



## Research report

# Adolescent and young adult perceptions of caffeinated energy drinks. A qualitative approach



H. Bunting<sup>a,b,\*</sup>, A. Baggett<sup>a</sup>, J. Grigor<sup>a,b</sup>

<sup>a</sup> Institute of Food, Nutrition and Human Health, Massey University, Albany, Auckland, New Zealand

<sup>b</sup> Riddet Institute, Massey University, Palmerston North, New Zealand

## ARTICLE INFO

## Article history:

Received 18 August 2012

Received in revised form 6 February 2013

Accepted 10 February 2013

Available online 16 February 2013

## Keywords:

Qualitative research

Caffeine

Regulation

Attitudes

Energy drinks

Focus groups

Age

Food

## ABSTRACT

Understanding consumer attitudes towards foods remains critically important for manufacturers, retailers and governing bodies. Regulation within the food industry should therefore support food choice whilst protecting members of society. There have been concerns regarding beverages marketed as 'energy drinks' and the levels of caffeine in these drinks. Focus groups were used to assess participants' perceptions and understandings of caffeinated energy drinks across three demographic age groups: 16–21, 22–28 and 29–35 year olds with the narrow age range providing a focused investigation of the demographic group specifically targeted by industry. Thematic analysis revealed a number of differences in participants' perceptions of energy drinks between age groups in relation to themes of advertising, age, alcohol, brand, efficacy, energy seeking, gender, sugar, peer influence, product attributes, safety and taste. Future implications for the use of qualitative research within the health promotion industry are discussed.

© 2013 Elsevier Ltd. All rights reserved.

## Introduction

The energy drinks sector has become an ever-increasing market in terms of monetary reward, demand for regulatory control and subsequent health concerns. Globally, the energy drinks sector has exhibited strong growth. For the year ending 2008 this sector comprised 42.4% of the overall functional drinks market, relating to a total revenue of \$11.8 billion USD (Datamonitor, 2004), as compared to \$5.1 billion in 2003 (Datamonitor, 2004). With continually strong growth rates the energy drink market is estimated to reach \$164 million for the year ending 2013 (Datamonitor, 2004). Although athletes were the initial primary target market for the energy drinks sector, research has shown that adolescents and young adults between the ages of 16–35 (Heckman, Sherry, & Mejia, 2010; Miller, 2008) have become the primary groups targeted.

The chief functional constituent in energy drinks is caffeine. Caffeine provides a stimulating effect (Alford, Cox, & Wescott, 2001; Gilbert, 1988; Heckman et al., 2010; Spiller, 1998), that can enhance mental and physical performance (Alford et al., 2001) and has been associated with improved alertness (Warburton, Bersellini, & Sweeney, 2001), concentration (Alford et al., 2001;

Warburton et al., 2001), endurance, reaction time (Miller, 2008; Seidl, Peyrl, Nicham, & Hauser, 2000) and mood (Smit & Rogers, 2000). A moderate caffeine intake of  $\leq 400$  mg per day has not been associated with any major adverse health effects (Heckman et al., 2010; Nawrot et al., 2003). Conversely, at increased intake levels caffeine has been associated with negative effects, including anxiety, restlessness, aggression, headaches and depression (Spiller, 1998). Furthermore, chronic toxicity due to prolonged exposure at levels greater than 500–600 mg a day, can lead to restlessness, headaches, nervousness, irritability, anxiety, nausea, vomiting and in severe cases cardiovascular symptoms (Nawrot et al., 2003). Death due to caffeine intoxication however is uncommon, as the lethal dose of caffeine in healthy adult humans has been estimated at 5–10 g/person (Babu, Church, & Lewander, 2008). This value may be lower for people with pre-existing conditions including cardiac or seizure disorders (Babu et al., 2008; Nawrot et al., 2003). In addition to caffeine intoxication, consumption of energy drinks has been associated with seizures (Iyadurai & Chung, 2007).

One of the approaches regulators may take when faced with the potential health implications of over-consumption of caffeinated drinks is to provide consumers with more information. The approach assumes that people will improve or change their behaviour when faced with evidence supporting positive change. Critics of this however, are quick to recognise (Eden, Bear, & Walker, 2008) that relationships between stakeholders (i.e. regulators, consumers, manufacturers, and retailers) is more complex and requires a

\* Corresponding author.

E-mail address: [h.e.bunting@massey.ac.nz](mailto:h.e.bunting@massey.ac.nz) (H. Bunting).

deeper understanding of the factors that drive purchase intent, particularly in relation to systematic differences based upon consumer demographics (Bere, Glomnes, te Velde, & Klepp, 2007; Miller, 2008; Mittal & Kamakura, 2001; Reissig, Strain, & Griffiths, 2009). Eden et al. (2008) reported that food assurance schemes provoke scepticism amongst consumers, suggesting that they are counterintuitive in terms of creating consumer trust. A secondary conclusion that can be drawn from these observations is that more appropriate techniques to investigate consumer attitudes and understandings is required to ensure that an appropriate level of understanding is obtained by consumers. Although previous research has primarily relied upon quantitative methodological approaches in an attempt to characterise the rational, cognitive drivers behind dietary choices and consumption patterns amongst consumers; comparatively less research attempts to address the social and emotional functions of food.

In the Western world, gender remains a key determinant of food choice, with men typically making different and often poorer dietary choices than women (Wardle et al., 2004), with women often making food choices based on issues relating to their appearance (Chambers, Lobb, Butler, & Traill, 2008; Croll, Neumark-Sztainer, & Story, 2001). Qualitative research specifically investigating how age impacts upon food choice have previously utilised a broad age range in an attempt to characterise individuals' understanding of health and nutrition (Chambers et al., 2008).

However Croll et al. (2001) in their investigation of adolescents and healthy eating found that social influence including peer relationships had a strong influence upon participants' perceptions and decisions surrounding diet and nutrition. As adolescence is a time of growth and development both physiologically and socially, with a myriad of changes taking place in a relatively short period of time, research specifically investigating differences in food choice and preference within a narrowly defined consumer market segment appears warranted. It appears reasonable, therefore, to assert that demographic differences such as age, may mediate dietary and nutritional choices within this narrowly defined age range rather than the population as a whole. Adolescents and young adults have been targeted as the primary energy drink consumers (Simon & Mosher, 2007); with such products appearing to perform a distinct social function in the construction and maintenance of a desirable social image within their peer group (Stead, McDermott, MacKintosh, & Adamson, 2011).

O'Brien et al. (2008) reported in their web-based survey of college students energy drink use, alcohol consumption and high risk behaviour that students consuming alcohol mixed with energy drinks were twice as likely to report being hurt or injured compared to students not consuming alcohol mixed with energy drinks. The health effects of combining heavily caffeinated drinks with alcohol are to date incompletely understood. However subjective reports of individuals' perceived level of intoxication when consuming caffeine and alcohol simultaneously appears to suggest that consuming such combinations comprises 'high-risk drinking' for adolescents and young adults.

Some energy drink manufacturers are sponsors of extreme sports. This type of promotion appears to have a role in the construction and maintenance of a 'daredevil' self-image and identity amongst adolescents and young adults. This suggests that the purchase and consumption of energy drinks is based upon more complex, subconscious drivers than merely quantifiable sensory or 'liking' of the product itself. As Croll et al. (2001) found that peer norms did not appear to support healthy eating practices; this suggests that within narrowly defined age cohorts such as adolescents, a number of different variables affect understandings and attitudes towards food products and food-related behaviours. Existing quantitative psychological models of behaviour change in relation to food and eating practices to date report an optimal

predictive validity of less than 30% (Baranowski, Cullen, & Baranowski, 1999) – suggesting that food choice performs more complex functions than those driven by physiology and rational cognition in isolation.

Therefore considering the evidence pertaining to the factors driving consumer purchase intent, the present study hypothesises that attitudes towards energy drinks will differ within and between narrowly defined participant demographic age groups. Furthermore, it is hypothesised that age will specifically impact the underlying motivations driving the purchase intent of energy drinks.

## Method

### Design

The study utilised a qualitative methodological approach, using focus groups to obtain participants' perceptions surrounding caffeinated energy drinks. Six focus groups ( $N = 36$ ) stratified by age were conducted, with age stratification of the groups forming the basis of the research question. The target age of the research participants was therefore set by the researchers as between 16 and 35 years of age.

### Participants

Recruitment of participants was conducted at three public venues in Auckland to allow a larger number of potential participants. Participants were randomly approached at the Massey University Gym, Westfield Albany Mall and local shopping areas on the North Shore. Age stratification was selected to obtain a diverse range of opinions from the consumers of these products in light of the aims and objectives of the research. Qualitative studies require samples that are representative of all possible opinion variations. A brief explanation of the study was provided prior to screening against inclusion criteria. The inclusion criteria required participants to consume energy drinks at least twice per month and to be between the ages of 16 and 35. Approximately 1 week before each study, participants were contacted and asked if they would like to take part in the study, with those willing and able to attend the session supplied with further information.

### Focus groups

The focus groups were stratified by age into three groups to ensure homogeneity: 16–21 years, 22–28 years and 29–35 years. In line with literature relating to qualitative research, focus groups were designed to be as homogeneous as possible in terms of participants' demographics, in order to facilitate discussion (Krueger & Casey, 2009) and to address the aims and hypotheses of the research. In total, six focus groups each containing six participants was conducted: two per stratified age group.

The focus groups were conducted during July and August 2010 with each group scheduled for a duration of one hour. Participants were provided with a NZD \$20.00 petrol voucher as an incentive for their time and to reimburse any travel expenditure. Respondents were asked to complete a demographic questionnaire and required to provide written ethical consent prior to participation and made aware of their right to withdraw from the study prior to engaging in the focus group discussions. The study was approved by the Massey University Human Ethics Committee prior to the research taking place.

Groups were conducted in a closed meeting room at Massey University in Albany, with seating arranged in a circular formation to encourage open discussion. The focus groups were moderated

Download English Version:

<https://daneshyari.com/en/article/7311016>

Download Persian Version:

<https://daneshyari.com/article/7311016>

[Daneshyari.com](https://daneshyari.com)