Additionally, intrinsic motivation had a direct, positive effect on personal involvement, such that respondents who were more intrinsically motivated to buy craft beer also experienced greater personal involvement with craft beer, and also consumed more craft beer. However, extrinsic motivation did not have a significant direct effect on either personal involvement or craft beer consumption.

With respect to whether the motivational factors would be mediated or moderated in the dynamics of consumption behavior, the results were somewhat mixed. Extrinsic motivation did moderate the effect of intrinsic motivation on personal involvement, such that the combination of high levels of both extrinsic and intrinsic motivation were associated with the highest levels of personal involvement with craft beer. However, extrinsic motivation failed to moderate the effect of intrinsic motivation on craft beer consumption, suggesting

that the impact of extrinsic motivation on consumption occurs primarily in its effects on personal involvement. This assertion is also supported by the findings with respect to the mediation analyses in which support was found for Hypotheses 8, 9, and 10. Specifically, the effect of extrinsic motivation on craft beer consumption is entirely indirect, through its moderation of the effect of intrinsic motivation on personal involvement. The effect of intrinsic motivation on craft beer consumption is, in turn, partially meditated by personal involvement. Based on these results, marketers need to consider all three motivational factors when developing promotional tools in the craft beer arena.

Based on the results of the ten hypothesis tests, with seven being supported by the model developed by Taylor et al., we conclude that their consumption model is not only effective in determining motivational factors of wine consumption, but is also effective in explaining craft beer consumption motivational factors. Additionally, their model may have utility in better understanding motivational factors related to consumption of other products.

Theoretical Implications

The main objective of this study was to investigate the impact of intrinsic and extrinsic motivation on personal involvement and, in turn, on craft beer consumption. Previous attempts to examine the consumer dynamics of craft beer consumption have been largely limited to extrinsic determinants (Aquilani et al., 2015), subculture (Koch & Sauerbronn, 2019), and consumer segmentation (Taylor Jr. & DiPietro, 2017). By adopting and testing a modified version of the model used in Taylor et al.'s (2018) study of wine consumption behavior, this study constructs what we believe is a novel heuristic model of the consumer cognitive process in craft beer consumption behaviors. Importantly, we have also examined the generalizability of Taylor et al.'s (2018) model of wine consumption to a different artisanal beverage.

We believe that this final model depicted in Figure 3 has advantages for understanding the various drivers of consumption. First, when examining the roles of extrinsic and intrinsic motivation in affecting personal involvement, it is important to note that they cannot be considered in isolation from one another. As noted above, much research on craft beer consumption has focused on the external (i.e. extrinsic) drivers of

consumption—which are aspects of the brand that marketers can sometimes readily change (e.g. packaging). However, a limited focus on the intrinsic motivators can mean that a very influential part of the drivers of personal involvement and consumption is potentially omitted from the research, as well as the practice. Moreover, given that extrinsic and intrinsic motivation interacted in the prediction of personal involvement, it is clear that research (and practice) should examine the two sources of motivation in conjunction.

We also should emphasize that intrinsic motivation is the more proximal predictor of personal involvement. Given that both intrinsic motivation and personal involvement are internal cognitive states (and indeed personal involvement has been connected with intrinsic motivational factors; see Taylor et al., 2018), it makes sense that intrinsic motivation would be more closely linked to personal involvement. This places extrinsic motivation in a more distal role from not only personal involvement but also from the ultimate criterion here, craft beer consumption. This further emphasizes the need to consider how intrinsic motivators of craft beer consumption might be affected, both theoretically as well as practically. For example, marketers might focus more on communicating the experiential aspects of craft beer, such as social interactions or hobby qualities. This latter point becomes all the more important when considering that intrinsic motivation had a fairly strong direct relationship with craft beer consumption, in addition to the indirect relationship via personal involvement.

Finally, the role of personal involvement should also be considered in craft beer consumption. We should note that personal involvement had a significant, albeit somewhat weaker relationship with craft beer consumption. Clearly, personal involvement plays a role in consumer behaviors, but the question of why it was overshadowed by the effect of intrinsic motivation may be a fruitful area for future research. When considering the results obtained here in contrast to Taylor et al.'s (2018) findings, their study obtained a fairly strong relationship between personal involvement and consumption. It may be that for wine afficionados, feeling personally involved with wine is a stronger influence on their behavior, to the point of being a part of their personal identity. In contrast, given that craft beer is newer form of artisanal beverage, consumers' personal involvement with craft beer may not be as firmly established in their identities (or society and culture), and thus

it may be that the intrinsic motivations are a more important driver of consumption. We encourage future research to examine these questions further.

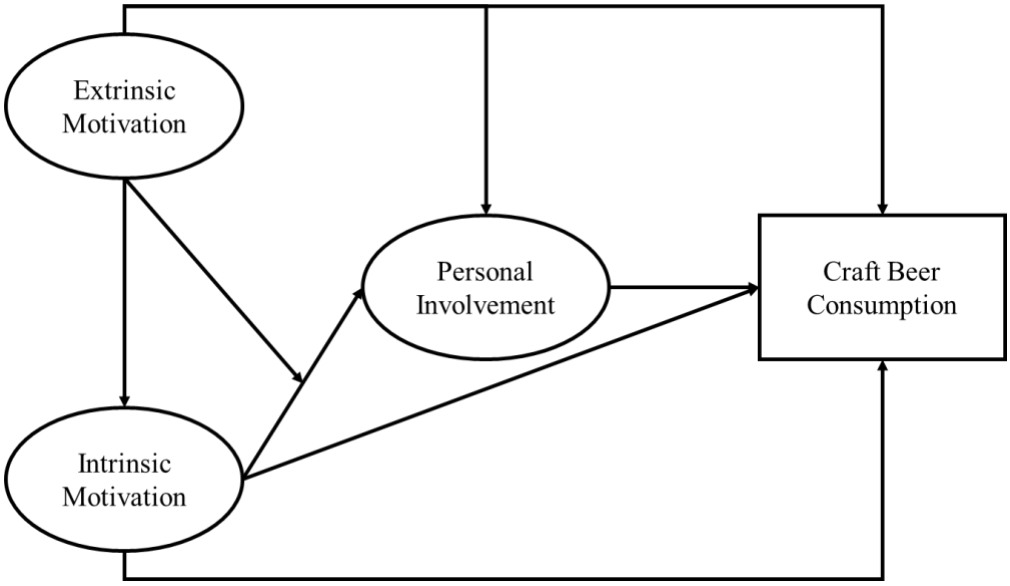


Figure 3. Final Model

Practical Implications

As noted previously, the relationships depicted in Figure 3 resemble the results obtained in Taylor et al.'s (2018) wine study. The considerable magnitude of the impact of extrinsic motivation on intrinsic motivation suggests that proper external factors, including shelving, labeling, packaging, design, display, and container (Aquilani et al., 2015) not only promote intrinsic cognition that regards the consumption of craft beer positively while strengthening the impact of intrinsic cognition on consumer involvement but also, in turn, generate the involvement and stimulate consumption of craft beer.

From a practical perspective, suggestions based on these findings should align with the unique characteristics of the craft beer industry and its consumers. Craft breweries differentiate themselves from mass-production beer firms by focusing on quality over quantity (Kleban & Nickerson, 2011), variety over price (Aquilani et al., 2015), and individuality over the economy of scale (Choi & Stack, 2005). Craft beer is consumed because of its identity, authenticity, and uniqueness over its functions (Gómez-Corona et al., 2016).

Effective marketing strategies for craft beer should focus extrinsically on its appealing quality, variety, and individuality while promoting a brand's identity and provision of authenticity. Consumers perceive that craft breweries' operations are small, independent, and largely traditional (Kleban & Nickerson, 2011). Craft beer practitioners should consider distinctive marketing approaches that emphasize a value proposition through which they can differentiate their products from those of mass-production beer companies. In particular, when considering these marketing approaches, our model suggests that extrinsic factors are not going to be as proximal to consumption as instrinsic factors or personal involvement. However, this does not mean that extrinsic factors should be neglected in marketing approaches, but that they should be carefully crafted to intersect with intrinsic factors for the greatest impact. Thus, we encourage marketers and advertisers to consider how their promotions might emphasize not only the extrinsic factors such as packaging but combine those with the intrinsic factors such as enjoyment or hobby, using a differentiation strategy. Initiatives that emphasize the intrinsic factors of craft beer may be useful in this strategy; for example, approaches such as craft beer festivals provide opportunities for developing the intrinsic motivations of consumers who attend these as a hobby or opportunity for social interaction.

Limitations and Future Research

This study is subject to several limitations. First, the sample was collected from two craft beer festivals in the southeastern part of the US, which may limit the generalizability of this study geographically. Additionally, the collection process was a convenience sample, which may have skewed the randomness of the collection process. Second, as is characteristic of such festivals, participants were generally more sophisticated than most customers or they were industry associates with a personal interest in promoting the products. This makes it likely that the participants overall do not represent the entire population of craft beer consumers. Future research should select samples from a broader population of craft beer consumers to better capture the roles of demographic variables in the proposed model. A range of cultural and socioeconomic factors should be included in future research—including multiple countries—to provide more robust results using our model.

An additional limitation is the use of a self-report survey at a single point in time. Although we did not detect statistical evidence of common method variance, future research should examine these research hypotheses with different methodology, such as using experimental designs. Such designs would also allow for investigations of causality; as our survey was at a single point in time, our ability to infer causality from the data is limited, and true experiments would permit us to make more concrete causal inferences.

As addressed in Taylor et al.'s study (2018), the scales for measuring intrinsic and extrinsic motivation adopted from their study were new. Even though our study could not completely incorporate the whole set of items for better model fit and validity, future research should further examine the properties and usefulness of these scales in a wider range of circumstances and samples. Additionally, situational factors associated with craft beer consumption should be accounted for in future research. As Aquilani et al. (2015) and Thomé et al. (2017) asserted, craft beer is frequently consumed in pubs or bars and with family members. The dynamics of motivation and personal involvement may vary when purchasing and consuming craft beer for social purposes or for oneself.

Finally, future research should extend the proposed model to other alcoholic beverage consumption behaviors to examine its consistency across other categories such as spirits, cider, perry, rice wine, soju, sake, and other exotic beverages. We look forward to continued research in this area that examines the motivational factors and personal involvement that impacts beverage choice and consumption.

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