

Gender Differences in Marketer and Non-Marketer Dominated Sources of Health and Wellness Information

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Introduction

At no time in history has the accessibility of health and wellness information been more available to the average American. Present-day marketing of health and wellness products, services, as well as idea marketing campaigns promoting healthier lifestyles, are readily available in a broad spectrum of advertising campaigns. Two fundamental questions challenging health care providers and professionals in wellness and health promotion are 1) with the current accessibility of health and wellness information, why are Americans not becoming healthier? 2) What can be done to promote healthier lifestyle choices of the average American?

In an effort to address question two above, the authors hypothesize that enhanced knowledge of how consumers respond to marketer/non-marketer dominated sources of health and wellness information is critical to the creation and implementation of effective promotional strategies and tactics. Seven marketer dominated media sources (magazine advertisements, television advertisements, books, newspapers, radio, internet, and direct mail) and three non-marketing sources (healthcare provider-pediatrician and nurse practitioner, friends, and family members) were tested for gender differences in this study. A report on gender differences is also provided on subjects' knowledge and importance ratings of childhood obesity, healthy nutrition, and regular exercise.

Review of the Literature

Health and Wellness – Issues of Obesity in the United States

The 2012 Institute of Medicine Report Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation, reported that obesity rates are significantly higher in specific demographic segments including ethnic minorities, lower income, lower educate, and those located in geographically rural populations. The negative impact of obesity was also reported to effect the incidence of early onset of Type II Diabetes. Additionally, the research notes the estimated economic impact of obesity in 2000-2005 to be 190.2 billion dollars or nearly 21% of the reported annual medical spending in the United States (The 2012 Institute of Medicine Report Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation, pg.2). The incidence of obesity, as well as the negative impact on health and wellness in The United States, has steadily increased over the past two decades. In 2017, approximately 29.6% of the adult population self- identified as obese, a 17.6 % increase since 1990 (Healthcare Business Market Research Handbook 2017-2018).

The negative impact of obesity has been well documented in the health and medical literature. Rössner (1998) warned of the dangers associated with childhood obesity and its impact on adulthood obesity. Weihang, Threefoot, Srinivasan, & Berenson (1995) reported on relationship between obese children and hypertension in adulthood. Freedman et al. (2001, 2007) found cardiovascular risk factors and conditions of morbid obesity to increase among children and adolescents who were classified as overweight. Obesity has also been shown to increase patients' risk for asthma (Sutherland, 2008) as well as children and adolescents risks of orthopedic problems (Taylor et al. 2006).

Rasmussen (2014) cites in his review of obesity in the late 1940s and 1950s in the United States, that it was a common belief that obesity was an addiction deep-rooted in psychoanalytic theory. This prevailing view resulted in additional negative stigmas attached to obese individuals and ineffective public health treatment centers. Reisch and Gwozdz (2010) found that obesity was one of the biggest societal problems in the United States and it is also often associated with numerous negative psychological consequences in children including but not limited to bullying and negative self-esteem. Obesity is not restricted to adults and when linked to children it has been found to have a negative influence on perception of personal and social relationships. Historic research by Lerner and Gellert (1969) found that children devalued obese children silhouettes. Politano and Politano (2011) retested

this premise and later found that although childhood obesity was more prevalent in the 2011 study, children continued to devalue obese shaped silhouettes.

The messages from health-care professionals have been clear; unhealthy eating habits and lack of adequate exercise of children and adolescents results in higher mortality rates as adults (Mahoney et al., 2005). Obesity affects children and adolescents more than adults and obese children are more prone to be obese later in life (Biro and Wien, 2010; Dietz, 1998; Freedman et al., 2001). The increase in unhealthy living styles, unhealthy food choices, and the lack of exercise in the United States has continued to escalate. Consumers seem unresponsive or unwilling to heed the warnings from health care professionals, preventive health care sources of information, grass root advocates, sponsors of good eating habits and the promotion of exercise, as well as PSAs and attempts by food and beverage industry campaigns to curb unhealthy food consumption by children. A disconnect between the negative result of consumers' consumption of unhealthy foods and lack of exercise, and mortality is similar to the undeniable unhealthy consumption of cigarettes in the early 1950s and 1960s in the United States.

Promotional Efforts Aimed at Health and Wellness

The authors believe that Providers of Preventive Health-Care Information (PHCI) can do more to inform consumers of unhealthy eating habits and the risks associated with lack of regular exercise. More knowledge about which sources of health care information (HCI) are rated higher by gender may be a step in the right direction. Knowledge about gender differences of health and wellness topics is another area that the authors believe will lead to adoption of healthier lifelong learning. In 2005, after rising criticism of the US food industry for their role in escalating childhood obesity, advertisers announced new programming policies aimed at reducing children's exposure to unhealthy food and beverage products (Warren et al. 2007). These policy changes were relatively ineffective in reducing obesity primarily because of the insignificant differences between television programming and advertising content.

The Federal Trade Commission (FTC) website on Consumer Information, warns consumers about the numerous false claims of advertisers who offer miracle remedies for weight loss and physical fitness. The website has a Weight Loss Challenge where consumers can test their knowledge (or lack thereof) of the claims from advertisers regarding their weight loss products. There have been several research studies on children's television viewing habits and obesity. The results of these studies have been mixed. For example, Beales and Kulick (2013) found that children aged seven and above, were more likely to associate a relationship between television viewing and obesity than children were less than seven years of age. There were no significant differences between the effects of viewing commercial versus noncommercial television. A cause and effect relationship between increased commercial television viewing and obesity was not established. Recent research has also demonstrated that consumers of health care information may prefer certain forms of preventative health care information. Cangelosi, Kim, and Ranelli, (2015) found that users do not rely on all sources of internet information for PHCI equally, and social media, such as Facebook and Twitter, were the least popular sources for PHCI.

Promotional campaigns for leading fast food restaurants have experienced an increase in consumer spending of large or super-sized soft drinks, high calorie food products, and mega-sized food portions. Unhealthy consumer eating patterns are trends that have been fueled by promotional campaigns of fast food restaurants and the absence of empirical evidence on how consumers perceive and value information sources regarding healthy eating and exercise habits. Fortunato (2011) presented a case study on McDonald's use of social responsibility initiatives to address the societal concern of obesity. The concern over the consumption of unhealthy, high calorie foods and beverages has been the focus of several local, regional, and national health-promotion campaigns. These efforts, coupled with the expressed concern of politicians, government agencies, and public-health officials, occurred as an outcome of obesity being identified as a large-scale human epidemic.

Public Policy Issues and Governmental Intervention

Roynes and Levy (2015) report that with the advent of the Affordable Care Act, and the changing political landscape, never before has health care and its importance to consumers, received as much media attention and

simultaneous scrutiny (pg.85). The United States Department of Agriculture Food and Nutrition Service currently offer multiple programs to provide healthy food choices to children. The USDA Food and Nutrition website cites that the goal of their programs is to help fight hunger and obesity. Programs including the National School Lunch Program, School Breakfast Program, Child and Adult Care Food Program, Summer Food Service Program, Fresh Fruit and Vegetable Program, and Special Milk Program are administered by state agencies (retrieved on May 15, 2017, <https://www.fns.usda.gov/school-meals/child-nutrition-programs>). In addition to the federally funded programs aimed at decreasing rates of obesity, numerous state funded campaigns, such as The Voices for Healthy Kids Campaign to Prevent Childhood Obesity, have gained notoriety. Several state legislators have also enacted (or are in the process of enacting) state legislation to tax high sugar products such as soft drinks. For example, in the state of Connecticut at the General Assembly February 2014 Session, lawmakers proposed Bill 96: a two percent tax on all beverages that are high in calories and sugar. The Statement of the purpose of Bill was “To combat obesity by increasing the price of high calorie, sugary drinks.” (State of Connecticut General Assembly, February 2014, Proposed Bill No. 96 LCO N0. 764).

Methodology

Sample

A total sample of 574 subjects completed a 46-item Consumer Health Information Questionnaire. A total of 505 subjects reported their gender, (282 males and 223 females). Response rates varied by question and are indicated when significant findings are reported. Subjects were instructed to complete the entire questionnaire. Questionnaire items consisted of health and wellness topics, use of marketer/non-marketer sources of health and wellness information, and demographic type questions. Seven point Likert-type scales were used to assess level of knowledge (1=Not at all Knowledgeable to 7=Very Knowledgeable), level of importance (1=Not at all Important to 7=Very Important), and utilization of marketer and non-marketer sources of health information (1=None of the Time to 7=All of the Time). Independent sample t tests were performed to test for gender differences for 1) marketer and non-marketer sources of health care information, and 2) level of knowledge and level of importance on childhood obesity, healthy nutrition, and regular exercise.

Additional open ended response questions were used to assess subjects’ responses to factual health-related information (i.e. primary risk factors associated with heart disease according to The American Heart Association, recommended daily caloric intake by the USDA, primary cause of death for women in the US, and BMI index for healthy adults). Demographic questions were included to evaluate gender, age, ethnicity, and exercise activity. The exploratory nature of this study will be limited to the analysis of questions related to gender, marketer/non-marketer dominated sources, level of knowledge and level of importance of childhood obesity, healthy nutrition, and regular exercise.

Findings

Descriptive Statistics

Mean scores represent utilization of health care information (1=None of the time and 7=All of the time). A ranking of the means for the ten sources of Health Care Information (HCI) found that the top three sources included two non-marketer dominated sources (Family Members, rank=1, and Health Care Provider, rank=3), and one marketer dominated source (Internet, rank=3)[See Table 1)].

Table 1: Means and Ranking for Health Care Information

Health Care Information	N	Mean	Ranking
Family Members	527	4.94	1
Internet	531	4.70	2

Health Care Provider (pediatrician, nurse practitioner)	519	4.49	3
Friends	523	4.24	4
Books	513	3.58	5
Television Advertisements	517	3.57	6
Newspapers	508	3.32	7
Magazine Advertisements	506	3.08	8
Radio	505	3.04	9
Direct Mail	538	2.45	10

Gender Differences of Marketer Dominated Sources of Information

Two significant differences < 0.01 were found, and one significant difference < 0.05 was found for males and females use of marketer-dominated sources of information (MDSI). Females' usage for all three marketer dominated sources (magazines, books, and newspapers) were significantly higher than males. The mean for females use of magazines was 3.46 and the mean for males was 2.75 with $t=5.055$, significant @ 0.000. The mean for females use of books was 3.89 and the mean for males was 3.45 with $t=3.277$, significant @ 0.001. The mean for females use of newspapers was 3.52 and the mean for males was 3.22 with $t=2.074$, significant @ 0.039.

Gender Differences of Non-Marketer Dominated Sources of Information

Three significant differences < 0.01 were found for males and females use of non-marketer-dominated sources (NMDSI). Females' usage for three non-marketer dominated sources of information (Health Care Provider-pediatrician, nurse practitioner, Friends, and Family) were significantly higher than males. The mean for females use of Health Care Providers was 4.86 and the mean for males was 4.22 with $t=4.716$, significant @ 0.000. The mean for females use of friends for non-marketer sources of information was 4.42 and the mean for males was 4.06 with $t=3.001$, significant @ 0.003. The mean for females use of family members was 5.10 and the mean for males was 4.75 with $t=3.056$, significant @ 0.002 [See Table 2].

Table 2: Marketer and Non-Marketer Gender Differences

Health Care Sources of Information	Mean		t	Sign (2 tailed)
	Males	Females		
Magazines	2.75	3.46	5.055	0.000**
Health Care Provider (pediatrician, nurse practitioner)	4.22	4.86	4.716	0.000**
Friends	4.06	4.42	3.001	0.003**
Television Advertisements	3.56	3.57	0.100	0.921
Books	3.45	3.89	3.277	0.001**
Newspapers	3.22	3.52	2.074	0.039*
Family Members	4.75	5.10	3.056	0.002**
Radio	3.02	3.08	0.400	0.689
Internet	4.60	4.85	1.897	0.058
Direct Mail	2.66	2.56	0.622	0.534

**Significant < 0.01 , *Significant < 0.05

Gender Differences in Level of Importance and Level of Knowledge

Level of Importance and Level of Knowledge were also tested for gender differences on the following health and wellness topics: childhood obesity, healthy nutrition, and regular exercise. Females' ratings of level of importance of childhood obesity, healthy nutrition, and regular exercise were significantly higher < 0.01 than males. The mean for females' ratings of level of importance of childhood obesity was 5.96 and the mean for males was 5.28 with $t=5.352$, significant @ 0.000. The mean for females' ratings of level of importance of healthy nutrition was 6.60 and the mean for males was 6.24 with $t=5.140$, significant @ 0.000. The mean for females' ratings of level of importance of regular exercise was 6.61 and the mean for males was 6.32 with $t=4.127$, significant @ 0.000 [See Table 3].

Table 3 – Gender Differences in Levels of Importance and Knowledge

Level of Importance/ Level of Knowledge of Health and Wellness Items	Gender	N	Mean	t	Sign (2 tailed)
Level of Importance of Childhood Obesity	Male	279	5.28	5.352	0.000**
	Female	216	5.96		
Level of Knowledge About Childhood Obesity	Male	276	4.28	1.908	0.057
	Female	216	4.53		
Level of Importance of Healthy Nutrition	Male	282	6.24	5.140	0.000**
	Female	222	6.60		
Level of Knowledge of Healthy Nutrition	Male	275	5.45	1.704	0.089
	Female	220	5.63		
Level of Importance of Regular Exercise	Male	281	6.32	4.127	0.000**
	Female	222	6.61		
Level of Knowledge About Regular Exercise	Male	275	5.92	1.845	0.066
	Female	219	6.10		

**Significant < 0.01

Discussion

The research presented in this paper focused on gender differences in the use of marketer and non-marketer dominated sources of HCI so that the reader may learn more about how men and women view Preventive Health Care messages in different ways. A summary of the significant differences between men and women suggest that women used three marketer-dominated sources: magazines, books, and newspapers more than did men. Women also used three non-marketer sources, Health Care Provider (pediatrician, nurse practitioner), friends, and family members significantly more than did men. Additionally, women's ratings of the importance of childhood obesity, healthy nutrition, and regular exercise were significantly higher than men's ratings.

Limitations and Implications for Future Research

The authors are encouraged by the results of this preliminary investigation to conduct further research inquiry specifically in the area of gender differences. The exploratory research presented in this paper found gender differences exist for marketer and non-marketer dominated sources of information and for importance ratings on health and wellness topics. Future research investigating probable relationships of additional variables associated with the promotion of HCI using causal modelling may shed more light on the findings presented in this paper. Obesity and the issues related to the promotion of critical health and wellness information are research areas that encompass many disciplines. The authors believe significant steps are achievable by a concerted effort of those actively engaged in research on how consumers respond to PHCI and the promotional strategy and tactics that

lead to healthy lifestyle choices.

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Keywords: *healthcare marketing, promotional strategy, integrated marketing communications*

Relevance to Marketing Educators, Researchers and Practitioners: This paper is relevant to health-care marketing practitioners, professional healthcare promotional planners, and marketing communication researchers.

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TRACK: Healthcare Marketing