University of Central Florida

STARS

Electronic Theses and Dissertations, 2020-

2020

Green Trust Perceptions of Eco-labels

Rebecca Dupont University of Central Florida

Part of the Communication Commons Find similar works at: https://stars.library.ucf.edu/etd2020 University of Central Florida Libraries http://library.ucf.edu

This Masters Thesis (Open Access) is brought to you for free and open access by STARS. It has been accepted for inclusion in Electronic Theses and Dissertations, 2020- by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

STARS Citation

Dupont, Rebecca, "Green Trust Perceptions of Eco-labels" (2020). *Electronic Theses and Dissertations, 2020-*. 38.

https://stars.library.ucf.edu/etd2020/38

GREEN TRUST PERCEPTIONS OF ECO-LABELS

by

REBECCA DUPONT B.S. University of Central Florida, 2018

A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts in the Department of Communication in the Nicholson School of Communication and Media in the College of Sciences at the University of Central Florida Orlando, Florida

Spring Term 2020

ABSTRACT

Sustainability in the United States trends a new marketing demand for eco-labels yet brands often skip regulation to obtain these labels and break consumer trust. The country currently has over 200 eco-labels, leaving consumers overwhelmed and confused. In the present study, 3 focus groups of 6-8 participants were interviewed about their opinions, perceptions and attitudes towards eco-labels. A thematic analysis of the focus group audio was completed. The results indicated that participants desire products with eco-labels yet paradoxically distrust ecolabeled products. This study is dedicated to my loving parents, who have been a source of strength and support. I appreciate both of you and everything you have done to provide for me. To my boyfriend, thank you for your loving support amidst my thesis writing. I am grateful to have such loving family and friends through this academic experience.

ACKNOWLEDGMENTS

I would first like to thank my thesis adviser, Dr. Yu, of the Nicholson School of Communication and Media at the University of Central Florida. Dr. Yu was always supportive and rekindled my confidence throughout the thesis process. I am grateful for the experience to work under her expertise and guidance.

I would also like to thank Dr. Hastings and Dr. Kohl for participating in my thesis committee. Both Dr. Kohl and Dr. Hastings provided valuable insight into the research process, and thematic analysis that enriched the study. This accomplishment would not have been possible without them.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION	1
Green Marketing	1
Greenwashing	2
Rationale for Study	4
Summary	4
CHAPTER TWO: LITERATURE REVIEW	5
Green Marketing and Trust	5
Greenwashing	6
Eco-Labels	7
Relational Dialectics	8
Research Goals	10
Summary	11
CHAPTER THREE: METHODOLOGY	12
Participants	12
Data Collection	13
Analysis	13
CHAPTER FOUR: FINDINGS	15
Eco-Label as Marketing Schemes	15
Eco-Label Regulation Distrust	16
Eco-Label Ambivalence	17
Eco-Guilt Paradox	20
Desire for Eco-Label Education	23
CHAPTER FIVE: CONCLUSION	25
Limitations	28
Implications	29
APPENDIX A: ECO-LABEL EXAMPLES	31
APPENDIX B: WELCOME MESSAGE BY MODERATOR	33
APPENDIX C: DEMOGRAPHICS QUESTIONNAIRE	35
APPENDIX D: PROBE QUESTIONS	38
APPENDIX E: IRB APPROVAL LETTER	40
REFERENCES	43

CHAPTER ONE: INTRODUCTION

Green Marketing

Green marketing is a growing trend used in consumer goods with an increasing demand in the market. In 2014 alone, a reported 33.12 million consumers expressed preference for products marketed as "green" (Shin, Ki, & Griffin, 2017). Following this increase, many marketing initiatives sought to target the growing consumer base interested in green products. (Bailey, Mishra, & Taimiyu, 2016).

Green marketing is described as the elements that are designed to achieve the strategic and financial goals of a firm, particularly in terms of reducing their negative effects on the natural environment (Farradia, 2019). Chen (2019) defines green marketing as multiple activities by companies designed to ensure key aspects of products have minimal environmental impacts.

Of many existing green marketing tools, consumers report the top preferred form of green marketing as eco-labels (Canavari & Coderoni's, 2019). Eco-labels are described by Sharma and Kushwaha (2019) as a symbol or logo on a product that depicts the product as environmentally safe and labels the product as a "green product". Moon, Costello, and Koo (2017) defined eco-labels as the practice of marketing products with a specific and distinctive label to inform consumers that the product's manufacturing process conforms to environmental standards.

Examples of eco-labels that we often see in the market include United States Department of Agriculture (USDA) Organic certification, UTZ fair trade coffee certification, Leadership in Energy and Environmental Design (LEED) certification for environmentally friendly buildings, and SFI for Sustainable Forestry Initiative (Castka & Corbett, 2016). Another two major ecolabels in the United States include the Green Seal and Green Cross, where Green Seal evaluates

the manufacturing process and the Green Cross verifies environmental packaging claims (Sharma & Kushwaha, 2019).

There are two different types of eco-labeling commonly found in green marketing for consumer goods: government and non-government certified (Sharma & Kushwaha, 2019). Government certified eco-labels are often provided by the government as meeting certain standards like the EU energy stars or other international organizations for standardization. Nongovernment certified eco-labels are ones a company might achieve on their own or a company might create on their own. For example, P&G's Future Friendly logo has used their own label to signify their brand's green products (Ethan, Lindsay, & Noseworthy, 2017). [See Appendix 1 Table 1 for examples of the eco-labels used in the current market.]

Greenwashing

With the growing environmental issues on a global scale, almost every industry has faced an increased demand for green marketed products (Demirel & Kesidou, 2019). In response to this demand, companies seek green marketing as a competitive advantage and have caused concerns such as greenwashing (Yazdanifard & Mercy, 2011). Greenwashing is defined as the use of vague or misleading environmental claims (Fernando, Sivakumaran, & Suganthi, 2014). Walker (2012) defined it as when a company with poor environmental performance tries to sell themselves as being green. It is described by Kenhove (2016) as a corporation's negative intention to deceive consumers of their environmental efforts by means of green marketing in relation to their products and services.

Greenwashing false claims have been found in a variety of products including cosmetics, beverages, hygiene, and the packaging (Saxena, 2015). For example, 7 Up beverage company

claimed their drinks had "all natural" ingredients when in fact their drinks contain high fructose corn syrup, and ethylenediamine tetra acetic acid or EDTA (a flavor preservative that is not natural). The Center for Science in the Public Interest sued the company for false claims.

Another example of greenwashing was Volkswagen (VW). In 2000, the company marketed their diesel engines as more fuel efficient and environmentally friendly in their "Think Blue" campaign (Aurand et al., 2018). This campaign emphasized VW's dedication to fuel efficient vehicles and high miles per gallon technology. Later, the Environmental Protection Agency later found the advertising to be false when they found the company's vehicle's emissions to be 75% over legal standards when tested on the road.

Lastly, another case of greenwashing was found with Krombacher beer in a campaign they conducted in 2002 in partnership with the World Wildlife Fund. The campaign advocated that 5 cents per crate were donated to the WWF to increase the protected wildlife lands of Dzanga-Sangha in Central Africa (Lutge, 2018). However, the money raised was donated to a previously existing campaign (Lutge, 2018).

Previous literature has suggested greenwashing can lead to reduced trust. Chen and Chang (2013) found that greenwashing negatively influenced consumer trust of green products in their study. They also found that greenwashing was positively associated with consumers' confusion. Aji and Bayu (2015) found greenwashing can cause consumer distrust and More (2019) concluded that greenwash reduction would raise green trust with the growing desire for environmentalism.

As part of the strategies used in green marketing, eco-labels have also raised public concerns. Taufique, Vocino and Polonsky (2017) found consumers had a lack of trust in eco-labels when the sources were not perceived as credible. In a study conducted by Moon, Costello,

and Koo (2017), they found a lack of trust with eco-labels due to greenwashing tactics. Atkinson and Rosenthal (2014) also found overall consumer distrust of eco-labels because attitudes were influenced by the credibility of the source.

Understanding the trust perceptions of consumers towards eco-labels is important. When consumers perceive higher levels of green trust they are more likely to purchase green products (Musgrove, Choi, & Cox, 2018). The current climate change and environmental sustainability issues of today demand the importance for research for consumer trust for eco-labels to continue to support environmentalist efforts (Atkinson & Rosenthal, 2014).

Rationale for Study

Many studies on green marketing analyzed green trust of green marketing in a broad sense. Studies have not thoroughly examined, however, how people perceive eco-labels existing in the market of government and non-government certified sources. Using Relational Dialectic Tensions as a theoretical framework, this study expands on previous research by examining how eco-label trust is perceived using a focus-group study. Understanding the trust of eco-labels is of great importance to both companies and service industries.

Summary

This thesis examines green marketing and trust perceptions of eco-labels. In Chapter 2, previous research of green marketing trust perceptions is identified to help formulate the foundation for this research study. Chapter 3 explains the questionnaire methodology used to administer focus group interviews. Chapter 4 describes the results of the focus group study, and Chapter 5 deduces discussion of the results and conclusions, limitations and implications.

CHAPTER TWO: LITERATURE REVIEW

Green Marketing and Trust

The research on green marketing agrees a growing number of consumers prefer to buy green products. Canavari and Coderoni's (2019) study found 21% of participants interviewed gave the highest importance to eco-labels when purchasing products. Most consumers prefer green products overall, although pricing and advertising types still influenced their purchasing intentions (Green & Peloza, 2014). Nielsen (2011) found more than half of Americans reported they prefer green marketed products, and 25% are considered environmentally concerned (Banerjee, Iyer, Kashyap, 2003).

Ku et al. (2012) found most consumers preferred green marketed products when given an option. Guo et al. (2017) found China's population preferred green marketed products over nongreen marketed products, and this preference actually forced several energy companies to adopt green marketing methods. According to the findings of these studies, it supports the growing preference on a global scale for green marketed products and services.

A person's level of environmental concern influences their perceptions of trust towards green marketing. A few scales for measuring environmental concern have been invented, with one of the most influential scales created by Bailey, Mishra and Taimiyu (2016) called the Receptivity to Green Advertising (REGRAD) scale, measuring how environmental concern positively measures green marketing receptivity. Many studies have found the higher a person scores on the scale in environmental concern, the more likely they are to have positive trust perceptions of green marketing. Chen and Chiu (2016) found individuals deemed more environmentally concerned will have higher trust green marketing messages, and overall positive

perception. Grimmer and Woolley (2014) agreed with these findings, since they also found that the environmental concern of a participant influenced their response to different green marketing appeals.

Matthes and Wonneberger (2014) studied how those deemed more environmentally concerned may have higher trust perceptions of green marketing. Within their study, they found that individuals with higher scores on environmental concern regarded green marketing as more trustworthy compared to lose who scored lower on environmental concern. The findings from this study found green marketing can influence trust the most when the use of detailed and informative green marketing is implemented.

Greenwashing

In recent years, scholars have paid attention to the effects of greenwashing. For example, Chen and Chang (2013) collected 252 valid questionnaires and found greenwashing negatively influenced green trust. In their study, they used a scale developed by Chen (2010) to measure green trust from consumers in Taiwan who had recently purchased an electronic product marketed as green [See Appendix 1 Table 2 for questionnaire]. Green trust was defined as willingness to depend on a product, service, or brand based on the belief or expectation resulting from its credibility, benevolence, and ability about its environmental performance (Chen & Chang, 2013). They found greenwashing caused confusion for consumers and increased their feelings of environmental consequences associated with purchasing behavior. Chen and Chang (2013) suggested companies reduce greenwashing activity in order to win back consumer's green trust.

Guo et al. (2017) also examined greenwashing effects on trust. Green trust was defined as beliefs or expectations based on the credibility, benevolence, and ability of an energy company's environmental performance after greenwashing [See Appendix 1 Table 4 for questionnaire]. They received 203 valid questionnaires and found a decrease in green trust from greenwashing and suggested it be counteracted through fostering brand loyalty by meeting public interests and green industrial standards.

A study by More (2019) also took notice of greenwashing's influence on green trust. This study built on previous literature by Chen (2010) defined green trust as "the readiness of a consumer to depend on a product based on belief or expectation resulting from its benevolence, credibility, and ability about environmental performance" and using the same developed scale [See Appendix 1 Table 1 for scale]. The questionnaire was sent to 579 participants and they found that greenwashing activities impact green trust negatively and erode green brand image and loyalty.

Eco-Labels

Past literature examined eco-label perceptions. For example, Taufique, Vocino, and Polonsky (2017) found positive environmental consumer behavior was influenced by trust. They defined green trust as the expectation of an organization to keep promises and obligations. 370 Malaysian college students were surveyed with a questionnaire [See Appendix 1 Table 3 for questionnaire] and found environmental knowledge and eco-label trust positively influenced purchase intentions of consumers. This study highlights the importance of understanding ecolabel trust and its ability to influence consumer behavior.

Atkinson and Rosenthal (2013) also studied eco-labels. Trust was defined as "the extent to which consumers believe the advertiser has the required expertise to provide the product or service effectively and the belief that the advertiser's word or written statement can be relied on." The study considered product attitude and eco-label certifying body attitude to influence eco-label trust. They surveyed 233 college students to find the influence of eco-label certifying source, product, and individual eco-labels on trust and purchase intent. A seven-point Likert scale was used to measure participant green trust perceptions [See Appendix 1 Table 5 for questionnaire]. The study found that the design of an eco-label and the certifying body did influence trust but not purchase intentions. They found that, although purchase intent was not impacted, the product attitude and trust perceptions towards a product and label were impacted.

According to Atkinson and Rosenthal's study (2013) they found that government certified eco-labels were most highly trusted amongst corporate and non-profit created ecolabels, but they did not have a high influence on behavioral intent. The study suggests this might be because participants had a stronger trust in government regulations versus corporate regulations on the eco-labels. Participants felt more trusting of certain products they used more often, and this influenced their answers in the study although it was found that corporate ecolabels improved attitudes towards the product.

Relational Dialectics

Relational Dialectics Theory (RDT) explains communication patterns that arise in relationships and focus on tensions which are internal and external contradictions within relationships (Baxter & Montgomery, 1996). This theory explains tensions or contradictions that exist between individuals in a relationship or with society. Internal dialects are between

relationships and external are with society. This study draws on Relational Dialectics Theory (RDT) by Baxter and Montgomery (1996). There are several dialectic tensions addressed by Baxter and Montgomery which include internal and external dialectic tensions. Some categories for tensions include integration-separation, stability-change and expression-nonexpression. Integration-separation category includes dialectic tensions in which individual autonomy must be sacrificed to connect with others (Montgomery and Baxter, 1996). Stability-change category includes all tensions which involve a balance between the expected and unexpected. Lastly, the category expression-nonexpression included the dialectic tensions in which privacy and sharing with society are involved.

This study focuses on the inclusion-seclusion and conventionality-uniqueness dialectic tensions (Prentice 2009). The conventionality-uniqueness dialectic tension is felt by people when they try to meet other's expectations in society and may often communicate in ways which show consistency or inconsistency with the larger social group. An individual may wish to do what is expected of society, yet desire to do the opposite despite the societal expectations. There is also another dialectic tension referred to as inclusion-seclusion where individual desire to participate in society and community actions but also desire to be separate (Prentice, 2009).

Applying RDT to this study refers to the conventionality-uniqueness dialect where individuals might desire to be eco-friendly aligned with society, yet might push against this societal pull. There may be individuals in society who feel societal pressures to follow the social desire for environmentalism, yet don't wish to participate because of the pressure. The inclusionseclusion tension dialectic tension may explain a desire to integrate with the common desire of society yet separate from this common consensus- such as eco-labeled products. Within this

dialectic tension, there might be a push and pull of wishing to purchase eco-labeled products like society but also desiring to be different for other reasons.

In a study by Rogan, Piancentini, and Hopkinson (2018), 15 intercultural couples were interviewed about their eating habits and perceptions of food products. The study used RDT to identify the contradiction between finding harmony and identity in an intercultural relationship yet holding on to a sense of unique identity with one's past culture through food. The research found that although the couples desired to have a harmonious culture and identity together, the individual in the relationship immersed in a new cultural society was driven to find cultural uniqueness.

Linton and Budds (2014) used RDT to study the relationship between societies and irrigation water systems. They found a contradiction in society's movement to act upon external nature and change it, yet society is frequently forced to change its own nature to irrigation systems. This dialectic tension exists because of society's desire to manage irrigation systems, yet this desire drives irrigation systems to create societies that rely and revolve around these systems.

Hence, my study focuses on RDT contradiction of these studies. The contradiction exists where consumers desire sustainability in their purchases yet distrust sustainable products.

Research Goals

Past research on eco-labels has sufficiently addressed the growing popularity of green marketing, greenwashing's influence, and sought to understand eco-label's effects on consumer purchase intention and behavior (Musgrove, Choi, & Cox, 2018). The present study is different from previous studies of green marketing in eco-labels in various ways and expands upon

previous research. Eco-labels previously studied were considered an influence on consumer behavior, rather than questioning what perceptions might exist towards government and nongovernment certified. Second, past research studying eco-labels has used products with the label, which may skew trust perceptions depending on a participant's relationship with the product or service.

To see how consumers are perceiving eco-labels of government and non-government certifications in aspects of trust and other concerns, the following research questions were proposed:

RQ1: How do consumers perceive eco-labels in terms of trust?

RQ2: Do consumers desire products with eco-labels, yet also distrust eco-labeled products?

RQ3: Does a dialectic tension exist in the relationship between environmentally friendly consumerism and eco-labels?

Summary

In this review of literature, the consumer distrust towards green marketing of eco-labels due to greenwashing and the mixed perceptions of eco-labels depending on sourcing have been discussed. The next chapter will explain the methodology used to answer the research questions. The participants, recruitment strategy, and trust scale used will be defined.

CHAPTER THREE: METHODOLOGY

Participants

Three focus groups of 8-9 participants were conducted for a total of 25 participants. Adults ages 18 and up were recruited by either volunteering or were invited to participate. Participants had an age range of 18 to 74 with the majority of participants between the ages of 25-34 (48%). Also, most of the participants were Caucasian (68%), 16% were Latino/Hispanic, 4% were African American and 12% reported as "Other" ethnicity. Using an adult population increased the likelihood that participants had firsthand consumer experiences of eco-labels. Since the study is exploratory and eco-labels are applicable to most consumer goods, age was the only recruitment criterion.

The participants were highly educated, as all attended some college, and 60% had at least a bachelor's degree. The annual salary of participants ranged from less than \$25k to over \$200k although the most salaries were between \$25k to \$50k annually (28%), \$50k to \$100k annually (32%), or less than \$25k (20%). Most participants did not have children (72%), although the participants that had children had 2-4 (24%). Lastly, 80% of participants lived in suburban areas, while 20% of participants lived in urban areas.

Participants were recruited through a convenience sample with individuals living locally within the neighborhood of the researcher. Participants were invited through printed invitations and Facebook groups to "participate in a study to and have a conversation about eco-labels". Participants in this study did not receive any direct payment for participation, and all participants provided informed consent.

Data Collection

The data was collected through three audio-taped focus group sessions which were conducted at three different locations. These lasted for an hour each and addressed the research questions "How do consumers perceive eco-labels in terms of trust?" and "Do consumers desire products with eco-labels, yet also distrust eco-labeled products?". Participants were encouraged to discuss any issues relevant to the study questions [See APPENDIX A for focus group instrument].

The audio tapes were transcribed verbatim. A brief demographic questionnaire was provided to participants inquiring gender, age, education, and salary range [See APPENDIX C for demographics questionnaire]

<u>Analysis</u>

The data collected from the focus groups were manually transcribed by the researcher/focus group coordinator by listening to the audio recordings of the study a total of three times to become familiar with the data. The data were also re-read several times in order to create codes and categorize topics. These codes were organized by color coding and used to create the themes in the audio data. Each transcript was applied codes, and multiple sentiments by the same respondents were recorded multiple times.

Themes were identified and defined as patterns in the data that encompassed a recurring idea. Each theme was assigned a name and definition and a thematic map was developed to track and identify themes, and the significance and relevance of the themes were identified. Themes were disregarded if they did not apply to the overall research goal, or pattern was loosely defined. Following the method of Owen (1984), a theme was noted when three criteria were met:

recurrence, repetition and forcefulness. When a theme occurred more than once but in different words, a similar meaning was inferred and grouped into one theme. The repetition of certain words, although possibly different meanings were also considered in the creation of themes as a certain topic was top of mind for the participants. Lastly, forcefulness describes the salience and emotion behind a theme if the participants were particularly opinionated or emotionally dogmatic about a theme.

CHAPTER FOUR: FINDINGS

The thematic analysis process applied to the transcripts derived themes apparent in the data. This resulted in the development of 5 themes. These themes can be labeled as "Eco-Label as Marketing Schemes, "Eco-Label Regulation Distrust, "Eco-Label Ambivalence, "Eco-Guilt Paradox" and "Desire for Eco-Education.

Eco-Label as Marketing Schemes

This theme is defined by the recurrence and forcefulness of participant's expression of eco-labels as a marketing scheme by companies to capitalize on environmentalism. The theme encompasses the identification of eco-labels as marketing scams, gimmicks or by means of financial benefit for companies. All participants in the focus groups expressed agreement to this perception and pointed out incentives as to why corporations used eco-labels as a marketing strategy.

Some participants from all three of the focus groups stated:

Woman, FG1: *I feel like the goal is to like target consumers*... *like marketing makes people feel better, but you [people in general] have no idea what they're doing.*

Male, FG2: the only reason they're [companies] even doing that [eco-Labels] is because there's a demand for that on the product. Because at the end of the day, they just want to sell. Male, FG3: It's a gimmick [referring to eco-labels].

Female, FG2: Companies that have other products that I guess are eco-friendly... Eco friendly and they're adding these labels to their new products. It's like- it's not because they care about the environment, but they're jumping on the bandwagon. They know it's like a... it's a thing now, right? So, they're capitalizing on that. Female, FG1: So, it makes me think about like marketing and sales [referring to eco-labels], because like... it makes me feel like they use it as a way to differentiate themselves from the rest of the products on the shelves.

Many of the participants appeared confident in their perceptions of intentions behind ecolabeling. Most felt they were a means of corporations marketing ploys, rather than manufacturing identification with genuinely environmentally friendly objectives behind the labels.

Eco-Label Regulation Distrust

This theme is defined as the expressed distrust in the regulation that eco-labels require to be labeled on a product. This distrust is defined as participant's perception of eco-label certification regulation to not be strict, and that standards are easily swayed for products to obtain the label.

Some participants from focus groups 2 and 1 stated:

Female, FG2: *I also think that there's not a lot of regulation and how certain terms [eco-labels] are used.*

Male, FG2: There's not a ton of regulation around this [eco-labels].

Male, FG2: It's just the parts... where there are regulations [around eco-labels] ... is generally a little sketchy- that I'm aware of.

Female, FG2: *I don't know if there's actually anything that they have to prove in order to get that label.*

Some participants expressed their concerns of whether regulation is easy to meet, and maybe although there is regulation- there is little effort involved.

Some participants from focus groups 2 and 1 stated:

Male, FG2: I walk down an aisle and see the eco labels. And I know that those companies are doing whatever, is like, the most cost efficient to meet the minimum possible standards to put that label on their product.

Male, FG1: It seems like you could just slap that on here. So, it's a lot of them... just kind of seems like signaling without having to do anything.

It appeared many participants did not understand the purpose of eco-labels, their meaning or the regulation behind them.

Eco-Label Ambivalence

Participants voiced a mixture of emotions regarding eco-labels. The eco-label ambivalence theme covers the concepts of desiring eco-labeled products because of their health and environmental benefits, yet distrust the eco-labels on products.

Participants expressed their agreement in eco-label desire and how they will always choose an eco-labeled product when the opportunity arises, or they are usually looking for ecolabels on products.

Some participants from focus groups 3 and 1 stated:

Female, FG3: I find this is a helpful guide because I always like to look [for eco-labels], you know? Like a triangle [recycling label]. I like to buy things that I can recycle. Yeah. So, it's a... it's a guide.

Female, FG3: To me, it's important to me too. And I tried to read the labels and I tried to buy things I figure is environmentally friendly.

Female, FG1: I'll be more inclined to buy it if I think it's better for the environment.

Female, FG1: For the same price [if one had it and one didn't] I would get the one with the label on it.

Male, FG3: *If the products are the same ones. Better for the ecosystem. You obviously choose that one.*

Other participants stated they often look for eco-labels because of the internal desire to help the environment:

Female, FG1: It makes me feel better about helping out.

Female, FG1: *Deep down you want to be a good person. Yeah. being a good person. Are you there for buying things that that minimize your carbon footprint?*

Some participants from all three of the focus groups expressed their lack of trust through the ambiguity of the eco-labels. There are currently over 200 eco-labels in the United States alone, and many participants appeared aware of this.

Male, FG3: [eco-labels] means whatever they want it to mean, you know?

Female, FG1: It's not always easy to understand what they mean. So, like you might see it has like a certain "Oh, this is eco-friendly" Or this is you know environmentally friendly. What does that mean? Like, is it from the way you make your product, or you ship it?... Or like... You know-what constitutes that because it might not actually be like [that].

Male, FG1: It's just like I still just like I said, you can't really trust these because I feel like half of them just don't mean anything.

Male, FG3: Because they don't really advertise what it means to have that stamp on there. It's kind of just like, Hey, we're probably go friendly. Just look at the stamp. It doesn't, there's no explanation as to like, you know, if you buy this over the leading brand, you save a tree and a half or something.

Some participants from focus groups 1 and 2, when asked, voiced their lack of trust due to those certifying the eco-labels and their intentions, although the participants disagreed on what certifying body was most trustworthy:

Female, FG1: *I would trust a nonprofit more.* [other person: same] Because they're not out for the money. You know, they really want to help people. Hopefully.

Male, FG2: I think the big issue trust wise with those is that it is exactly- that its government funded. And that probably goes for a lot of things that are government funded... Is that you know, if the rules are more stringent and less of those rules were bent on, you know, for the sake of lobbying money and stuff like that...

Male, FG1: *I think it comes from like a third-party observer, it's a lot easier to trust something being, you know, certified, like I said, with the USDA.*

Female, FG2: I guess at the same token, you could say though, then maybe like self-imposed organization ones are more credible because they don't have to do [certifications] and they're just going the extra mile to do it. I guess if I had to make a decision, I would think, like, government ones would be the less credible, I would start there.

Lastly, eco-labels were desired by participants but the trust in the quality of the product was low because of eco-labels. Participants desired eco-labeled products yet didn't trust the quality of the products. Some participants from focus groups 2 and 1 stated:

Male, FG2: There's a sliding scale of where's your threshold of "okay" [to] accept the quality you're sacrificing permit being a conventional versus a green product. Where does that line up on what your minimum acceptance criteria [asking the group]?

Female, FG2: [referring to eco-labeled laundry detergent] it costs almost double and it doesn't work.

Female, FG1: [*Referring to non-eco-labeled products*] Or they do better job. Maybe harsh chemicals that are bad for the planet but darn it- it gets my grout clean.

There is a paradox existing between the participant's clear desire for eco-labeled products, yet distrust in products due to being eco-labeled. Participants seem to desire eco-labels, but distrust these eco-labels for a variety of reasons including quality, certifying body and ambiguity.

Eco-Guilt Paradox

Relational Dialectics Theory (RDT) by Baxter and Montgomery (1996) addresses relationships and in this case the relationship between individuals and society as a whole. This theme is identified as participants recurrence of the expressions of guilt for being "part of the problem" in society for environmentalism problems, feelings of responsibility or a lack of desire to change because one small change on their part won't create enough of an impact. Some participants from the three focus groups stated pressures they feel to be eco-friendly: Male, FG2: *I think, like, there's no like direct pressure from the people or like [inaudible]. or something. But like, the word of like being eco-friendly. It's somehow always in your head. Like no matter why, like no matter where you go, but you always have the idea you had like, you know...*

Female, FG3: *I would say I'm conflicted because I think that there's a lot of society pressure for me to be eco-friendly.... And in my heart, I would like to be eco-friendly, but as [Participant Name] suggested, I don't know if I'm willing to pay 30% more 50% more for product especially when no one is really looking over my shoulder to see what I'm doing.* Some participants from the three focus groups expressed feelings of guilt: Female, FG2: *I do feel a little bit of guilt if I don't end up buying an eco-friendly product. Just internal [guilt].*

Male, FG2: It's more of a - it's a guilt -not I don't not society- whatever- society is body but it is certainly like a "common [name] and you couldn't just suck it up and spend the extra dollar" or "you couldn't suck it up and do what was better for everything"?... and not you know, you know, there's certainly that in and that's not just with purchasing, you know, that that's something they experience in every facet of life. Like why can't you just suck it up and do the right thing? Female, FG3: I mean, I feel guilty personally because I recycle like 90% of the stuff but if I have like a salsa jar, I don't feel like rinsing it out.

Male, FG2: Consumerism and lack of sustainability. Literally, we can't just suck it up and do the right thing internally.

Some participants from the three focus groups expressed feelings of responsibility:

Female, FG3: Also, I think when we were growing up our age group, it was like, are you doing your part? You're doing your part, you know, so that's why I think we feel a sense of purpose personal responsibility. Not sure why you don't.

Female, FG3: *I feel*... *I feel a sense of responsibility for the future for next generation. I always I feel for my grandchildren, my children.*

Female, FG3: I don't think I feel pressure, but I think I feel it like a personal responsibility. That's why I feel so responsible. Yeah so it makes you more conscientious, you know, like maybe like again and everything plays a role...

Female FG3: I feel my responsibility [to be eco-friendly] but I don't necessarily act on that responsibility. So, I'll have guilt. So, like I should buy the, you know, the \$5 one, you know

instead of the \$3 one, but I won't because my practicality overrules my responsibility to eco friendly

Female, FG3: Yeah, yeah, you too. I feel that sense of responsibility.

Female, FG3: If everyone is one drop of water in the ocean as well as but many drops of water make the ocean. Okay? So we will do a little bit it helps rather than not doing anything at all. So that's how I feel there is a responsibility for every single person in the world.

Some participants from the three focus groups expressed no intention of being eco-friendly: Female, FG1: I feel like knowing that no one else cares about it either. Like just like sitting here and everyone's like agreeing. They don't really care. It makes me care even less because like, I'm just like one person. And like, Am I really going to like make that big of a difference? You know? Because like the companies that don't put the labels on it, they're still going to be like making products whether I buy it or not. Yeah.

Female, FG3: One person out of billions of people, you know, it's like, yes, you know, it starts with one person. But that doesn't mean it makes a big difference. So it's like I'm saying, I'm taking money out of my pocket just so I can, you know, benefit the environment, but at the same time, it's like, Is it really worth it?

Referring to the RDT theory, the conventionality-uniqueness dialectic tension can be found in the data (Baxter & Montgomery, 1996). Some participants expressed a desire to meet society's expectation of environmentalism, but others state a push against this expectation because of financial reasons. The inclusion-seclusion dialectic tension can also be found in the data, since many stated a need to participate in solving society's problem through environmentalism yet many had feelings of not wishing to invest in eco-labeled products because it wouldn't help against the problems caused by society.

Desire for Eco-Label Education

This theme illustrates the participant's desire for some sort of standardization of these labels and a greater knowledge of the regulations required.

Some participants from focus groups 1 stated:

Male, FG1: I was gonna say, put some kind of like explanation on the packaging or something to explain what this really means.

Male, FG1: I think If I knew what these labels actually meant, like, if I was better informed on that, then I'd be more inclined to follow them.

Female, FG1: [They should do] Education on why we want to do it eco-friendly... right? Why does it matter?

Some participants from the three focus groups agreed on a need for less eco-labels and more standardization:

Male, FG3: They should standardize it... They should standardize it because when there's 30 different labels nobody really knows what they mean... or, you know, who's regulating it? Female, FG3: I'd be nice if there was one that's more one that everybody for sure knows. Female, FG3: Well I think they could educate the children in the school system to know what the eco label means. And you know, encourage them to choose eco label products, because they would know how it links to the environment. So, I think it probably has to start in the school system.

Male, FG3: I think we said this halfway through is if they became a little bit more standardized, and you saw the labels on, you know...You're used to the labels on a product, but when you didn't see it on the product, you said, Okay, well, that one's not, you know, eco-friendly or

whatever, as opposed to having 50 different labels and don't know what the heck any of them mean.

There was an agreed consensus that there should be standardization and education of ecolabels for the public. The participants wished to know what eco-labels meant and their regulations but felt there was no reliable source or easy access to the information. If there were fewer labels, participants felt that maybe it would be easier to learn and identify labels rather than several certifying bodies and hundreds of different labels that currently create eco-labels.

CHAPTER FIVE: CONCLUSION

Greenwashing has driven out consumer trust in green marketing in most forms, and ecolabels were not left out (Aji & Bayu, 2015). The results from this research highlight the distrust consumers feel towards eco-labels. At the same time, participants desire eco-labels to identify eco-friendly products because they wish to be eco-friendly but distrust the standards in place.

In this study, the perception of eco-labels was generalized as a marketing ploy. Many of the participants voiced their feelings that the labels of these sustainability efforts were not genuine and used as a strategy for corporations to profit. Participants expressed feelings of being a victim of marketing. Much of this can be blamed on greenwashing breaking consumer trust and causing consumers to assume the sole purpose is to capitalize on a green movement. This perception of eco-labels as a form of marketing is so prevalent that many participants defined eco-labels in these terms. This becomes a difficult situation for companies which foster genuine sustainability intentions for their brand and may be ignored due to this perception.

Participants did not have awareness of the certifications of government certified ecolabels, corporations or nonprofits. Participants were not aware in all three groups of who the certifying bodies were and did not recognize most eco-labels or who regulated them. A lack of trust towards eco-labels is likely due to the little understanding of how eco-labels are certified and less feelings of ambiguity from participants towards eco-labels.

Once again, the greenwashing impacts on consumer trust leak into the perceptions of ecolabels. In this study, the participants voiced a strong distrust towards eco-label regulations. Much of this can be rooted in a lack of education on eco-labels, what standards are upheld and understanding who is certifying eco-labels. The participants voiced distrust in the labels, as

anyone can just "slap a label" on a product and certify it or meet the minimum requirements. Some of this distrust might be attributed to previous greenwashing instances participants faced in the past, as some eco-labels like 7 Up's incidents with falsifying their eco-label claims are common in consumer goods (Saxena, 2015). Participants were divided on which certifying body was most trustworthy and did not trust government, non-profit organizations or corporations more than another.

It is interesting to note that several participants voiced a desire for eco-labeled products to help in their current demand for sustainable purchasing, yet at the same time did not trust ecolabels or eco-labeled products. Plenty of participants desire products eco-labeled but their continued distrust in the eco-label as a marketing ploy and ambiguous certification standards leave them feeling conflicted. Another interesting point was the mention of quality and price by many participants. Most participants desired a similarly affordable eco-labeled product, but many viewed eco-labeled products untrustworthy regarding the quality. Essentially, many agreed that they felt it often was a sacrifice in product and price to purchase an eco-labeled product. This can be noted as interesting, as participants continued to voice a desire for eco-labeled products under certain circumstances.

When considering RDT and the relationship between participants and society, it appears many participants feel as though they do feel pressure from society within the conventionalityuniqueness dialectic tension (Baxter & Montgomery, 1996). Many expressed their feelings of not wishing to purchase eco-labeled products because they felt it wouldn't make a difference. This might be due to the relationship between the individual and society and a feeling of helplessness of low impact for change. Ironically, change is only possible through each individual but a sense of belonging to society comes from this.

When considering the inclusion-seclusion dialectic tension, many stated a need to participate in the environmentalism efforts imposed by society as their duty, but others expressed a desire against this since they felt like their individual financial needs were more important as eco-labeled products often required financial sacrifice. This can fall into the inclusion-seclusion dialectic tension because many participants voiced desire for involvement in social environmentalism yet desire to seclude themselves for personal reasons like finances.

While applying the RDT theory to this study, it highlighted the paradox in the data where participants experienced societal pressures to be environmentally friendly. The theory addressed participant's desire to be an active individual in society towards environmental change, but also uprooted the conflicted emotions they faced towards doing so. By employing RDT theory, it exposed the push and pull of wishing to engage in environmental change with eco-labels through the inclusion-seclusion and the conventionality-uniqueness dialectic tensions.

Some participants from the three focus groups voiced a desire for quantified impact included in eco-labels, such as "each purchase plants X trees" as an improved means for ecolabel standards and improved relationship with purchasing. The feeling of responsibility for society also was expressed by some, stating they feel a sense of guilt and responsibility to be eco-friendly for others.

Over 200 eco-labels exist in the United States and there seems to be no regulation, making it difficult to recognize and become familiar with any particular label. There is no traditional form of education for the public on eco-labels, and much of the research is pushed on consumers. In this study, many participants voiced a desire for standardization of these many eco-labels into an easily identifiable label, rather than another anonymous symbol. Some expressed the challenge to keep an eye out for new labels, when so many companies can also

make their own. Other participants voiced a need for educational requirements in sustainability and including eco-labels for future generations. If eco-label education was taught in schools and there was a standardized set of well-regulated labels, purchasing sustainable products would be less stressful for the consumer, and they may be more likely to purchase sustainable products if the price permits.

This research contributes to the body of green marketing literature as it explored existing perceptions of eco labels, eco-label trust and individual relationships with society's environmentalism and eco-labels. Although this literature does not agree with Atkinson and Rosenthal's (2013) study where government certified eco-labels were found as the most trustworthy, this study explored what current knowledge of eco-labels and consumer understanding of the consumer bodies.

Limitations

Some limitations of the study exist in the potential of thinking with the group or staying silent due to opposing opinions and lack of anonymity in the focus group setting. Another limitation was the shyness of some groups over other focus groups. Some individuals within the group were more talkative than others, and some of the focus groups themselves were more engaged and talkative than other groups.

There were some participants from all three focus groups that appeared to have stronger opinions and be more talkative than others, which may have intimidated others from voicing their own opinions and thoughts. For most of the groups, everyone seemed comfortable in sharing their honest opinions.

Other limitations of this study include the demographics of the participants. The participants of this study were all of at least some college education and might not reflect the same in a more diversely educated sample. This same limitation applies to income, where most of this group was above the poverty line and above average income and the results might reflect differently with other levels of income since eco-labeled products are often considered expensive.

Implications

Environmentalism is on the rise, and consumers desire eco-labeled products. It's no longer enough to place a label on a product and claim sustainability. Consumers want details, transparency, education and standardization. This study may suggest future research for how eco-labels may communicate a means of gaining consumer trust. Participants expressed feelings of responsibility to society, and the planet. A feeling of helplessness participants expressed to face the sustainability issues society has caused may lead to future research on effective means of quantifying eco-label impacts.

Future research may want to examine different means of educating individuals on ecolabels and most effective means. Standardization models may be a possible research purpose, as many participants desired a more standard means of creating and identifying eco-labels rather than the hundreds that currently exist.

Eco-labels are confusing for consumers because consumers feel out of touch. Many express feelings of powerlessness to instill environmental change, yet each person holds the consumer dollar power to shift societal norms. Eco-labels should be a guide for consumers to drive this change by rewarding companies that engage in true sustainable efforts. Their

purchasing power can force more companies to strive towards environmentalism. Participants feel like eco-labels lack meaning. They have so little faith in the certification, so they choose unsustainable products because they simply don't trust eco-labels. Eco-labels can empower consumers to drive the change they truly want if they are provided with proper education, regulation transparency, and standardization of eco-labels.

APPENDIX A: ECO-LABEL EXAMPLES



APPENDIX B: WELCOME MESSAGE BY MODERATOR

Welcome Message by Moderator

Hello, my name is Rebecca. Thank you for attending this focus group study and the contribution of your time. This study is about eco-labels for consumer products. The completion of this project will add to the existing literature on eco-label perceptions.

This is a group selected for the study, and we would like to hear about your overall perceptions of eco-labels current in the market. A few examples eco-label visuals will be provided which you may recognize, and their certifications and regulators will be explained.

During this focus group study, I will ask questions and facilitate a conversation about eco-labels. Please remember there is no "right" or "wrong" answer for the questions that will be discussed. The goal of this study is to stimulate conversation and open up discussion to disclose opinions and perceptions about eco-labels by everyone in the room. Hopefully everyone will feel comfortable in disclosing their honest opinions and ideas.

This session will be recorded, and I will be taking notes during the focus group study to ensure all ideas are captured during this meeting. Please note the comments within this focus group will be kept confidential and anonymity will be honored to any comments or opinions you make.

At this time, are there any questions anyone might have before we begin?

[double check recording device]

Project overall questions:

RQ1: How do consumers perceive eco-labels in terms of trust?

RQ2: Do consumers desire products with eco-labels, yet also distrust eco-labeled products? **RQ3**: Does a dialectic tension exist in the relationship between environmentally friendly consumerism and eco-labels?

APPENDIX C: DEMOGRAPHICS QUESTIONNAIRE

Demographics Questionnaire

1) What is your gender?

a) Male

b) Female

c) Other

d) Do not wish to disclose.

2) What is your age?

a) 18-24 years old

b) 25-34 years old

c) 35-44 years old

d) 45-54 years old

e) 55-64 years old

f) 65-74 years old

g) 75 years or older

h) Prefer not to say.

3) What is your ethnicity?
a) Caucasian
b) Africa-American
c) Latino or Hispanic
d) Asian
e) Native American
f) Native Hawain or Pacific Islander
g) Two or more
h) Other/Unknown
i) Prefer not to say

4) What is your highest level of education?
a) No high school
b) High School/GED
c) Some College
d) Bachelor' Degree
e) Master's Degree
f) Ph.D. or higher
g) Trade School
h) Prefer not to say

5) Please indicate your annual salary.
a) Less than \$25,000
b) \$25,000- \$50,000
c) \$50,000-\$100,000
d) \$100,000- \$200,000
e) More than \$200,000

f) Prefer not to say.

6) How many children do you have?

a) None

b) 1

c) 2-4

d) More than 4

e) Prefer not to say

7) Which of the following best describes the area you live in?

a) Urban

b) Suburban

c) Rural

d) Prefer not to say.

APPENDIX D: PROBE QUESTIONS

Probe Questions

STAGE 1: General eco-label feelings.

- 1) Are any of you familiar with any existing eco-labels? If so, what are your thoughts and opinions on those eco-labels?
- 2) When a product is labeled with an eco-label, what does that mean to you? Please elaborate.
- 3) If a product is labeled with an eco-label, does that change what you think about the brand or product? What would your perception toward that product be?
- 4) Are there any products with eco-labels that you regularly purchase? Give me some examples. Is it because you trust the product or is it because you trust the brand?
- 5) What products do you usually buy with eco-labels? Do you notice them?
- 6) Does the presence of eco-labels change your perception of the brands or the products?

[Introduce eco-labels graphics]

STAGE 2: Exposure to eco-labels, trust and background knowledge.

- 1) Please look at the examples I'm providing to you. Do you recognize any of them? Please let me know if any of these are familiar. It's okay if you don't. Do you think there are other examples you can share with the group?
- 2) What are the opinions you might have about these eco-labels?
- 3) This might be a difficult question, but in your mind do you feel like some eco-labels are more trustworthy than others? Why so?
- 4) Do you find any of these examples of eco-labels trustworthy? If so, which ones? Why?
- 5) What could eco-labels do differently to gain your trust?
- 6) What are your opinions and thoughts about the credibility of these eco-labels?
- 7) Do you know who has the authority to certify eco-labels?
- 8) Among these eco-labels can you identify which are certified by the government, or non-government?
- 9) Some argue non-government certified ecolabels are less trustworthy than government certified, do you agree or disagree?

STAGE 3: Dialectic Tensions probe questions.

- 1) Do you feel conflicted, unconflicted or nothings towards eco-labels?
- 2) Do you think society in general has an expectation for people to buy products with ecolabels?
- 3) Do you feel like you experience/feel these expectations or pressures?
- 4) Do you feel a sense of responsibility to buy products with eco-labels? If so, how does that make you feel?

Is there anything else we haven't discussed that you think is important? Please share.

Thank you for your time and participation.

APPENDIX E: IRB APPROVAL LETTER



Institutional Review Board FWA00000351 IRB00001138, IRB00012110 Office of Research 12201 Research Parkway Orlando, FL 32826-3246

UNIVERSITY OF CENTRAL FLORIDA

EXEMPTION DETERMINATION

February 12, 2020

Dear Rebecca Dupont:

On 2/12/2020, the IRB determined the following submission to be human subjects research that is exempt from regulation:

Type of Review:	Initial Study
Title:	GREEN TRUST PERCEPTIONS OF GOVERNMENT
	CERTIFIED VS. NON-GOVERNMENT CERTIFIED
	ECO-LABELS
Investigator:	Rebecca Dupont
IRB ID:	STUDY00001304
Funding:	None
Grant ID:	None
Documents Reviewed:	 Faculty Advisor Form, Category: Faculty Research
	Approval;
	 Demographics Survey, Category: Survey /
	Questionnaire;
	 Focus Group Instrument, Category: Test Instruments;
	 HRP 254, Category: Consent Form;
	 HRP255, Category: IRB Protocol;
	 Moderator Greeting, Category: Interview / Focus
	Questions;

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please submit a modification request to the IRB. Guidance on submitting Modifications and Administrative Check-in are detailed in the Investigator Manual (HRP-103), which can be found by navigating to the IRB Library within the IRB system. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Page 1 of 2

Sincerely,

Kanille C. Berkbeck

Kamille Birkbeck Designated Reviewer

REFERENCES

- Atkinson, L., Rosenthal, S. (2013). Signaling the green sell: the influence of eco-label source and argument specificity on consumer trust. *Journal of Advertising*, DOI: 10.1037/t48423-000
- Atkinson, L, Rosenthal, S. (2014). Signaling the green sell: The influence of eco-label source, argument specificity, and product involvement on consumer trust. *Journal* of Advertising, 43(1), 33-45. DOI: 10.1080/00913367.2013.834803

- Aurand, T., Finley, W., Krishnan, V., Sulivan, U., Abresch, J., Bowen, J., Rackauskas, M., Thomas, R., Willkomm, J. (2018). The VW diesel scandal: A case of corporate commissioned greenwashing. *Journal of Organizational Psychology,* 18(1), 23-32. Retrieved from https://search-ebscohost-com.ezproxy.net.ucf.edu/login.aspx?direct=true&db=buh&AN=131505227&site=eds-live&scope=site
- Bailey, A., Mishra, A., Taimiyu, M. (2016). Green advertising receptivity: An initial scale development process. *Journal of Marketing Communications*, 22(3), 327-345. doi:http://dx.doi.org/10.1080/13527266.2014.904812

^{Aji, H., Bayu, S. (2015). The extended consequence of greenwashing: Perceived consumer skepticism.} *International Journal of Business and Information*, 10(4), 433-468. Retrieved from https://search-ebscohost-com.ezproxy.net.ucf.edu/login.aspx?direct=true&db=buh&AN=136370436&site=eds-live&scope=site

- Banerjee, S., Iyer, E., Kashyap, R. (2003). Corporate environmentalism: Antecedents and influence of industry type. *Journal of Marketing*, 67(2), 106-122. Doi: 10.1509/jmkg.67.2.106.18604
- Baxter, L. A., & Montgomery, B. (1996). Relating: Dialogues and dialectics. New York, NY: Guilford Press.
 - Canavari, M., Coderoni, S. (2019). Green marketing strategies in the dairy sector:
 Consumer-stated preferences for carbon footprint labels. *Strategic Change*, 28, 233–240. https://doi.org/10.1002/jsc.2264
 - Castka, P., Corbett, C. (2016). Governance of eco-labels: Expert opinion and media coverage. *Journal of Business Ethics*, *35*(2), 309-326. doi:10.1007/s10551-014-2474-3
 - Chen, Y., Chang, S. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and perceived risk. *Journal of Business Ethics*, 114(3), 489-500. doi:10.1007/s10551-012-1360-0
 - Chen, M., & Chiu, C. (2016). Go green: How to influence the perceived effectiveness of a green product? *International Journal Of Advertising*, 35(4), 622-641. doi:10.1080/02650487.2015.1105647
 - Chen, Y.-S., Lai, S.-B., & Wen, C.-T. (2006). The influence of green innovation performance on corporate advantage in Taiwan. *Journal of Business Ethics*, 67, 331–339. Doi: https://doi.org/10.1007/s10551-006-9025-5
 - Chen, H., Yang, C. (2019). Applying a multiple criteria decision-making approach to establishing green marketing audit criteria. *Journal of Cleaner Production*, 210, 256-265. Doi: 10.1016/j.jclepro.2018.10.327

Chin, C., Chee, C., Wong, W. (2018). The implementation of green marketing tools in rural tourism: The readiness of tourists?. *Journal of Hospitality Marketing & Management*, 27(3), 261-280.

doi:https://doi.org/10.1080/19368623.2017.1359723

- Demirel, P., Kesidou, E. (2019). Sustainability-oriented capabilities for eco-innovations:
 Meeting the regularlatory, technology, and market demands. *Bus Strat Env*, 28, 847-857. Doi: https://doi.org/10.1002/bse.2286
- Ethan, P., Lindsay, M., Noseworthy, T. (2017). Isolated environmental cues and product efficacy penalties: The color green and eco-labels. *Journal of Business Ethics*, 143(1), 159-177. doi:10.1007/s10551-015-2764-4
- Eurobarometer (2013), Attitudes Of Europeans Towards Building The Single Market For Green Products, *FLASH EUROBAROMETER*, 367, Retrieved from: http://ec.europa.eu/public_opinion/fl ash/fl _367_en.pdf
- Farradia, Y., Bon, A. (2019). Green marketing mix role toward sustainability performance of petrochemical industry in Indonesia. Proceedings of the International Conference on Industrial Engineering and Operations Management Bangkok, 3640-3650. Retrieved from https://search-ebscohostcom.ezproxy.net.ucf.edu/login.aspx?direct=true&db=aci&AN=137667558&site= eds-live&scope=site
- Fernando, A., Sivakumaran, B., Suganthi, L. (2014). Nature of green advertising in India: Are they greenwashed? Asian Journal of Communication, 24(3), 222-241. doi:https://doi.org/10.1080/01292986.2014.885537

- Guo, R., Tao, L., Li, C., Wang, T. (2017). A path analysis of greenwashing in a trust crisis among Chinese energy companies: The role of brand legitimacy and brand loyalty. Journal of Business Ethics, 140, 523-536. DOI 10.1007/s10551-015-2672-7
- Green, T., & Peloza, J. (2014). Finding the Right Shade of Green: The Effect of Advertising Appeal Type on Environmentally Friendly Consumption. *Journal of Advertising*,43(2), 128-141. doi:10.1080/00913367.2013.834805
- Grimmer, M., Woodley, M. (2014). Green marketing messages and consumers' purchase intentions: Promoting personal versus environmental benefits. *Journal of Marketing Communications*, 20(4), 231-250. doi:10.1080/13527266.2012.684065
- Kenhove, N., Biro, L (2016). Advertising skepticism: The influence of demographic factors, consumerism and green washing in the organic food industry.
 Institutionen för marknadsföring, 79, Retrieved from http://urn.kb.se/resolve?urn=urn:nbn:se:lnu:diva-53651
- Ku, H., Kuo, C., Wu, C., Wu, C. (2012). Communicating green marketing appeals effectively. *Journal of Advertising*, *41*(4), 41-50. doi:10.1080/00913367.2012.10672456
- Linton, J., Budds, J. (2014). The hydrosocial cycle: Defining and mobilizing a relationaldialectical approach to water. *Geoforum*, 57, 170-180. Retrieved from https://doi.org/10.1016/j.geoforum.2013.10.008
- Lutge, C. (2018). Krombacher beer, the world wildlife fund, and cause-related marketing: A case of greenwashing? *Sage Publications*, doi:10.4135/9781526445919

- Matthes, J., Wonneberger, A. (2014). The skeptical green consumer revisited: Testing the relationship between green consumerism and skepticism towards advertising.
 Journal of Advertising, 43(2), 115-127. DOI: 10.1080/00913367.2013.834804
- Moon, S., Costello, J., Koo, D. (2017). The impact of consumer confusion from ecolabels on negative WOM, distrust, and dissatisfaction. *The International Journal* of Advertising, 36(2). 246-271. doi: 10.1080/02650487.2016.1158223
- More, V. (2019). The impact of greenwashing on green brand trust from an Indian perspective. *Asian Journal of Innovation & Policy*, 8(1), 162-179. doi:10.7545/ajip.2019.8.1.162
- Musgrove, C., Choi, P., Cox, C. (2018). Consumer perceptions of green marketing claims: An examination of the relationships with type of claim and corporate credibility. *Services Marketing Quarterly*, *39*(4), 277-292. doi:https://doi.org/10.1080/15332969.2018.1514794
- Nielsen (2011). Sustainable Efforts and Environmental Concerns, Retrieved from: www.nielsen.com/us/en/insights/reports-downloads/2011/sustainable-eífortsenvironmentalconcerns.html
- Owen (1984). Interpretive themes in relational communication. *Quarterly Journal of Speech*, 70(3), 274-287. DOI: 10.1080/00335638409383697
- Prentice, C. (2009). Relational Dialectics Among In-Laws. Journal of Family Communication, 9(2), 67-89. Doi: 10.1080/15267430802561667
- Rahbar, E., Nabsiah, A. (2011). Investigation of green marketing tools' effect on consumers' purchase behavior. *Business Strategies Series*, 12(3), 73-83. doi:https://doi.org/10.1108/17515631111114877

- Rogan, D., Piancentini, M., and Hopkinson, J. (2018). Intercultural household food tensions: a relational dialectics analysis. *European Journal of Marketing*, 52(12), 2289-2311. DOI: 10.1108/EJM-10-2017-0778
- Royne, M., Martinez, J., Oakley, J., Fox, A. (2012). The effectiveness of benefit type and price endings in green advertising. *Journal of Advertising*, *41*(4), 85-102. doi:10.1080/00913367.2012.10672459
- Saxena, S. (2015). Are they really green: Flipping the second side of green marketing coin- A critical analysis using green selected cases? *Amity Global Business Review*, 10, 110-113, Retrieved from https://search-ebscohostcom.ezproxy.net.ucf.edu/login.aspx?direct=true&db=buh&AN=101518089&site= eds-live&scope=site
- Schmuck, D., Matthes, J., Naderer, B. (2018). Misleading consumers with green advertising? An affect-reason-involvement account of greenwashing effects in environmental advertising. *Journal of Advertising*, 47(2), 127-149. doi:10.1080/00913367.2018.1452652
- Sharma, K., Kushwaha, S. (2019). Eco-labels: A tool for green marketing or just a blind mirror for consumers. *Electronic Green Journal*, 1(42), 56-77. Retrieved from https://search-ebscohost-

com.ezproxy.net.ucf.edu/login.aspx?direct=true&db=gft&AN=135788309&site= eds-live&scope=site

Shin, S., Ki, E., Griffin, W. (2017). The effectiveness of fear appeals in 'green' advertising: An analysis of creative, consumer and source variables. *Journal of* *Marketing Communications*, 23(5), 473-492.

doi:https://doi.org/10.1080/13527266.2017.1290671

Taufique, K., Vocino, A., Polonsky, M. (2017). The influence of eco-label knowledge and trust on pro-environmental consumer behavior in an emerging market. *Journal of Strategic Marketing*, 25(7), doi:https://doi.org/10.1080/0965254X.2016.1240219

- Walker, K., Fang, W. (2012). The harm of symbolic actions and green-washing:
 Corporate actions and communications on environmental performance and their financial implications. *Journal of Business Ethics*, *109*(2), 227-242. Retrieved from https://www-jstor-org.ezproxy.net.ucf.edu/stable/23259314
- Widyastuti, S., Said, M., Siswono, S., Firmansyah. (2019). Consumer trust through green corporate image, green marketing strategy, and social responsibility: A case study. *European Research Studies Journal*, 22(2), 83-99. Retrieved from https://www.um.edu.mt/library/oar//handle/123456789/4300
- Yang, D., Lu, Y., Zhu, W., Su, C. (2015). Going green: How different advertising appeals impact green consumption behavior. *Journal of Business Research*, 68(12). 2663-2675, doi:10.1016/j.jbusres.2015.04.004

Yazdanifard, R., Mercy, I. (2011). The impact of green marketing on consumer satisfaction and environmental safety. International Conference of Computer Communication and Management, 5, Retrieved from: http://www.ijstm.com/images/short_pdf/1456578278_396S.pdf

Yoon, D., Chen, A. (2017). A green shadow: The influence of hotel customers' environmental knowledge and concern on green marketing skepticism and behavioral intentions. Tourism Analysis, 22, 281-293. DOI:

https://doi.org/10.3727/108354217X14955605216032

(2019). Ecolabel Index. Retrieved from http://www.ecolabelindex.com/