

# YOUNG ADULTS' PERCEPTIONS AND BUYING INTENTIONS OF HEALTHY FOODS IN SOUTH AFRICA

**C ROOTMAN** (Nelson Mandela Metropolitan University)  
**K GALLOWAY** (Nelson Mandela Metropolitan University)

**Abstract:** Despite the extensive research that has been conducted on the impact of marketing on food consumption, media communication channels and the promotion of healthy lifestyles, no known research has been conducted in the healthy fast-casual restaurant segment with a specific focus on media communication channels. This article considers the impact that a more selective choice of media communication channel can have on restaurants in the healthy fast-casual segment when targeting young adult consumers. This selectivity has become increasingly important due to the advertising clutter in the South African restaurant industry which is aggravated by healthy fast-casual restaurants needing to compete against traditional fast-casual restaurants who are adding healthier items to their menus. The use and perceptions of South African young adult consumers of selected media communication channels, obtained by means of a structured questionnaire, suggest that print and online media communication channels influence their healthy lifestyle buying behaviours more than display and broadcast media communication channels. The provision of healthy offerings and marketing by means of print and online media can be used by restaurants to attract and retain more young adults as consumers, to enhance business performance and to create a healthier South African community.

*Key phrases: healthy fast-casual restaurants; healthy lifestyle perceptions; healthy lifestyle purchase intentions; media communication channels*

## 1 INTRODUCTION

“Health describes the state of a person whose physical body functions efficiently and is generally able to resist the onset of disease or readily heals itself; whose mental well-being copes well with stress; who has a high self-esteem and a sense of control over life’s events; whose social well-being supports positive relationships, who maintains a career and sense of community; and whose sense of spirituality supports the person’s understanding of life and peacefulness” (Weinstein & Rosen 2003:18). Lifestyle is a person’s pattern of living as expressed through activities, interests and opinions (Kotler, Armstrong & Tait 2010:157). For a study concerning consumers’ healthy lifestyles, it is important to consider these two concepts together. The World Health Organisation (WHO) refers to a healthy lifestyle as one where a person uses no tobacco, has nutritional eating habits and exercises regularly (Bradshaw & Norman 2007:644).

In 2002/2003 a national survey done in South Africa by the World Health Organisation (WHO) indicated that adults’ dietary behaviours are too high in saturated fats, salts and sugars and too low in fruits, vegetables and fibre. Less than one in three of the South African adult population met the international requirements for health enhancing physical activity per day for every day of the week (Swart, Sanders & McLachlan 2008:135). Surveys revealed that, among South African adults aged 18 to 69 years,

nearly half (44.9%) are physically inactive and over two-thirds (70.6%) consume fewer than five servings of fruits and vegetables per day (Porter, Johnson & Petrillo 2009:2). This shows that many adults in South Africa have poor diets, do not exercise regularly and therefore do not lead healthy lifestyles.

Lifestyles of this nature have subsequently increased the incidence of non-communicable diseases (NCDs). NCDs include a group of conditions that are of slow progression, long duration and are largely preventable. The four main types of NCDs are cardiovascular diseases, cancer, chronic respiratory diseases and diabetes (WHO 2011:Internet). According to the WHO (2012:Internet), NCDs represent the reason for 63% of all annual deaths. These chronic diseases of lifestyle (CDL) are the consequences of risk factors such as obesity, hypertension and tobacco addiction (Mayosi, Flisher, Lalloo, Sitas, Tollman & Bradshaw 2009:3; Steyn, Fourie & Temple 2006:1). Therefore, these risk factors can be regarded as contributors to an unhealthy lifestyle.

A national and global effort to find sustainable solutions to improve consumers' lifestyles and slow down the growth of NCDs to improve the overall health of communities is crucial. South African businesses in the restaurant industry, especially those in the healthy fast-casual segment, produce market offerings that can contribute to healthier lifestyles for consumers. Therefore, these businesses can contribute to a culture that supports healthy communities, while at the same time realising business success. To follow are sections explaining the problem statement, purpose and research objectives of this study. In addition, a literature overview follows including discussions on the South African restaurant industry, marketing communication, media communication channels as well as the healthy lifestyle perceptions and purchase intentions of young adults. Thereafter, the research hypotheses and research methodology are highlighted. A detailed discussion on the empirical results is provided, and finally, the article concludes with managerial implications.

## **2 PROBLEM STATEMENT**

In South Africa's restaurant industry, there are numerous businesses who are trying to obtain and retain the attention of consumers with need satisfying offerings. Advertising clutter in the restaurant industry is aggravated by healthy fast-casual restaurants

needing to compete against traditional fast-casual restaurants. Healthy fast-casual restaurants (e.g. Kauai), need to create more effective communications towards current and potential customers through the most effective media communication channels (e.g. print media, display media, broadcast media and online media), to create positive healthy lifestyle perceptions (leading to long term healthy behaviours). In addition, it is necessary to create the desired response, which is an increase in healthy lifestyle purchases.

The marketing communication programs of restaurants should be modified to suit the changing needs of young adult consumers, to encourage and persuade these consumers to choose healthy menu options and to influence the consumers' healthy lifestyle perceptions overall. These perceptions could be used to increase overall healthy lifestyle purchase intentions and thereby possibly increase the sales of healthy fast-casual restaurants in the long term.

In an effort to promote more effective, integrated marketing communication programs in the South African restaurant industry, the study will focus solely on selected media communication channels. Media communication channels are used as valuable mediums for message transmission between businesses and their current and potential customers. Print media, display media, broadcast media and online media can be chosen as channels for communication (Kotler & Armstrong 2010:437; Smith & Zook 2011:172). For a successful marketing communication program, the selected media communication channels need to positively influence the target markets' overall buying behaviour. As Percy (2008:263) states, some marketing communications primarily aim to commit consumers to actual buying. More appropriate media selections can improve the success of business marketing communication programs by influencing consumers' perceptions and purchase intentions on marketed offerings (Hawkins, Best & Coney 2004:27).

The testing of the influence of these media communication channels on young adult consumers' healthy lifestyle perceptions and healthy lifestyle purchase intentions aims to provide useful empirical results. These results may indicate the optimum media communication channels to be used by businesses in the fast-casual restaurant industry to ultimately increase healthy lifestyle purchase intentions.

### **3 PURPOSE AND OBJECTIVES**

The primary objective of this study is to investigate the influence of selected media communication channels on young adults' healthy lifestyle perceptions and the influence of these healthy lifestyle perceptions on young adults' healthy lifestyle purchase intentions.

In order to attain the objective, the researchers identified three research questions to be answered while conducting this study, namely:

RQ1: What are the current perceptions of young adults toward healthy lifestyles?

RQ2: What is the influence of selected media communication channels on the healthy lifestyle perceptions of young adults?

RQ3: Which media communication channels are the most valuable for influencing the healthy lifestyle perceptions and ultimately the healthy lifestyle purchase intentions of young adult consumers?

In an attempt to answer the above research questions, it is necessary to provide a literature overview on the subject matter.

### **4 LITERATURE OVERVIEW**

A literature overview of the South African restaurant industry, marketing communication, media communication channels and the healthy lifestyle perceptions and purchase intentions of young adult consumers is provided below.

#### **4.1 The South African restaurant industry**

Fast-food consumption patterns in South Africa indicate that the tradition of eating home cooked meals is decreasing. As dual-income households and standards of living are increasing, more people are purchasing fast-foods. Also driving food consumption patterns is the globalisation and the westernisation of diets (Pingali 2007:281). Quick Service Restaurants (QSRs), also referred to as fast-casual restaurants, are involved in the sale and provision of meals and drinks, ordered from a menu at a counter, prepared on the premises for takeaway purposes in a packaged format (not on plates), at a stand or in a location, with or without provided seating (Statistics South Africa 2007:31).

The increased demand for fast-food, and more recently, the increased demand for healthier menu items, has led to significant changes in the alignment of South Africa's QSR industry structure. The health consciousness trend has led to the expansion of the QSR industry in South Africa with the introduction of the healthy fast-casual segment. The concept combines the need to "eat on the run" with the growing demand for healthier options (Franchise Help 2012:Internet). Consumers are "on the move" more than ever and require healthy and fast meal options. The healthy fast-casual segment of the restaurant industry is the fastest growing segment, showing double digit growth year on year (since 1996), double the rate of the traditional fast-casual food segment which includes Kentucky Fried Chicken (KFC), McDonald's and Steers (Bizcommunity 2008:Internet; Franchise Help 2012:Internet).

Traditional fast-casual restaurants have recognised the changing needs of consumers and have adapted to these needs by introducing healthy wraps, salads and vegetarian items onto their menus (McDonald's 2012:Internet). Businesses operating in the healthy fast-casual segment are therefore competing not only with other businesses in this segment, but also with local and international businesses in the traditional fast-casual segment of the restaurant industry.

Business success in the restaurant industry relies on differentiation and customer satisfaction (which can lead to customer loyalty) (Arora & Singer 2006:89; Parsa, Self, Sydnor-Busso & Yoon 2011:364). Marketing communication can be used as a tool to successfully differentiate businesses from industry competitors and develop long term customer relationships.

#### **4.2 Marketing communication and the use of media communication channels**

Marketing communication can be defined as communication by a marketer that informs, persuades, and reminds potential buyers of a product/service in order to positively influence their opinions and to get them to respond (Strydom 2011:177). The marketing communication mix consists of advertising, sales promotion, personal selling, public relations, direct marketing and sponsorship (Koekemoer 2004:2; Shimp 2010:7; Strydom 2011:178). This study will focus on advertising which is, "the non-personal presentation and promotion of ideas, goods or services by an identified

sponsor" (Kotler & Armstrong 2010:426), as businesses in the restaurant industry often use advertising as their main marketing tool.

Non-personal communication channels, also termed media communication channels, are used in advertising (Kotler & Armstrong 2010:434) and these can be divided into four major forms of media namely, print media, display media, broadcast media and online media. The most common forms of print media include newspapers and magazines; display media include billboards and posters; broadcast media include television and radio, and the most popular forms of online media include social networks and business websites (Kotler & Armstrong 2010:437). These media communication channels are used to convey messages through the marketing communication process.

Print media refers to printed or written forms of communication that allow businesses to communicate marketing messages to consumers. As most consumers have access to newspapers and magazines, these two forms are the most used print media mediums. According to Koekemoer (2004:196) 50 per cent of businesses' total advertising expenditure is spent on print advertising.

Display media, termed by Clow and Baack (2010:248) and Floyd (2000:357) as outdoor advertising and alternatively termed by Koekemoer (2004:173) as out-of-home advertising, is large in size and makes use of words and visuals to communicate a simple message quickly. Display media can be in the form of billboards, signs on transport vehicles, blimps and large video screens (Shimp, 2003:356). Billboards and posters are the most common forms of outdoor media and are therefore the focus of the display media variable in the study (Lichtenthal, Yadav & Donthu 2004:15; Shimp 2003:356).

Broadcast media include advertising mediums that are used to communicate business messages to the masses. The most common mediums of broadcasting are television and radio (Yeshin, 2006:322). A television commercial, according to Koekemoer (2004:164), should be well written, simple, interesting, credible and entertaining. A single idea should be effectively communicated in the space of 10, 15, 20, 30 or 60 seconds. Radio advertisements consist of voice only, music and voice or music, voice and sound effects.

Online media, also termed by Koekemoer (2004:515) as 'new media', is different to the traditional forms of communication (print media, display media and broadcast media), in that it is not unidirectional communication. Online media can be interactive and experiential for consumers who access the Internet through computers, laptops or mobile devices. Users of these channels therefore do not have to merely be viewers, listeners or readers of the information (Koekemoer, 2004:530; Kotler *et al.*, 2010:528). The two forms of *online media* that are included in this study are corporate websites and social media (specifically social networking sites).

Previously researched topics relating to various media communication channels and healthy lifestyles are as follows:

- Jordaan, Ehlers and Grové (2011:1) researched the advertising credibility across media channels with regard to the perceptions of Generation Y consumers. Specifically, the study explored traditional media advertising (e.g. print media) versus new media advertising (e.g. cellphone advertising).
- Lichtenthal, et al. (2004:2) discussed the role and advantages of outdoor advertising in the business marketing promotional mix. Furthermore, it discussed the evolution of outdoor advertising and the effects of technology on its use.
- Story and French (2004:1,15) examined the food advertising and marketing channels used to target children in the United States of America (USA), the impact of food advertising on eating behaviour, and current regulation and policies. This study focused on the food and beverage industry's use of marketing channels such as direct marketing, e.g. television advertisements, and indirect marketing, e.g. corporate sponsored school contests.
- Lin, Blum and Dodd (2002:27) researched favourite fast-food television advertisement formats amongst college students in order to assist businesses in effectively communicating with their target audience and encourage product purchases.
- DiPietro, Crews, Gustafson and Strick (2012:265) researched the use of social networking sites in the restaurant industry. The study analysed the use and

perception of social media sites for large chain restaurants by conducting a survey amongst restaurant managers operating in the USA.

- Flanagin and Metzger (2001:153) researched the use of the Internet in the contemporary media environment and compared the Internet's information-retrieving and information-giving features to that of the television, newspapers, magazines and books.
- The study of Thackeray, Neiger, Hanson and McKenzie (2008:338) suggested that social marketers take advantage of the emergence of Web 2.0 technology (second generation Internet-based applications) by incorporating it into their promotion strategies and using it to assist in health promotion.

Considering these studies, no known research has focused specifically on the healthy fast-casual restaurant segment and the influence of selected media communication channels on the *healthy lifestyle perceptions* and *healthy lifestyle purchase intentions* of young adult consumers in South Africa.

The marketing communication process (and thus the selection of media channels) begins with the *sender* who *encodes a message* and sends it to the *receiver* through a selected *media* communication channel. The receiver then *decodes* the message and *responds* to the sender through *feedback*. This feedback indicates whether or not the message has been understood. Communication becomes effective when the sender's intended message is encoded correctly, communicated and decoded by the receiver who then assigns the message with a meaning similar to the meaning that was originally intended by the sender (Chitty, Barker, Valos & Shimp 2011:26; Clow & Baack 2010:30; Yeshin 2006:29). *Noise* occurs throughout the process and can be defined as the general clutter of information within which the message is placed, and through which it must penetrate in order to achieve an effective impact on the desired target audience (Dahlen, Lange & Smith 2010:38; Evans, Jamal & Foxall 2006:52; Kotler & Armstrong 2010:432; Yeshin 2006:30).

Using the study as an example, the sender could be a business in the healthy fast-casual segment promoting healthy food menu options and the receivers of the message could be young adult consumers. The media communication channels that are selected should be those that young adult consumers have access to and which



can influence their purchase decisions. Young adult consumers will then respond or give feedback in a way that reflects their comprehension of the message that was received. For example, young adult consumers may like a restaurant or specific market offering, or be more inclined to purchase offerings from the marketed restaurant, or they could have no response at all. Positive responses for businesses would include improved brand recognition; positive perceptions of the products/services offered, and increased intentions to purchase (Chitty *et al.* 2011:26). During this marketing communication process, the young adult consumers could encounter increasing levels of noise in the form of other marketing communication messages from local, national and international restaurants in South Africa.

The challenge for restaurants in the healthy fast-casual segment is to find more effective methods of communication to break through the competitive advertising clutter and gain the attention of the consumers in order to increase the demand for their healthy products. Marketing messages for restaurants in the healthy fast-casual segment, should attempt to promote healthy lifestyle purchase intentions. These purchase intentions rely not only on the effectiveness of the advertising message that is communicated, but possibly also on the healthy lifestyle perceptions of the consumers.

### **4.3 Perception and the healthy lifestyle perceptions of young adults**

“Perception is the process by which people select, organise and interpret information to form a meaningful picture of the world” (Kotler & Armstrong 2010:174). People can form different perceptions of the same stimulus because of three perceptual processes: selective attention, selective distortion and selective retention. Consumers usually only perceive and interpret stimuli that hold some form of meaning to them or that they choose to be exposed to; this is referred to as selective attention or selective exposure. (Strydom 2011:61).

Marketers need to develop messages that have a greater chance of being noticed and remembered due to the abundance of marketing communication stimuli that consumers are exposed to. Selective distortion refers to the previous experiences and individual attitudes that affect consumer perceptions. In other words, it is the tendency of people to interpret information in a way that will support what they

already believe (Kotler & Armstrong 2010:174). Consumers tend to filter out stimuli that do not support their beliefs and/or they do not wish to remember. This is referred to as selective retention (Kotler & Armstrong 2010:174; Strydom 2011:61).

Based on the previously mentioned definitions of healthy lifestyle (Bradshaw & Norman 2007:644) and perception (Kotler & Armstrong 2010:174), a healthy lifestyle perception could be defined as the way in which consumers select, organise and interpret information to form a picture of what healthy living means in terms of good nutrition (focus for this study), physical activity and tobacco consumption. These perceptions will include the beliefs and attitudes on healthy lifestyles benefits that have been concluded from health information received through business marketing messages, social networks, family members and peers.

According to Goldstein (2010:10), perceptions are continually changing as new knowledge is acquired. Constantiou (2009:273) indicates that different consumers may perceive the value of a product/service offering differently, leading to different responses. Perceptions that are influenced lead to altered actions that match these new perceptions. For perceptions to be influenced there needs to be new incoming data (i.e. stimuli) that is selected, organised and interpreted to form new perceptions, if the new information supports what the consumer already believes and/or wishes to remember. These perceptions can then lead to new actions that support the newly acquired information and perceptions. For example, consumers may not choose healthy meals over healthier meals unless the benefits of doing so are communicated to them and they change their perceptions of their own lifestyles based on the support of new information. This study will focus on the healthy lifestyle perceptions of young adult consumers specifically.

Young adults could be viewed as the group who are leading the movement of information usage to make more informed consumption choices (Lenhart, Purcell, Smith & Zickuhr 2010:27). Consumers are also exposed to higher levels of information about product/service offerings (Al-Rasheed, Zairi & Ahmed 2010:3). Young adults hold attitudes and perform learnt behaviours which have been developed throughout their childhood as a result of their interactions with and observation of key influencers such as parents, family, peers, educators and

communities. However, the young adult years are also marked by the development of individual identity and independence, both physically, socially, emotionally and financially (Cigna 2012:Internet; Rindfuss 1991:494).

Young adults begin to take responsibility for their own physical and nutritional needs and develop their own eating habits based on their individual preferences. This creates a unique opportunity for businesses to help break any poor eating habits that may have been formed, by providing young adults with the necessary information to make more informed choices. This information can be used to adjust eating behaviours to promote healthier lifestyles which can possibly influence succeeding generations (Cigna 2012:Internet). These healthy lifestyle perceptions can then lead to the increased purchase intentions of consumers and ultimate the buying of healthy market offerings.

#### **4.4 Purchase intention and the healthy lifestyle purchase intentions of young adults**

Purchase intention is referred to as a successful indicator for forecasting the actual purchasing decision (Mitchell & Greatorex 1993:179-200). It represents the likelihood that a consumer will buy a particular product resulting from the interaction of his/her need for it, attitude towards it, perceptions of it and the business which produces it. According to Dahlen *et al.* (2010:160), a consumer's attraction towards a product/service, or purchase intent thereof, should be enough to actually lead to the purchase of the product/service. "Purchase intention is a common measure used to assess the effectiveness of eliciting response behaviours" (Chan & Zhenhui 2010:43; Li, Daugherty & Biocca 2002:47).

According to the WHO healthy lifestyle definition provided by Bradshaw and Norman (2007:644), healthy lifestyle purchase intention would refer to the planned action to purchase market offerings which support good nutrition, physical activity and which do not lead to tobacco consumption. This study will focus on young adults' purchase intentions of healthy market offerings from the restaurant industry and will thus relate to good nutrition only.

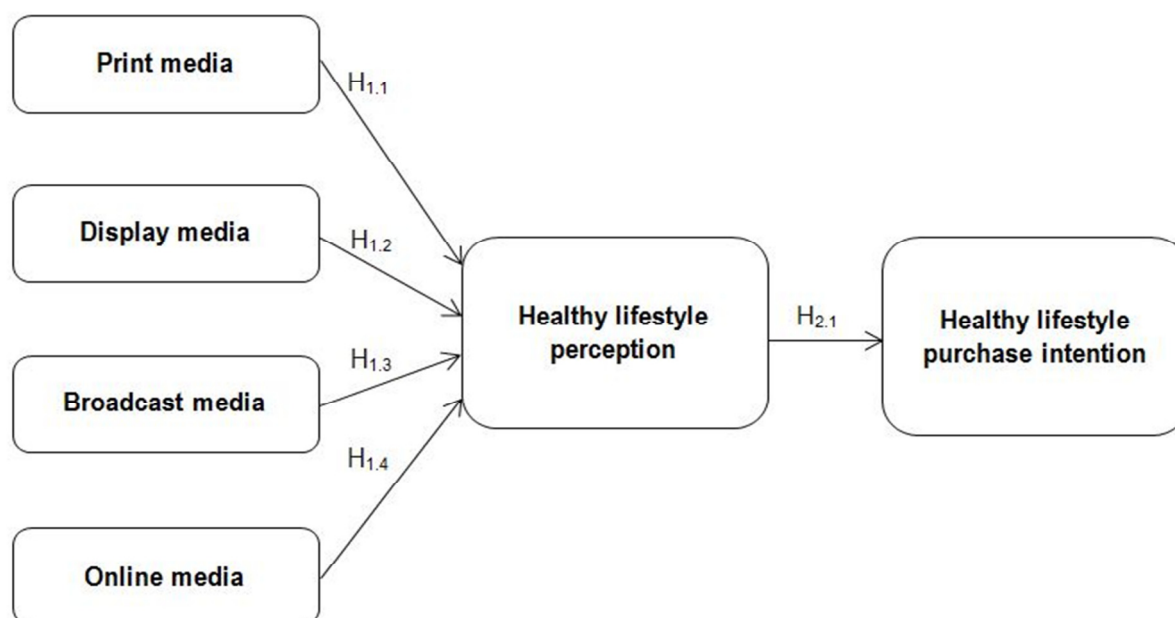
Young adults' purchase intentions are the focus of the study as young adults spend a vast majority of their disposable income on market offerings that supply instant

gratification, e.g. eating out and entertainment (Instant Money 2012:Internet). As mentioned previously, purchase intention is often an indication of actual purchase behaviour. Therefore, if the intention to purchase can be increased, actual purchases should increase, leading to increased sales, and ultimately long term success for businesses.

## 5 RESEARCH HYPOTHESES

The literature overview as well as the research objectives and questions led to the construction of a theoretical framework which is illustrated in Figure 1.

FIGURE 1: THEORETICAL FRAMEWORK



Source: Researcher's own construction

The following hypotheses were prepared in order to test the relationships identified in the theoretical framework:

- H1.1: There is a statistically significant relationship between print media and healthy lifestyle perceptions.
- H1.2: There is a statistically significant relationship between display media and healthy lifestyle perceptions.
- H1.3: There is a statistically significant relationship between broadcast media and healthy lifestyle perceptions.

- H1.4: There is a statistically significant relationship between online media and healthy lifestyle perceptions.
- H2.1: There is a statistically significant relationship between healthy lifestyle perceptions and healthy lifestyle purchase intentions.

The research design and methodology used to test the theoretical framework is discussed below.

## **6 RESEARCH METHODOLOGY**

A positivistic and quantitative approach was used (Zikmund 2010:94), as the study sought to establish the possible relationships between selected media communication channels and the health lifestyle perceptions and purchase intentions of young adults. Primary data was collected through the distribution of questionnaires among NMMU students in Port Elizabeth, South Africa. Respondents completed the questionnaires during lectures voluntarily and anonymously.

### **6.1 Population and sample**

The population of this study was all young adult consumers living in Eastern Cape, South Africa. A sample frame was not available to the researchers, therefore a non-probability sampling technique was used to select the sample of NMMU students, and as a result convenience sampling was used. Convenience sampling is a non-probability sampling method that uses units or people that are the most convenient to collect data from (Zikmund 2003:380). The objective was to use a sample of not less than 300 university students (by nature mostly young adults), currently studying at NMMU. The minimum sample of 300 was determined by considering the number of measuring instrument items.

### **6.2 Measuring instrument**

Data was collected using a self-developed, self-administered, structured questionnaire. The questionnaire was divided into three sections. Section A was used to gather biographical information from the respondents to determine the individual characteristics of each respondent. Statements were formed to determine: gender, age category, population group, qualification studying towards, living situation, amount of money available to spend on goods (per month) and the amount of money spent on

fast-food (per month). Section B included statements about the selected media communication channels and was in the format of a five-point Likert-type scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). Section C was also in the format of a five-point Likert-type scale ranging from 'strongly disagree' (1) to 'strongly agree' (5) and gathered data on the healthy lifestyle perceptions and healthy lifestyle purchase intentions of the young adult consumers.

The validity of the measuring instrument was ensured as experts in the field of marketing management and marketing communication assisted with the questionnaire design. In addition, ethical clearance was obtained from the NMMU Research Ethics Committee – Human (REC-H) before questionnaires were distributed. A pilot study was also conducted among five young adult consumers.

### **6.3 Data analysis**

Collected data was statistically analysed in five phases through the use of the computer programs Microsoft Excel and Statistica (Version 9). Firstly, descriptive statistics were calculated (Lind, Marchal & Wathen 2008:6). The descriptive statistics used in the study included frequencies, means and standard deviations. Various inferential statistics were also calculated (Kremelberg 2011:498). The validity of the measuring instrument was considered through the performance of an exploratory factor analysis (EFA) (Haynes, Richard & Kubany 1995:239; Kent 1999:80; Schumacker & Lomax 2004:108).

Thereafter, a reliability analysis, based on Cronbach alpha coefficients, was conducted to establish the reliability or internal consistency of the research instrument and the variables of the theoretical framework (Kent 1999:307). The research instrument to be used in this study was designed in order to achieve favourable Cronbach alpha readings of more than 0.7 (Kent 1999:308). Following the reliability analysis, a regression analysis was used to determine the existence of relationships as suggested by the theoretical framework in Figure 1. Multiple regression analysis is used to predict a single dependent variable from two or more independent variables (Hair, Black, Babin & Anderson 2010:629-630; Kent 1999:180).

For the purpose of this study, this analysis was performed to test whether the selected media communication channels, namely print media, display media, broadcast media

and online media influence the intervening variable, healthy lifestyle perceptions, and consequently the dependent variable, healthy lifestyle purchase intentions. The last step of the data analysis included comparison tests which were used to determine any statistical and practical significance between the factors and the biographical variables used in the questionnaire. The comparison tests included: the t-test, ANOVA test, post hoc Sheffe test and Cohen's d test.

## **7 EMPIRICAL RESULTS AND MANAGERIAL IMPLICATIONS**

The results of the data analysis are discussed below and include insight and recommendations for healthy fast-casual restaurants, based on the empirical findings.

### **7.1 Questionnaire responses and descriptive statistics**

Questionnaires were distributed to students on the NMMU South, Second Avenue and Missionvale campuses in Port Elizabeth, South Africa. A total of 440 questionnaires were distributed in hard copy during lectures; completed by the students voluntarily and anonymously; and returned to the researchers. Of the 440 questionnaires that were distributed, 350 complete questionnaires (a 79.55% response rate) were found to be suitable for quantitative statistical analysis. The 21.45% of questionnaires that were not included for statistical analysis were not used as they were not completed in full.

Most of the sample respondents came from the NMMU South campus (72.00%). The majority of the respondents were female (51.71%) and 48.29% were male. The majority of the respondents were between the ages of 20 and 25 years (77.43%) with a further 58 respondents below 20 years of age (16.57%) and 17 respondents between the ages of 26 and 30 years (4.86%). These age category results were as expected (due to the convenience sample collected at NMMU). The age results were as required, as the purpose of the study was to investigate the influence of selected media communication channels on the healthy lifestyle perceptions and healthy lifestyle purchase intentions of young adults.

The majority of respondents represented the black population group (51.14%). Most of the respondents were studying towards a degree (69.71%) and the highest per cent of the respondents lived at home with parent(s) or guardian(s) (46.29%). Most of the respondents (45.14%) have less than R1 000 available to spend on goods per

month and a further 35.71% have between R1 000 and R2 000 available to spend on goods per month. The responses indicated that 60.00% of the respondents spent less than R250 of their available money per month on fast-food, with a further 30.86% spending between R250 and R500 per month on fast-food.

The young adult market could be seen as a worthy investment for restaurant businesses, as 80.85% of young adults have between R0 and R2000 per month to spend on goods, and 90.86% of young adults are spending between R0 and R500 of this money per month on fast-food. As a result, young adults offer a profitable market for healthy fast-casual restaurants.

## 7.2 Validity results – Exploratory factor analysis

The EFA indicated that selected items of the questionnaire loaded onto five factors after three factor rotations. Factors one to four (*print media*, *display media*, *broadcast media* and *online media*) represent the four independent variables. Factor five represents a combination of the original intervening (healthy lifestyle perceptions) and dependent (healthy lifestyle purchase intentions) variables, which were combined to form one dependent variable, named *healthy lifestyle buying behaviour*.

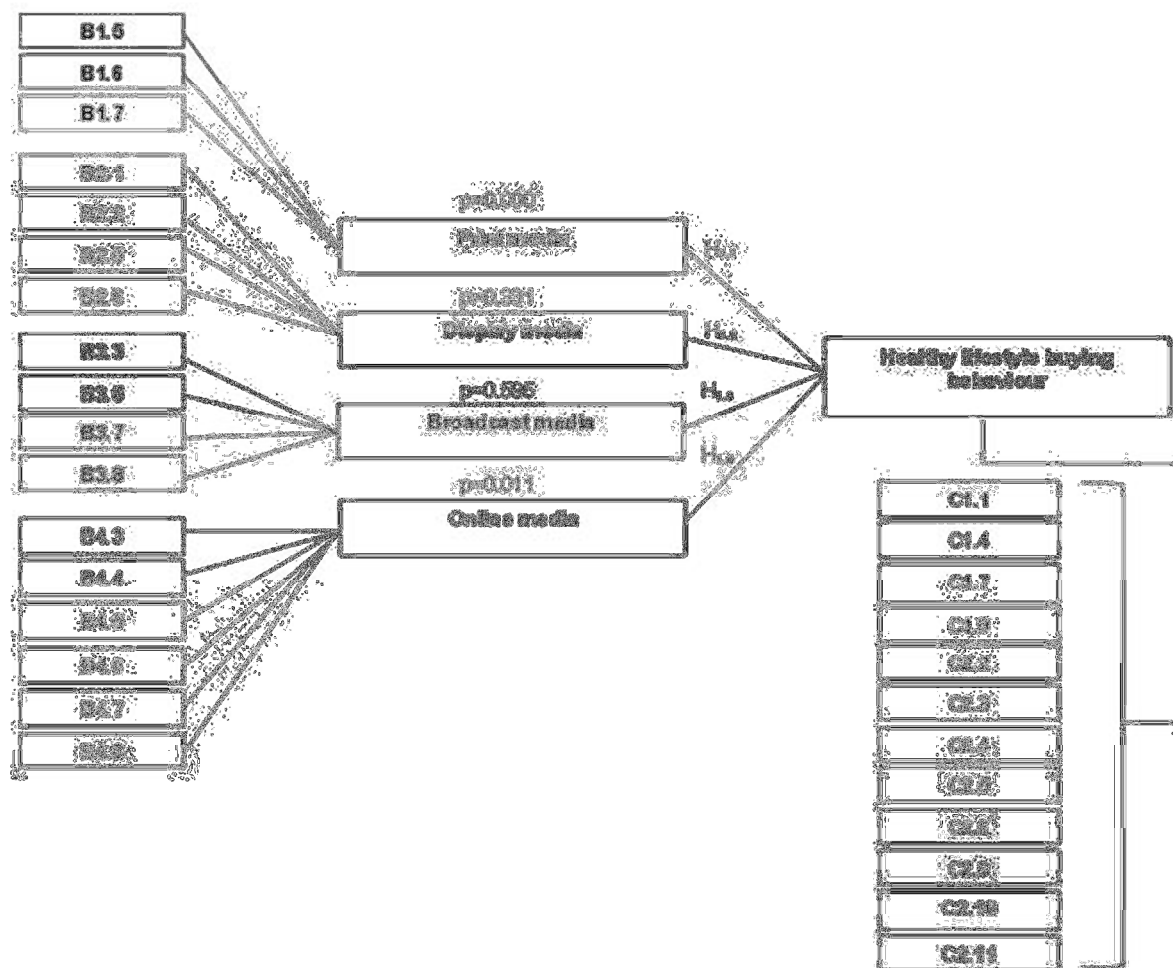
In other words, items originally developed to separately measure healthy lifestyle perceptions, and healthy lifestyle purchase intentions, loaded onto one factor in the EFA results. Therefore, instead of the original healthy lifestyle perceptions and healthy lifestyle purchase intentions as two separate constructs, *healthy lifestyle buying behaviour* was used as a factor for the remainder of the study. These factors resulted in the construction of the empirical model illustrated in Figure 2. Figure 2 indicates which individual items loaded onto each of the factors as well as the proposed hypotheses that were tested in further analysis.

Descriptive statistics were calculated for the new factors that formed as a result of the EFA loadings, and findings from these statistics assisted in answering the first research question which was adapted to include *healthy lifestyle buying behaviour* instead of healthy lifestyle perceptions: What are the current healthy lifestyle buying behaviours of young adults toward healthy lifestyles? Considering the means of responses to the various questionnaire items that loaded (12 items for *healthy lifestyle buying behaviour*), the results indicate that currently young adults play an



active role in their lifestyle choices and believe that living healthily (and eating healthily) is important in avoiding non-communicable diseases.

FIGURE 2: THE EMPIRICAL MODEL



Source: Researcher's own construction

In terms of buying behaviour, young adults would seek out healthy food options and will sometimes choose restaurants based on whether they have healthier menu items to choose from. With regards to the outlook of the respondents, in terms of the average scores (10 of the 12 items had means above three), it is evident that young adults seek to live a healthier lifestyle and this reflects in their buying decisions.

### 7.3 Reliability results – Cronbach alpha coefficients

Cronbach alpha coefficient scores and inter-item correlation coefficients (see Table 1) were calculated for the measuring instrument that was used to measure the independent and dependent variables.

Variable	Average inter-item correlation	Cronbach alpha
Print media	0.52	0.76
Display media	0.60	0.85
Broadcast media	0.35	0.67
Online media	0.46	0.83
Healthy lifestyle buying behaviour	0.43	0.89

Source: Researcher's own construction

According to Hair, Anderson, Tatham and Black (1998:118), a commonly accepted Cronbach alpha is 0.7, although a value of 0.6 can be accepted during exploratory research. As a result of this definition and the results shown in Table 1, the measuring instrument is considered as being reliable.

### 7.4 Relationship results – Multiple regression analysis

Multiple regression analyses were performed to test the relationships between the variables. Table 2 provides the multiple regression analysis results.

TABLE 2: MULTIPLE REGRESSION ANALYSIS FINDINGS

Independent variable	Regression coefficient	P-value
Print media	.231	.000
Display media	.053	.331
Broadcast media	-.030	.595
Online media	.139	.011
R-square (variance) = .092		

Source: Researcher's own construction

Table 2 indicates that *print media*, *display media* and *online media* have positive relationships with *healthy lifestyle buying behaviour* (dependent variable). *Broadcast*

*media*, in the case of young adults, has a negative relationship with *healthy lifestyle buying behaviour*. Two of the four variables, namely *print media* and *online media* exert a statistically significant influence on the dependent variable (*healthy lifestyle buying behaviour*). The statistical significance (p-value) of a result is an estimated measure of the degree to which it is "true" in the sense of "representative of the population" (Statsoft:Internet 2012). The relationship between *print media* and *healthy lifestyle buying behaviour* ( $p=0.000$ ) and the relationship between *online media* and *healthy lifestyle buying behaviour* ( $p=0.011$ ) are significant at the 5% significance level. These relationships imply that the increased use of *print media* and *online media* will lead to increased *healthy lifestyle buying behaviours* among young adults.

The independent variables in the multiple regression analysis explain 9.20% of the variance ( $R^2$ ) in the dependent variable (*healthy lifestyle buying behaviour*). It can therefore be said that 9.20% represents the amount of variation in the *healthy lifestyle buying behaviour* of young adults that is explained by *print media*, *display media*, *broadcast media* and *online media*. This variance can possibly be explained by the presence of other variables that can influence *healthy lifestyle buying behaviour* which were not measured in this study.

The findings from the multiple regression analysis assisted in answering the last two of the three research questions, which were modified to include *healthy lifestyle buying behaviour* instead of healthy lifestyle perceptions and healthy lifestyle purchase intentions, as a result of the EFA (subsequently  $H_{2.1}$  not being applicable): What is the influence of selected media communication channels on the healthy lifestyle buying behaviour of young adults? Which media communication channels are the most valuable for influencing the healthy lifestyle buying behaviour of young adult consumers?

The findings from the multiple regression analysis show that two of the four hypotheses namely,  $H_{1.1}$  and  $H_{1.4}$ , can be accepted.  $H_{1.1}$  and  $H_{1.4}$ , representing the relationships between *print media* and *healthy lifestyle buying behaviour* and between *online media* and *healthy lifestyle buying behaviour* respectively, show positive and statistically significant relationships between the variables. A positive, but insignificant relationship was evident between *display media* and *healthy lifestyle buying*

*behaviour*, therefore  $H_{1,2}$  is not supported.  $H_{1,3}$  was also not supported, as a negative and insignificant relationship exists between *broadcast media* and *healthy lifestyle buying behaviour*.

In terms of the research questions stated above, it can thus be said that *print media*, *display media* and *online media* all influence the *healthy lifestyle buying behaviour* of young adult consumers positively. However, only *print media* and *online media* influence the *healthy lifestyle buying behaviour* of young adults significantly. Therefore, based on this study, *print media* and *online media* are the most valuable media communication channels available to healthy fast-casual restaurants, to influence the *healthy lifestyle buying behaviour* of young adult consumers.

Based on the multiple regression results, it is recommended that healthy fast-casual restaurants in South Africa, when targeting young adult consumers, should increase the use of *print media* and *online media* in their marketing communication programs to increase the *healthy lifestyle buying behaviour* of these consumers. More specifically, magazines, social networking websites and fast-food restaurant websites should be utilised, as these media tools featured in the items that loaded significantly on the *print media* and *online media* factors.

This study has shown that *print media* and *online media* provide the most significant contributions for influencing young adults' *healthy lifestyle buying behaviour*. The focus on these two media communication channels can lead to decreased marketing costs as media budgets can be reduced due to the more deliberate and selective use of the media communication channels that have been proven to be more effective regarding the *healthy lifestyle buying behaviours* of young adult consumers. In addition, restaurants should put more time and effort into creatively using *print media* and *online media* to stand out from amongst the advertising clutter. This may possibly lead to increased sales, profits and improved financial performance for businesses as well as contribute toward a healthier population.

## 7.5 Comparison test results

In addition, the researchers conducted comparison tests based on respondents' biographical information, to add more value to the answer for the first research question. The findings from the comparison tests (used as indicated in the data

analysis section) indicated that males and females differ significantly on *print media* ( $p=0.0001$ ) with medium practical importance ( $d=0.53$ ). Restaurants are therefore recommended to target females (mean score of 3.21) slightly more than males (mean score of 2.75) when using *print media* to target young adults, e.g. advertise more often in women's health magazines.

Results showed that the white population group differed significantly from the black population group on *healthy lifestyle buying behaviour* ( $p=0.0317$ ). This is of medium practical importance ( $d=0.41$ ) and suggests that when restaurants refer to *healthy lifestyle buying behaviour* it should be noted that white consumers place slightly more emphasis (mean of 3.40) on purchasing foods that promote healthy lifestyles than black consumers (mean of 3.36). Given these results, it would be more appropriate to use advertising content and reference groups that appeal slightly more towards a white population.

Furthermore, significant differences were found between certificate/diploma and degree respondents for broadcast media ( $p=0.0441$ ) with medium practical significance ( $d=0.42$ ). Restaurants that use for example, radio advertisements, should include certificate/diploma students (highest mean of 3.30 compared to 3.02) as the 'voices' (message sources) for these advertisements when targeting young adults. In addition, comparison tests revealed that broadcast media is used and perceived differently based on the amount of money respondents had available to spend on goods per month. The R1000 – R2000 group uses broadcast media more often (mean score of 3.16) than the >R2000 (mean score of 2.78) and <R1000 group (mean score of 3.13).

This could mean that moderately priced restaurant items or specials should be broadcast using the radio, for example, as the advertisements will be heard by the respondents who have R1000 – R2000 to spend on goods per month possibly more than the other groups. In addition, the more money young adults have to spend per month, the higher their preference for buying healthier options, providing restaurants with an opportunity to market their healthy options to young adults who have more than R2000 to spend on goods per month. This was indicated by the mean score for the >R2000 group of 3.71 versus the mean score of the <R1000 group of 3.30.

Young adults who spend R250 – R500 per month on fast-food have a higher mean score for healthy lifestyle buying behaviour (3.52) than those that spend >R500 per month on fast-food. Therefore, healthy fast-casual restaurants should recognise that young adults who spend a moderate (R250 – R500) amount of money per month on fast-foods have a higher regard for healthy lifestyles than young adults who spend >R500 or more per month on fast-food. Restaurants should thus target the R250 – R500 group so that a bigger portion of this amount can be spent on healthy fast-foods (therefore increasing healthy lifestyle buying behaviours).

It was indicated that the NMMU students' use of broadcast media differed based on the NMMU campus where they were studying. Missionvale students can be accessed through broadcast media (especially the radio) more frequently than South campus students. This is evident from the mean scores of Missionvale campus students (3.49) and South campus students (3.00) with regard to broadcast media.

## 8 FINAL CONCLUSION

Young adults' healthy lifestyle buying behaviours are important for all restaurants to note, especially healthy fast-casual restaurants, as this study shows a demand for healthier fast-food options to be more effectively communicated, more readily available and more competitively priced.

Businesses in the restaurant industry, especially healthy fast-casual restaurants, should strategise their marketing communication programs which are targeted at young adult consumers, to include media communication channels that can improve business performance and contribute to a healthier population. Specifically, media communication strategies should be adapted to include more *print media* and *online media* channel selections to potentially improve the sales of healthy food options. Ultimately this will contribute to increased business success as well as building a healthier nation.

It is suggested that future research includes the study of young adults at other universities and geographical locations; the empirically testing of other external variables (e.g. the consumers buying situation) that could have an influence on consumers' healthy lifestyle buying behaviours; and the use of young adult focus

groups (qualitative research) to investigate how to maximise the potential of *print* and *online media* communication channels.

However, it is evident that this study made a valuable contribution to restaurants operating in the healthy fast-casual segment, especially regarding the selection of their media communication channels. It has been shown that *print* and *online media* should be focused on by these businesses in order to increase the *healthy lifestyle buying behaviour* of their young adult target market.

## REFERENCES

- AL-RASHEED S, ZAIRI M & AHMED AM.** 2010. Getting in the mind of the consumer: An empirical study of consumer behaviour in retailing. European Centre for Best Practice Management. [Internet: <http://zairi.com/wp-content/plugins/downloads-manager/upload/Getting%20in%20The%20Mind%20of%20The%20Customer%20An%20Empirical%20Study%20of%20Consumer%20Behaviour%20in%20Retailing.pdf>; downloaded 2013-02-13.]
- ARORA R & SINGER J.** 2006. Customer satisfaction and value as drivers of business success for fine dining restaurants. *Services Marketing Quarterly*, 28(1):89-102.
- BIZCOMMUNITY.** 2008. Healthy fast-food group announces massive expansion. [Internet: <http://www.bizcommunity.com/Article/196/173/23534.html>; downloaded on 2012-05-20.]
- BRADSHAW D & NORMAN R.** 2007. Strengthening public health in South Africa: Building a stronger evidence base for improving the health of the nation. *South African Medical Journal*, 97(8):643-649.
- CHAN J & ZHENHUI J.** 2010. Effects of interactivity on website involvement and purchase intention. *Journal of the Association for Information Effects of Interactivity on Website Involvement and Purchase Intention*, 11(1):34-59.
- CHITTY W, BARKER N, VALOS M & SHIMP T.** 2011. Integrated marketing communications. 3<sup>rd</sup> Asia Pacific edition. Belmont, CA: Cengage.
- CIGNA.** 2012. Family life cycle. [Internet: <http://www.cigna.com/individualandfamilies/health-and-well-being/hw/medical-topics/family-life-cycle-ty6171.html>; downloaded 2012-05-16.]
- CLOW KE & BAACK D.** 2010. Integrated advertising, promotion and marketing communications. 4<sup>th</sup> edition. Upper Saddle River, NJ: Pearson.
- CONSTANTIOU ID.** 2009. Consumer behaviour in the mobile telecommunications' market: The individual's adoption decision of innovative services. *Telematics and Informatics*, 26:270-281.
- DAHLEN M, LANGE F & SMITH T.** 2010. Marketing communications: A brand narrative approach. West Sussex, Chichester: Wiley.
- DIPIETRO RB, CREWS TB, GUSTAFSON C & STRICK S.** 2012. The use of social networking sites in the restaurant industry: Best practices. *Journal of Foodservice Business Research*, 15(3):265-284.
- EVANS M, JAMAL A & FOXALL G.** 2006. Consumer behaviour. Chichester: Wiley.
- FLANAGIN AJ & METZGER MJ.** 2001. Internet use in the contemporary media environment. *Human Communication Research*, 27(1):153-181.
- FLOYD, CF.** 2000. The takings clause in billboard control. *Washington University Journal of Law and Policy*, 3(1):357-378.

**FRANCHISE HELP.** 2012. Fast casual industry analysis 2012 – Cost and trends. [Internet: <http://www.franchisehelp.com/industry-reports/fast-casual-industry-report>; downloaded 2012-05-01.]

**GOLDSTEIN EB.** 2010. Sensation and Perception. 8<sup>th</sup> edition. Belmont, CA: Cengage.

**HAIR JF, ANDERSON RE, TATHAM RL & BLACK WC.** 1998. Multivariate data analysis. Upper Saddle River, NJ: Prentice Hall.

**HAIR JF, BLACK WC, BABIN BJ & ANDERSON RE.** 2010. Multivariate data analysis: A global perspective. 7<sup>th</sup> edition. Upper Saddle River, NJ: Pearson.

**HAWKINS, D.I., BEST, R.J. & CONEY, K.A.** 2004. *Consumer Behaviour: Building Marketing Strategy*. 9th edition. New Delhi: Tata McGraw-Hill.

**HAYNES SN, RICHARD DCS & KUBANY ES.** 1995. Content validity in psychological assessment: A functional approach to concepts and methods. *Psychological Assessment*, 7(3):238-247.

**INSTANT MONEY.** 2012. Young, free and rearing to spend. [Internet: <http://www.mypressoffice.co.za/instantmoney/pressrelease-4213.html>; downloaded 2012-05-16.]

**JORDAAN Y, EHLERS L & GROVÉ JM.** 2011. Advertising credibility across media channels: Perceptions of generation Y consumers. *Communicare*, 30(1):1-20.

**KENT R.** 1999. Marketing research: Measurement, method and application. London: Thomson.

**KOEKEMOER L.** 2004. Marketing communications. Cape Town: Juta.

**KOTLER P & ARMSTRONG GM.** 2010. Principles of marketing. 13<sup>th</sup> edition. Upper Saddle River, NJ: Pearson.

**KOTLER P, ARMSTRONG GM & TAIT M.** (eds). 2010. Principles of marketing: Global and southern African perspectives. Cape Town: Pearson.

**KREMELBERG, D.** 2011. Practical statistics. Thousand Oaks, CA: Sage.

**LENHART A, PURCELL K, SMITH A. & ZICKUHR K.** 2010. Social media and mobile internet use among teens and young adults. Washington, DC: Pew Internet & American Life Project.

**LI H, DAUGHERTY T & BIOCCA F.** 2002. Impact of 3-D advertising on product knowledge, brand attitude, and purchase intention: The mediating role of presence. *Journal of Advertising*, 31(3):43-57.

**LICHTENTHAL JD, YADAV V & DONTHU N.** 2004. Outdoor advertising for business markets. *ISBM Report 3*. The Pennsylvania State University Institute for the Study of Business Markets:1-35.

**LIN F, BLUM SC & DODD T.** 2002. Fast-food television advertisement formats. *Journal of Foodservice Business Research*, 5(4):27-44.

**LIND DA, MARCHAL WG & WATHEN SA.** 2008. Basic statistics for business and economics. 6<sup>th</sup> edition. New York: McGraw-Hill.

**MAYOSI BM, FLISHER AJ, LALLOO UG, SITAS F, TOLLMAN SM & BRADSHAW D.** 2009. The burden of non-communicable diseases in South Africa. Health in South Africa 4. [Internet: <http://www.sudafrica.cooperazione.esteri.it/utlsudafrica/EN/download/pdf/The%20burden%20of%20non-communicable%20diseases%20in%20South%20Africa.pdf>; downloaded 2013-02-13.]

**MCDONALD'S.** 2012. Our full menu. [Internet: <http://mcdonalds.co.za/content/food.php>; downloaded 2012-05-16.]

**MITCHELL VW & GREATOREX M.** 1993. Risk perception and reduction in the purchase of consumer services. *The Service Industries Journal*, 13(4):179-200.

**PARSA HG, SELF J, SYDNOR-BUSSO S & YOON HJ.** 2011. Why restaurants fail? Part II - The impact of affiliation, location, and size on restaurant failures: Results from a survival analysis. *Journal of Foodservice Business Research*, 14(4):360-379.

**PERCY L.** 2008. Strategic integrated marketing communications. Oxford, UK: Butterworth-Heinemann.



- PINGALI P.** 2007. Westernization of Asian diets and the transformation of food systems: Implications for research and policy. *Food Policy Journal*, 32(3):281-298.
- PORTER K, JOHNSON PH & PETRILLO J.** 2009. Priority health behaviours among South African undergraduate students. *International Electronic Journal of Health Education*, 12(1):222-243.
- RINDFUSS RR.** 1991. The young adult years: Diversity, structural change and fertility. *Demography*, 28(4):493-512.
- SCHUMACKER RE & LOMAX RG.** 2004. A beginner's guide to structural equation modelling. 2<sup>nd</sup> edition. Mahwah, NJ: Lawrence Erlbaum.
- SHIMP TA.** 2003. Advertising, promotion and supplemental aspects of integrated marketing communications. 6<sup>th</sup> edition. Mason, OH: Thomson.
- SHIMP TA.** 2010. Integrated marketing communication in advertising and promotion. 8<sup>th</sup> edition. Mason, OH: South-Western, Cengage.
- SMITH PR & ZOOK Z.** 2011. Marketing communications: Integrating offline and online with social media. 5<sup>th</sup> edition. United Kingdom, London: Kogan Page.
- STATISTICS SOUTH AFRICA.** 2007. Food and beverages industry. [Internet: <http://www.restaurant.org.za/pdf/New-Final-food-and-beverages-report.pdf>; downloaded 2012-05-20.]
- STATSOFT.** 2012. Electronic statistics textbook. [Internet: <http://www.statsoft.com/textbook/statistics-glossary/s/?button=0#Statistical%20Significance%20%28p-level%29>; downloaded 2012-11-18.]
- STEYN K, FOURIE J & TEMPLE N.** 2006. Chronic diseases of lifestyle in South Africa: 1995 - 2005. Technical Report. Cape Town: South African Medical Research Council.
- STORY M & FRENCH S.** 2004. Food advertising and marketing directed at children and adolescents in the US. *International Journal for Behavioural Nutrition and Physical Activity*, 1(3):1-17.
- STRYDOM J.** 2011. Introduction to marketing. 4<sup>th</sup> edition. Cape Town: Juta.
- SWART R, SANDERS D & MCLACHLAN M.** 2008. Nutrition: A primary health care perspective. *South African Health Review*. Durban: Health Systems Trust.
- THACKERAY R, NEIGER BL, HANSON CL & MCKENZIE JF.** 2008. Enhancing promotional strategies within social marketing programs: Use of Web 2.0 social media. *Health Promotion Practice*, 9(4):338-343.
- WEINSTEIN E & ROSEN E.** 2003. Teaching children about health: A multidisciplinary approach. Belmont, CA: Thomson.
- WORLD HEALTH ORGANISATION (WHO).** 2011. South Africa country profile (NCDs). [Internet: [http://www.who.int/nmh/countries/zaf\\_en.pdf](http://www.who.int/nmh/countries/zaf_en.pdf); downloaded 2012-04-29.]
- WORLD HEALTH ORGANISATION (WHO).** 2012. Noncommunicable diseases. [Internet: [http://www.who.int/features/factfiles/noncommunicable\\_diseases/en/](http://www.who.int/features/factfiles/noncommunicable_diseases/en/); downloaded 2012-04-29.]
- YESHIN T.** 2006. Advertising. London: Thomson.
- ZIKMUND WG.** 2003. Business research methods. Cincinnati, OH: Thomson.
- ZIKMUND WG.** 2010. Business research methods. 8<sup>th</sup> edition. Mason, OH: South-Western Cengage.