

Consumer exposure to food and beverage advertising out of home: An exploratory case study in Jamaica

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Abstract

Consumers are inundated with messages about food and beverages in their daily lives. Research has shown that television advertising contains frequent low-nutrient food and beverage messages which are thought to influence consumers' food consumption. Yet, consumption decisions are often made out of the home. We systematically capture and describe food and beverage consumer communications at or near the point of purchase through observation of messages in food environments (Study 1: retail, restaurant) and content analysis of out-of-home advertising (Study 2: billboards). To do so, we focus on Jamaica, a middle-income country that is experiencing a nutrition transition from a traditional to a Westernized diet featuring refined carbohydrates, sugars, fats, sodium and processed foods. Globalization of food and beverage brands is one of the contributory factors to dietary changes and the prevalence of obese and overweight Jamaican consumers is a serious health issue. However, there is no research on advertising in Jamaica to help inform the understanding of its influence on consumers' health. Therefore, we gauge the prevalence and persuasion techniques across two forms of local and global food and beverage advertising that are rarely investigated (retail/restaurant, outdoor). Findings reveal that fast food and sugary beverages, mostly of U.S. origin, were predominantly promoted. Observations in grocery stores and fast-food restaurants included point-of-purchase displays, posters and sales promotion tactics, most typically for low-nutrient foods. Content analysis results revealed that one in four outdoor advertisements was for a food or beverage. The most frequently advertised foods were energy-dense processed foods, sodas and fast-food restaurants. These advertisements typically featured the brand name and a visual. As a whole, this study presents a unique descriptive snapshot which suggests that consumers in Kingston, Jamaica are exposed to multiple messages for low-nutrient foods in their everyday lives and near the point of purchase.

KEY WORDS

food advertising, globalization, health, Jamaica, obesity, outdoor, out-of-home advertising, retail, remote acculturation

1 | INTRODUCTION

Obesity is no longer only a first world problem. Whereas the increase of obesity among adults has slowed in developing countries, the number of overweight and obese children, adolescents and adults has vastly increased in low- and middle-income countries (Ng et al., 2014). Further, the growing availability of high-calorie, nutrient-poor foods has led to a new kind of malnutrition: one where consumers are overweight and undernourished (Brown, 2018). Globalization of food and beverages is one of the contributory factors to this nutrition transition from traditional to Westernized diets featuring refined carbohydrates, sugars, fats, sodium and processed food products (Popkin, Adair, & Ng, 2012). Consumers in low-income countries consume less healthy (energy-dense nutrient-poor) food at a rate of 5 times more than consumers in developed countries and they drink triple the amount of soda (Brown, 2018). This type of unhealthy eating is a major modifiable risk factor for obesity and associated chronic noncommunicable diseases (NCD) like diabetes (World Health Organization [WHO], 2014). Increasingly, the rising rates of obesity and NCDs are of great societal concern in low- and middle-income societies such as Jamaica (Hibbert, 2018). According to a World Health Organization (WHO) report, about 30% and 60% of Jamaicans suffer from obesity and being overweight, respectively (WHO, 2014). The Heart Foundation of Jamaica (HFJ) expressed concern that middle or older age diseases are beginning at younger ages (Hibbert, 2018). As a result, addressing unhealthy eating is a priority action by Caribbean heads of government (www.carpha.org).

Obesity is a multidimensional problem which requires investigation and cooperation from several sectors in society, including the "food industry, retailers, the media and marketers" (Reisch & Gwоздz, 2011, p. 4). Given that the media are considered to be a community-level factor in normalizing or encouraging food-related behaviours (Dresler-Hawke & Veer, 2006), this study explores the local media with focus on the food promotion environment out of home (OOH) in the middle-income country of Jamaica. The food environment in Jamaica reflects a mix of local and global brands. The U.S. exerts a strong external cultural influence on Jamaica through tourism, imported goods and brands and media (Ferguson, 2016). Indeed, it is Pepsi on a billboard that welcomes visitors and residents to Kingston.

There is international evidence that supports the links between consumer exposure to food advertising and consumption of food (e.g., Halford, Gillespie, Brown, Pontin, & Dovey, 2004; Harris, Bargh, & Brownell, 2009; Kinard & Webster, 2012); therefore, the investigation of the prevalence of certain foods and beverages being advertised in Jamaica is important to understand the potential influence of these messages on consumption. Most studies of food media and advertising are conducted within developed nations; they examine television advertising to reveal that energy-dense foods are predominantly featured as compared with healthier foods such as fruits and vegetables (e.g., Finland: Prattala & Roos, 1989; U.S.: Harrison & Marske, 2005; U.S.: Kim, Lee, Hong, Ahn, & Lee, 2016). Further, although nonadvertising content (i.e., television programmes) tends

to display fruits and vegetables to a greater extent than does advertising content, the relatively frequency and ways in which these foods are depicted within television content vary (e.g., U.S.: Warnke & Albrecht, 1994; Sweden: Olafsdottir & Berg, 2016).

However, traditional television viewing is on the decline, especially among those under 24 years of age (*Business Insider*, 2017) including in Jamaica (Market Research Services Ltd, 2014). Therefore, companies are shifting their dollars to other forms of persuasion, including outdoor advertising (Outdoor Advertising Association of America, 2018) and shopper marketing (i.e., in-store communications, Point of Purchase Advertising International, 2018). As people are increasingly spending more time on their mobile devices and outside of the home, brands seek to reach those audiences in the public sphere (Rayport, 2013). "Outside" messages (e.g., on-premise business signs, billboards) and those near or at the point of purchase (i.e., in food environments such as grocery stores or restaurants) become important persuasive devices and can lead to unplanned purchases (Cohen & Lesser, 2016). Therefore, across two studies, our research identifies and describes the food promotion environment through observational techniques to gauge the extent to which consumers may be exposed to low-nutrient food and beverage messages in retail and restaurant contexts (Study 1) and out-of-home advertising (Study 2). Our novel approach

TABLE 1 Study 2: Product category frequency (N) and percentage (%) in outdoor advertisements

Product category	Frequency (N)	Percentage (%)
<i>Everyday</i>		
Meat	2	1.5
Seeds and nuts	3	2.3
Grocery products	3	2.3
Dairy products	3	2.3
Water	5	3.8
Fruits and vegetables	1	0.8
Subtotal	17	13.0
<i>Select carefully</i>		
Sit-down restaurants	9	6.8
Bakery goods	2	1.5
Coffee/Tea	2	1.5
Fruit juice	1	0.9
Others	6	4.5
Subtotal	20	15.2
<i>Occasionally</i>		
Fast-food restaurants	46	34.8
Alcohol	5	3.8
Soft drink	17	12.9
Energy drink	5	3.8
Snack food	14	10.6
Confectionery	6	4.5
Subtotal	93	70.4
Total	132	100.0

moves beyond broadcast advertising to consider wider influences of food messages in the lived environment. Given that this is the first known study to examine advertising in Jamaica, and with the rise of globalization and food marketing, the study is descriptive, also focusing on the extent of global or local influence and information content.

2 | LITERATURE REVIEW

2.1 | Cultural context: Jamaica

Jamaica is the largest English-speaking island in the Caribbean. Globalization is not new: Amerindians originally inhabited the island in 5000–4000 BC (Davis, 2011), but after the arrival of Christopher Columbus in 1494, it was subsequently ruled and settled first by the Spanish, who imported African slaves for labour, and later (1655) by the English. Jamaica remained under British rule until independence in 1962. This history, based on colonization and slavery, impacts contemporary culture and the ways in which individuals may accept or reject foreign cultural influences; Jamaicans are both suspicious of and embrace foreign culture (Forbes, 2010). The official language in Jamaica is English; however, Jamaicans often use Jamaican Patois, an English-based creole language in spoken language.

The traditional Jamaican diet consists of dishes such as rice and "peas" (beans), ackee and saltfish, the "patty" (pastry with meat), curry goat and a variety of fruits and vegetables (Higman, 2008). Jamaica has experienced changes in lifestyle and diets over the past 30 years, which has resulted in individuals eating more convenient, heavily processed and energy-dense foods (e.g., Henry, Caines, & Eyre, 2015). Most Jamaican adolescents (99%) do not consume the recommended levels of fruits and vegetables (Jackson, Samms-Vaughan, & Ashley, 2002). Instead, Jamaican young people are consuming higher intakes of sugar-sweetened beverages and fast food. Specifically, individuals who watch more U.S. cable television and less local television were more likely to eat U.S. fast food (Ferguson & Bornstein, 2015). In a follow-up qualitative study, Ferguson and Iturbide (2013, 2015) explored adolescents' and mothers' insights into their cultural identities and external cultural influences on the island. Media from the United States was regarded as the primary driver of "Americanization" in identity and food habits, in a process called remote acculturation (Ferguson & Iturbide, 2013, 2015). Therefore, we investigate the extent of local and global influences found in the food and beverage promotions, described next.

2.2 | Globalization and persuasion

Globalization affords opportunities for food and beverages to reach consumers with a global consumer culture positioning and persuasion strategy (Alden, Steenkamp, & Batra, 1999). This strategy creates a set of shared cultural symbols such as spokespersons, logos and slogans that are recognized around the world. The use of English language is one way to show "global" appeals versus the use of local

language or dialect (Alden et al., 1999). Global brands with global positioning tend to use global models rather than local spokespersons (Whitelock & Rey, 1998). A contrasting brand positioning strategy focuses on the local consumer culture's norms and identities. Localization can be manifested in many ways from language to spokespersons to colours or cultural values. In Jamaica, the colours of the national flag (black, green, gold) signify aspects of the culture, with green associated with the fertile land, gold with the abundant sunshine and black with the African majority and their hardships (Horst, 2014). Jamaica's flag is used on product packaging to indicate "Jamaica-made". Another set of colours (red, gold, green) is related to the unique Jamaican religion and culture of Rastafarianism. Horst (2014) points out how global brand Digicel adapted its brand colours to red and green to fit with the local culture and discussed how they sponsored local sports contests and singing competitions. The extent to which local or global brand advertising in local media in Jamaica uses global or local brand positioning is explored across both studies in this research as a way to understand globalization and implications for food consumption.

3 | STUDY 1: OBSERVATIONS OF FOOD AND BEVERAGE PROMOTION IN RETAIL/RESTAURANTS

Significant promotional materials are found within and outside food retail and restaurants. These persuasive messages influence the type of purchase decisions people make, given that consumers' decisions are often made at these establishments (Inman, Winer, & Ferraro, 2009). Shopper marketing refers to all activities from planning and strategy to execution, including persuasion stimuli (signs, posters, point-of-purchase, packages, promotional products) that are based on understanding the consumer in "shopping mode"; Shankar, Inman, Mantrala, Kelley, & Rizley, 2011). Tactics such as displays or point-of-sale materials (POS) are often used to attract attention and increase purchasing, for example, for tobacco products (e.g., Pereira & Veludo-de-Oliveira, 2014). Such POS promotions often lead to consumer purchases of unplanned items (Stilley, Inman, & Wakefield, 2010). Critics contend that such impulse marketing encourages consumption "by placing tempting, usually low-nutrient foods ubiquitously and in locations that people cannot avoid seeing, often when they are most likely to be cognitively stressed or depleted" (Cohen & Lesser, 2016, p. 390). Thus, there are consumer welfare concerns related to impulse purchases with respect to these retail promotion tactics (Shankar et al., 2011), especially since young people are obtaining a substantial portion of their empty calories from outside the home, including stores and fast-food restaurants (Poti, Slining, & Popkin, 2014).

Posters and signs on the outside and the inside of restaurants and stores attract customers and encourage them to purchase the advertised products. A study in the United States found that most fast-food restaurants included at least one promotional sign (Basch, Ethan, & Rajan, 2013). These posters often advertised specials or

promotions for lower nutrient foods that are higher in fat, sodium or sugar. Most signs and menus did not provide nutrition information. Signs in retail environments also direct attention and capitalize on visual cues from television and Internet advertising. An analysis of signs in U.S. stores found that those in black neighbourhoods were more likely to contain promotional signs for breakfast cereals, cookies and crackers than stores in white neighbourhoods (Grigsby-Toussaint, Moise, & Geiger, 2011).

Food packaging is another source of communication near the point of purchase. Studies of food packages targeting children in retail environments consistently find that packages predominantly feature characters and other fun, colourful messages, attractive to children and adolescents, on less healthy foods (e.g., Canada: Elliott, 2008; U.S.: Harris et al., 2009; Australia: Mehta et al., 2012; Guatemala: Chacon, Letona, & Barnoya, 2013; Chile: Stoltze et al., 2018). For example, children's cereal packages were likely to contain games and other entertainment features (Song, Halvorsen, & Harley, 2014).

Despite a decrease in spending on toys/premiums to promote children's meals in fast-food restaurants in the United States (Federal Trade Commission, 2008), studies have consistently found that price promotions and toys are used in other countries as a way to market children's meals in fast-food restaurants (e.g., Guatemala: Mazariegos, Chacón, Cole, & Barnoya, 2016).

However, no known studies have investigated such food promotion strategies in Jamaica. Thus, in this first study, we examine food/beverage consumer food promotions in the "physical environment" of Kingston, Jamaica—settings near or at the point of purchase where people procure or consume food (Larson & Story, 2009) with a focus on these research questions:

RQ1: What is the prevalence of food and beverage advertising messages within in-store food and beverage promotions?

RQ2: What is the prevalence of food and beverage advertising messages within fast-food restaurants?

4 | METHOD

4.1 | Overview

This was a descriptive study where a trained research assistant used a semi-structured guide to observe and catalogue the food and beverage promotions (i.e., an audit or environmental scan of the materials inside and outside the sites including POS materials, displays, signage, packaging and other persuasion materials; Inman et al., 2009). Like other research studies (Basch et al., 2013), data were collected at a single point in time to capture a "snapshot" for consistency across field sites. Data for analysis were collected by direct observation at the retail and grocery store location field sites.

Cataloguing and describing the food and beverage promotions are important as we seek to understand the ways that environmental factors such as advertising may contribute to the obesity environment in Kingston, Jamaica.

4.2 | Observation sites

The sampling frame for this study comprised retail outlets selling food for purchase in stores or in fast-food restaurants based on the food retail environment in Jamaica (The Competition Bureau, 2015). Corner shops are the oldest and most prevalent form of retail establishment. They are found in most communities and reach several consumers including those with lower incomes. Wholesale clubs are few (e.g., PriceSmart) but contain several items including grocery products. They attract mainly the relatively affluent "members" of the club. Supermarkets represent the largest category in numbers of stores and in sales. They tend to stock the full line of products and include a bakery and deli (Larson & Story, 2009) and are frequented mainly by middle-income consumers in Jamaica. We observed at least one site at each of these categories in addition to the major local (e.g., Mothers) and global (e.g., KFC) fast-food restaurants in the capital city of Kingston, Jamaica. Training observations took place in July and observations were conducted between September and December. We purposely selected field sites along major transportation hubs/arteries in Kingston: Papine, Liguanea, Cross Roads and Half Way Tree.

4.3 | Procedure

Data were collected by direct observation to record how food and beverage promotions were displayed and to describe the kinds of POS promotional materials available. A resident Jamaican research assistant (RA) conducted the observations at 16 field sites: eight grocery stores and eight fast-food restaurants in Kingston using a semi-structured guide with a structured checklist to guide the recording of observations (e.g., space, promotions-objects and so forth) as well as open-ended questions developed from previous published studies. In line with ethnographic fieldwork procedures (Fetterman, 1989), the RA also took photos and videos and developed sketches of the site layout. The RA received training from a senior investigator (first author) and they pilot tested two observations in the field together—one at a U.S. fast-food restaurant and one at a major local supermarket. The RA and the investigator took notes independently and then discussed their findings and the field note guide was adjusted after discussion.

For the store observation, the guide included point-of-purchase communications, signs and posters and package display (e.g., nutrition claims, local/global cues). For the fast-food restaurant observation, the guide asked the RA to note the presence of any healthy food option, promotions (e.g., posters in the restaurant and those facing outside, including the food and/or beverage product advertised and

price) as well as the display of nutrition information, the children's menu and any toys. The observations were conducted in Kingston for 1–1.5 hr at a time for a total 19 hr and 40 min, which resulted in 16 sets of fieldnotes, including text and photos from each location for a total of 324 pages of fieldnotes, 100 + photos and three videos (grocery stores: 10 hr and 30 min, 96 pages; fast-food restaurants: 9 hr 66 pages). An iterative process of descriptive coding and analysis aided to capture themes and patterns regarding our research questions (Saldaña, 2015).

5 | RESULTS

5.1 | What is the prevalence of food and beverage advertising within in-store food and beverage promotions?

We explored food and beverages and their promotion materials in Jamaican grocery stores. A wide range of foods and beverages, including fruits and vegetables, was available in the majority of stores we observed, suggesting widespread access to healthy foods. However, less healthy food and beverages (i.e., high in sugar or fat or highly processed foods and beverages; Henderson & Kelly, 2005) predominantly used shopper marketing and persuasion techniques, especially point-of-purchase (POP) retail displays. Processed snack and soda aisles were the most frequent places for such displays. Interestingly, most of these displays featured U.S. brands of snacks (e.g., Doritos, Lays, Pringles) and soda (e.g., Coke and Pepsi). Pepsi featured smiley emojis and happiness messages to attract customers, which was part of their global advertising campaign at the time (Nudd, 2016). The global brands' displays did not appear to be localized for the Jamaican market.

Local snack brands used different point-of-purchase and packaging techniques. They often emphasized Jamaican values on the packages, signs or displays; for example: *The original Jamaican product* (National, cookies), *Jamaica's favorite* (Excelsior, crackers) and *100% Jamaican snacks* (Reggae Carmella, cookies). There were some special "back to school" promotions, which featured snack packages bundled with school supplies such as a pencil case, a pencil and a notebook. This promotion was offered by Jamaican snack brands or grocery retail brands. Many of these processed foods were also higher in sugar or fat; these unhealthy snack foods were targeted towards families with young children. There were no back-to-school special bundling packages with fruit or vegetables, however.

Throughout the store, several promotions, sweepstakes and contests were featured, such as ways to "become a millionaire" (Tang juice) or "win a Smart TV" (Milo's flavoured milk). These types of tactics attract attention and act as a sales promotion device to encourage sales. There were no sales contests or sweepstakes for any of the fresh fruits or vegetables.

However, major retail grocery store chains were likely to communicate the health benefits of produce. One supermarket attached

"Did you know?" signs on the top of the refrigerated unit explaining nutrition information of carrots, pineapples, and so on. Grocery stores used large signs with words such as *"fresh"* and *"mega fresh"* in the produce sections. Occasionally, produce brands used health claims directly on the food. For example, bananas, one of the major Jamaican fruits, were actively promoted by the Jamaica Producers Group Ltd (i.e., JP Farm). JP Farm stickers *"Brain Fuel"*, *"Yum, Yum, Potassium"* or *"Your Healthiest Choice"* were placed on bananas in the produce section. Milk and fruit juice also included health claims on the point-of-purchase posters or on the packages such as *"no sugar added"*, *"vitamin C added"*, *"rich in protein and calcium"*, *"Staying healthy is a breeze!"* and so on. In general, there was some in-store promotion and some use of health claims on the packages, posters or peels of healthier foods.

5.2 | What is the prevalence of food and beverage advertising within fast-food restaurants?

Next, we reviewed the messages featuring foods and beverages within fast-food restaurants in Kingston. All of the Jamaican brand restaurants primarily feature Jamaican foods such as *"patties"* as well as soups and rice and peas. However, each of them also features French fries and soda. One of the Jamaican fast-food restaurants (Island Grill) offers grilled vegetables and meats and is the only one to display nutrition information (e.g., calories) on the menu. The U.S. brands were Wendy's, Popeye's, KFC and Burger King. These restaurants primarily offered similar food and beverage products that can be found in U.S. markets with some localized differences (e.g., special seasoning on the chicken). The restaurants were ubiquitous around Kingston; some were available 24 hr.

The majority of U.S. and Jamaican fast-food restaurants promoted their restaurants focusing on value meals. KFC's Big Deal was a major theme of its advertising campaign during this time, and its presence was also conspicuous on posters and promotions displayed inside the store. Popeye's, Burger King and Wendy's also provided value meals emphasizing Jamaican's money savings.

Jamaican fast-food restaurants used a slightly different approach to sell their food and beverages. Jamaican's uniqueness and tastes were more clearly observed from Jamaican fast-food restaurants. Jamaican colours (green, yellow, black and so forth), local foods and community-friendly features were predominantly present in Jamaican fast-food restaurants. Tastee, for instance, focused on how they have been hard working for their local community for more than 35 years. Their historical value was a key theme of the restaurant. In addition to their seasonal events or new menu promotion (e.g., Juici Big Driva Christmas), Island Grill and Juici Patties also promoted Jamaican food (e.g., Juici Patties' theme: serious Jamaica food). Island Grill highlighted their Veggie Boostahh (variety of fruit and veggie juice), Yaad Style Chicken Sandwich and biodegradable packaging. Interestingly, however, Coca-Cola was often featured within the posters. In addition, all of the restaurants featured at least one poster on the outside or inside of the windows or restaurant.

Jamaican fast-food franchises provided few unlimited soda refill machines to customers. Only one U.S. and two Jamaican fast-food franchises provided soda machines. When soda machines were available, children and teenagers as well as adults were likely to use the machines more than one time. Only U.S. fast-food franchises (all except Popeye's) provided children's meals, which typically featured a sandwich, French fries, soda, a dessert and a toy. Toys were dolls or plastic figures from popular cartoons such as SpongeBob SquarePants, Kung Fu Panda, Transformers and so on.

In summary, our observations of places to buy food from grocery stores to fast-food restaurants revealed a variety of ways that food and beverage companies were using persuasion techniques to attract attention, instill purchase (e.g., contests) and communicate the value (e.g., price, health) of their food or beverage. Most of the promotion efforts featured low-nutrient foods and beverages. The leading global brands appeared to rely on a standard, global communication strategy with little localization, whereas the local brands were more likely to feature Jamaican cultural cues in their marketing. Despite the prevalence of less healthy food and its ubiquitous promotions, there was availability and limited promotional efforts and nutrition information for healthier foods including fruits and vegetables.

6 | STUDY 2: CONTENT ANALYSIS OF OUT-OF-HOME ADVERTISING

Food and beverage companies spend billions of dollars on persuasion strategies around the world. These efforts include a wide variety of promotion efforts designed to influence consumption behaviours (Larson & Story, 2009). Due to changes in media habits, companies are shifting their advertising dollars away from broadcast television and into digital advertising and out-of-home advertising (OOH; US Online and traditional, 2019). OOH advertising is one of the few forms of media that is expected to grow from 2019–2021 worldwide (Guttman, 2019). Outside advertising includes on-premise business signage ("basic information about the products and services that are nearby" found on the outside of the stores or restaurants) and OOH advertising (Claus & Claus, 2001, p. 16). OOH advertising (e.g., billboards, bus shelters, transit) is a unique local medium which reaches a mass audience because it is visible 24 hr a day and offers repeated exposures (Taylor, Franke, & Bang, 2006). Advertisers believe that outdoor advertising enhances name recognition and drives audiences to the establishment.

Despite its importance for food advertising, only a handful of studies have investigated the prevalence of different kinds of foods found in outdoor advertising. For example, an examination of food advertising in transit stops near Melbourne, Australia revealed that, overall, about 30% of the advertising featured foods (Settle, Cameron, & Thornton, 2014), with more economically challenged neighbourhoods likely to be exposed to advertising for fast-food restaurants, flavoured milks and juice and more affluent neighbourhoods exposed to advertising for diet soft drinks, coffee and tea.

Within the United States, in Los Angeles, a study showed similar findings with respect to socio-economic status of the area and the types of healthier or unhealthier foods advertised (Cassady, Liaw, & Miller, 2015). Further, although both healthier beverage and unhealthier beverages were featured in advertising, the prevalence of unhealthy foods (four times as much space) was noted. Finally, a cross-city examination of food and beverage advertising in New York, Philadelphia, Austin and Los Angeles revealed significant differences in the prevalence of sugary beverage and fast-food billboard advertisements across cities and income areas (Yancey et al., 2009). Results showed that fast-food advertising was highest in low-income Latina/o areas and for sugary beverages in low-income African American areas. Very few fruit or vegetable advertisements were noted in any of the areas or cities. Across cultural contexts, these studies show the predominance of less healthy foods and beverages in outdoor advertising.

We were interested in the overall proportion of food/beverage advertising as well as the frequency of healthier or less healthy types of foods or beverages. In addition, we were interested in examining the extent of global or local advertising strategies and the amount of information available in the advertisements. Therefore, for Study 2, we captured and analysed OOH advertising, including billboards, posters and transit advertising (Cassady et al., 2015) with a focus on these research questions:

RQ3: *What is the prevalence of food and beverage advertising within out-of-home advertising?*

RQ3a: *To what extent are unhealthy and healthy food advertisements available outside of home?*

RQ3b: *To what extent are the outdoor advertisements localized to the Jamaican market?*

RQ3c: *What types of information cues are used in the outdoor food and beverage advertisements?*

7 | METHOD

7.1 | Data collection

We captured outdoor advertising within high-traffic locations in Kingston, Jamaica to allow for site visits (photo and/or video footage) from our research assistants within four major transportation hubs/arteries (Liguanea, Papine, Cross Roads and Half Way Tree). Two research assistants travelled to these locations to capture all "publicly viewable advertising" on all surfaces (external) in Kingston within a small time period in November–December 2016 (Taylor & Taylor, 1994). Similar to other research (e.g., Lesser, Zimmerman, & Cohen, 2013), we captured all advertisements to get a sense of "effective exposure to food and beverage ads"—computing the percentage of

total outdoor advertising that was devoted to food as a measure of the relative frequency or "strength" of food advertising in a given area. Coding of the content of the advertisements occurred only for food or beverage advertisements.

($n = 6/37; 16.22\%$); Cross Roads ($n = 60/274; 21.90\%$); and Half Way Tree ($n = 53/113; 47\%$).

7.2 | Coding manual

The unit of analysis was the outdoor sign, which included the type of food and beverage category (Henderson & Kelly, 2005; State Government of Victoria, 2012; Taylor & Taylor, 1994), local or global brand and extent of message localization (Nelson & Paek, 2007), information cues (e.g., Resnik & Stern, 1977; Taylor & Taylor, 1994), spokespersons (e.g., Nelson & Paek, 2007) and food display (e.g., Wirtz, Ahn, Song, & Wang, 2013).

7.3 | Coding procedures

Two trained raters coded all food or beverage advertisements based on the coding manual. For initial coding, two raters coded 10 outdoor advertisements with the manual. After the initial coding, two raters and the second author discussed unclear descriptions in the manual and we updated the manual with clarity. Krippendorff's Alpha (κ) was calculated for intercoder reliability of each coding manual item (Hayes & Krippendorff, 2007). The κ index of all items was above 0.80. In total, 484 advertisements were captured; 132 of them (27%) were for food or beverages, which were coded and analysed [by area: Liguanea ($n = 13/60; 21.67\%$); Papine

8 | RESULTS

8.1 | Types of food and beverage advertised

Research question 3a inquired about the proportion of unhealthy and healthy food and beverage advertisements viewed outside of the home. Three food product categories from Healthy Canteen Kit (State Government of Victoria, 2012) were adopted to review healthy and less healthy food and beverages: Everyday, Select Carefully and Occasionally. Healthy Canteen Kit provides resources and guidelines for food selection, food safety and other school food service policy to assist schools to develop healthy food services. Out of 132 outdoor advertisements, the percentage of less healthy food advertisements was higher (Occasionally, 70.4%) than healthy food advertisements (Everyday, 14.5%), with 34.8% of fast-food franchises and 12.9% of soft drink brands. Among fast-food restaurant advertisements, more than half of the advertisements were U.S. brands such as KFC, Burger King, Wendy's and Popeye's. Burgers and fried chicken were the primary types of fast food promoted by the advertisements, followed by French fries and soft drinks. In addition, 82.4% of the soft drink advertisements, featured U.S. brands such as Coca-Cola and Pepsi. See more details in Table 2.

Out of the 132 advertisements, almost 30% of the food advertisements were displayed with soda. Soda drinks were frequently

TABLE 2 Study 2: Information cues present in outdoor advertising

Cue name	Cue rank	Frequency	Percentage	Example
Brand signage (No specific appeal)	1	33	25.0%	Brand logo
Emotional	2	18	13.6%	Life's just more fun with honey bun Love is the best ingredient
Value/economy savings	3	16	12.1%	2 Patties & A drink (Save \$70) Everyday's Mother's value
Taste	3	16	12.1%	Love at your first taste Real homemade taste ready
Location/ availability	3	16	12.1%	Everybody's pharmacy and Deli across the road at xxx road, Tel: xxxx
Nutrition	6	14	10.6%	Improve concentration Nuts packed with power Power up your day Trans free with added vitamins
Price	7	9	6.8%	Get 12 oz Pepsi for only \$50

Note: This table shows the most frequently occurring informational cue in the Jamaican outdoor advertising. The table indicates that brand signage with no specific information occurred most frequently. The total percentage does not sum to 100% because some advertisements contained multiple cues.

shown either in fast-food franchise or individual soda advertisements. They were mostly branded with Coca-Cola or Pepsi even though some advertisements displayed a general cola image in the fast-food restaurant advertisements or even as part of the local shop. Healthier food advertisements included milk, bananas and water.

8.2 | Global or local advertising strategy

Overall, there were total 85 Jamaican local brands (64.4%) and 47 international/global brands (35.6%) out of total 132 brands. Research question 2b asked about the extent of localization of outdoor food and beverage advertisements. A majority of the advertisements used a "totally global" approach (62.9%); most global food and beverage advertisements did not appear to tailor the ad to the local market at all. Of those advertisements, 13 out of 83 (15.67%) featured "everyday" healthier foods, but the majority of the products featured were for occasional or less healthy foods or beverages (61 out of 83; 73.49%). For example, Popeye's general claim was related to people's love for chicken with a dominant visual of the food.

Approximately 25% of the advertisements used a "totally local" approach (e.g., using Patois or "Jamaican" or "Caribbean" words or focusing on the local history or culture). For instance, Juici Patties and Tastee emphasized their prestige of offering serious Jamaican food for a long period in Jamaica. This concept was also well-portrayed in other forms outdoor advertisements. For example, a local soda brand, Bigga's painted sign features the words "A Suh Wi Dweet!" which means "This is how we do it" with Jamaican colors, and the nation's flag with "I am Jamaican". The majority (60%) of these localized advertisements were for "occasional" foods, which tend to be higher in fats, sugar or sodium, whereas "every day" healthier foods with localized appeals made up about 21% of the sample. In addition, 12.1% of the advertisements used a "mixed" approach (inserting Jamaican colours, spokespersons, telephone numbers or locations in the advertisements). Sunshine Snacks, Wray and Nephew Rum and other few brands used this mixed approach. Out of the advertisements which used a "totally local" or "mixed" approach, 81% of the food and beverage advertisements featured "occasional" less healthy food advertisements such as fast-food franchises and soda.

8.3 | Information cues

Interestingly, about 25.0% of the advertisements were brand signage only or the advertisements including basic information of the product (generally image-based); see Table 2. This type of outdoor advertisement acts as a reminder cue so that people always recognize the brands wherever they go. The display of visual information, especially for low-nutrient food and beverages, is congruent with findings for television advertisements featuring these same

types of foods in the U.S. (Kim et al., 2016). However, there were some advertisements that communicated specific information in the advertisements: most commonly an emotional appeal, value appeal or taste appeal. Emotional appeals, which use happiness, excitedness or fun images and phrases, were frequently used in soft drink advertisements (50.0%), which were followed by snack foods, fast-food franchises and confectionery. These types of persuasion strategies resemble a type of "peripheral cue" rather than information about the contents or nutrition value (i.e., a "central" cue), which was also found in a study examining the content of low-nutrient food television advertising in the U.S. (e.g., Kim et al., 2016). Thus, consumers are not provided with the nutrition information to make healthy choices. As argued by Kim et al. (2016), consumers are rarely provided with nutrition information in food commercials. We show these same peripheral persuasion techniques are used in outdoor advertising (i.e., dominant visual only, emotional appeal).

Fast-food restaurants often used a value appeal (e.g., KFC's meal deal: Big Deal) and taste appeal in general. There were very few "everyday" food and beverage products which used emotional, value or taste appeal except a local brand, Kendel's ginger tea ad. Kendel's claim centred on "the taste of quality" and this brand aimed to highlight its taste and quality at the same time. Water (e.g., WATA), Seafoods (e.g., Rainforest Seafoods) and some fruits and vegetables (e.g., JP Farm) promoted their brand with their simple brand logo or a nutrition/healthy claim. However, given the relatively low frequency of these types of food products, there were few nutrition claims overall.

In summary, our observations of out-of-home advertising showed that more than one in four messages viewed in the four major transportation hubs of Kingston featured a food or beverage. Overall, less healthy foods, including fast-food advertisements, soda and processed snacks were significantly more advertised than healthier food and drinks such as milk or bananas. The advertising strategy used by global brands was mostly "global" using a standard approach with little localization for Jamaica whereas local brands often capitalized on their Jamaican origin in the advertisements with colour, flags, values or the patois dialect. Outdoor advertisements overwhelmingly featured the brand name and a dominant visual. Advertisements also used additional information cues such as emotional appeal, value or taste.

9 | GENERAL DISCUSSION

Our multiple-method research study provides evidence that promotion in outdoor spaces (e.g., billboards, transit advertising) and in places where consumers are buying or procuring food (retail, restaurants) is a tool used by the food industry, especially among low-nutrient foods and global brands, in the city of Kingston, Jamaica; for a summary, see Table 3. These findings relate to the evidence that globalization, Americanization in particular, is a recent factor fueling unhealthy eating in developing countries (Ferguson, Muzaffar,

TABLE 3 Summary of observational methods to document out-of-home food promotion in Kingston, Jamaica

Food promotion field site	Method details	Data summary	Summary of findings
Fast-food restaurants	Nonparticipant observation, narrative with semi-structured guide. Guide asked observer to write observation notes and narrative (including date/time/address), sketches, photos and videos of: Location, Setting, Layout, Menu, Population/People, Food/Beverage Offered	8 Fast-food restaurants: 9 hr of observation, 66 pages of field notes, 50+ photos	Most of the in-restaurant promotions featured "value" meals, which often featured a sandwich, side order and soda
	Attention to (1) local versus nonlocal food options and promotion/cues; (2) children's meals and promotions; see Mazariegos et al., 2016; (3) the presence of nutritional information; and combination/value meals (Mazariegos et al., 2016)	Descriptive coding (Saldana, 2013)	Only one fast-food restaurant offered nutrition information onsite. All of the U.S. fast-food restaurants (except Popeyes) offered children's meals, including toys. Localization of food in fast-food restaurants. Promotions featured "local" cues for Jamaican brands
Shopper marketing: promotion audit	Nonparticipant observation with semi-structured guide. Focus on store layout, food availability, packaging/cues, point-of-purchase, sales promotions, signs and posters. Attention to food type (e.g., produce, snacks) and to use of global versus local cues in their promotions	8 Food retailers. 10.5 hr of observation. 96 pages of fieldnotes, 50+ photos, 2 videos Descriptive coding (Saldana, 2013)	Point-of-purchase displays most frequently found for low-nutrient foods and beverages, especially U.S./global brands Some nutrition information and promotion for fruits and vegetables Packaging for local Jamaican brands often used "local" cues
Out of home advertising	Content Analysis Coding for (1) product type (2) relative "healthiness" of product, (3) extent of localization, (4) information cues	"All publicly viewable food and beverage advertising" (billboards, transit, posters and so forth) along the four major transportation hubs in Kingston. 484 advertisements were captured; 132 of these were food or beverages	Approximately one in four outdoor ads was for a food or beverage Out of 132 outdoor advertisements, the percentage of less healthy food advertisements was higher than healthy food advertisements Fast-food restaurants were the most frequent food advertised Among fast-food restaurant advertisements, more than half of the advertisements were U.S. brands (KFC, Burger King, Wendy's, Popeye's) Burgers and fried chicken were the primary types of fast food promoted by fast-food restaurants 82.4% of the soft drink advertisements, featured U.S. brands (Coca-Cola, Pepsi) Most outdoor ads contained brand name and a dominant visual. Emotional appeals (fun, excitement) were also used often

Iturbide, Chu, & Meeks Gardner, 2018), including Jamaica (Francis et al., 2009). Food advertising is thought to be a factor contributing to those trends. Our exploratory research presents the first known study to describe the food and beverage advertising environment in Jamaica to investigate the exposure of consumers to these kinds of messages. We used a multi-method system of capturing exposure to persuasive communications at the point or near the point of purchase. These communications are packaging, in-store point-of-purchase messages, on-premise signage and OOH advertising (e.g., billboards). Unlike television advertising, these forms of advertising are not always explicitly attended to nor are they technologically

skipped. Rather, their purpose is to remind, coax and lead the consumer to the retail store or restaurant or to the check-out to buy the featured product. The purpose of the study was to offer a descriptive snapshot of the ubiquity and types of food and beverage messages that Jamaicans in Kingston are exposed to in their daily lives.

Our data reveal that food and beverage advertising is ubiquitous in Kingston. About 27% of all outdoor signs along the four transportation hubs featured a food or beverage. And the majority of those food and beverages that are advertised feature energy dense foods such as processed foods, sugary drinks and fast-food restaurants, from both Jamaican brands and global brands. These findings are

congruent with those found with respect to outdoor advertising in other countries (e.g., U.S.: Cassady et al., 2015). Further, the majority of in-store and in-restaurant signage and point-of-purchase displays promoted these less healthy foods. Thus, it is difficult to avoid seeing cues for less healthy food in daily life in Kingston. This finding for advertising parallels research pointing to the changing diet for Jamaicans and locals in other developing countries (e.g., Popkin et al., 2012), particularly increases in fast-food consumption among those adolescents (e.g., Ferguson & Bornstein, 2015). It appears that there is prevalent and repeated exposure to less healthy food and beverage advertising in the local media. These findings are important for understanding the health and well-being of the Jamaican people. Research has shown that exposure to food advertising can lead to more food consumption (e.g., Boyland et al., 2016). Even incidental exposure to outdoor advertising may influence the consumption patterns of local residents. A higher percentage of outdoor advertising that features food and beverages in a certain area increases the likelihood of obesity for people living in that area irrespective of socio-economic factors (Lesser et al., 2013).

Findings from our study of out-of-home (in-store, outdoor) advertising also revealed that global brands (predominantly U.S. in origin) are pervasive in Kingston even in these local media. These global brands are mainly using global strategies in billboards and in shopper marketing strategies. That is, the same "Taste the Feeling" campaign for Coca-Cola and emoji campaign for Pepsi were seen in Kingston as found in other venues all over the world. In addition to these campaigns, other food or restaurants would also feature one

of these global brands in their marketing communications. The continuous exposure to global brands and brand values may be linked to changes in cultural values and lifestyles, which may be especially prevalent among younger cohort groups (Kjeldgaard & Askegaard, 2006). In this way media and global brands operate as socialization forces to local audiences showing them a way to consume. In Jamaica, multiple studies by Ferguson and colleagues have demonstrated how some young people and mothers evidence a part-American identity and behavioural preferences, which resemble the cultural identity and orientations of Jamaican immigrants living in the United States and native-born American peers in the United States (Ferguson & Bornstein, 2012). However, Jamaicans are also reminded of their own culture through exposure to local persuasive communications. Given the pride in Jamaica and local culture, the local Jamaican brands often use local cultural cues in their marketing communications, such as Jamaican colours or dialect or explicitly show the Jamaican brand origin. This local strategy was especially true on food packaging in the supermarkets, but was also visible in the local fast-food restaurants and on outdoor signs of local brands. Thus, Jamaican country of origin serves as a cue for purchase.

Although our exploratory research was descriptive, the findings hold significance for understanding the types and extent of global content and brand exposure in under-studied markets. There is very little research conducted on advertising in the Caribbean/Central American regions. As such, this initial, emic-examination offers some insights into how global and local brands operate in developing markets. Based on our observations of shopper marketing and outdoor

TABLE 4 Strengths and weaknesses of observational methods used in our study

Method	Strengths	Weaknesses
Study 1: Nonparticipant observation using a structured guide and open-ended questions. Also referred to as a "message audit" or "environmental scan" of communication messages. Used in retail and fast-food restaurant field sites	<p>Direct observation of actual (rather than self-reported) promotions</p> <p>Documentation of environment and context, using semi-structured guide plus rich narrative, photos, videos and sketches</p> <p>Trained observer from the local culture; useful for interpretation</p> <p>Multiple types of food locations across meal times (e.g., different types of stores, fast-food restaurants)</p> <p>Ability to capture multiple promotions across field sites at one moment in time</p>	<p>Single observer in line with anthropological ethnography training. Multiple observers and comparison of inter-coder reliability indicative of positivistic approach might improve trustworthiness in data (see Ward et al., 2008)</p> <p>Single observation in each field site</p> <p>(similar weakness noted in another low-income country: Mazariegos et al., 2016)</p> <p>Emphasis on promotions does not offer information on consumer response. Participant observation may help add consumer insight and understanding</p>
Study 2: Capture and Content Analysis of outdoor advertising (billboards, transit advertising)	<p>Systematic capture and explicit coding of content</p> <p>Multiple trained coders who independently assessed the content, which increases reliability in findings</p> <p>Purposively selected major transportation hubs with high-traffic and consumer exposure</p>	<p>Examination of content alone does not allow for understanding of actual consumer exposure or response</p> <p>Snapshot approach does not allow insight into potential seasonal or longitudinal differences in advertisements</p> <p>Focus on high-traffic areas may leave out other important locations (e.g., schools, rural areas)</p>

advertising, we witnessed little localization from global food and beverage brands and "cultural cues" from local brands.

Given Jamaica's tropical climate and many varieties of tropical fruits, many fruit juices are now packaged and marketed. Indeed, JP Farms showed innovative advertising, using stickers on their fruit peels and advertising on street signs. Prevention and intervention efforts for healthier food and beverage consumption could capitalize on this existing strength in healthy advertising. Research in India has shown, for example, that outdoor advertising is a good medium to offer health information to mass audiences (Raj, Sharma, Singh, & Goel, 2014).

There was some evidence of posters and signs attracting attention and providing information about a range of fruits and vegetables in grocery stores in our study. Research has shown that such in-store interventions can positively impact purchases (e.g., Foster et al., 2014). Incidental exposure to advertising environment cues (such as exposure to posters with fruits and vegetables) can increase consumption of those advertised items (Berger & Fitzsimons, 2008). Although eye-tracking research of consumers in the grocery store also shows that nutrition information is competing with other dominant information such as brand names and pricing (Bartels, Tillack, & Lin, 2018). However, in our observations of existing communications within grocery stores, we noted there were few point-of-purchase displays, sweepstakes or contests or "sales" for fruits or vegetables. Some experts believe that short-term sales promotions may be the best method to increase sales of healthier foods (e.g., Liberato, Bailie, & Brimblecombe, 2014). The ways in which low-nutrient foods and beverages persuade consumers could and should be applied by healthier foods and beverages.

9.1 | Limitations and future research

This research analysed a relatively small sample of advertisements and observations. For example, like other studies (e.g., Mehta et al., 2012), we were limited in the number of stores reviewed. For the content analysis, we captured more than 400 advertisements in total, of which more than 100 featured food or beverage advertising. However, this study focused on one city within a short time period. Extending the study to other locations (rural) within Jamaica may offer additional insights. Content analysis of the outdoor advertising offered a systematic examination of the kinds of foods, their information cues and persuasion strategies used. However, analysis of content alone cannot inform understanding of consumers. Future research might use interviews or surveys to gather insights into the ways in which local consumers feel about or respond to these promotions. Researchers could also see whether or not exposure to global brand food advertising or local Jamaican cultural cues primes or influences identity and food consumption. For additional discussion of the strengths and weaknesses, please see Table 4. We hope our initial study of Jamaican advertising inspires other researchers to consider examining the prevalence and potential influence of global brands and

promotions on identity and health behaviours and their strategies in under-studied markets.

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