Clemson University **TigerPrints**

Focus on Creative Inquiry

Research and Innovation Month

2014

Investigating if Dr. Pepper TEN is a \10\" for men"

M. Macnaughton

B. Butterworth

A. Corverse

K. Davis

E. Ewald

See next page for additional authors

Follow this and additional works at: https://tigerprints.clemson.edu/foci

Recommended Citation

Macnaughton, M.; Butterworth, B.; Corverse, A.; Davis, K.; Ewald, E.; Green, H.; Grigg, A.; Jones, E.; Keating, L.; Maurer, M.; Martinez-Dawson, R.; and Dawson, P., "Investigating if Dr. Pepper TEN is a 10" for men" (2014). Focus on Creative Inquiry. 8. https://tigerprints.clemson.edu/foci/8

This Article is brought to you for free and open access by the Research and Innovation Month at TigerPrints. It has been accepted for inclusion in Focus on Creative Inquiry by an authorized administrator of TigerPrints. For more information, please contact kokeefe@clemson.edu.

Authors M. Macnaughton, B. Butterworth, A. Corverse, K. Davis, E. Ewald, H. Green, A. Grigg, E. Jones, L. Keating, M. Maurer, R. Martinez-Dawson, and P. Dawson									



INVESTIGATING IF DR. PEPPER 10 IS "NOT FOR WOMEN" BUT A "10" FOR MEN

BROOKE BUTTERWORTH, ALLIE CORVESE, KATHRYN DAVIS, ERIC EWALD, ERIN FITZGERALD, CAMERON FLOWERS, HANNAH GREEN, ALYSSA GRIGG, GABRIELLE GUNTER, EDWARD JONES, LINDSEY KEATING, MOLLYE MACNAUGHTON, MARK MAURER, DR. ROSE MARTINEZ-DAWSON* AND DR. PAUL DAWSON**.

DEPARTMENT OF MATHEMATICAL SCIENCES* AND FOOD, NUTRITION AND PACKAGING SCIENCES** CLEMSON UNIVERSITY



Introduction:

Food advertising targeting males has increased possibily because 40% of men are now the primary grocery shopper in the household¹. Powerful Yogurt is marketing "the first yogurt in the U.S. designed for a man. Another example is "Ruffle's Ultimate potato chips has "manly ridges for real men." The Dr. Pepper Snapple Group invested over \$30 million dollars into the Dr. Pepper 10 line extension². The Dr. Pepper 10 advertising campaign touts the new soda as a low calorie drink with all the same flavor as the original Dr. Pepper soda appealing to men and "not for women" in an effort to debunk the stigma that diet sodas are viewed as a feminine drink. This increase in marketing towards men was the inspiration to test the Dr. Pepper 10 claim of "not for women" and the "manliest low calorie soda in the history of mankind." These commercials may not be considered "politically correct" by some. One of the commercials features men in an action movie scene declaring their preference for Dr. Pepper 10 and telling women to "keep their romantic comedies and lady drinks." The focus of this research was to test food manufacturers' advertising claims. The study focused on three main questions: Do the majority of men and women prefer Diet Dr. Pepper or Dr. Pepper 10? Is there a difference in taste preference for Diet Dr. Pepper or Dr. Pepper 10 based on gender? Is there an association between gender and the willingness to purchase Dr. Pepper 10 after viewing a Dr. Pepper 10 commercial?

Materials and Methods:

Materials:

The data were obtained from 168 Clemson University undergraduate students who completed a three part survey, including taste preference test.

Methods:

To answer the research questions an online survey was developed using Qualtrics³. The survey consisted of 3 sections: (1) demographics (sex, soda consumption frequency, and Dr. Pepper soda consumption frequency), (2) taste preference and (3) questions concerning soda purchases after viewing a Dr. Pepper 10 commercial. IRB approval was obtained and the survey was administered to four undergraduate classes at Clemson University during the fall 2013 semester. Each class received a blind sample of Dr. Pepper 10 and Diet Dr. Pepper to taste and order of consumption was randomized for each class. Each class was then shown the same Dr. Pepper 10 commercial and completed the survey by answering questions about their willingness to purchase the product after watching the commercial.



Statistical Testing:

Descriptive statistics were calculated and hypothesis tests were performed. Of the 168 participants who completed the survey, 153 had a taste preference. One and two proportion Z tests were performed for the taste preference questions using data for those who had a taste preference. Chisquared tests were conducted to test association between gender and soda purchases after seeing the commercial. Statistical significance was determined using α =0.05.

Results:

Table 1: Proportions who preferred Dr. Pepper 10 by sex

	Overall	Soda Drinkers	Dr. Pepper Drinkers
Male	51/65	44/57	40/51
Female	65/88	54/73	41/52

<u>Table 2:</u> Association between sex and likelihood of buying soda after seeing the Dr. Pepper 10 commercial

	1	2	3	4	5	6	7		
Overall- Includes those who did not do the taste test									
Male	16.6%	23.1%	12.8%	15.4%	21.8%	6.41%	3.84%		
Female	21.8%	25.4%	19.1%	12.7%	10.0%	9.09%	1.81%		
Soda Drinkers who did the taste test									
Male	9.83%	21.3%	14.7%	18.0%	24.6%	6.55%	4.91%		
Female	16.2%	23.7%	22.5%	13.7%	11.2%	10.0%	2.50%		
Dr. Pepper drinkers who did the taste test									
Male	11.7%	19.6%	15.7%	13.7%	25.5%	7.84%	5.88%		
Female	7.69%	21.1%	23.1%	15.4%	13.5%	15.4%	3.84%		

1=Very Unlikely; 2=Unlikely; 3=Somewhat Unlikely; 4=Undecided; 5=Somewhat Likely; 6=Likely; 7=Very Likely

The majority of males and females (overall, soda drinkers and Dr. Pepper drinkers) preferred the taste of Dr. Pepper 10 (p-value < 0.001). There was no evidence that a higher proportion of males preferred the taste of Dr. Pepper 10 than women (p-value= 0.2546). In addition, no evidence of an association was observed between gender and likelihood of purchasing Dr. Pepper 10 after seeing the commercial (p-value > 0.25)

Conclusions:

Despite the projection that Dr. Pepper 10 is a "man's drink," this study indicated that men and women with a taste preference preferred the taste of Dr. Pepper 10 over Diet Dr. Pepper. As further evidence against gender preference for Dr. Pepper 10, this research found a lack of evidence that men preferred the taste of Dr. Pepper 10 more than women. In addition, there was no evidence of an association between gender and the likelihood of purchasing Dr. Pepper 10 after watching the commercial. Although the advertisement was to appeal to the male consumer, this study showed that it did not achieve this goal.

Since the participants in this research were of a narrow age range, future research would include participants with more varied demographics. Focus groups could be conducted to more fully investigate the commercial's effect on consumers' perceptions of the soda.

Potential Significance to Culinology®:

The results give doubt to the "just for women" claim of the advertisements. Adverting claims on products are important to the field of Culinology because Food Scientists want to provide accurate information about their products to the consumers. New product claims and competitive products are routinely tested to ensure that the claim accurately reflects what is advertised. This builds a sense of trust between the consumer and company. Therefore, it is important that Culinologists be able to statistically verify food advertising claims on their own products as well as competitive products.

References:

Dr. Pepper 10 commercial: http://www.youtube.com/watch?v=Zza3GqEL5B0

1: Tuttle, Brad. 2013. Guys and Dollars: How Groceries, Barbies, Fashion and More Are Being Marketed to Men. Time Magazine. January 4, 2013.

2:Mintel Group Ltd. February 14,2013. Dr. Pepper strongly invests behind TEN platform. Food Business News [serial online]; Availabile from Mintel Group Ltd Online. [Accessed September 2013].

3:Qualtrics Headquarters, Provo, UT.

This project was supported by the Creative Inquiry program at Clemson University

