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The Bridge to Closing The Green Gap

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The Bridge to Closing the Green Gap

By

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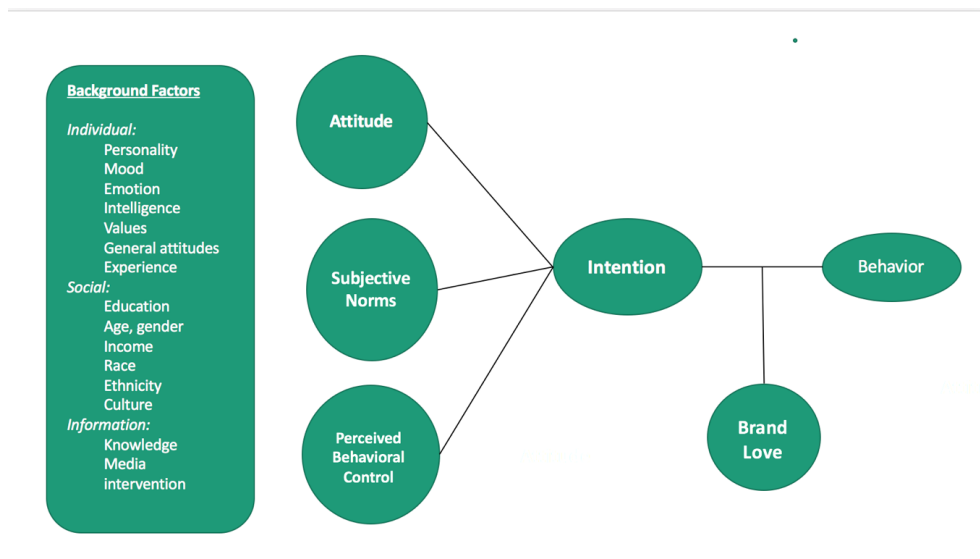**University of Arkansas**
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SUMMARY:

In today's society, we have seen the theme of green consciousness and sustainability become more prevalent as the years pass by. Even as this concept seems to increase in consumer engagement there is not a proportional increase in consumer behavior. This is what is referred to as the gap between green consciousness and green consumerism. Many believe the root of this issue can be solved by increasing regulations. However, I believe this gap can be narrowed by using brands to shift consumers behaviors through their message.

The main question that I want to focus in on is, "Can a brand love influence the consumer to a point where it increases their desire to be sustainable, beyond any other variables."

Through these we can get a better understanding of why consumers purchase certain brands. Brand love is related to the construct of purchase behavior. This means that the purchase patterns of consumers are influenced by their love for the brands. This bring us to the construct of green consumerism, which is defined by Cambridge Dictionary as, "the situation in which consumers want to buy things that have been produced in a way that protects the natural environment." If you have a brand that people love that protects the environment, they will become green consumers, thus increasing green consumerism. Over time the increasing green consumerism will help close the green gap. Through this framework I will determine if brand love can truly increase green consumerism and green consciousness. The responsibility for finding a solution to closing the green gap rests on corporations' marketing strategies and socially responsible initiatives.

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I.   INTRODUCTION:

Green Consciousness:
Green Consciousness is the mindset when someone is aware of how items or actions are affecting others and the space around them. Often times this is seen as more saturated than Green Consumerism itself. In a study by Glein and Lawson they learned that 83% of individuals are concerned about the earth around them. While only 16% of people preform in ways that align with that ideal. In a study conducted by Neilson, they found that 73% of consumers would shift to purchasing green products. However only 41% of consumers say they are willing to spend more. That is already a 32% gap in purchase intention. To break down Green Consciousness even more, Neilson shows us that Millennials are the most likely to be Green conscious followed by Gen X and then baby boomers (Unpacking the Sustainability Landscape).

Green Consumerism:
Green Consumerism is when people purchase products that are green, sustainable, organic, free trade, or environmentally friendly. Overall these products better the environment in some way. Based on a Study from the *Harvard Business Review* many consumers are often drawn to green consumerism through social influence, political identity, and incentives. Often times people will also purchase green products in order to increase their self-perception or for the purpose of increasing their positive-perception of others. According to an article entitled, 'The Rise of Green Consumerism', there has been a steady rise in green consumerism since 1970's and 1980's; which shows that it is possible to make this change and further increase green consumerism (The Rise of Green Consumerism).

Green Gap:
Primarily this gap stems from a gap in attitude and behavior. This means that people generally have positive associates with Green and Sustainable items, products, actions, and causes. However, when it comes to measuring these same persons behavior the correlation is significantly lower. In an article by Joshi, they stated that "Grunert (1995) reported that consumer household purchases were responsible for 40% of the environmental damage (Joshi)." This problem can often be due to Greenwashing, is when marketing teams develop tactics to make a product or action appear green when in reality it has little to no effect on the environment and can yield consequences (Gleim). Freeriding is also a factor that contributes to the spread between attitude and behavior. Freeriding is when a consumer believes that many other consumers are behaving a in certain way that is beneficial to the community that they do not have to (The Elusive Green Consumer).

Marketing & Brand Love:
Marketing is a key strategy that companies use in order to gain or bring exposure to competitive advantages of a brand. This can often be called branding. According to an article written by Pickett-Baker and Ozaki, branding is an essential tool when trying to shift attitudes. Marketers have a lot of control on how the consumer sees the product, not just physically on the shelf but internally what the product makes them feel. Saatchi and Saatchi a well-established

marketing firm that works with many companies for example P&G, General Mills, and Visa. They developed a theory called Love Marks which states that if a product is highly loved and respected by a consumer it is called a love mark. This term simply means the consumer will be loyal to this brand/product beyond any reason. Due to the fact that there is a gap in the attitude and behaviors of consumers on the green scale It may be possible that in order for sustainable products to gain traction they could employ tactics such as this one. Research from Pro Environmental Products: Marketing influence on consumer purchase decision, they say "affective marketing could convert passive green consumers who are willing to pay premium prices for pro environmental products to greener consumption (Ottman,1998)."

Theory of Planned Behavior:

The Theory of Planned Behavior (TPB) is derived from Azjen's Theory of Reasoned Action (TRA). Both of these theories assume attitudes and intentions as predictors of behavior. However, Theory of Planned Behavior (TPB) puts more emphasis on what happens between intention and behaviors. This theory adds a construct called Perceived Behavioral Control (PBC). This encompasses a person's control to actually perform a behavior. It is also composed of internal and external factors (Azjen's). I chose this model as it follows along with my main questions of there is more that a person needs than just the simple intention to purchase green products, I believe that looking at Perceived behavioral control as well as adding brand love to the mix may be a key to closing this gap. In order to gain a better understanding of these two models see the illustration below.
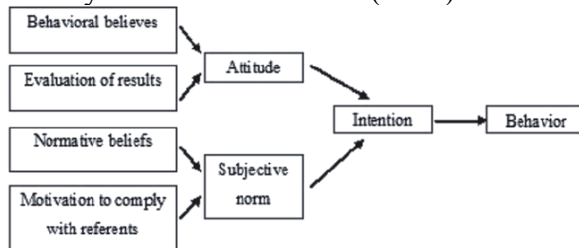
Theory of Reasoned Action (TRA):   Theory of Planned Behavior (TPB):
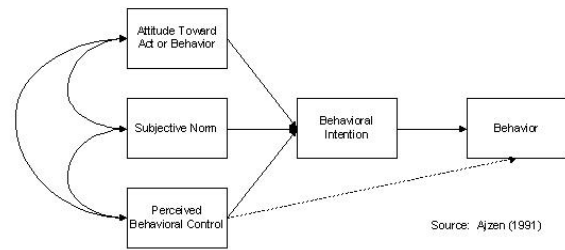
II.   METHODS

Research Methods:

In this study, qualitative and quantitative data were collected solely in the form of a survey. This data was collected in order to serve the purpose of identifying which factors, if any, lead to the consumer purchasing 'green' paper towels. Most specifically the factor that was the main concern was "Brand Love" and determining if this impacts consumers decision enough to purchase 'green products'. The Survey was created on the platform Qualtrics, with access provided by the University of Arkansas.

Measures:

The survey questions where based on the Theory of Planned Behavior Model. This model is based on Azjens Theory of reasoned action, just adding measures such as perceived behavioral control (PCB). This study contains ten constructs of concern, and they are as follows;

Table 1:
Construct Averages

Constructs:	Averages:
Attitude (AT):	13.6
Environmental Involvement (EI):	19.7
Green Trust (GT):	18.3
Information Utility (IU):	12.5
Subjective Norms (SN):	11.3
Perceived Behavioral Control (PBC):	11.5
Self-Expression (SELFEX):	15.8
Word of Mouth (WOM):	9.2
Intention (I):	-
Behavior (B):	-
Brand Love (BL):	34.4
Brand Loyalty (BLOY):	8.6

The first construct is Attitude (AT). This construct is made up of three separate constructs. The first being, Environmental Involvement (EI). The second is Green Trust (GT). The third is Information Utility (IU). Overall attitude is one of three constructs that affects intention. The other two constructs that influence intentions are Subjective Norms (SN) and Perceived Behavioral Control (PCB). These three constructs impact intention which then impacts behavior. However, the final construct overall is Brand Love (BL), which intercepts itself in-between intentions and behavior.

A.) Attitudes (A)
Merriam Webster defines attitude as "a bodily state of readiness to respond in a   characteristic way to a stimulus." A study completed by Bagozzi and *Yi* researched, *The Degree of Intention Formation as a Moderator of the Attitude-Behavior Relationship* They administered a survey to test participants attitudes and it revealed that there is a positive correlation between attitudes and intentions and how they both affect behavior (Bagozzi).

They administered several questionnaires along with reading follow up cases on reports   and class discussion. They tested for attitude using a Likert scale of four items to test attitude towards the cases. The results showed a positive correlation between attitudes and intentions and how they both affect behavior (Bagozzi).

B.) Environmental Involvement (EI)

Environmental Involvement is a person's willingness to cooperate, preform, and educate oneself on environmental topics and duties. A study was performed by *Hebel*, *Montpied* and *Fontanieu* on *What Can Influence Students' Environmental Attitudes? Results from a Study of 15-year-old Students in France.* This study discusses how Environmental attitudes or utility effect attitude and behavior. They also discussed how factors such as media, wealth, and education can affect your level of Environmental Utility. This study shows that is it important to include Environmental Utility as a construct of attitude (What Can Influence Students' Environmental Attitudes).

C.) Green Trust (GT)

According to an article written by *Chen* and *Chang,* Green trust is when organizations release more trustworthy information on what it actually means to be green. This is a deeper connection that goes further than just green washing (Aaker).

D.) Information Utility (IU)

Information Utility is how the company pushed out information to the consumers and how valuable those consumers view this information before making a purchase. According to a study by Ifat Levy about information utility, there can be positive and negative utility. In this same study, it showed that participants were told to participate in a lottery. The members of this study wanted information to help them with their choices in a gain setting. It even says that these people would have paid money in order to gain more information ahead of time. This study shows that many people take information seriously and it helps them develop an attitude on a topic or in a situation. With greater information utility, they feel they are better prepared to make a choice (Levy).

E.) Subjective Norms (SN)

A study was preformed to collect information regarding a parent's intention to reduce a child's fever with medicine. In this study they said, "subjective norms or the person's perceived social pressure to engage or not engage in a behavior." This also has a lot to do with external factors such as what will the other people in my life think about the decision I make. In this study, overall subjective norms where related to intentions (Walsh).

F.) Perceived Behavioral Control (PCB)

This is a construct that was added to the Theory of Reasoned Action. This measures a person believed control they have over their overall behavior. In a study researching a consumer's intention and behavior to use coupons when shopping, the PCB would be the consumers ability to use E-coupons and their internet and digital use efficacy. This study is a great example in explaining Perceived Behavioral Control and its effect on Intention (Kang).

G.) Intention (I)

According to Azjen's model of Theory of Reasoned Action and Theory of Planned Behavior intentions are highly correlated to a person behavior. In a study completed by, Masser, White, Hyde, Terry, and Robinson. they focused on If the participant had high intentions to donate blood they were likely to complete that behavior with a .82 correlation.

H.) Brand Love (BL)

Sarkar,Sarkar, and Bhatt discuss the significance of Brand Love in creating an intention to be Brand Loyal. In another article written by Saatchi and Saatchi called Lovemarks, they

emphasis the importance of Brand Love when a consumer purchases an item. They created a Matrix measuring respect on the vertical axis and love on the horizontal axis. This resulted in Brands which have high respect, low love; products which are low respect and low love; Fads which are high love and low respect; and Lovemarks which are high love and high respect. If a product is a Lovemark it is suggested that the consumer will purchase this product despite any other factors such as price, availability, and intentions. If a company's product is a love mark they can assume their customer will be loyal beyond reason (Future Beyond Brands).

I.) Behavior (B)

This is the overall action the consumer will take. What product will they purchase, what decision will they make, what direction do they go? The overall behavior can be seen as made up of outside factors, intention, and brand love.

Survey:

In order to best understand consumers, I developed a survey through Qualtrics. I began the survey by creating a series of demographic questions that are contained to one block. I then created a second block of questions. This begins with a quick explanation on the item in question, paper towels. Overall this block contains three questions. Two require the survey taker to rank their preferred qualities of paper towels with 1 being the most important and 5 or 10 being the least. The third question is an open response that will provide me with ration data that asks, "what is the most you will pay for a six pack of paper towels?" this question will help me to find the quantity demanded for different price levels, and to see the maximum price that could be charged without losing customers. Overall this block helps to develop a foundation and better understand each consumers attitudes and desires when purchasing paper towels. The next step that was taken was I pulled images of four different brands paper towels. I used Viva, Bounty, Great Value, and Seventh Generation. Seventh Generation is included to be a more Eco- Friendly option, Great Value is designed to be the price sensitive option, and Viva and Bounty are more well-known brands. Each image shows that they are a pack of six paper towels, they all have a best seller label and the star ranking has been removed in order to make these choices as similar as possible. Each option is listed under different prices. Each of these image groups were put into a separate block. Once each block was created I went into the survey flow section and used the randomizer tool. This will ensure that each participant will randomly see one of the six couples created.

Once each participant chooses a brand they will be prompted to the next block of questions. This block was designed to measure the construct of attitude, brand love, subjective norms, and perceived behavioral control. Questions from the survey where a combination of several previous relevant studies. Brand Love attributes where measured using a scale from, *Carroll, Barbara & Ahuvia, Aaron*, from there study, *Some Antecedents and Outcomes of Brand Love.* Questions to measure attitudes where sourced from Maichum, Parichatnon, and Peng, from their study on *Application of the Extended Theory of Planned Behavior Model to Investigate Purchase Intention of Green Products among Thai Consumers.* Social Norms and Perceived Behavioral Control (PCB) were modeled from, *Tan* and *Teck* on their study, *Use of structural equation modeling to predict the intention to purchase green and sustainable homes in Malaysia.* Overall this Block focuses on the specific brand the participant selected.

The next block of questions is designed specifically to gain a better level of understanding of the participants environmental involvement, information utility, and green trust.

These measures are all constructs that go into the attitude construct. Questions from the survey where a combination of several previous relevant studies. with Questions intended to identify a person's environmental involvement, Information utility, and Green Trusts where modeled from, *Wei, Chiang, Kou, and Lee,* from their study, *Toward Sustainable Livelihoods: Investigating the Drivers of Purchase Behavior for Green Products.*

At the end of the survey the participants were able to leave an email address in order to enter to win an incentive. This incentive helped to encourage people to take the survey as well as increase their efforts to answer honestly.

This survey was distributed through social media platforms such as Facebook, LinkedIn, and Instagram. It was also distributed through email, text messages, and word of mouth.

For more information on the Survey please see the Appendix.

Participants:

Table 2:
Survey Participant's Characteristics

Constructs:	Amount/Median:
Demographics:	
Gender:	
Female	120
Male	59
Prefer not to say	1
Age:	25.5 (Median)
Ethnicity:	
African American	3
Asian Pacific	4
Caucasian	148
Hispanic/Latino	4
Native American	18
Other	3
Prefer Not to Answer	2
Zip Code:	72701 (Median)
Education Level:	
Some High School	3
High School	44
Associates	15
Bachelors	76
Masters	37
PHD	7
Income:	
Less than $10,000	39
$10,000-$19,999	16

$20,000-$29,999	10
$30,000-$39,999	12
$40,000-$49,999	15
$50,000-$59,999	9
$60,000-$69,999	14
$70,000-$79,999	13
$80,000-$89,999	14
$90,000-$99,999	8
$100,000-$149,999	11
More than $150,00	21

Overall For this survey, there was no target market that was prioritized. Mainly majority of the population would fall under the category of a paper towel purchaser. Giving us a large population size to pull from. As you can tell from the chart of characteristics, majority of respondents were female and had a Fayetteville, AR area code. There were no significant correlations to responses with any specific demographic item.

Responses:

The survey responses were then analyzed to determine relationships among variables. SPSS™ was used for all analyses. After the demographic portion of the survey, there was a section that was based on personal preferences regarding paper towel purchases. The first section was ranking characteristics such as Quality (1), Price (2), Brand (3), Green/Environmentally Friendly (4), Absorbency (5). These were each given corresponding number in order to better interpret the data. The mean of this data overall was 1.68. showing that Quality and Price are most important to people when purchasing paper towels. Overall Quality was the number one pick with 69 participants ranking it as number one and 42 participants ranking price as number 1. Absorbency was the next highest ranked attribute followed by Green/Environmentally friendly and Brand. 3.8% of people ranked brand as number one and 3.1% of people ranked Green as the number one attribute. Due to the only slight difference between these two traits it is safe to assume that people claim to not put any more emphasis on brand than they do whether or not an item is environmentally friendly.

Next participants were asked to state the maximum price they are willing to pay for a 6 pack of paper towels. The minimum amount listed was $1.00. The Maximum was $30. The mean amount was $9.96. The most listed amount was $10.00 with 34 responses making up 21.3% of participants.

The participants where then again asked to rank another set of attributes based on what they prefer in paper towels. The attributes where labeled with corresponding numbers as well. These consist of, Price (1), Sheets per roll (2), Absorption (3), Sustainability (4), Shelf Placement (5), Brand (6), and Texture (7). The mean was 1.98, this shows that price and sheets per roll where the top picked attributes. This data also shows that shelf placement is ranked fairly low, this is able to show us that there is strong validity in this survey, as this is not a very desirable characteristic. The top ranked attributes was price with 45.6% of people ranking this as their number one. The second most ranked characteristic was Absorption.

This data shows that people are price sensitive and are driven to purchase paper towels based on quality and absorption. Around $10.00 seems as if it would appease most shoppers

when purchasing paper towels. People also state that brand is equally important to Environmentally Friendly/Green.

While analyzing the survey, a regression applied to the Theory of Planned Behavior (TPB) model was conducted. The traditional variables in the model are attitude, social norms, and Perceived Behavioral Control (PBC). When the regression was conducted there was only one significant independent variable which was attitude.

People where then prompted with 6 different paired options in regard to paper towel brands. The options are as follows:

Table 3:
Brand Choices

Constructs:	Amount:	Percentages:
Option 1:		
Viva	4	10.6%
Bounty	17	2.5%
Option 2:		
Great Value	14	8.8%
Bounty	8	5.0%
Option 3:		
Seventh Generation	1	0.6%
Bounty	22	13.8%
Option 4:		
Seventh Generation	1	0.6%
Viva	23	13.4%
Option 5:		
Seventh Generation	3	1.9%
Great Value	21	13.1%
Option 6:		
Viva	7	4.4%
Great Value	17	10.6%
Overall:		
Great Value:	52	32.5%
Bounty:	47	29.4%
Viva:	34	21.3%
Seventh Generation:	5	3.1%

:

Statistics

TOTALCHOICE

N	Valid	138
	Missing	22
Mean		1.9420
Median		2.0000
Mode		1.00
Std. Deviation		.87769
Variance		.770
Range		3.00
Minimum		1.00
Maximum		4.00

TOTALCHOICE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	52	32.5	37.7	37.7
	2.00	47	29.4	34.1	71.7
	3.00	34	21.3	24.6	96.4
	4.00	5	3.1	3.6	100.0
	Total	138	86.3	100.0	
Missing	System	22	13.8		
Total		160	100.0		

The brand names where transformed into numerical values for ease of analyzing the data. The numbers that correlate to the brand are as follows; Great Value (1), Bounty (2), Viva (3), Seventh Generation (4).

Viva and Bounty:

In the race between Viva and Bounty, Bounty came in with 70.83% of the votes. With Viva totaling only 16.6% of the votes. In this test the price and pack size where the same, so here we can assume that Bounty outperformed Viva in regards to quality or brand. and When a regression was preformed there was one significant variable, which was Green attributes, from the first ranking that was shown to participants. The beta was -.234 which shows us that as a choice is made between viva and bounty that the green attribute decreases. This is likely because these are not necessarily "green" brands/products.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.917	.762		3.827	.001
	Quality	.113	.114	.205	.997	.334
	Brand	-.028	.091	-.063	-.305	.764
	Green	-.234	.081	-.635	-2.902	.010
	Absorbency	.048	.069	.155	.698	.495

a. Dependent Variable: VIVABOUNTY

Great Value and Bounty:

In this category, Great Value is the front runner with 63.6% of the votes. Bounty collected 36.26% of the votes. When a regression was performed there were no significant variables in regards to how participants ranked the qualities of their paper towels.

Seventh Generation and Bounty:

In this pairing Bounty collected almost all of the votes totaling to 95.65%. Seventh generation received one vote putting it at 4.3% of the votes. When a regression was performed there were no significant variables in regards to how participants ranked the qualities of their paper towels.

Seventh Generation and Viva:

In this pairing Viva received 95.8% of the votes while Seventh Generation received 4.16% of the votes. When a regression was completed it was shown that price and absorption had a positive correlation with Viva and seventh generation while sustainable, and shelf placement had a negative correlation. Each of these traits where deemed significant with p-values below.05.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.600	.525		6.861	.000
	Price2	.078	.027	.451	2.917	.010
	Absorption	.061	.027	.342	2.236	.039
	Sustainable	-.086	.037	-.554	-2.342	.032
	Shelfplacement	-.068	.026	-.459	-2.605	.018
	Brand2	.003	.022	.022	.128	.900
	Texture	-.018	.025	-.170	-.714	.485

a. Dependent Variable: VIVA7TH

Seventh Generation and Great Value:

Great Value received 87.5% of the votes with Seventh Generation totaling 12.5% of the votes. Scoring better than Bounty or Viva when paired with Seventh Generation. When a regression was preformed there was one significant variable when compared to set one of the rankings participants where shown previously in the survey. Price had a beta coefficient of .618. Showing that price was related to the choice made between Great Value and seventh Generation. This is likely due to the premium pricing of seventh generation brand.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-2.121	2.219		-.956	.351
	Quality	.116	.303	.099	.383	.706
	Price	.618	.295	.668	2.097	.050
	Brand	.172	.195	.245	.882	.389
	Absorbency	.378	.216	.478	1.746	.097

a. Dependent Variable: GV7TH

Viva and Great Value:

Great Value received 70.83% of the votes while Viva collected 21.16% of the votes. Out of all of the pairings, Great Value and Viva had the narrowest margin. When preforming a regression, you can see that sheets per roll has a positive relationship with the choice between

Great Value and Viva. This is also the only variable that was deemed significant with an alpha of .042.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	-.215	2.397		-.090	.930
	Price2	.204	.135	.313	1.509	.150
	SPR	.291	.132	.505	2.203	.042
	Absorption	-.091	.222	-.097	-.409	.688
	Sustainable	.013	.153	.021	.088	.931
	Shelfplacement	.058	.151	.085	.385	.705
	Texture	.026	.134	.051	.192	.850

a. Dependent Variable: GVVIVA

Brand Love:

Once all of the participants selected there roll of choice they were prompted to a new block of questions. The next few questions are likert scales with six options; strongly disagree, slightly disagree, disagree, agree, slightly agree, strongly agree. The first set of these styled questions focused in on Brand Love. The questions and responses are as follows.

Q1: This is a wonderful brand
 For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). Overall the mean was 4.45. Showing us that people have slightly high brand love for their paper towel choice. The highest selected answer was agree. With the least selected answer being strongly disagree.

Q2: This brand makes me feel good
 For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean for this question was 3.89. The slightly agree option was selected 44 times making it the most selected choice.

Q3: This brand is totally awesome
 For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The average answer was 3.91. Slightly agree was the most favorable answer choice for this question. Showing that people like the brands they are choosing.

Q4: I have neutral feelings about this brand
 For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (6), disagree (5), slightly disagree (4), slightly agree (3), agree (2), strongly agree (1). The mean answer was 2.67. The most selected answer was agree.

Q5: This brand makes me happy

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 3.68. The most chosen answer was slightly agree in this case.

Q6:I Love this brand

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 3.71. Most people selected slightly agree, saying they do love the brand they chose.

Q7:I have no feelings about this brand

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (6), disagree (5), slightly disagree (4), slightly agree (3), agree (2), strongly agree (1). The mean answer is 2.74. Majority of people stated they strongly agree and have no feelings about the brand of choice.

Q8:This brand is pure delight

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 3.4. Slightly Agree was again the most favorable answer choice.

Q9: I am passionate about this brand

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 3.02. Many people answered disagree and slightly disagree. Stating that they are not necessarily passionate about the brand of paper towels they consume.

Q10: I am very attached to this brand

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The average answer was 2.94. Many people selected strongly disagree. This shows that people say they are willing to purchase other brands. After all items where scored they were summated to create a total brand love score. Overall the total average brand love was 34.48. Revealing that overall people think positively about the brand they choice however are willing to purchase something else. According to Kevin Robert's theory on Brand Love it is safe to assume that the paper towel brands listed are not considered lovemarks. Overall the items included in the scale have a satisfactory reliability.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.779	.944	11

Item Statistics

	Mean	Std. Deviation	N
NEWBL1	4.4545	1.19722	121
NEWBL2	3.8926	1.27673	121
NEWBL3	3.9174	1.25557	121
NEWBL4	2.6777	1.37365	121
NEWBL5	3.6860	1.32308	121
NEWBL6	3.7190	1.42140	121
NEWBL7	2.7438	1.63059	121
NEWBL8	3.4298	1.35294	121
NEWBL9	3.0248	1.49144	121
NEWBL10	2.9421	1.62428	121
TOTALBRANDLOVE	34.4876	10.83906	121

A regression was completed using total brand love as the dependent variable and total information utility, total green trust, and total environmental involvement as the independent variables. The only significant independent variable was total green trust. This tells us that total brand love can be predicted by total green trust. Therefore, is a brand providing the consumer with more trustworthy sustainable information they are able to gain a love of their brand over others. Total Information Utility and Total Green Trust were both positive, but only total Green Trust was significant. However, total Environmental Involvement was negative and not significant.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16.702	6.468		2.582	.011
	TOTALIU	.445	.375	.109	1.187	.238
	TOTALGREENTRUST	1.082	.155	.555	6.993	.000
	TOTALEI	-.387	.328	-.108	-1.181	.240

a. Dependent Variable: TOTALBRANDLOVE

Another regression was performed with the independent variables being totals of brand loyalty, total word of mouth, total social norms, total attitude, total self-expression, total perceived behavioral Control (PBC), and the dependent variable being Total Brand Love. There was a positive significant relationship total word of mouth, total attitude, and total Perceived behavioral control (PBC). There was a significant negative relationship with total social norms and total self-expression. This shows that as Total brand loyalty

increases then the importance of word of mouth increases, attitude increase, and the perceived behavioral control increases. Thus, in order to help close the green gap brands such as seventh generation can appeal to these sustainable attitudes, word of mouth marketing, and helping to increase PCB in order to increase the Brand Love. The happier the brand makes a person overall will increase their love for the brand. The more a person the more consumers you get to fall in love with a green brand the more they will tell their friends and family. The more control they feel they have over their purchase meaning the more funds they have and the more sustainable options that are on the shelf the more likely they are to make an ecofriendly purchase. It also shows that social norms or a person's self-expression so not necessarily make them love a brand of paper towels. This shows that the average paper towel consumer is not concerned with the thoughts of how others view their purchase.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	18.084	4.168		4.339	.000
	TOTALBRANDLOYAL	-.134	.211	-.058	-.636	.526
	TOTALWOM	1.516	.222	.739	6.813	.000
	TOTALSOCIALNORMS	-1.052	.233	-.322	-4.511	.000
	TOTALATTITUDE	.705	.311	.161	2.270	.025
	TOTALSELFEX	-.004	.138	-.003	-.030	.976
	TOTALPBC	.519	.247	.145	2.107	.037

a. Dependent Variable: TOTALBRANDLOVE

Brand Love was one variable that was classified as an independent variable against the total brand choices which was the independent variable. The Total Choices are made up of the four paper towel brands and are labeled as so, Great Value (1), Bounty (2), Viva (3), Seventh Generation (4). As you can see in the Chart Below. Seventh Generation had the highest mean in the Brand Love Category.

Report

TOTALCHOICE		TOTALBRAND LOVE	TOTALBRAND LOYAL	TOTALSELFEX
1.00	Mean	32.9302	7.7907	16.0233
	N	43	43	43
	Std. Deviation	11.79870	4.41080	8.65610
2.00	Mean	37.3182	8.6818	14.6364
	N	44	44	44
	Std. Deviation	8.36041	4.33360	8.47730
3.00	Mean	32.2581	8.9032	16.3226
	N	31	31	31
	Std. Deviation	11.94702	4.96222	9.63462
4.00	Mean	38.3333	16.3333	26.0000
	N	3	3	3
	Std. Deviation	12.42310	5.13160	18.52026
Total	Mean	34.4876	8.6116	15.8430
	N	121	121	121
	Std. Deviation	10.83906	4.67862	9.16970

Brand Loyal:

Once all of the participants selected their answers regarding brand love they were prompted to a new block of questions. The first set of these styled questions focused in on Brand Loyalty. The questions and responses are as follows.

Q1: This is the only brand of paper towels I will buy
For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean score was 2.25, revealing that people will purchase other brands of paper towels.

Q2: When I go shopping, I don't even notice competing paper towel brands.
For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean choice was 2.75. Showing that people do notice other brands when browsing the paper towel isle.

Q3: If my store is out of this brand of paper towels, I'll postpone buying or go to another store.
For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 1.85. Again showing that people are not loyal to brands to the point of going without them.

Q4: I'll 'do without' rather than buy another brand of paper towels.
For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 1.74, again showing that people have a stronger need for paper towels than a want for a specific brand.

Overall the total average brand loyalty was scored at a 8.6. Majority of people are not brand loyal to specific paper towel brands. Meaning they are open and willing to

purchase other things. Overall the reliability of this test is high, see below for more details.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.831	.934	5

Item Statistics

	Mean	Std. Deviation	N
NEWLOYAL1	2.2562	1.51398	121
NEWLOYAL2	2.7521	1.44500	121
NEWLOYAL3	1.8595	1.31216	121
NEWLOYAL4	1.7438	1.17989	121
TOTALBRANDLOYAL	8.6116	4.67862	121

A regression was completed using total brand loyalty as the dependent variable and total information utility, total green trust, and total environmental involvement as the independent variables. The only significant independent variable was total green trust. This tells us that total brand loyalty can also be predicted by total green trust. Therefore, is a brand providing the consumer with more trustworthy sustainable information they are able to gain a more loyal customer base. The regression equation is as follows: -3.958=.240+.337+1.65 (with the order being total Information utility, total green trust, total environmental involvement.)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.958	3.074		-1.287	.201
	TOTALIU	.240	.178	.136	1.349	.180
	TOTALGREENTRUST	.337	.074	.400	4.587	.000
	TOTALEI	.165	.156	.106	1.061	.291

a. Dependent Variable: TOTALBRANDLOYAL

When another regression was run with the independent variables being totals of brand loyalty, total word of mouth, total social norms, total attitude, total self-expression, total perceived behavioral Control (PBC), and the dependent variable being Total Brand Loyalty. Total word of mouth and total self-expression had significant positive relationship. This shows that as brand loyalty increases amongst consumers that total word of mouth and total self-expression become more important. This is very interesting because in relation to brand love self-expression had a negative relationship. This tells us that as a consumer feels more brand loyal they often use a certain brand to express themselves as well as tell others about the product.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.818	2.075		-.876	.383
	TOTALWOM	.308	.119	.347	2.587	.011
	TOTALSOCIALNORMS	.030	.117	.021	.258	.797
	TOTALATTITUDE	.251	.144	.133	1.739	.085
	TOTALSELFEX	.207	.060	.400	3.440	.001
	TOTALPBC	.130	.115	.084	1.125	.263
	TOTALBRANDLOVE	-.028	.045	-.066	-.636	.526

a. Dependent Variable: TOTALBRANDLOYAL

Word of Mouth:

Once all of the participants selected their answers regarding brand loyalty they were prompted to a new block of questions. The next few questions are Likert scales with six options; strongly disagree, slightly disagree, disagree, agree, slightly agree, strongly agree. The first set of these styled questions focused in on Word Of Mouth Transmission. The questions and responses are as follows.

Q1: I have recommended this brand of paper towels to lots of people.
>For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean response was 2.4. Many people have not recommended this brand to others.

Q2: I 'talk up' this brand of paper towels to my friends.
>For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 2.2, With most responses being strongly disagree and disagree.

Q3: I try to spread the good-word about this brand of paper towels.
>For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The average answer was 2.2. Majority of people selected strongly disagree.

Q4: I give this brand of paper towels tons of positive word-of-mouth advertising.
>For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 2.2 showing that many people do not share their thoughts with others on the paper towel brands they purchase.

The total mean for WOM was 9.18. This shows that many people do not spread good thoughts about paper towel brands or share their opinions at all. Overall the reliability of this test is high, see below for more details.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.849	.976	5

Item Statistics

	Mean	Std. Deviation	N
NWM1	2.4132	1.49259	121
NWOM2	2.2397	1.34179	121
NWOM3	2.2397	1.39059	121
NWOM4	2.2893	1.37500	121
TOTALWOM	9.1818	5.28047	121

Self Expression:

Once all of the participants selected their answers regarding word of mouth advertising they were prompted to a new block of questions. The next few questions are Likert scales with six options; strongly disagree, slightly disagree, disagree, agree, slightly agree, strongly agree. The first set of these styled questions focused in on Self Expression. The questions and responses are as follows.

Q1: This brand symbolizes the kind of person I really am inside.
> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 2.08. 51 respondents strongly disagreed with this statement. While only four strongly agreed.

Q2: This brand reflects my personality
> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The average answer was 2.1. 29.4% of people said they strongly disagree. With another 26.9% saying they disagree.

Q3: This brand is an extension of my inner self.
> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 1.9. 33.8% of people strongly disagree with this statement. This shows us that the brand of paper towel selected does not have much to do with their inner self.

Q4: This brand mirrors the real me
> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 1.9. 55 participants said they strongly disagree with this statement.

Q5: This brand contributes to my image.
> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 1.9. 33.1% of participants said they strongly disagree with this thought, while only 1.3% strongly agree.

Q6: This brand adds to a social 'role' I play.

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 1.9. Only 1.9% of participants said that the brand they chose plays a role in their social life.

Q7: This brand has a positive impact on what others think of me.

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 1.9. For this statement only 1.7% of people strongly agree.

Q8: This brand improves the way society views me.

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean was 1.9. 57 participants said that the brand of paper towels they chose has no effect on thy way society views them.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.804	.986	9

Item Statistics

	Mean	Std. Deviation	N
NSE1	2.0826	1.32027	121
NSE2	2.1074	1.25699	121
NSE3	1.9339	1.16000	121
NSE4	1.9835	1.28442	121
NSE5	1.9504	1.17510	121
NSE6	1.9256	1.18438	121
NSE7	1.9504	1.18217	121
NSE8	1.9091	1.15470	121
TOTALSELFEX	15.8430	9.16970	121

Attitudes:

Once all of the participants selected their answers regarding self-expression they were prompted to a new block of questions. The next few questions are Likert scales with six options; strongly disagree, slightly disagree, disagree, agree, slightly agree, strongly agree. The first set of these styled questions focused in on Attitudes. The questions and responses are as follows.

Q1: I think that purchasing green product is favorable

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 4.2. Resulting in the most average answer being slightly agree. Overall people think that being green is important.

Q2: I think that purchasing green product is a good idea

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 4.66. This shows

us that the average answer was between agree and slightly agree. This is conclusive that people often put green products in a positive light.

Q3: I think that purchasing green product is safe

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 4.7. Which shows us the most average answer was agree to slightly agree. Many people think that these products are safe with only 1.9% strongly disagreeing with this statement.

Overall this shows that people think highly of green products. This supports the idea of green consciousness. Overall there is no significant difference regarding ages or gender when looking at attitudes of green products. Overall the reliability of this test is high, see below for more details.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.859	.940	4

Item Statistics

	Mean	Std. Deviation	N
NEWA1	4.2397	1.10321	121
NA2	4.6612	.89957	121
NA3	4.7107	.91686	121
TOTALATTITUDE	13.6116	2.60247	121

Social Norms:

Once all of the participants selected their answers regarding Attitudes they were prompted to a new block of questions. The next few questions are Likert scales with six options; strongly disagree, slightly disagree, disagree, agree, slightly agree, strongly agree. The first set of these styled questions focused in on Social Norms. The questions and responses are as follows.

Q1: Most members of my family would expect me to buy green and sustainable paper towels

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.5. The highest selected choice was slightly agree with 20.6% of people selecting it.

Q2: I intend to follow the advice of my friends that I should buy green and sustainable paper towels

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.88. The highest selected choice was slightly agree collecting 30% of the participants votes.

Q3: My friends would recommend that I should buy green and sustainable paper towels

For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3),

slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.9. the choices where more spread out for this question with a close tie between agree with 20% of votes and agree with 21.3% of votes.

Overall, many people on average agree that their social circles would expect or recommend buying green/sustainable paper towels. However, despite people feeling the pressure from friends and family they often did not chose the sustainable option when asked. This is evidence that the green gap exists. Overall the reliability of this test is high, see below for more details.

Reliability Statistics

Item Statistics

	Mean	Std. Deviation	N
NSN1	3.5133	1.45844	113
NSN2	3.8850	1.19338	113
NSN3	3.9381	1.21216	113
TOTALSOCIALNORMS	11.3363	3.30208	113

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.847	.913	4

Perceived Behavioral Control (PBC):

Once all of the participants selected their answers regarding Social Norms they were prompted to a new block of questions. The next few questions are Likert scales with six options; strongly disagree, slightly disagree, disagree, agree, slightly agree, strongly agree. The first set of these styled questions focused in on Perceived Behavioral Control. The questions and responses are as follows.

Q1: I have a great deal of control in terms of resources and opportunities over whether I can buy green and sustainable paper towels

> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 4.1. There was an even split between agree and slightly agree. With most people finding this to be an agreeable statement it shows they feel they are responsible for the choices they make when shopping.

Q2: It is easy to buy green and sustainable paper towels

> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.6. The mean of this statement is slightly lower. With most people selecting slightly agree, however 30% of people tended to disagree in some way.

Q3: I felt a great deal of confidence about my ability to buy green and sustainable paper towels

> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.6. Slightly Agree was the most popular choice with 40 participants selecting it. This again shows the green gap as people feel confident about being able to purchase green products, however they continue to put traits such as quality and price above sustainability.

Overall people feel they have control over their choices when shopping for paper towels. This shows us that these people feel as if they have control over the behaviors they exhibit while shopping. Overall the reliability of this test is high, see below for more details.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.846	.910	4

Item Statistics

	Mean	Std. Deviation	N
NPBC1	4.1858	1.16916	113
NPBC2	3.6726	1.16068	113
NPBC3	3.6460	1.22416	113
TOTALPBC	11.5044	3.02113	113

Environmental Involvement (EI):

Once all of the participants selected their answers regarding Perceived Behavioral Control they were prompted to a new block of questions. The next few questions are Likert scales with six options; strongly disagree, slightly disagree, disagree, agree, slightly agree, strongly agree. The first set of these styled questions focused in on Environmental Involvement. The questions and responses are as follows.

Q1: I am concerned about the environment
> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 5.1. The highest selected choice was agree with 49 and the second selected option was strongly agree with 42.

Q2: The condition of the environment affects the quality of my life
> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 4.7. 61.9% of people selected some form of agree in regard to this statement. This shows that people believe that the environment directly affects their quality of life.

Q3: I am willing to make sacrifices to protect the environment
> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 4.6. Only 5.7% of participants disagreed in some form, showing that majority of people feel they make sacrifices to help the environment. This again shows the green gap. People say they will make sacrifices but when they have the option they do not choose the paper towel that is best for the environment.

Q4: My actions impact the environment.
> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3),

slightly agree (4), agree (5), strongly agree (6). The mean answer was 5.1, with 22 people selecting slightly agree 45 people selecting agree, 44 people selecting strongly agree.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.814	.896	5

Item Statistics

	Mean	Std. Deviation	N
NEI1	5.1327	.83990	113
NEI2	4.7876	1.13744	113
NEI3	4.6637	.96001	113
NEI4	5.1593	.79694	113
TOTALEI	19.7434	3.00232	113

Informational Utility (IU):

Once all of the participants selected their answers regarding Environmental Involvement they were prompted to a new block of questions. The next few questions are Likert scales with six options; strongly disagree, slightly disagree, disagree, agree, slightly agree, strongly agree. The first set of these styled questions focused in on Information Utility. The questions and responses are as follows.

Q1: I find most of the information in green ads useful
>   For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 4.1 with slightly agree being the most picked option.

Q2: Green ads are helpful for my buying decisions
>   For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 4.4 with majority of people selecting that they agree in some form.

Q3: Green ads deliver the information that I need for my buying decisions.
>   For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.9, with slightly disagree, slightly agree and agree being the most frequent responses.

Overall the participants in this study believe that green advertisements are helpful when deciding what to purchase. Very few people said they disagreed and thought they were not helpful. Overall the reliability of this test is high, see below for more details.

Reliability Statistics

	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
	.834	.886	4

Item Statistics

	Mean	Std. Deviation	N
NIU1	4.1770	1.07927	113
NIU2	4.4159	1.00646	113
NIU3	3.9204	1.13501	113
TOTALIU	12.5133	2.63938	113

Green Trust (GT):

Once all of the participants selected their answers regarding Information Utility they were prompted to a new block of questions. The next few questions are Likert scales with six options; strongly disagree, slightly disagree, disagree, agree, slightly agree, strongly agree. The first set of these styled questions focused in on Green Trust. The questions and responses are as follows.

Q1: I feel that this product's environmental reputation is generally reliable

> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.6 with the most selected choice was slightly agree with 44 participants selecting this option.

Q2: I feel that this product's environmental performance is generally dependable

> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.6 Again the top selected option was slightly agree.

Q3: I feel that this product's environmental claims are generally trustworthy

> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.7 with high frequencies around slightly disagree, slightly agree, and agree.

Q4: This product's environmental concern meets my expectations

> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.6, with 23.8% of people answering slightly agree.

Q5: This product keeps promises and commitments for environmental protection.

> For this question, the scale choices were assigned numbers in order to compute a mean. The numbers are as follows; strongly disagree (1), disagree (2), slightly disagree (3), slightly agree (4), agree (5), strongly agree (6). The mean answer was 3.6 with most people slightly disagreeing and slightly agreeing.

Overall there is a mix of people who would slightly disagree that sustainable products are not always reliable while the other half of people would slightly agree that they are. However, there are few strong opinions on this subject matter. Overall the reliability of this test is high, see below for more details.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.832	.979	6

Item Statistics

	Mean	Std. Deviation	N
NGT1	3.6726	1.14520	113
NGT2	3.6460	1.17959	113
NGT3	3.7522	1.17664	113
NGT4	3.6195	1.18260	113
NGT5	3.6106	1.19846	113
TOTALGREENTRUST	18.3009	5.54025	113

Conclusion:

Overall, I believe the survey and the participants greatly reflect the entire population of paper towel consumers. However, one thing I would do differently if I were to do my research again would be to choose another product category. The paper towel category is one with low involvement decision making. This study may show different findings in a more active product category for consumers. With that being said there were still significant findings within the category.

After looking over the data from the survey that was distributed several things remain evident in relation to the original model and hypothesis. To reiterate the hypothesis in questions is can brand love lead to an increase in green consumerism in order to narrow the green gap that is currently persisting. A Theory of Planned Behavior model was used in order to attempt to predict behavior. Overall the theory of the Green Gap was evident with high ratings on questions referring to the environment and sustainable actions, with a small amount of people not selecting the sustainable paper towel brand presented. One main point that came from interpreting the data was that Brand Love along with Self Expression can predict the type of paper towel brand consumers purchase. This was found using a Multinomial logistic regression. This regression involves using nominal independent variables to predict nominal dependent variables. This regression was significant with a p-value less than .05.

Model Fitting Information

Model	Model Fitting Criteria -2 Log Likelihood	Likelihood Ratio Tests Chi-Square	df	Sig.
Intercept Only	258.611			
Final	243.497	15.114	6	.019

Likelihood Ratio Tests

Effect	Model Fitting Criteria -2 Log Likelihood of Reduced Model	Likelihood Ratio Tests Chi-Square	df	Sig.
Intercept	250.146	6.649	3	.084
TOTALBRANDLOVE	255.036	11.539	3	.009
TOTALSELFEX	252.906	9.409	3	.024

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

This presents the idea that in order to influence the Brand Choice you can do so through increasing brand love as well as making a brand become a part of a consumer's identity. This can be done in several ways. First by increasing reach and awareness of a brand as well as demanding respect from your customer base. An article written by, Ladislava Knihová explains that a lovemark can be created through digital media platforms. This article explains that mobile apps and mobile app store platforms create connectivity which is a key desire of many consumers in today's day and age. Making a brand avalible and seen seamlessly across a plethora of mobile apps can help to increase awareness, love, and create a way consumers can form an identity around a brand.

Another key finding was that when a regression was performed with Brand Love as being the dependent variable and Green Trust, Information Utility, and Environmental Involvement as the independent variables. Green Trust was the only significant variable to have a linear relationship with Brand Love. This shows that in order to create a lovemark out of an environmentally friendly brand, companies need to emphasize and clearly explain the environmental impacts and effects this product can create. This can be done by using trustworthy public figures, statistics, or real stories from real consumers.

The Final key finding was that a multinomial logistic regression was performed placing Total Choices as the dependent variable and the items in the TPB model as the independent variables (Social Norms, Perceived Behavioral Control, and Attitudes). Attitudes was the only significant predictor of what brand choice the consumers would purchase. Looking back at the survey questions focused around attitudes people are who think positively about purchasing green products are more likely to buy a brand such as Seventh Generation.

Likelihood Ratio Tests

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	153.755[a]	.000	0	.
TOTALPBC	193.368	39.613	39	.443
TOTALSOCIALNORMS	191.667	37.912	39	.519
TOTALATTITUDE	268.374[b]	114.619	33	.000

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.

b. The log-likelihood value cannot be further increased after maximum number of step-halving.

Overall In order to increase green consumerism, companies that sell sustainable products need to focus on three key things. The first is increasing Brand Love by helping their product be away for its consumers to express themselves. The second is the Increase the Green Trust aspects of the Brand. Lastly, they need to increase awareness of green products of being favorable and beneficial for everyone. With all of these things combined brands are assured to gain love and respect bringing them one step closer to becoming a lovemark in the eyes of the consumer. Through sustainability campaigns, seamless mobile campaigns, real stories, trustworthy spokespersons, and demonstrations proving a great quality product consumers are sure to trust, love and believe in more sustainable brands. This could be the key to shrinking the green gap.

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Appendix:

A.) Survey:

Thesis

Q56 **Thank you for choosing to complete this survey.**

Your honest answers will help me gather research that will be used in order to complete my honors thesis for the Walton College of Business. This research will also help gather findings that could be beneficial to CPG companies and the future of the environment.

Please take time to answers the questions with full transparency and accuracy. Your time and responses are greatly appreciated. In order to be compensated for your time, after the completion of the survey you will be prompted to enter your email in order to be entered to win a $20 Amazon gift card.

As always, this survey is voluntary and all responses are anonymous (other than your email address for the incentive above!). The study is under the supervision of Professor Steve Kopp (skopp@uark.edu).

Thank you again. Your time is greatly appreciated.

- -

Q1 Gender

○ Male (3)

○ Female (4)

○ Non-binary / third gender (5)

○ Prefer not to say (6)

Q2 Please enter your current age

_____

Q3 What is your race/ethnicity

○ African American (1)

○ Asian Pacific (2)

○ Caucasian (3)

○ Hispanic/latino (4)

○ Native American (5)

○ Other (6)

○ Prefer not to awnser (7)

Q4 What is your Zip Code

_____

Q5 Education

○ Some High School (1)

○ High School Graduate/GED (2)

○ Associates (3)

○ Bachelors (4)

○ Masters (5)

○ PHD (6)

Q51 What is your income after taxes?

○ Less than $10,000 (1)

○ $10,000 - $19,999 (2)

○ $20,000 - $29,999 (3)

○ $30,000 - $39,999 (4)

○ $40,000 - $49,999 (5)

○ $50,000 - $59,999 (6)

○ $60,000 - $69,999 (7)

○ $70,000 - $79,999 (8)

○ $80,000 - $89,999 (9)

○ $90,000 - $99,999 (10)

○ $100,000 - $149,999 (11)

○ More than $150,000 (12)

Q35 Paper towels are products that most people buy for their households. When going to the store or shopping online for paper towels there are many different brands and types. The following questions ask about your usual thoughts and decisions when purchasing paper towels for your own home.

Q14 How important are the following factors on a scale from 1-5 (1 being the most important 5 being the least)
In order to rank these attributes use your cursor to move the product characteristics up and down.
_____ Quality (1)
_____ Price (2)
_____ Brand (3)
_____ Green/Environmentally Friendly (4)
_____ Absorbency (5)

Q17 What is the maximum price you are willing to pay for a pack of 6 paper towels?

_____

Q21 Rank the following qualities that you evaluate when purchasing paper towels (1 being the most important and 7 being the least) In order to rank these attributes use your cursor to move the product characteristics up and down.
_____ Price (1)
_____ Number of Sheets per Roll (2)
_____ Absorption (3)
_____ Sustainable (4)
_____ Shelf Placement (5)
_____ Brand (6)
_____ Texture (7)

End of Block: Block 1

Start of Block: Block 4

Q32 Imagine you are in a store and are searching for paper towels if you are faced with these two options what paper towels would you choose?

Q44 Which item would you choose?

○ Great Value (1)

○ Viva (2)

Q33 Imagine you are in a store and are searching for paper towels if you are faced with these two options what paper towels would you choose?

Q45 Which item would you choose?

○ Bounty (1)

○ 7th Generation (2)

Q34 Imagine you are in a store and are searching for paper towels if you are faced with these two options what paper towels would you choose?

Q46 Which item would you choose?

○ Great Value (1)

○ 7th Generation (2)

Q40 Imagine you are in a store and are searching for paper towels if you are faced with these two options what paper towels would you choose?

- -

Q47 Which item would you choose?

○ Viva (1)

○ 7th Generation (2)

Q41 Imagine you are in a store and are searching for paper towels if you are faced with these two options what paper towels would you choose?

- -

Q48 Which item would you choose?

○ Viva (1)

○ Bounty (2)

Q43 Imagine you are in a store and are searching for paper towels if you are faced with these two options what paper towels would you choose?

-- --

Q49 Which item would you choose?

○ Great Value (1)

○ Bounty (2)

Q16 Based on the brand of paper towel you chose, please indicate your level of agreement with the following statements:

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)

This is a wonderful brand. (1)	○	○	○	○	○	○
This brand makes me feel good. (2)	○	○	○	○	○	○
This brand is totally awesome. (3)	○	○	○	○	○	○
I have neutral feelings about this brand. (4)	○	○	○	○	○	○
This brand makes me very happy. (5)	○	○	○	○	○	○
I love this brand! (6)	○	○	○	○	○	○
I have no particular feelings about this brand. (7)	○	○	○	○	○	○
This brand is a pure delight. (8)	○	○	○	○	○	○
I am passionate about this brand. (9)	○	○	○	○	○	○
I'm very attached to this brand (10)	○	○	○	○	○	○

Q18 Again, based on the brand of paper towel that you chose, please answer the following questions:

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
This is the only brand of paper towels that I will buy. (1)	○	○	○	○	○	○
When I go shopping, I don't even notice competing paper towel brands. (2)	○	○	○	○	○	○
If my store is out of this brand of paper towels, I'll postpone buying or go to another store. (3)	○	○	○	○	○	○
I'll 'do without' rather than buy another brand of paper towels. (4)	○	○	○	○	○	○

Q19 Based on the brand of paper towels you chose answer the following questions:

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)

I have recommended this brand of paper towels to lots of people. (1)	○	○	○	○	○	○
I 'talk up' this brand of paper towels to my friends. (2)	○	○	○	○	○	○
I try to spread the good-word about this brand of paper towels. (3)	○	○	○	○	○	○
I give this brand of paper towels tons of positive word-of-mouth advertising. (4)	○	○	○	○	○	○

Q20 Based on the brand of paper towels you chose answer the following questions:

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)

This brand of paper towels symbolizes the kind of person I really am inside. (1)	○	○	○	○	○	○
This brand of paper towels reflects my personality (2)	○	○	○	○	○	○
This brand of paper towels is an extension of my inner self. (3)	○	○	○	○	○	○
This brand of paper towels mirrors the real me (4)	○	○	○	○	○	○
This brand of paper towels contributes to my image. (5)	○	○	○	○	○	○
This brand of paper towels adds to a social 'role' I play. (6)	○	○	○	○	○	○
This brand of paper towels has a positive impact on what others think of me. (7)	○	○	○	○	○	○

This brand of paper towels improves the way society views me. (8)	○	○	○	○	○	○

Q23 Based on the brand of paper towels you chose answer the following questions:

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
1 (1)	○	○	○	○	○	○
I think that purchasing green paper towels is favorable (2)	○	○	○	○	○	○
I think that purchasing green paper towels is a good idea (3)	○	○	○	○	○	○
I think that purchasing green paper towels is safe (4)	○	○	○	○	○	○

Q38 Based on the brand of paper towels you chose, how green would you rank your purchase on a scale from 1-10? One being the least environmentally friendly, and ten being the most.

0 (0)
1 (1)
2 (2)
3 (3)
4 (4)
5 (5)
6 (6)
7 (7)
8 (8)
9 (9)
10 (10)

Page Break

Q37 The following questions will be evaluating your thoughts and considerations on a more general topics regarding environmental concerns. Please answer honestly.

Q25 Answer the following questions based on your opinion.

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)
Most members of my family would expect me to be green and sustainable with my actions (1)	○	○	○	○	○	○
I intend to follow the advice of my friends that I should pursue green and sustainable actions (2)	○	○	○	○	○	○
My friends would recommend that I should buy green and sustainable products (3)	○	○	○	○	○	○

Q26 Answer the following questions based on your opinion.

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)

I have a great deal of control in terms of resources and opportunities over whether I can be green and sustainable. (1)	○	○	○	○	○	○
It is easy to buy green and sustainable products (2)	○	○	○	○	○	○
I felt a great deal of confidence about my ability to buy green and sustainable products (3)	○	○	○	○	○	○

- -

Q27 Answer the following questions based on your opinion.

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)

I am concerned about the environment (1)	○	○	○	○	○	○
The condition of the environment affects the quality of my life (2)	○	○	○	○	○	○
I am willing to make sacrifices to protect the environment (3)	○	○	○	○	○	○
My actions impact the environment. (4)	○	○	○	○	○	○

Q28 Answer the following questions based on your opinion.

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)

I find most of the information provided on sustainable products to be useful (1)	○	○	○	○	○	○
Environmental education is helpful for my buying decisions (2)	○	○	○	○	○	○
Sustainable products deliver the information that I need for my buying decisions. (3)	○	○	○	○	○	○

- -

Q29 Answer the following questions based on your opinion.

	Indicate your level of Agreement					
	Strongly Disagree (1)	Disagree (2)	Slightly Disagree (3)	Slightly Agree (4)	Agree (5)	Strongly Agree (6)

I feel that this product's environmental reputation is generally reliable (1)	○	○	○	○	○	○
I feel that this product's environmental performance is generally dependable (2)	○	○	○	○	○	○
I feel that this product's environmental claims are generally trustworthy (3)	○	○	○	○	○	○
This product's environmental concern meets my expectations (4)	○	○	○	○	○	○
This product keeps promises and commitments for environmental protection (5)	○	○	○	○	○	○

Page Break

Q54 Thank you for completing this survey. Your honest responses will be valuable when collecting research. Since you have completed this survey you will be entered to win a $20 Amazon Gift Card. Please enter your email below to earn a chance to win.

_____

Q59 If you are asked to complete the survey for extra credit, please enter the name of your instructor.

_____

End of Block: Block 2