Online marketing communications and childhood's intention to consume unhealthy food

Paramaporn Thaichon [a,*], Thu Nguyen Quach [b]

[a] S P Jain School of Global Management, Sydney, Australia
[b] Swinburne University of Technology, Victoria, Australia

ABSTRACT

This study investigates the impact of online advertising on social network sites on children's intention to consume fast food in Australia. The study adopted a qualitative, inductive approach to data collection using a sample of 30 Australian children who use social network sites and their parents. It was found that fast food ads on social networking sites could manipulate the young audience in terms of their purchasing likelihood, views on fast food, and eating habits. The results from the interviews also indicated that peer pressure is an important element of online communications on social networking sites. By showing their ads to a group of young consumers, companies can create a sense of socialization and associate their product with a community. This study is one of the first to consider broad aspects of children's perception of marketing communications on social networking sites in the context of the fast food industry.

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1. Introduction

Using social networking sites has become a popular activity among children in this digital age (Fernández, 2011). These sites, such as Facebook, MySpace, and Twitter, allow social interaction and create a sense of community. They act as a portal for entertainment and communication and have developed significantly over the past few years (Fernández, 2011). Research demonstrates that health-related behaviors are formed and controlled by a variety of social and community environments; likewise, the manner in which individuals belong to broader social networks and communities has a significant impact on their health and well-being (Morrow, 1999). In this digital age, social media play an important part in everyone's life, and children are no exception. It is believed that traditional media, such as television, can be blamed for reductions in physical activity and escalations in sedentary behavior, which lead to a wide range of health effects (Marshall et al., 2004). Furthermore, social networking sites present a new opportunity for companies to target children. A review of online marketing to children in the United States reveals that fast-food restaurants allocated 19% of all their online advertising on Facebook in 2012 (Clarke and Svanaes, 2014). Big brands such as Starbucks, McDonald's, Pepsi and Subway had a substantial presence on social networking sites including Facebook, Twitter and YouTube with millions of followers and 'likes'

(Harris et al., 2013). Brands use various engagement tactics such as using celebrity images or videos, doing polls or quizzes, hosting competitions, or providing discounts and vouchers in order to facilitate the interactions between the users and the brands (Clarke and Svanaes, 2014). One of the most popular techniques is to depict complimentary toys or premium with a children's meal or special discount voucher that could be used when purchasing the product in the advertisements. However, an understanding of the effects of marketing communications in social networking sites on children is lacking.

On the other hand, the prevalence of overweight and obesity among Australians has been growing progressively for the past 30 years (NHMRC, 2014). Between 2011 and 2012, around 60% of Australian adults were classified as overweight, and more than 25% of these fell into the obese category (NHMRC, 2014). In 2013, over 12 million or three out of five Australian adults were overweight or obese (AIHW, 2014). Furthermore, one in four Australian children were overweight or obese (AIHW, 2014). Besides, overweight and obesity are only beaten by smoking and high blood pressure as contributors to the burden of diseases (AIHW, 2014).

Recent research suggests that obesity can be escalated across social networks, highlighting the role of social networks and social media regarding obesity of children (Bahr et al., 2009; Christakis and Fowler, 2007). Previous research concentrated predominantly on advertisements in children's web page design, and advergames as a form of advertising have been given the most attention by researchers (Clarke and Svanaes, 2014). This is partly because of the popularity of online games among children, which is considered an

* Corresponding author. Tel.: +61 2 8970 6841.
 E-mail address: park.thaichon@spjain.edu.au (P. Thaichon).

advantage for advergames to become an extremely effective and affordable advertising method (An and Kang, 2014; An and Stern, 2011; Dias and Agante, 2011). Notwithstanding, scant research has been done on the new forms of data-driven advertising, especially social networking sites. There is little evidence on how young consumers respond to fast food ads on social networking sites, which are supposed to be their private space. In addition, as children are considered digital natives and more digital literate than most adults (Clarke and Svanaes, 2014), it is important to investigate to what extent children are vulnerable to advertising influence. Therefore, this study endeavors to investigate the child's perception of online advertising in social networking sites and the impact on his/her intention to consume unhealthy food in the Australian setting, which can be associated with the issue of obesity.

2. Literature review

2.1. Online food marketing to children

Marketing communications, especially advertising, aim to deliver a specific message to the target audience through various platforms (i.e. online and offline). Communications are most effective when targeting certain behavior rather than behavioral classifications or objectives (Fishbein, 2000). They can be used to enhance awareness through greater exposure (Chen and Green, 2009). Advertising can also endorse certain behaviors and at the same time diminish the strength of the attitudes or perceived norms that lead to the opposite behaviors or reinforce the existing beliefs and attitudes related to the targeted behaviors, so that their roles are highlighted in determining intentions and actual action (Agha, 2003; Fishbein and Cappella, 2006).

As one of the important elements of the marketing mix, online advertising plays a significant role in companies' communications with their target market (Belch et al., 1985). Advertising can strengthen a behavior, as desired by the company, and at the same time reduce the strength of the attitudes or perceived norms that result in unwanted behaviors (Fishbein and Cappella, 2006). Supporting this view, Verbeke et al. (1999) find that marketing communications influence attitudes, thereby have an impact on the behavior regarding fresh meat consumption in Belgium. As advertising has an impact on customer attitudes and motivates customers to repeat a certain behavior over time, it is proposed that online advertising has a positive influence on customer habits. Recent research reveals that nutritional disorders and poor eating habits among children are related to food advertising effects (Costa et al., 2012). Therefore online advertising can be considered as an important socialization agent in children's food consumption and preference, although there is scant evidence on its role and effects (Young, 2003).

While overweight and obesity are a growing global concern, more and more advertising and promotional efforts have been focused on encouraging the consumption of unhealthy food, fast food in particular (Clarke and Svanaes, 2014). In 2012, the US fast food restaurants alone spent a total of $4.6 billion on advertising, increasing by 8% from 2009 (Fast Food Marketing, 2013). In addition, it was found that in 2013 children under six saw about three fast food advertisements every day, whereas 12 to 17 years old saw approximately five advertisements daily (Ramrayka, 2014). The majority of food brands advertising to children on television is also promoted on the Internet through their corporate websites, popular children's websites (e.g., nick.com, neopets.com), ads placed in existing video and especially social networking sites (e.g. banners, sponsored stories). A report on food marketing to children and teens from the Federal Trade Commission reveals that "[f]ood marketers had their own Facebook and MySpace pages, links to Twitter accounts, dedicated portions of YouTube, and used other popular

social media sites" (Common Sense Media, 2014, p. 12). For example, children and young users aged 13–24 are most likely to like four pages: Domino's Pizza Australia, Pringles, McDonalds Australia and Cadbury Eyebrows (Dunlevy, 2014). Most of them are professionally managed and appear to be part of an overall marketing strategy. On the other hand, food advertising is one of the main factors behind children's increasing energy consumption, which is a more important contributor to increasing overweight and obesity than decreasing physical exercise levels in Australia (MacKay et al., 2011). Hence, this research is devoted to investigating the role of advertising in promoting an unhealthy lifestyle.

Furthermore, recent research demonstrates that children are bombarded with a large number of marketing messages on social networking sites in the forms of banner ads or sponsored messages in news feed (O'Keeffe and Clarke-Peatson, 2011; Dietz, 2013). Researchers raise a concern on the link between youth-oriented brands and a strong presence on social networking sites (Rideout, 2014). Fast food companies have used many tactics to engage young audience on their websites, including images, videos, giveaway vouchers and toys. This engagement strategy attempts to touch on the concepts of fun and novelty, which most likely appeal to young kids (Franchin et al., 2012). For example, young consumers are encouraged to "like" companies' Facebook page or sign up for their Twitter feeds, usually in exchange for premiums such as toys or discounts (Federal Trade Commission, 2012). In fact, food marketing to children featuring toys is prevalent, making up 70 percent of fast-food ads targeted at children (Otten, 2014). On Facebook, young users' activities, for instance liking a page or posting a comment, may show in news feed of their Facebook friends' sites as endorsements or sponsored stories (Goel, 2013). In fact, online food marketing to children is more sophisticated and complex because it is often harder to detect the borderlines between content and pure advertising on the Internet than traditional media such as television (American Psychological Association, 2013). Despite the increase in concerns, little research has been done in the area of advertising to children on social networking sites, including advertising effects and children's exposure, awareness, and understanding (Rideout, 2014). The majority of extant research investigating children's use of social networking sites has mainly concentrated on privacy, social interactions and cyberbullying (Boyd, 2014; Lenhart, 2012; Livingstone, 2008; Valkenburg and Peter, 2007).

2.2. Peer influence and habit formation

Several studies underline the importance of peer influence on habit formation, especially during adolescence, when there is usually a shift from home influence to group motivation (Eisenberg et al., 2005). In line with this thinking, a research by Valente et al. (2009) indicates that overweight adolescents were more likely to have overweight friends than their normal weight peers. The term "peers" is defined as a "group of members who know each other, share mutual knowledge and life experience, and serve as a comparison or reference to each other" (Niu, 2013). Durkin (1995) conjectures that peers share many traits, such as social status and cognitive ability. In consumer socialization theory, it is demonstrated that peers' impact on the children socialization process increases with age as the parental effect reduces (Moschis and Churchill, 1978; Thomson and Laing, 2003; Ward, 1974). In social network sites, virtual friends who interact with children online can also be considered as a source of influence. Children who are active users of social network sites and like to share and message are likely to promote brands and products to their friends (Harris et al., 2013). Rozendaal et al. (2013) postulate that children who are open to peer influence or appreciate the opinions of their peers often show a desire for the brand suggested by their peers. However, the nature of peer influence and how this could influence children purchase,

product request or consumption in the context of social networking sites is under-researched (Clarke and Svanaes, 2014).

In a similar vein, Cullen et al. (2000) report that peer influence has a positive effect on the snacking habits of children. Both habits and peer influence have an effect on their intention to purchase (Woisetschläger et al., 2011). It is found that when habits begin to develop and increase their strength, planning is less important and certain behavior is mainly based on automaticity and inertia (Olsen et al., 2013). Customers also tend to choose and consume a particular type of food under peer pressure or social network influence. While Woisetschläger et al. (2011) assert that there is a significant positive impact of social ties or group motivation on customer behavior, habits are found to be a direct determinant of the intention to consume and purchase (Olsen et al., 2013). When habits gain strength, their effects on the intention to consume unhealthy food are more likely to increase, as customers tend to engage more in habitual behavior.

This study endeavors to investigate the impact of online advertising via social network sites on children's intention to consume unhealthy food in Australia. It explores children's view of marketing communications, eating habits, and peer pressure in relation to their intention to consume fast food.

3. Research design

3.1. Data collection

The study adopted a qualitative, inductive approach to data collection using a sample of Australian children who use social network sites and their parents. Adopting a qualitative approach meant that the effects of marketing communications could be explored. It would have been difficult to examine these issues through quantitative methods as the different levels of meaning required to understand this topic would not have been uncovered (King, 2004). Research has shown that using qualitative interviews with children can produce rich, in-depth, reliable accounts and result in disclosures of knowledge (Mayall, 2000; Watt, 1992). The semi-structured interview format (i.e. there are several key questions that help to define the areas of interest; this format also allows for deviation and/or follow-up questions) is recommended to be the most suitable for children (Gill et al., 2008). Children particularly find the provided guidance on what to talk about in semi-structured interviews helpful in an interview situation (Gill et al., 2008).

Semi-structured interviews were conducted with 30 Australian children, as the main subjects, and their parents. All of the children had been using the Internet and social network sites for a minimum of one year. Recruitment of respondents took place through two primary and secondary schools in Australia. The data collection was carried out in the respondents' own homes, and one interview lasted from 30 minutes to 45 minutes as young kids are often not able to concentrate for a long time on a same activity (Banister and Booth, 2005). The interviews were conducted with parents and children separately as this would help to gain insights from both parent and child without the views of one intervening the other's answers (Thomson and Laing, 2003).

The interviews followed an in-depth, loosely structured approach and involved the use of open-ended questions, with probing questions used by the interviewer to clarify and elicit more detail from the participants' responses to the original question. In the beginning, children were shown snapshots of fast food marketing in the social networking sites, such as posts, images, links, and pictures of ads, with some featuring toys and other premiums. This is an effective way to engage the children, as they are more comfortable with graphics than with words (Peracchio and Mita, 1991). Subsequently, the researchers let the children freely talk and express their opinions about various advertisements from fast food companies that they encountered while using social networking sites. Most children started to share their own experience and perception of online advertising in social networking sites.

The themes covered in the interviews include an exploration of their attitudes toward fast food online advertising, the role of self-identity and group norms, and their eating habits and behavior. All the interviews were digitally recorded and transcribed.

3.2. Sample

The term 'child' usually refers to a relationship, or a person in the earlier stages of their life. The Australian Bureau of Statistics commonly specifies the age group 0–14 years for children (ABS, 2015), while the "Convention on the rights of the child" of the United Nations Children's Fund defines a 'child' as an individual below 18 years old (UNICEF, 2015). In this study, half of the children respondents (i.e. 15) of the sample were male and their average age was 12.5 (i.e. the youngest was 11 and the oldest 16).

In this study, half of the children respondents (i.e. 15) of the sample were male and their average age was 12.5 (i.e. the youngest was 11 and the oldest 16). While it was not the intention to interview certain types of children, only those who were willing to participate, this sample profile would appear to reflect online population of children who use social networking sites, and thus become the target audience of online advertising on social networking sites. A study by Newspoll Market and Social Research (2013) reveals that in Australia 23 percent of children aged 8 to 9 and 45 percent of children aged 10 to 11 years old used social networking sites in the last four weeks. This figure is almost 70 percent for 12- to 13-year-olds, 85 percent of those aged 14 to 15, and 92 percent 16- to 17-year-olds. More than 90 percent of 10- to 17-year-olds have experienced the use of social networking sites (i.e. 92 percent for 10 to 11 years old, 97 percent for 14 to 15 years old, and 99 percent for 16 to 17 years old) (O'Neale, 2013). In the current study, based on the body mass index, it was identified that 12 children were overweight, 4 were obese and 14 were normal weight. On the other hand, regarding the interviews with parents, 11 participants were male and 19 were female, and 14 respondents were from 32 and 42, while the rest were between 42 and 52 years old.

All the interviews were digitally recorded and transcribed. Template analysis was employed to detect the key themes emerging in the interviews (Crabtree and Miller, 1999). This involves the development of codes, which underline wide themes, and subsequently finer, specific themes that are significant to the study.

4. Findings

As more than half of the children interviewed were overweight or obese, a link between obesity and obesity-inducing behavior was established. It appears that the online marketing communications via social network sites had a strong impact on children's decision to consume fast food. The following themes, "new things to try," "more toys for my collection," "match my friends," and "it looks tasty," are the sub-themes of "what I see in the ads." In addition, the influence of peer pressure, eating habits, and intention is discussed.

4.1. What I see in the ads

4.1.1. Curiosity – "new things to try"

A theme emerged indicating that online advertising via social network sites can influence children's perception regarding new things to try.

> I don't mind to see some ads on my Facebook home page because I know what to try next time when I go to their store. (Girl aged 12)

I really like to try all these new chicken wings and burgers. (Boy aged 11)

It is great to see so many new things in the ads on my Facebook page. I want to try them all. (Boy aged 14)

Some of the children reported that they were happy to see or to receive more information about advertisements shown online via social network sites. This could be the result of the ability to meet the interests of a particular audience group in tailored online advertising.

I don't know why, but I think some of the ads on the Internet show me more of the things I want to see and I am interested in. … Like when there is a new product or something. (Boy aged 12)

Interestingly, there were fewer cases that were negatively influenced by online advertising via social network sites.

I don't like to look at these ads and pop-ups. These seem to be really annoying. (Girl aged 15)

I prefer not to see any ads while I am searching on my Facebook page. … It makes me lose focus on what I am doing. (Boy aged 14)

4.1.2. Collectors – "more toys for my collection"

Some young customers reported that they wanted to see online advertisements via social network sites as they wanted to obtain more information on toy collections. It was revealed that the content on social network sites can motivate young users to visit other linked sites such as corporate webpages.

It is easier to see the whole collection on the Internet. You could also check them out on the company's website. (Boy aged 11)

I find it cool to see a picture of new products with new toys. (Girl aged 11)

In addition, many children stated that their age did not give a strong indication of whether they had any interest in the toys in the advertisements or not. In relation to age, two of them said:

It does not matter how old I will be, I always want to get more toys for my bedroom. (Boy aged 13)

I really enjoy collecting all the different collections. I have been collecting them since I was six years old and I am enjoying it. (Girl aged 11)

On the other hand, one older respondent expressed a negative opinion toward "more toys for my collection."

I would expect to have more information on the food. I don't really care much about the glass collection or the toy collection. … My older brother would be laughing at me if I look at or try to get any of those toys. (Boy aged 15)

Surprisingly, many of the boys who responded admitted that they were motivated to look at advertisements showing the complimentary toys that come with the food.

It is very cool how you can see all of them on your Facebook page. You know what is the best thing? I do not have to buy them in order for me to see them (toys). (Boy aged 14)

My brother and I are sharing some of our collection. We get all of their pictures from the Internet, for example Facebook. (Boy aged 11)

4.1.3. Visual appeal – "it looks tasty"

Another theme that emerged is "it looks tasty." The appealing pictures clearly create positive perceptions of the consumption of fast food. Some of the respondents admitted that they were willing to try some of the food that they saw on the online advertisements via social network sites.

The color and shape of the food in the pictures is very nice. … They look so yummy. I want to eat them all. (Girl aged 12)

Most of the ads on my page are food that I like to eat. … The advertising sometimes makes me even want to have them more. (Boy aged 15)

4.2. Peer pressure – "match my friends"

Another theme that emerged is "match my friend." More specifically, customers try to "match" their page through the function of "like" and "share" via social networks with and among their friends.

Yes, we just do the same things on our Facebook home page. Like we share the same type of things, see the same pictures, like the same type of food, and go to the same place. (Girl aged 11)

We have a private group for our class and we normally like or share stuff on our Facebook pages. … We also share new [food] ads and go to try the food together. (Girl aged 14)

The respondents pointed out that having the same knowledge as their friends is very important to stay in their social circle.

You seem to be an idiot if you don't know this [fast food] stuff that has been around on Facebook or Twitter. My friends and I always talk about it. (Girl aged 14)

To be honest, we laugh at those who do not know what is new and fashionable. Sometimes, it might be just a new type of burger. We need to stay on trend. (Boy aged 16)

4.3. Eating habits and intention

Many children said that they tend to change their eating habits after repeatedly being exposed to advertisements on social networking sites.

Mum says I should not eat fast food too much. But it looks so good and I think it does not have any harm. Just food, you know. Now I am used to it. Not a big deal. Just my quick lunch or dinner… fun, cool, just like the ads. (Boy aged 12)

Yes, sometimes mum says it is not good to eat fast food. I used to think so but not anymore. Look at the pictures on my Facebook, they are colorful, so many types and cheap. (Girl aged 11)

I just cannot resist it. … I had been looking at the ads all day and I decided that I needed to try these. (Girl 14)

Interestingly, fast food was associated with socialization and fun.

The pictures (i.e. ads) make me feel like this is where we belong. This is part of us and our lifestyle … where we hang out and can be ourselves. (Boy aged 14)

This is about our culture, young, active and free. We are kids but also not kids. We are different. (Girl aged 16)

4.4. Parents' reaction to children's fast food consumption

In the interviews conducted with parents, although the participants (i.e. parents) tried to encourage their children to eat healthy food, many of them admitted that their children's preferences had an effect on the choices that they considered. It was mainly due to their desire to avoid any trouble with their children and to make

them happy. However, parents agreed that fast food should not be consumed on a regular basis.

> I want them to eat fresh and clean food. However, I can't simply stop them from eating fast food. They will nag and feel upset for the whole day. (Mother aged 40)

> They always cry and complain if I don't buy them those burgers or chicken nuggets, and yes, toys as well. (Mother aged 35)

> I will let my kids eat whatever they like but not every day though. Children need enough nutrition, especially at a young age. I will explain to them that fast food is not very good for their health and they should eat something else to grow better. (Father aged 50)

Two parents stated explicitly that they and their husband/wife did not allow their child to eat fast food. They were also aware of the influence of peer pressure and advertising on their children's choice of food.

> Well, it is pretty difficult sometimes because the girls insist that it (i.e. fast food) is what their friends eat and nothing wrong with it. We just try and keep pushing some other healthier options upon them. (Mother aged 48)

> Yeah, my boy always says that the pictures of the food on his Facebook page look so yummy and he wants to try it so badly. But they are all deceiving. Only marketing tactics. Nothing good in there. I bought him some once and told him to compare it with the ads; they weren't real. (Father aged 39)

Most participants noticed that their children's eating habits changed over time. Some of them did not relate this to social norms, while several considered it to be the consequence of advertising. However, none of them particularly indicated online marketing.

> Yes, their preferences change very often. My girl used to like fruit and fish, and suddenly she only wants burgers and chips. I think it is due to the kids at school. You know, staying in a circle of friends is very important to them and they tend to act the same. Of course, they want to eat the same things as well. (Mother aged 41)

> My kids love fast food, only recently though. It must be because of those advertisements on television and movies. I can't imagine how much advertising a child has seen. (Father aged 43)

> Yes, maybe online ads on their Facebook page as well. I am not sure though, but they could be there. You know, they play ads everywhere, on television, at train stations, in the streets. (Mother aged 51)

5. Discussion

The online world is considered to be a popular channel for communicating with young audiences. Many social networking sites show a wide range of advertisements, for instance banners, behavioral advertising that targets the audience on the basis of their Web-browsing behavior, and demographic-based advertisements that target people on the basis of a specific demographic factor, such as age, gender, education, or marital status (Fernández, 2011).

It was found that fast food ads on social networking sites can manipulate young audience members in terms of their purchasing likelihood, their views on fast food, and their eating habits. The results from the in-depth interviews indicate that children are influenced by the promotion of fast food products as well as the complimentary toys. In fact, recent research by Costa et al. (2012) reveals that nutritional disorders and poor eating habits among children are related to food advertising effects. Furthermore, the theme of newness and curiosity indicates that children tend to prefer new and interesting food, consistent with previous

research on the relationship between humans and food by Martin (2005). In fact, curiosity or interest is undoubtedly a significant part of children's cognitive development (Jirout and Klahr, 2012). Curiosity and novelty evoke children's interest, which is an emotion related to exploration, attention, and learning with clear motivational and goal components, particularly for exploration (Franchin et al., 2012).

Moreover, the association between fast food and complimentary toys received mixed reviews from the children. Older children seemed to express negative feelings toward toys. In this case, they might be avoiding being considered childish and attempting to formulate and project a self-image through their behavior (i.e. not having any toys). This could be explained by the fact that older children are aware of and often try to build their self-identity, which is an important construct related to how one perceives oneself and how one defines who one is (Biddle et al., 1987). In addition, the perception of other children and the need to conform to the norms in the social group that one is associated with could be another reason for the different attitudes toward toys reported by two respondents: "My older brother would be laughing at me …" and "My brother and I are sharing some of our collection."

Furthermore, peer pressure is an important element of online communications on social networking sites. This could include normative pressure from others and social punishment upon violation of group rules (Yap et al., 2014). Olsen et al. (2013) claim that customers tend to choose and consume a particular type of food or buy a certain product under peer pressure. This can be facilitated by self-identity, similar to the previous discussion regarding children's perceptions of toys. There are certainly some behaviors that are important to self-identity (Conner and Armitage, 1998), for example food choice (Armitage and Conner, 1999; Sparks and Guthrie, 1998) and purchasing certain products (Smith et al., 2007). Supporting this, Martin (2005) asserts that food can carry important identity values.

In addition, Woisetschläger et al. (2011) emphasize that there is a significant positive impact of social ties and group motivation on customer behavior (Olsen et al., 2013). Subjective norms refer to one's perception of social pressure to act or not to act in a certain way (Yun and Silk, 2011). Approval from and connecting with peers are an important factor of life, not only for adults but also for children (Fernández, 2011). By showing their ads to a group of young consumers, companies can create a sense of socialization and associate their product with a community. Furthermore, fast food is associated with socialization and fun, according to some of the respondents. As a result, these factors encourage the consumption of unhealthy food, which can be blamed for obesity (Marshall et al., 2004). This is demonstrated through the theme of "match my friends," as stated by two of the respondents: "… we share the same type of things, see the same ads, like the same type of food, and go to the same place …" and "We have a private group for our class and we normally just like or share the stuff on our pages." In line with this thinking, Alente et al. (2009) find that overweight people had friends who were also overweight, indicating that individuals might engage in the same behaviors of physical inactivity and unhealthy eating in their social circles.

It is confirmed that health-related behavioral change happens gradually under the effects of different factors (Parkinson et al., 2012). Previous research illustrates that attitudes, self-identity, and social norms are antecedents of intention, which in turn is regarded as a predictor of behavior in accordance with the theory of planned behavior (Terry et al., 1999). In fact, the results show that online marketing communications can change children's eating habits and behavior through the influence on children's attitudes and peer pressure. As illustrated in the interviews, many children stated that they tend to change their eating habits after repeatedly being exposed to advertisements on social networking sites, especially because of

the ads' visual appeal. Therefore, it can be concluded that the design of the ads appears to be an influencing factor that taps into the psychological side of children, who are usually curious and easily attracted to colorful and fun things.

On the other hand, although the interviewed parents stated that they wished to choose healthy food options for their family, their reported experiences revealed that this wish might suffer from the pressure of pleasing their children. Maintaining harmony with their children appears to be the main reason for buying fast food for them. While some parents act as a gatekeeper in the choice of food, they sometimes compromise with their children, for instance allowing them to purchase fast food on some occasions. Only a few of them attempted to change their children's perceptions regarding fast food. In addition, although many were aware of the effects of advertising and peer pressure, most of them did not notice the specific influence of online marketing communications. Hence, it is important that parents and social organizations are aware of the effects of digital advertising to enable them to understand and improve children's behavior, especially in health-related matters (Kunkel et al., 2004).

6. Implications and conclusion

This study is one of the first to consider broad aspects of children's perception of marketing communications on social networking sites in the context of the fast food industry. This study seeks to address the factors related to customer intention to consume unhealthy food, namely advertising, eating habits, and peer influence, in the Australian context. The paper provides exploratory data to illustrate the impact of social network sites' online communications on children's attitudes toward fast food consumption, and fill the void in the literature of food marketing using new media aimed at children. Fast food advertising targets children through (1) displaying novel and visually tasty food products to appeal to children's curiosity, (2) associating fast food with toys/collections, and (3) delivering a sense of socialization and peer pressure that can create a snowball effect within a community. In general, it is proposed that the marketing effort from fast food chains can encourage unhealthy eating habits and intentions.

Furthermore, this study confirms the notion that children already possess an adequate understanding of advertising at their early age (for instance, eleven years old in this study) (Young, 2003). In fact, John (1999) states that children from 11 to 16 are in the reflective stage of consumer socialization, establishing some certain understanding of products and marketing practices, and possessing fairly complex knowledge of products and marketer's intention. However, as indicated in this study, they might not be aware of the actual effects of advertising on their behavior and can be influenced to purchase particular brands and products if the advertisements are appealing enough. It also contributes to the current knowledge by providing some exploratory evidence of what children actually see in food advertising on social networking sites. In addition, advertising as an agent of socialization seems to exert its influence on children through another agent – peers, which are a relatively strong force in children's food preferences and choices.

Mass media public health campaigns can promote healthier behaviors (Agha, 2003). However, recommendations in health communications can be harder to comply with than the usual non-health communications, for example advertisements from fast food companies (Block and Keller, 1997). The findings of this study have significant implications for policy makers and practitioners. For instance, it is suggested that the visual component seems to enhance the effectiveness and influence of online marketing communications, although the pictures do not always reflect the real quality of the products. This opens up the possibility for policy makers to review the regulations related to online communication on social network websites targeting young children. As such, the dimensions of visual appeal used in advertising can be strictly defined and monitored to suit customers of a younger age. Moreover, parents need to study the digital environment surrounding their children more as a majority of them are not aware of the effects of online advertising in social networks. In general, the intervention of government and health organizations should concentrate on increasing the attention paid to health issues, self-efficacy, and perceived norms, and at the same time lessening the influence of marketing efforts aiming to motivate unhealthy eating habits. Endorsing children's healthy eating habits is not only a solution to obesity but also a preventative method for a healthier society.

7. Limitations and future research direction

There are several limitations to this study. First, the research illustrates the impact of novelty and curiosity. It is often debated whether the tendency to choose novel food is a result of nature, nurture, or both. Silvia (2005) argues that a person might just be naturally curious, which means that interest is considered mainly to be a property of the individual perceiver rather than of the stimulus itself (Silvia, 2005). On the other hand, Livingstone (2005) emphasizes the role of social learning and exposure through technology and marketing. As such, further research could be conducted to examine the drivers of curiosity and interest of children. Additionally, the current research was only able to capture the behavioral intention. A possible opportunity for future research is to investigate whether online communications on social networking sites can alter children's actual behavior. In addition, it would be interesting to examine the changing patterns of children's attitude and behavior toward fast food through longitudinal loyalty.

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Paramaporn Thaichon is an Assistant Professor of Marketing at the S P Jain School of Global Management, Sydney, Australia. His research has been published in leading marketing journals throughout Europe, North America and Australasia, including but not limited to the *Journal of Retailing and Consumer Services, Journal of Business and Industrial Marketing, Asia Pacific Journal of Marketing and Logistics*, and *Journal of Relationship Marketing*.

Thu Nguyen Quach holds a Master's Degree in Marketing and is currently working toward a PhD program in Marketing in the Faculty of Business & Enterprise – Swinburne University of Technology, Melbourne, Australia. Her research interests are in the area of services marketing, marketing research, consumer behavior and relationship marketing. Thu's research has been published in the *Journal of Retailing and Consumer Services, Journal of Business and Industrial Marketing*, and *Services Marketing Quarterly*, among others.