

THESIS

EXPLORING COLLEGE STUDENTS' INTERPRETATIONS AND IMPLICATIONS OF THE USE
OF CANNABIS LEAVES ON PACKAGING OF FOODS WITH HEMP-DERIVED INGREDIENTS

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ABSTRACT

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One of the main communication channels used to acquire consumers' attention through emotional appeal is packaging, and after more than 80 years of stigma, the hemp industry is quickly developing in terms of the design and establishment of their products. In 2017 this industry reported \$820 million in retail sales, 17% coming from food products. Designers have adopted different packaging approaches hoping to communicate efficiently with their customers. Some of them use green cannabis leaves on the package design of hemp-derived products, possibly driving the audience to different conclusions around the product. There is limited research done around hemp food advertising and the reframing of people's mentality around hemp and cannabis. There is a lack of academic research around the meaning of this symbol in general or in combination with marijuana products. For this reason, the purpose of this research is to; 1) explore people's beliefs around cannabis leaves and their symbolism in consumable hemp products, and 2) understand the attitudes, social norms, perceptions about product availability, and intent to purchase these products using the focus groups method. Two approaches were considered. Semiotics studies (i.e., the study of signs and symbolism), which offer lenses through which to further examine the consumer's perspective and beliefs on hemp food product consumption to navigate schemas around cannabis that could negatively impact the marketability of these products. Theory of Planned Behavior, which provides guidelines to understand the decision-making process around the purchase said products. It was found that late Z generation beliefs around the signs and symbols presented in the packages had an impact in their attitudes towards the product. Low behavioral control was one of the main limitations they considered when deciding whether to purchase hemp food products. Consumers self-described habits and past behavior were more strongly connected to their behavioral intention compared to attitudes.

TABLE OF CONTENTS

ABSTRACT ii

LIST OF TABLES vii

LIST OF FIGURES viii

INTRODUCTION 1

 Cannabis criminalization 2

 Marijuana Edibles in the U.S. 3

 Marketing Challenges and Opportunities for Hemp-Based Food Products..... 4

Chapter 2 7

LITERATURE REVIEW 7

 Semiotics..... 7

Semiotics and food products..... 9

 Theory of planned behavior 11

Attitudes toward a behavior 11

Subjective norms..... 12

Perceived behavioral control..... 13

 Theory of planned behavior and food products 14

 Consumer Behavior and the Role of On-Package Communication..... 15

 Literature Synthesis and Conceptual Model for the Study 19

Chapter 3 22

METHODS	22
Rationale	22
Design	23
Selection of hemp-derived products.	24
Participants.....	33
Procedures.....	34
Data Analysis	36
Research Rigor.....	38
Chapter 4.....	40
RESULTS	40
Focus Groups Demographics	40
Beliefs Around Cannabis Leaves.....	41
Beliefs Around the Cannabis Symbol.....	42
Social Norms Around the Cannabis Symbol	43
Attitudes Around Hemp Food Packages.....	44
Hemp Candy	44
Hemp Energy Drink.....	48
Hemp Oil.....	50
Hemp Seeds	54
Hemp Granola.....	56
Social Norms Around Hemp Food Packages.....	57

People Whose Opinion Participants Value	58
Important Others' Opinion Influence on Participants Purchase Intention.....	60
Perceived Behavioral Control Around Hemp Food Packages	61
Accessibility Perception.....	61
Perceived Advantages	61
Perceived Disadvantages	63
Participants Further Interest About the Products	63
Effective Branding Perception.....	64
Purchase Intention Around Hemp Food Products	65
Influence of the Cannabis Symbol on Purchase Intention	66
Participant's Advice for Marketing Hemp-based Products	67
Chapter 5.....	70
DISCUSSION.....	70
Attitudes Around Hemp Food Packages.....	75
Subjective norms.....	77
Perceived behavioral control.....	78
Purchase intention.....	79
Limitations	80
Recommendations for Practice	83
Recommendations for Future Research	84
Conclusion	86
References.....	88

Appendix A.....	97
Inviting Participants	97
Appendix B.....	100
Focus Group Moderator’s Guide	100
Beliefs and Associations with Cannabis Leaf:.....	101
Attitudes	103
Social Norms.....	103
Perceived behavioral control.....	104
Purchase intention.....	104
Appendix C	106
Product Images.....	106
Appendix D.....	109
Cannabis Leaves	109

LIST OF TABLES

Table 1 Design Elements Found in Hemp Food Products.....	32
Table 2 Participants Demographics	40

LIST OF FIGURES

Figure 1 Conceptual Model of the Study	21
Figure 2 Hemp Energy Drink	28
Figure 3 Hemp Candy	29
Figure 4 Hemp Oil	30
Figure 5 Hemp Seeds	31
Figure 6 Hemp Granola	32
Figure 7 Cannabis Leaves Figure 8 Cannabis Symbol	72

Chapter 1

INTRODUCTION

The hemp industry invests a great amount of effort on educating the population about the difference between marijuana and hemp, which are completely distinct species of the Cannabis Sativa family (Owen, 2012). Even though, physically, it is hard to distinguish marijuana from hemp, their composition, properties, benefits, and uses are very different. Marijuana is a species of cannabis that contains more than 5% of THC (Tetrahydrocannabinol), a substance that produces strong psychoactive effects in its users (Cherney & Small, 2016). Hemp is a species of cannabis sativa that has been cultivated exclusively as a bast (stem) fiber source. Hemp fiber is not only more resistant than other high-performance fibers like nylon, polyester, polypropylene, cotton, and plastic but it's also high in nutritious content, allowing the ingestion of products high in potassium, magnesium, vitamins A, C and E, Omegas 3 and 6, Iron, Zinc, protein and good fats (USDA, 2018). This plant contains less than 0.3% of THC, making it insufficiently potent to produce any psychoactive effect. Instead, hemp products contain a high percentage of CBD (Cannabidiol), a non-hallucinogen substance that has analgesic, anti-inflammatory, and anti-anxiety properties (Nagarkatti, Pandey, Rieder, Hegde, & Nagarkatti, 2009).

As a result of almost 90 years of anti-marijuana publicity, the cannabis industry faces an identity crisis mostly caused because of the lack of education and the blurry line between marijuana and hemp branding. The use of the cannabis leaves as a symbol to advertise marijuana edibles, as well as hemp food products, might complicate the interpretation process and affect the purchase intention. Considering that hemp products are still in the process of gaining popularity, Kim and Mark (2018) speculated that it's possible that consumers have a lack of knowledge around hemp products. However, considering the historical positioning of hemp as unsavory and illegal (at its worst), and counterculture (at its best), consumers' perceptions of hemp-based products is unlikely to be a knowledge-deficit issue.

Currently, no published studies have explored the use of the cannabis symbol by its own or in combination with food products. This lack of academic research has limited the understanding of the established meaning of the image. Thus, the purpose of this research is to explore consumers' perceptions and intent to purchase hemp-based food products that use the cannabis symbol on its package and how those factors take shape under different considerations (e.g., subjective norms, perceived behavioral control, product match with different consumer goals).

Cannabis criminalization

The 19th century represented a breaking point for the hemp industry due to two main factors: the change in the U.S. social configuration, and the technological advances supporting its mass production. The Mexican revolution in 1910 led to an increase of immigrants to the U.S, who brought with them their customs and traditions, including the recreational use of marijuana, which is the Spanish term for cannabis. Even though cannabis was widely used in the U.S. population as medicine (Bridgeman & Abazia, 2017), and “although employers welcomed them in the 1920s, Mexicans were also feared as a locus of crime and deviant social behavior. By the mid-1920s horrible crimes were attributed to marijuana and its Mexican purveyors” (Musto, 1972, p. 425). In the mid-1930s the improvement in technology for mass production enable the development of synthetic fiber, and other industries like steel, oil and chemical companies that played an important roll in the domestic economy. This left the hemp industry relegated (Herer, 2000).

During Roosevelt administration, anti-marijuana propaganda led by the U.S. Commissioner of the Federal Bureau of Narcotics, Harry Aslinger, and directed by William Randolph Hearst used yellow journalism and films like “Reefer madness” (1936) as tools to shape people's cultural perception of cannabis (McDonald, 2017). The cannabis leaves became a symbol associated with illegal immigration, racial discrimination, crime, poverty, violence, dementia, insanity among other prejudices (Herer, 2000). All cannabis types cultivation and use were controlled under the Marijuana Tax Act of 1937. During the 1960s and the hippie counterculture movement, marijuana consumption increased mostly among young

people, producing a change in the perception of marijuana. This time, anti-marijuana efforts focused on decreased intelligence and sperm count, lazy behavior, low energy, slowness of learning, short-term memory, and even cancer (Herer, 2000). Cannabis was criminalized after the 1969 Controlled substance act directed by the Nixon administration, where all cannabis species were placed in Schedule 1 (Class I) drugs, the same category as heroin and cocaine (Herer, 2000).

In the past 90 years, pro-cannabis activists accomplished not only the decriminalization of the medical and recreational use of marijuana in several states around the U.S., but also removed hemp from the Controlled Substance act. Previously, hemp products have been imported from Canada and consumed by the U.S. population. Even though it's still being regulated by the DEA, the eventual aim is to transfer control to the United States Department of Agriculture. In December 2018, the Farm Bill approved under the Trump administration allowed hemp to be legally grown in the U.S. under certain regulations and restrictions. These policy changes are positioned to change the course of the hemp-based consumer product marketplace; food with hemp-derived ingredients is one market segment ripe for more research since consumers may take pause to consume products from a plant fraught with such a complicated socio-political and regulatory history.

Marijuana Edibles in the U.S.

Marketing and designing advertising for hemp-derived food products is possibly affected by the expansion of the THC-based edibles market in the past five years. Hartman, Humphreys, Lambert, & Martin (2018) on the medical marijuana mid-year update shows that edible marijuana product sales represent approximate 45% of the legal marijuana marketplace in Colorado. "The monthly average of units sold (Medical and Adult Use combined) for both edibles and concentrates increased by 13.8% and 94.6%, respectively" (p. 11). According to the report, 5,973,690 units of edibles, both recreational and medical, are sold monthly.

Marijuana-containing food products such as cookies, soft and hard candies, chocolate bars, desserts, lozenges, and different kinds of beverages “are skillfully produced and packaged to closely mimic popular candies and other sweets” (MacCoun, 2015, p. 989). However, many challenges have emerged around marijuana edibles. “Colorado’s marijuana surveillance system collects adverse outcomes data from hospitalizations, emergency department visits, and poison center calls” (Hancock-Allen, Barker, VanDyke, & Holmes, 2015, p. 771). The assumption from consumers is that a candy bar, for example, represents one serving, however, most of the THC products generally contain four or more servings (MacCoun, 2015). Stories of intoxications, panic attacks and even deaths have been circulating around edibles consumption (MacCoun, 2015), which may be one reason why there is fear around marijuana products and the CBD products that could potentially be associated with them.

Marketing Challenges and Opportunities for Hemp-Based Food Products

Owen (2012) analyzed the challenges the hemp food industry faces regarding its legitimization. “Discussing the relationship between hemp and the psychoactive varieties of Cannabis is part of the educational process. However, as many hemp stakeholders agree, mixing the two causes or movements can be problematic” (p. 6). The author highlights the value of analyzing stakeholders’ current approaches around hemp food products. The presidents of two successful hemp food companies (company A and B) were interviewed by Owen (2012) about the strategies adopted to manage the relationship between marijuana and hemp products. Both agreed the biggest challenge was to convince the general public on the safety related to hemp consumption.

“The president of Company “A” explained that consumer education was often a number one priority for their company. A tactic of this company was to provide samples at events such as trade shows and to supply educational materials about hemp nutrition.” (Owen, 2012, p. 72)

Owen (2012) shared the experiences of the president of company “A” and people’s responses at trade shows. In one of the quotes extracted from this interview the president stated:

“[A] guy in a suit and tie saying, ‘I used to do this all the time in college’. That’s where hemp was kinda sexy in a way, because people who had connections to marijuana; they were very open to the whole thing...” (p. 73)

From his experience, he concluded that “in some ways, the sexiness of hemp works in your favor. For most part, it works against you. We are very careful around here to not mix the two” (p.73).

Hemp Food Company “B” co-founder explained the struggles on clearing the myths about hemp. He commented that “people didn’t know about the crop or the products. If they did, they had a slanted view because they thought hemp was marijuana because of all the misinformation and the campaigns that happened back in the ‘30s and ‘40s” (Owen, 2012, p. 74). Company “B”, as well as company “A”, spent substantial resources conducting research to find out ways to communicate what “hemp is and isn’t”, leading both companies to success. It can be inferred that the association of hemp with marijuana is not always an effective strategy. According to Owen (2012), a common issue identified among stakeholders is that “the leaf looks the same and everyone thinks that a person who smokes a joint is...crazy. They think it’s the same commodity. I’d say stigma has been the biggest downfall” (p. 149).

Small and Marcus (2002) added to this idea when they stated, “some American manufacturers and distributors have chosen to exploit the association of hemp products with marijuana in their advertising. Such marketing is unfortunate, sending the message that some in the industry are indifferent to the negative image that this generates in the minds of much of the potential consuming public. Admittedly, such advertising works” (p. 320).

In 2018, Nielsen Homescan Data showed that older U.S. adults are less interested in consuming hemp products (with the exception of hemp protein), compared to younger groups (less than 40 years old). Overall, the data showed the higher their level of education, the greater the consumer’s interest in consuming hemp products. In states where industrial hemp laws were present, consumers perceived hemp products to be healthier than their conventional alternatives (Kim & Mark, 2018).

It is fundamental to promote research around the cannabis symbol' associations and uses to educate decision-makers on the conceptions around this visual. This information will allow hemp businesses to communicate better with their audience and possibly reframe people's understanding of hemp food products. Informed decisions can not only facilitate the adoption process but decrease the barriers around the product interpretation.

Chapter 2

LITERATURE REVIEW

Semiotics

Because communication adopt several forms, for the purpose of this research, visual communication was the main model developed. Through visual communication (VC), concepts and ideas can be represented using signs. Signs can be defined as visual representations. Everything, even sounds, and intangibles can be displayed graphically, with the goal of being processed by an interpreter. A sign can become a symbol when there is a social consensus around its meaning after it is used repeatedly (Peirce, 1913). More precisely, a symbol is defined as “any structure of signification in which a direct, primary, literal meaning designates, in addition, another meaning which is indirect, secondary, and figurative and which can be apprehended only through the first” (Ricoeur, 1974, p. 13). In this sense, it seems very challenging and complex to find exact meanings for symbols.

Ideally, VC sends objective information that passes from a sender to a receiver, avoiding various interpretations. However, the meaning of signs and symbols can vary and be perceived differently depending on cultural, political, economic, environmental, and other factors. A symbol’s characteristics and attributes can connote a different interpretation than the one intended. Thus the “content” of a message should not be defined as the “meaning”. According to Skaggs (2017), meaning is a complex concept subject to changes determined by the interpreting system.

Semiotics theory is the study of meanings through sign and symbol observation. According to Ceriani (2017), this word comes from “Semeiotikos”, Greek for “observat of signs”. Semiotics investigates how symbols are interpreted and how meanings are attributed. Atkinson (2002) suggests that “reality is a semiotic construction and that signs such as words or images shape our perception and understanding” (p.18). For every symbol there is an interpretation.

Interpretation, as an interrelated concept of symbol, is defined by Ricoeur (1974) as the action of breaking down the perceived meanings of a symbol to uncover the original meaning. Interpretation is seen as the relationship between signifier (the image) and signified (the concept), meaning there is something that is being defined in terms of individual perception. On the same line, Ferdinand de Saussure, the father of semiotics, considers that the signifier as the literal word (e.g. cannabis leaves) and the signified, referring to the schemas or mental conceptualization associated with that word (e.g. drugs), have no natural association between each other, thus symbols only depend on the individual perception (Barbosa de Almeida, 2015).

Baran and Davis (2015) support the theory that “people give meaning to symbols and that those meanings come to control those people” (p. 302). They also elaborate on how communication changes and adapts to its cultural structure, and how people define their reality. Blumer (1986) suggests that there are three simple relevant premises involved in the interpretation process. “The first premise is that human beings act towards things based on the meanings that the things have for them. (...) The second premise is that the meaning of such things is derived from, or arises out of, the social interaction that one has with one’s fellows. The third premise is that these meanings are handled in and modified through an interpretative process used by the person in dealing with the things he encounters” (Blumer, 1986, p. 2).

Barthes, one of the pioneers in semiotics research, studied the way “mass media disseminate ideological views based on its ability to make signs, images and signifiers work in a particular way, conveying deeper, mythical meanings within popular culture than the surface images immediately suggest” (Mastin, 2008). This approach denotes arbitrariness on the interpretation or meaning-making of concepts depending on the intended audience and their realities. As Herer (2000) outlines, through the years, the anti-marijuana propaganda adopted different approaches and evoked different perceptions on each generation that helped to shape people’s beliefs towards the plant. “The pot leaf, with its iconic odd-numbered spears, is probably the most widely recognized botanical image in the world. It owes this visual fame partly to the rise of stoner culture over the last half-century, but the plant is also indebted to

countless ancient and Medieval artists who were inspired to depict it in religious and scientific illustrations” (Ferreira, 2017)

Cultural symbols are common and shared meanings essential for individuals to assume their interpretation of the world as reasonable. Cultural symbols can only adopt meaning when positioned in the context of contemporary culture. These socially shared symbols generally are categorized with other symbols to point an accepted behavior. They “are associated with strong emotions and possess the power to stimulate large-scale mass actions if they are used wisely” (Baran & Davis, 2015, p. 49). It can be inferred that the cannabis plant became a cultural symbol that has adopted meaning through time. “The cannabis leaf implies so much more than the simplicity of its visual presentation. It represents getting high. It represents rebellion against authority. It establishes cannabis friendliness. The simple leaf implies nature and safety and somehow seems like it could be part of the environmental green future. The ecology movement also uses leaves in its imagery” (Gabriel, 2019)

Semiotics and food products

The twenty-first century is characterized by the power visual symbols have over consumer decisions. The global market culture is largely the construction of symbolic environments, making it fundamental to understand that contemporary consumers are constantly absorbing and consuming not only preferred products but the visual cues around those products. Hence, an a priori semiotic analysis of visual elements to be incorporated in hemp food labels can allow designers to make more calculated decisions.

Research conducted by Ares et al. (2011) and Piqueras-Fiszman, Ares, and Varela (2011) are perfect examples of semiotics and food labels where only visual cues were identified from packages found on an inventory from a specific food category offered on the market. Meanings around these visuals were interpreted using information provided on a survey distributed to the population targeted. Finally, through an experiment using those visual cues on several packages the authors got to test

consumer reactions. Researchers conclude that a semiotics analysis of food label symbolisms can help to anticipate consumer associations with the visual elements.

On the same line, a study conducted by Celhay and Remaud (2018) demonstrates that “semiotic studies help to anticipate and explain most of the associations of ideas a package graphic design is likely to generate among consumers” (p. 139). Thus, these results point to the reliability of adopting a semiotic approach on the use of cannabis leaves in food-based hemp product marketing. “Semiotic studies appear to be a relevant tool for marketers to guide them in the design of their package or logo” (p. 130). “More importantly, the semiotic approach helps explain why a specific visual cue is likely to produce a specific set of meanings” (p. 139)

Considering that symbols’ meanings are built through cultural, political and other societal and individual perception factors, this study merges two approaches to gather deeper information on the symbolization of cannabis leaves, and how the meanings that are being attributed are affecting and influencing consumer behavior towards hemp products. In this paper, semiotics is used to determine the different interpretations that people may have towards cannabis leaves, independently, as well as in association with hemp products. Along with the meanings these symbols convey to people, this study aims to determine attitudes toward hemp products that use cannabis leaves for their market, and consumer intention to purchase those products by identifying consumers’ beliefs around the cannabis symbol. A theoretical framework widely used to analyze and explain beliefs, motivation and antecedents of purchase intention is the theory of planned behavior.

Theory of planned behavior

The theory of planned behavior (TPB), developed by Ajzen (1991), states that the best way to predict a behavior is by identifying the individual's intention of performing that behavior. Intention is considered the direct antecedent of behavior and can be described as a person's readiness to perform a behavior. It is a cognitive representation on how hard a person is willing to try and how much effort they will invest in a given behavior. Behavioral intention is a result of three considerations: 1) the individual's attitude towards the behavior, 2) the individual's subjective norms, and 3) the individual's perceived behavioral control, which are internal and external factors that control and influence behavior. According to TPB, attitudes are constructed by the group of beliefs an individual holds and the evaluation of those beliefs. Beliefs come from knowledge or what is perceived to be true. "Specifically, TPB posits that attitude toward the behavior is the summation of the product of the beliefs that the behavior leads to salient consequences and the evaluation of these salient consequences" (Bang, Ellinger, Hadjimarcou, Traichal, 2000, p. 454).

According to TPB, behavior is a reasoned action consistent with the information an individual possesses and considers relevant to the behavior, thus a behavior is not an automatic, unthoughtful reaction. Behavioral belief "is defined as a person's subjective probability that performing a certain behavior will produce a particular outcome" (Ajzen, 1991, p. 440), hence each outcome has a certain subjective value. The combination of these behavioral beliefs and the analysis of the outcomes results in an overall polarizing attitude towards the behavior.

Attitudes toward a behavior

Attitude is the personal predisposition towards a behavior. An attitude is formed after the behavior is evaluated, resulting in a positive, negative or neutral response. According to Kraus (1995), up to a certain point, attitudes are stronger predictors of purchase intention when the consumer has built a previous attitude towards a product; hence someone that has experienced hemp products in the past might

be more likely to have a positive/negative/neutral attitude towards buying hemp related products. Attitude towards behavior is believed to be linked with one's beliefs that performing a behavior will lead to positive outcomes (Blackwell, Miniard & Engel, 2006). Thus, one is more likely to have a positive attitude towards hemp products marketed with the cannabis leaves if one's association with this symbol is positive and one's beliefs about hemp (or marijuana) are positive as well. Also, if there is a positive attitude towards those concepts, the outcomes are more likely to be perceived as positive.

Subjective norms

A subjective norm (SN) is the individual's perception about other people's opinions of performing a behavior. In other words, it is how the attitudes of important others (family, friends, etc.) affect the decision-maker's intention to perform or not perform a behavior. People develop certain normative beliefs or social norms as to whether or not certain behaviors are acceptable. These beliefs can come from what an individual was told, by inferring what others expect from them, or through observing important others' actions. These perceived social rules guide humans to define what behavior is wrong or right (Harré & Lamb, 1986).

Since SN is formed by a set of normative beliefs linked to important others' expectations, someone may perceive social pressure to avoid hemp related products if he/she believes that important others think that he/she shouldn't use hemp products, and vice versa (Arvola, Vassallo, Dean, Lampila, Saba, Lähteenmäki, & Shepherd, 2008). Something important to notice is that "subjective norms are conceptually independent of attitudes towards a behavior" (Ajzen, 1991, p. 443), so people can have a positive attitude towards hemp products yet avoid purchasing them based on perceived social pressure. Although this is a possible scenario, personal attitudes and SN rarely differ from each other due to the common correlation between behavioral and normative beliefs. Levi (1959) argued that the adoption of a product does not only rely on its functionality, but also on personal and social meanings. It can be inferred that the meaning attributed to the product, based on the social environment, has more weight on purchase intention than utility itself.

Smith, Terry, Manstead, Louis, Kotterman, and Wolfs (2008) investigated the utility of TPB in predicting purchase intentions related to soft drinks. Their findings suggested:

“Both attitude toward buying one’s preferred soft drink and injunctive norms were significant predictors of purchase intentions. Respondents who reported a more positive attitude toward purchasing their preferred brand of soft drink and who perceived support for consumption from those around them reported significantly stronger purchase intentions. Individuals were more likely to intend to purchase their preferred soft drink if they perceived support from important others to purchase that brand and if important others purchased the same brand” (p. 327)

Based on their findings, the authors suggested that “advertisers and marketers interested in changing behavior would be advised not only to show people engaging in consumption, as is done commonly, but also to present information regarding social approval for consumption” (p. 328).

Perceived behavioral control

External and internal factors can influence and modify the performance of a given behavior. Behavioral Control is “the extent to which people possess the requisite information, mental and physical skills and abilities, the availability of social support, emotions and compulsions, and absence or presence of external barriers and impediments” (Ajzen, 1991, p. 446). TPB suggests that people act based on their intentions when they have the ability, information, skills and intelligence needed to achieve the behavior and overcome possible external difficulties, also known as control factors. Control factors include how an individual may perceive a behavior as time-consuming, expensive, inconvenient or unknown. Perceived behavioral control is “the extent to which people believe that they can perform a given behavior if they are inclined to do so” (Ajzen, 1991, p. 446). This concept can relate to Bandura’s self-efficacy concept that “refers to beliefs in one’s capabilities to organize and execute the course of action required to produce given attainments” (Bandura, 1997, p. 3).

Theory of planned behavior and food products

Giampietri, Verneaub, Del Giudicec, Carforad and Fincoa (2018) developed an investigation regarding trust around purchasing food in short food supply chains (SFSCs). They found that “the easier it is for consumers to shop at SFSCs (and the higher their trust, the higher their intention is as well; similarly, the more consumers’ attitudes are positive towards SFSCs and the more people who are important to them (i.e., social referents such as family, friends) approve of shopping at such alternative agri-food networks, the more consumer intention to perform this behavior will increase. Furthermore, both intention and perceived behavioral control are antecedents of consumer behavior” (p. 165).

In TPB, it is believed that when someone is inclined to perform a behavior (intention) and control is perceived as high, meaning that the individual feels capable of performing the behavior, intention should be sufficient to predict behavior. However, when the individual feels that he/she has limited or reduced control over that behavior, there is a high possibility the behavioral intention will decrease, and the behavior will be less likely to be performed. Vermeir and Verbeke (2008) suggested that an individual’s determination to purchase a consumable product will be greatly guided by their feeling towards the content found in the product’s package. If the consumer feels confident about the “information present in label (i.e. consumers with a stronger belief that the product does what it promises)” (p. 544), they will have a greater intention to purchase said food than a consumer that has doubts or lacks confidence about the information provided for the product.

There are numerous studies that test the ability of the TPB to determine food purchase intention based on labels. Nurse, Onozaka and McFadden (2012) found that “a consumer’s willingness to pay for apples that were labeled locally grown was significantly predicted by the attitude, social norms, and Perceived Consumer Effectiveness components of the expanded TPB model” (p.14). On the same line, Vermeir and Verbeke (2008) showed that “50% of the variance in intention to consume or purchase sustainable dairy was explained by the combination of attitudes, perceived social influences, perceived consumer effectiveness and perceived availability” (p. 548).

A study by Lorenz, Hartmann and Simons (2015) supported that “all classical elements of the TPB, namely Attitudes, Subjective Norms and PBC were significant determinants of the Purchasing Intention for regional pork” (p. 153). Moreover, according to the authors, “advertisement for and labeling of regional products need also address consumers’ Affective Attitudes/Personal Norms” (p. 155). Thus, they suggested that Affective Attitudes/Personal Norms are the main factors in purchase intention.

Research conducted by Stranieri, Ricci and Banterle (2016) aimed to understand representative factors that have influence in the purchase decision of products labelled with environmentally friendly features. The authors found that “attitude and perceived behavioral control influence positively consumer intention to buy Integrated Pest Management minimally processed vegetables. Moreover, consumer’s intention is positively correlated with consumer behavior towards such products” (p. 710).

Consumer Behavior and the Role of On-Package Communication

The study of consumer behavior encompasses elements like product need, evaluation and adoption that contribute to predictions generated on future purchase behavior. Solomon (1983) explains how product evaluation and adoption rely mostly on the product’s visual elements rather than the product’s functionality. According to Solomon, consumer’s decision to purchase a product relies not on rational considerations but mostly on emotional elements.

One of the main communication channels used to acquire consumers’ attention through emotional appeal is packaging. Even though the first role of a package is to protect and transport the product, the second is for marketing purposes (Jahre & Hatteland, 2004). According to Silayoi and Speece (2007) package elements can be divided in two categories: visual and informational. For García-Madariaga, Blasco López, Burgos, and Virto (2019) “visual components are connected to the emotional part of the consumer purchase decision, verbal components are connected to the cognitive part” (p.98). Images used on labels work like triggers in the consumer’s consciousness that can evoke memorable and positive associations with the product, and vice versa. “There is, of course, a danger that the package

communicates negatively, but a package well designed for its marketing function helps sell the product by attracting attention and positively communicating” (Silayoi & Speece, 2007, p. 1498).

To understand the effects from product type it is important to consider two basic consumption effects: gratification coming from consequences of consumption and gratification based on sensory attributes. The first category aims to lead consumer choice based on the product’s virtues and health-related payoffs. “Utilitarian goods are those whose consumption is more cognitively driven, instrumental, and goal oriented and accomplish a functional or practical task” (Cramer & Antonides, 2010, p. 4). The factors that influence purchase of utilitarian products are based on the benefits in the long run, like foods high in vitamins and minerals. “Utilitarian aspect of an attitude toward a behavior relates to usefulness, value, and wiseness of the behavior as perceived by the consumer” (Olli T. Ahtola, 1985). The second category is the Hedonic products that are “characterized by an affective multi-sensory emotional experience, including tastes, sounds, scents, tactile impressions and visual images, which are far more subjectively than objectively oriented” (Cramer & Antonides, 2010, p. 4). This category is related to vices and the lack of consequences of consumption. The factors that influence purchase of hedonic products includes “taste, sounds, scents, tactile impressions and visual images” (Cramer & Antonides, 2010, p. 4), which are based on emotional and multi-sensorial experiences. Hedonic aspect results from the esthetic/emotional feelings like love, hate, joy, boredom, etc. (Olli T. Ahtola, 1985)

Rettie and Brewer (2000) considered that the attributes found in food packaging are responsible for helping consumers identify and sustain their attention for the product. As Silayoi and Speece (2007) stated:

“intention to purchase is determined by what is communicated at the point of purchase. The package becomes a critical factor in the consumer decision-making process because it communicates to consumers at the time they are deciding in the store. How they perceive the subjective entity of products, as presented through communication elements in the package, influences choice and is the key to success for many food products marketing strategies” (p. 1496)

The authors also highlighted the importance of understanding segmentation as an influential factor. Not all consumers evaluate packaging attributes the same way. For this reason, a marketing strategy targeting a general population should be carefully implemented to avoid misconceptions among different groups. “In categories where the product knowledge is low, a product image may be more likely to help consumers to quickly understand what the product is and what it is good for” (García-Madariaga et al., 2019, p. 100). This is especially important to consider with products that are new in the market or not commonly used like hemp-based products, where there might not be previous experiences customers can relate to. The lack of knowledge around the hemp industry and its ingestible products have represented a big barrier for its adoption.

Food packaging builds expectations in the consumer that can be based in “consumer’s previous experiences with the product, information presented on the label, packaging characteristics and the product itself, particularly through its appearance” (Ares, Piqueras-Fiszman, Varela, Marco, López, Fiszman, 2011, p. 689). This will only apply if there is a deeper analysis on the image’s profound meaning in order to avoid greater confusion.

Consumer evaluation depends on limited cues that, according to semiotics, can be presented using intrinsic (attributes inherent to the product itself) or extrinsic (characteristics attributed to the product) features. The visual intrinsic properties can be defined as the level of representativeness that a symbol has. It is common for companies to adopt symbols aiming to create instant visual identifications of the product. These symbols, designed for the specific reason of recognition, are identified in marketing as logos. The frequent use of logos in marketing allows consumers to recall and easily differentiate products in the market (Kohli & Suri, 2002). For example, the globally recognized company, Apple, uses an intrinsic symbol on its logo that people can distinguish: an apple. Extrinsic properties can be found in the association of the product and the company’s image. A well-known example of an extrinsic symbol is the Nike swoosh that aims to transmit movement. This cue is almost instantly associated by consumers with a sports company even though its visual characteristics have low representativeness with the business. Both companies are only examples of the use of intrinsic and extrinsic main visual symbols. It is important to

notice that intrinsic and extrinsic visuals are not only found on the logos but in the overall design of the labels or packaging.

“The power of extrinsic properties is high; the degree of realism in the design is inversely related to the ability to attribute additional meanings” (Hynes, 2008, p. 546). Szybillo and Jacob (1974) suggested that “intrinsic cues might be more important determiners of perceived quality than extrinsic cues” (p. 74) for consumers. It can be implied that the higher the quality is perceived, the higher the purchase intentions will be; however, the use of intrinsic cues (food-based hemp products using cannabis leaf cues as a symbol) might be affecting the evaluation of the product. If the nature of the product is being misperceived, quality should not be the main focus. It is in the advertiser’s best interests to create effective labels that will lead to favorable responses and attitudes towards the business. However, it is fundamental to highlight the importance of using visuals in food packages. Research shows that “packages that contain images are more likely to attract consumers' attention than those that do not have pictorial elements” (García-Madariaga et al, 2019, p.97), thus hemp business could redirect marketing efforts towards extrinsic cues that can be associated with the benefits of the product rather than its composition instead of removing graphic cues from the packaging. From García-Madariaga et al. (2019) the results indicate that:

“This could be explained by the easy access to information about the product that images can provide. This is an important conclusion for marketers because it suggests they could enhance the “attention catching power” of products by including pictorial elements on the packaging.” (p.100)

Fenko, Vries and Rompay (2018) suggest that images on food labels are not only to catch the buyer’s attention, but also to create a product identity and communicate the product values and characteristics like honesty, purity, speed, strength, etc. Those attributes will stick with the consumer even after the purchase. Visuals on food packages can also transmit multisensorial information like flavor, smell and texture perception. The authors mention that images drive consumer to begin a rewarding process of “figuring out” how the product and the images relate to each other, inspiring a positive evaluation.

A semiotic study of hemp food packages and labels could help to “understand and interpret consumer’s associations and expectations of the content, and hence to design packages that arouse specific reactions in the consumer” (Ares et al., 2011, p. 691). For this reason, this study intends to explore the cannabis leaves’ symbolism from the consumer perspective when it is used on food products with hemp-based ingredients.

The goal of this investigation is to explore beliefs around cannabis (marijuana and hemp) and its symbolization. “A semiotic study of food packages and labels could help to understand and interpret consumer’s associations and expectations of the content, and hence to design packages that arouse specific reactions in the consumer” (Ares et al., 2011, p. 691). For this reason, this study proposes to analyze cannabis symbol used on packages to promote hemp products. The attitudes towards hemp products that uses cannabis leaves in their labels as a marketing strategy will be analyzed as well. This research also aims to identify subjective norms’ influence towards these products and determine perceived barriers that can affect intentions to purchase those products. For this reason, two approaches are considered: Semiotics and Theory of Planned Behavior.

Literature Synthesis and Conceptual Model for the Study

Extensive research has been done around the use of symbols in food packaging. Little has been done around the symbolization of the cannabis leaf and its use on packaging of food products with hemp-based ingredients. The production and consumption of consumable hemp products has increased in the last few years, “although detailed market information for hemp is not readily available, estimates from Vote Hemp show that the total retail value of hemp products in the U.S. in 2017 was \$820 million. This includes food and body products, clothing, auto parts, building materials, and other products” (Industrial Hemp, 2019). Previously, hemp production was allowed only for pilot programs analyzing market interest in hemp-derived products. The 2018 Farm Bill permits hemp cultivation in a broader way. This bill

makes it possible to cultivate and transport hemp-derived products across U.S. states lines for commercial or other purposes.

Even though food products with hemp-derived ingredients are a strong and growing industry, consumers may use heuristic processing affected by the historical and cultural meanings of cannabis, particularly the more familiar byproduct of marijuana. Some hemp food-based businesses have adopted the cannabis leaf as their logo, potentially reinforcing this misconception around the difference between marijuana and hemp products. According to Opperud (2004) signs used in product labels are the first cue that consumers focus their attention on to be able to recognize and classify the product. The purpose of this research is to explore people's beliefs around cannabis leaves and their symbolism in consumable hemp products and understand the attitudes, social norms, perceptions about product availability, and intent to purchase these products. To understand the meaning making process of visual representations, semiotics was selected as a fundamental approach to analyze beliefs around the cannabis leaf to market edible hemp products. Because this symbol is characterized by strong social connotations, its use can convey a different interpretation than the one intended by the hemp businesses. Semiotic studies suggest that interpretation will vary depending not only on societal and cultural factors but individual perceptions. For this reason, this study analyzes the relationship between signifier (the image) and signified (the concept) around the cannabis symbol.

Research has shown that consumer behavior and product evaluation rely mostly on the product's symbolic features rather than its nature (Solomon, 1983). For this reason, semiotic studies, responsible for the evaluation of the symbol's features, will work along the Theory of Planned behavior to analyze and predict consumer intention to perform a behavior. Figure 1 is a visual representation of the theoretical approach that this study aims to implement. "Food packages and labels not only retrieve information about qualities of the product itself but also about the people who consume it" (Ares et al., 2011, p. 690). TPB applied on this research states that behavioral intention to purchase consumable hemp products branded with the cannabis leaf can be identified after analyzing the attitudes towards the behavior, subjective norms and perceived control (Ajzen, 1991).

Attitudes are defined as the group of beliefs an individual holds and their personal predisposition towards a behavior. The positive, negative or neutral beliefs towards cannabis leaves' symbolism will influence the attitude people will have on buying a product branded with such logos. Subjective norms are the individual's perception about others' opinions of performing a behavior. Significant others' perceptions of cannabis leaves can impact an individual's product evaluation and decision-making process around hemp products branded with cannabis logos. Perceived control is determined by the perception of an individual's ability to perform a behavior. The barriers that can be perceived by an individual can be based on the lack of knowledge or information, accessibility, impediments, etc. regarding hemp products (Ajzen, 1991).

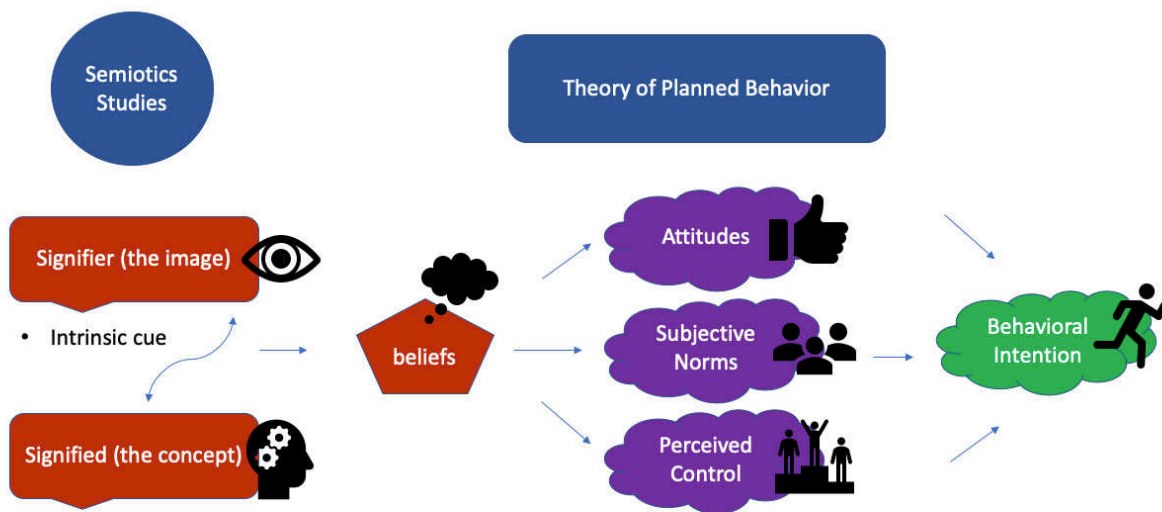


Figure 1 Conceptual Model of the Study connecting literature on consumer intentions on purchasing hemp products branded with cannabis leaves.

The central research question driving this study is: What are people's beliefs, attitudes, and subjective norms pertaining to the cannabis leaf symbol when used in association with consumable hemp products?

Chapter 3

METHODS

Rationale

For the purpose of this research, a qualitative approach was selected to conduct the investigation. “Qualitative techniques can increase a researcher’s depth of understanding of the phenomenon under investigation. This is especially true when the phenomenon has not been investigated previously” (Wimmer & Dominick, 2014, p. 48). The flexibility of this method provides the opportunity to discover and identify other factors that were not considered previously but that can redirect and enrich the findings. “The most common qualitative data collection method in advertising and marketing research, as well as the least common method in academic studies of advertising, is the focus group” (Belk, 2017, p. 37).

The focus group method “is a research strategy for understanding people’s attitudes and behavior” (Wimmer & Dominick, 2014, p. 136). This method and a research design informed by past literature will be used in order to determine consumers’ beliefs and opinions towards the cannabis symbol, their knowledge and attitudes about hemp products, perceived subjective norms of consuming said products, perceived behavioral control and their purchase intention. Focus groups allow researchers to understand the participants’ feelings, opinions and thoughts towards an issue or topic. “Data from focus groups are used to enhance understanding and to reveal a wide range of opinions, some of which the researcher might not expect” (Wimmer & Dominick, 2014, p. 136).

The goal of focus groups is to gather information through listening to the participants’ guided conversations. “The group is 'focused' in the sense that it involves some kind of collective activity - such as viewing a film, examining a single health education message or simply debating a particular set of questions” (Kitzinger, 1994, p. 103). A comfortable, permissive and non-judgmental environment was intended to encourage the audience to share their points of view regarding this matter, promoting self-disclosure among participants.

According to Bertrand, Brown, and Ward (1992) “focus groups offer a number of practical advantages as well. They can be conducted in a short span of time by a small staff with limited financial resources” (p. 199). Based on those guidelines, each focus group lasted a maximum of 90 minutes and was conducted by a moderator and an assistant. Focus groups “allow local researchers with little or no formal training in the social sciences to gather and organize information for program planning” (p. 199). Each focus group was done in one sitting, so history and maturation (time and the effect time has on people) should not affect the internal validity of the research. Because this research did not receive any financial contribution from outside members, participants didn’t receive monetary compensation but rather extra credits for classes and snacks offered during the focus groups. Finally, this research did not intend to reach consensus or influence participant perceptions. The focus groups was conducted after receiving IRB approval.

Design

A focus group design was used to explore a range of opinions of people across several groups. According to Onwuegbuzie, Dickinson, Leech, and Zoran (2009) “researchers could use the multiple groups to assess if the themes that emerged from one group also emerged from other groups” (p. 6). Hence, the group discussion was conducted 3 times with similar types of participants to compare data from across groups. “Saturation occurs when the focus groups no longer provide fresh information” (Wimmer & Dominick, 2014, p. 139), however, a fourth group was not needed. After systematic analysis, trends and patterns in perception were identified. Each group consisted of 6-7 participants maximum to avoid fragmentation, “the group should be small enough for everyone to have opportunity to share insight and yet large enough to provide diversity of perceptions” (Krueger & Casey, 2009, p. 6). Each discussion lasted 90 minutes, including a 15-minute break.

The focus groups was held on the Colorado State University campus. A room with computer access, a projector and enough space for the number of participants was required. Bertrand et al. (1992)

recommend that “focus group sessions be recorded in two ways simultaneously: by an audio recorder (used with the permission of group participants), and by a reporter who takes notes during the session (but does not participate in the discussion)” (p. 200). For this study, the focus group sessions was audio recorded after receiving the proper permission from IRB and the participants and transcribed in order to present quotes from the participants allowing the reader to appraise the interpretations and conclusions that this research will provide (Kirk & Miller, 1986). A moderator and an assistant toke notes during the discussion to be able to have quick access to comments and observations. This can facilitate deeper analysis around some ideas if needed.

Selection of hemp-derived products. “Growing demand for hemp-based food products including cooking oil, dairy alternatives, flour, and salad dressings is expected to drive market growth. In addition, rising demand for hemp-based bakery products such as bread and cookies is expected to drive the market” (Industry Trends Report, 2018). Other sources, including SPINS data, include trends on hemp-based shelf stable grocery products like granola, seeds, and energy bars. From this data the fastest-growing segments are frozen and refrigerated hemp products like desserts, juices, functional beverages, coffee, teas and plant-based meat alternatives. Cannabidoil (CBD) products and shelf-stable candy being products with the most explosive growth (Watson, 2018). Other marketplace data supports that milk, granola, seeds and oil are the most consumed hemp-derived food products (Kim & Mark, 2018).

Six existing edible hemp-derived products were selected to serve as focal points for participants to discuss in the focus groups: granola, seeds, oil, candy, and an energy drink (see appendix C). However, considering that the population for the focus group is college students, energy drinks and candy were included as well to provide a broader variety of options that the target audience may frequently purchase and consume.

Based on a Google search of key terms of hemp products, hemp food, hemp drinks and specifics like hemp candy, etc., an ad hoc analysis was made of their package front package labels to select products within each of the 5 product types that use cannabis leaves in their packaging. This ad hoc

analysis to select products also allowed for identifying characteristics of each product, both the product itself as well as how that presumably interacts with the front-of-package design and brand elements (particularly the cannabis leaves). Understanding these characteristics was helpful when it came to discuss this study's findings in the context of why participants' beliefs, attitudes, social norms, and behavioral intentions may have varied based on those characteristics. There were two hemp granolas companies offering a variety of hemp products packaged using said symbol. For hemp seeds, five different companies were identified using the cannabis leaves. Ten companies selling hemp oil used the cannabis symbols on their packages. CBD oil products, one of the hundred concentrates of the cannabis sativa type commonly found in hemp plants and generally confused with hemp oil, were not part of the analysis. The results for hemp candy included 11 companies advertising products like gummies, lollipops, and chocolate, using the cannabis leaves on their package. Finally, 14 different hemp energy drink companies labeled the beverages with cannabis leaves designs.

From all the samples gathered for each product type, six stimuli were selected, representing a variety of designs, styles and uses of the cannabis symbols. The samples selected show the leaves in different locations in their packaging, as backgrounds, centered as the main or only visual, or as complementary cue among other illustrations. The colors used for each package varied from each other, giving different styles in the presentation. It's important to note that the approach selected for each design is directly related to the nature of the hemp product, so the granola, oil and seeds front-of-package design evoke associations with natural/earth-derived food and resemble similar products in the functional and utilitarian foods categories that do not contain hemp-derived ingredients. The cannabis leaves on these products seem to be attempting to evoke natural and healthfulness associations to emphasize consumers' perceived healthiness of the products. In contrast, the candy and the energy drink package fronts are designed to fit in the hedonic foods category. The cannabis leaves and/or references to stoner culture (i.e., the brand name "Rocky Mountain High" referencing the feeling or mental state often associated with THC use) are used more predominantly to evoke the sensory and emotional desires associated with fun.

Package design has been studied for decades due to its importance in driving consumers to perform desired behaviors (Deng & Kahn, 2009). The saturation of advertisements, especially around the food market, demand a deeper understanding on how consumers process the information on packages through several design elements and the way they are being used. A visual's location, color, symmetry, and other characteristics are important factors that can signal and shape consumer perceptions. Thus, it is fundamental to analyze how the different attributes of the cannabis leaves as a visual element found in the hemp food products selected as a stimulus for this study affect the consumers perception and the package message. According to Young (2012), on average, consumers are capable of evaluating a label displayed on a shelf in five to seven seconds. Due to this limited time to capture buyer attention, advertisers have to make an impression and drive individuals to purchase a product, an analysis on the design applied to packages and the labels is vital.

“At the point of sale, the product package can play a pivotal role in a consumer's purchase decision. Even after the purchase, the packaging can continue to influence the consumption experience. Thus, understanding how packaging variables, such as shape, color, and graphics, affect consumer perception, evaluation, and behavior is of theoretical and managerial importance.” (Deng & Kahn, 2009, p. 725)

Roger and Sternberg (1982) advised that metaphoric representations (e.g. symbols) used in the correct context can speed consumer comprehension. Schwarz (2004) adds that the faster a consumer is able to process a label, the higher the individual's favorability towards the product will be. This phenomenon is identified as processing fluency. Along the same lines of semiotics, processing fluency focuses on “how easy something can be made sense of” (Sundar & Noseworthy, 2014, p. 140).

The cannabis leaves on hemp food labels was analyzed using Sternberg and Sternberg (2012) Gestalt Laws. They describe the Gestalt Laws as a series of principles that organize how humans perceive complex elements and give them sense. These laws include figure-ground perception (3D appearance), similarity (objects placed next to each other as part of a group), continuity (coherent, smooth, harmonious),

closure (we artificially fill in objects that are incomplete), and symmetry (giving preference to objects that are symmetrical, rather than asymmetrical).

The location of the leaves was scrutinized based on a Deng and Kahn (2009) study focused on the relative location of product images on different package faces/fronts. The authors found that “Drawing on the art and visual perception literature, we hypothesize and demonstrate a “location effect,” in which product images placed at certain locations on a package facade appear to be heavier than the same images placed at other locations. Specifically, we first show that the “heavier” locations are on the bottom, right, and bottom-right of the package facade and that the “lighter” locations are on the top, left, and top-left. We then show that different locations of the product image can influence the shopper’s perception of the visual heaviness of the product and that these differing perceptions can affect package evaluation.” (p. 725)

The present study, however, does not analyze the perceived weight of an image in a food label but rather adopts those guidelines to describe the placement of the cannabis symbol in hemp food related packages. Even though not all symbols used in marketing are logos, all logos are symbols used in packages and labels for brand recognition. Henderson and Cote (1998) focused specifically on the analysis of seven logo design elements: naturalness, “combines representative and organic. This factor reflects the degree to which the design depicts commonly experienced object”; harmony, “combines symmetric and balance”; elaborateness, “combines complexity, activity, and depth”; parallel elements, repetition, proportion, and roundness in relation to liking and recognition within an audience (p. 20). This framework will be adopted to describe how the elements in the selected hemp packages could be perceived and to determine how the different styles impact consumers’ perceptions of each product versus the message they intended to communicate.

The hemp energy drink label (Figure 2) uses the cannabis leaves as the only symbol on their label. This visual is centered and occupies most of the front of the label showing proportion in the design. Naturalness on the symbol is perceived as one of the design elements because of the level of representativeness. The visual is not only front facing but also balanced and symmetrical, denoting its

harmony. The label consists of three colors, the green of the cannabis leaves being the most dominant, followed by red used for the letter and linear designs around the top of the can, with a clear grey background. The color treatment that eludes to the Rastafari culture closely related to marijuana consumption. The design is simple and straight forward. The contrasting, bright colors of red, green, and the silver of the can evoke energy as opposed to a sense of calm. Red and green being complementary colors (opposite one another on the color wheel) creates maximum contrast. This product does not show any utilitarian function, so it is placed in the hedonic goods category.

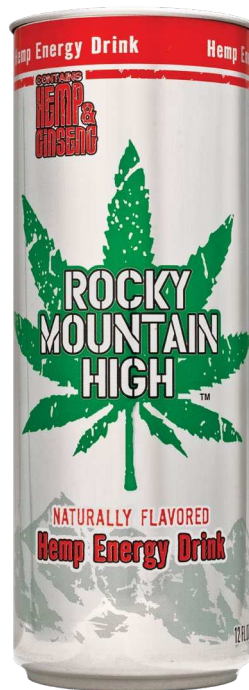


Figure 2 Hemp Energy Drink

The hemp candy (Figure 3) is presented in a vertical rectangular label using as background a color gradient starting on the bottom with a darker salmon pink ending at the top with white. The design shows not only the Gestalt principle of similarity but repetition placing several lollipops on different sizes around the label. These design principles are also applied on the cannabis leaves placed asymmetrically in the top right of the box. This package uses a typography treatment that eludes to the marijuana culture. The leaves look very organic and have elements of naturalness. The green of the symbols is the second

most dominant color. This package has a higher level of elaborateness and complexity and does not show any positive outcome of consumption so it is placed in the hedonic goods category.

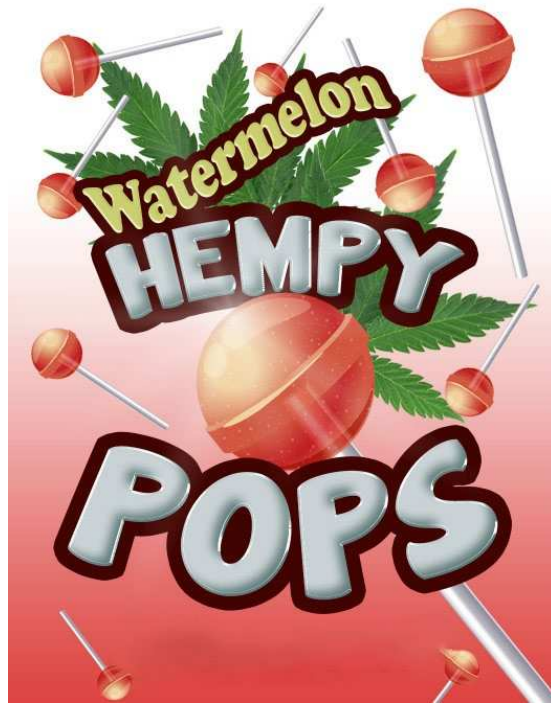


Figure 3 Hemp Candy

The hemp oil container (Figure 4) is a black plastic bottle, covered by a label divided in three colors, more than half is white, followed by black and green sections. The cannabis leaves are placed on both sides of the front of the bottle. The leaves look very organic and have elements of naturalness, following the law of repetition placed one next to another in different sizes. There is a combination of asymmetry, balance and representativeness. In the middle of the label, between the leaves is a white bowl that contains hemp seeds. The colors of green and brown are earthen colors that further emphasize the

naturalness of the product. The label on the bottle does show the attributes of the product so it is placed in the utilitarian goods category. This design does not show references from the marijuana culture.

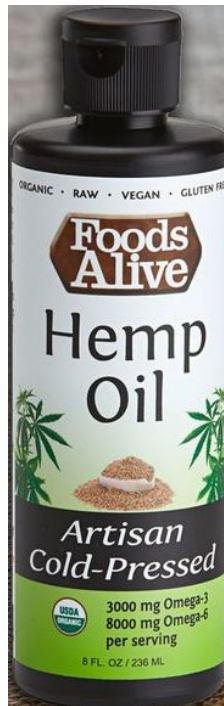


Figure 4 Hemp Oil

The hemp seeds (figure 5) are packaged in a green cardboard package shaped like a square from the front and triangular on the sides. The design of this package uses more than one visual and is very elaborate. The green cannabis leaves are presented in a nonrealistic style as a partial background starting at the middle of the front following a U shape. There is a contrast in the color between both the background and the leaves. The other visual elements are two ceramic hands in a holding position on both sides of the package. Between the hands and over the leaves, there is a transparent oval cut-out that lets the viewer see the hemp seeds inside the container. There is a high level of representativeness in the symbol and a design element of continuity where there is harmony around the different images. This package shows health claims placing the product in the utilitarian goods category. References from the marijuana culture were not found on this design.



Figure 5 Hemp Seeds

The hemp granola package (figure 6) present an elaborate design with more than one visual element. The biggest visual, size wise, is a brown bowl of granola with sliced red strawberries in the top right corner (lighter location) of the square box. Because the image is presented in a corner, part of the visual is cut. The green cannabis leaves are located on the right side of the package asymmetrically, the lower corner of the leaves is not present in the front of the package. Rastafarian colors of bright red and green are present on this design, but their execution of the red in the strawberries and font make it less obvious. The color cue as a referent to marijuana culture still could be subtle or even subconscious. The focus groups will explore this idea. Both visual elements call on the Gestalt Law of closure. This product contains utilitarian functions on the package, so it is placed in the utilitarian goods category.



Figure 6 Hemp Granola

Table 1 Design Elements Found in Hemp Food Products

	Hemp Energy Drink	Hemp Candy	Hemp Oil	Hemp Seeds	Hemp Granola
Naturalness	✓		✓	✓	✓
Symmetrical	✓				
Asymmetrical		✓	✓	✓	✓
Harmony	✓			✓	✓
Simplicity	✓				
Complexity/Elaborateness		✓		✓	✓
Repetition		✓	✓	✓	✓
Closure					✓

Utilitarian			✓	✓	✓
Hedonic	✓	✓			
Rastafarian/Marijuana Referents	✓	✓			✓

Participants

Kim and Mark (2018) determined that a population more likely to consume hemp by-products are younger groups (younger than 40) with a higher level of education. They also mention that U.S. states “where industrial hemp bills were introduced play an important role in the purchase of hemp by-products” (p. 16). For this reason, a college student population residing in Colorado, a state pioneering in cannabis regulations, was considered appropriate to sample from for this study. Billups (2012) suggest that because college students are still in the process of developing their sense of identity, they often feel more comfortable in group settings (focus groups) rather than in an individual interview where they can feel insecure about expressing their opinion.

According to Rickes (2009), college students perceive group settings as safer environments where their ideas can be expressed, especially if they are surrounded by peers. “College students are used to group interactions since their entire educational experience is rooted in classroom settings and group settings. They are relatively at ease when the discussion is guided, their thoughts solicited, and diverging viewpoints are expected (Billups, 2012, p. 6).

The program Sona that is managed by the Colorado State University Department of Journalism and Media Communication was the source of sampling and recruitment (see Appendix A Inviting Participants). Sona organizes access to students currently enrolled in the department’s courses wherein the instructors have opted to allow their students to participate in research for course extra credit. As an additional incentive, pizza and beverages were provided at each session. A convenience sample of 19 CSU students was divided in three focus groups. Generational breaches will be avoided and only

participants ranging from 19 to 23 years old (late Z generation) were recruited to participate. According to Celhay and Remaud (2018),

“Piqueras-Fizman et al. (2011) make the hypothesis that consumers from different age groups may interpret package designs differently because “they share different past experiences and traditions that might shape their present conventions” (p. 130).

Younger people base their decisions on personal experience and advice of significant others. A study conducted by Wilks (1986) shows that for 175 young adults (18-24 years old) parents, specially mothers, and friends of the same sex are considered the people most important people in the participants lives. “Parents were perceived as most important in certain future-oriented areas, whereas for current decisions, friends’ opinions were more valued” (p. 323). Thus, the goal was to characterize the influence of friends’ perceived opinion versus parent’s perceived opinion on college students’ purchase/consumption of hemp products marketed with the cannabis symbol.

Procedures

The 90 minute-sessions was divided in five categories of open-ended questions. The focus groups started with a script (see appendix B Moderators Guide) read by the moderator to introduce the setting and the role of participants and of the assistant moderator, followed by an introductory question to help participants begin to feel comfortable participating. Then, the groups were guided through a simple word association task, which is a commonly used qualitative methodology. This approach was adopted in studies related to semiotics and food labels by Ares and Deliza (2010), Ares et al. (2011), and Piqueras-Fizman et al. (2011). Students will be asked to write down the first thing that comes to their mind when looking at cannabis leaves. By doing so, the influence of dominant voices in individual responses can be controlled. This image was projected on a screen. This activity “is based on the assumption that providing a stimulus to a respondent and asking him or her to freely associate what ideas come to his/her mind could give relatively unrestricted access to the respondent’s mental representations of the presented stimulus” (Ares et al., 2011, 692).

A study conducted by Fishbein (1963) was analyzed as a successful example of the implementation of this tactic. That research tested the relation between beliefs and attitudes towards African Americans through a free-response format. A list of five groups of people, including “Negroes”, were read to the participants five times. After, participants were asked to provide a word that would represent or characterize the groups. “The ten attributes mentioned most frequently in relation to Negroes were selected for further investigation. Among these attributes were dark skin, curly hair, musical, athletic, uneducated, and hard workers” (Ajzen, 1991, p. 442). The same model was implemented to gather attributes and beliefs around the cannabis symbol. The questions that follow aimed to determine students’ opinions and attitudes towards the use of cannabis leaves in certain products’ labels.

The second category of questions (8-12) discussed participants’ attitudes around hemp food products that uses the green cannabis symbol in their package in a time lap of maximum 20minutes. These questions intent to identify participant’s opinion on product functionality, interesting or unappealing aspects they may found in the package design, and the perceived audience for these products. These set of questions also intent to gather adjectives used to describe the product and its packages design. Perceived behavioral control and social norms are expected to be determined during the conversation as well asking participants to determine whether or not they’ll consume a free sample of the product if offered and their perception of others opinion around said products.

After 30 minutes of the discussion, participants will have a 15-minute break to enjoy pizza and beverages, refresh, stretch and mingle.

The next questions (13-15) aim to gather information regarding the students’ subjective norms in a 20-minute period.

“Direct measures are obtained by means of items that ask participant how likely it is that important others think they should perform a behavior of interest, how likely it is that important others themselves perform or would perform the behavior, and so forth. Similar items are formulated to assess normative beliefs with respect to particular social referents. That is, participants indicate how likely they think it is that certain

persons or groups of individuals want them to perform the behavior or themselves would perform the behavior.” (Ajzen, 1991, p. 443)

The questions aim to encourage participants to nominate a significant other whose opinion is valued and can influence the purchase of food products. Questions are also designed to determine significant others' perceived attitudes around hemp products using the cannabis symbol. However, by identifying some views around subjective norms, the information provided by the participants reinforced previous answers related to attitudes and beliefs.

Perceived behavioral control questions followed, aiming to determine knowledge and perceived ability to purchase those products, but also about outcomes/expected or desired impacts of the consumption of said products in a 15-minute period. “Direct measures of perceived behavioral control are typically obtained by asking people whether they believe that they are capable of performing that behavior of interest, whether they believe that doing so is completely under their control, and so forth” (Ajzen, 1991, p. 448). The question aims to fold back in hedonic or utilitarian characteristics that may provide insight into the goals they would associate with these products and whether those would be attained; will their consumption action lead to their desired outcome? How do they use the branding to defend their choices/intended goals to important others?

Finally, to close the discussion, 5 minutes were invested in some ending questions to determine purchase intention and conduct member checking of some of the key points the group discussed.

Data Analysis

Once information was collected from the focus groups, data recorded on tape was transcribed exactly in the same words used originally by the participants. Written notes taken by both moderator and assistant were only used to identify speakers, clarify unclear comments from the tape or expand on the dynamics of the group if relevant. “The advantage of the note-expansion approach is that it saves time and retains all the essential points of the discussion. Real-life discussions and complete transcripts tend to be full of false starts, irrelevant remarks, and repetition” (Bertrand et al., 1992, p. 202). The dynamic of the

group might be important to consider because it can suggest discomfort about certain topics, excitement around specific ideas, dominant members, heated discussions, etc. (Duggleby, 2005). Thus, the completed transcript will include verbal and non-verbal behavior.

Bertrand et al. (1992) suggested that to synthesize the many points of view and turn them into meaningful conclusions, an inventory of points discussed can be created. “The inventory can be established either from the complete transcription of the sessions or from the notes taken by an observer. The advantage of this system is that it reduces vast quantities of information into a manageable form” (p. 204). For organization purposes, each category of questions will be numerically coded (Beliefs =1, Attitudes =2, SN =3, PBC =4, PI =5). Participant comments for each question were categorized in themes based on similarities in views. If the same idea is repeated during the session, it will be placed in a category accordingly. Quotable statements will be marked with an asterisk. Images presented for each category as stimuli during the sessions will be letter coded (cannabis leaves =L, hemp energy drink =D, hemp granola =G, hemp candy =C, hemp seeds = S, hemp oil =O). Lastly, participants will be distinguished using pseudonyms to protect their identity.

“The inventory should be used only to orient the analyst to the diversity of viewpoints expressed and to the degree of consensus on these points. It may not be used to generate quantitative statistics, nor should the inventory itself appear in the final report” (Bertrand et al, 1992, p. 204), so a discursive analysis will be adopted to evaluate language use. Onwuegbuzie et al. (2009) suggest that,

“The discourse analyst examines words and phrases to ascertain how individuals use accountability for their versions of experiences, events, locations, and the like. For example, when questioning the competence of a female supervisor, a male employee might use the phrase “I am a big supporter of feminism,” to prevent being accused of sexism. Positioning denotes the proclivity for speakers to situate each other with respect to social narratives and roles.” (p. 7)

This method of analysis can be useful in discussions around topics laden with stigmas and misinformation, like cannabis and its uses.

Research Rigor

Based on Chioncel, Van Der Veen, Wildemeersch and Jarvis (2003), a pragmatic approach was selected to judge the validity and reliability for this research. Qualitative research methods rely on an interpretative process that

“starts from the assumption that the process in which meanings are assimilated to the scientific data is in fact a process of reconstruction, re-interpretation of reality. Thus, the reality is not objective but subjective and, moreover, the (subjective) reality researchers perceive is based on the constructions of those interviewed, for example in focus groups.” (p. 500)

Even though in qualitative methods data, as well as reality, is subjective, it is important to view the research through an objective lens. To evaluate a qualitative study in term of objectivity, components like validity (accuracy) and reliability (replicability) must be present. “In the case of focus groups, this supposes constructing accurate, valid and insightful explanations of what was discussed, so that the interpretations might be reached on further occasions” (Chioncel, Van Der Veen, Wildemeersch, & Jarvis, 2003, p. 501). Literal transcription of the participants’ answers based on the voice recording of the discussions will assure responses will not be tergiversated. “Descriptive validity (factual accuracy) and interpretative validity (grounded in the language of participants) requires a recording technique that is as accurate as possible. The best way is to use audio-taping that is subsequently transcribed literally, but even then, a lot of the non-verbal communication is missed” (Johnson, Johnson, & Stanne, 2000, p. 504). An assistant was present to support the moderator on each focus group and oversee outstanding non-verbal cues. Moderator and assistant take notes and moderator should ask for clarification after each question and will offer a brief summary at the end of the discussion.

“What is important in searching for understanding of the nature of validity and truth is to enquire whether the research is measuring what it was intended to measure (Chioncel et al., 2003, p. 501). Because focus groups data analysis is contextual and not statistical, the frequency of participants’ responses is less relevant than the responses quality and association (Krueger & Casey, 2009). “Knowledge is a social construction of reality, not a mirror of reality, and the truth is constituted through a dialogue” (Chioncel, et al., 2003, p. 499). Thus, communicative validity can be supported by focus group discussions. In this method the role of researchers is not objective or detached from the participants, moreover, they must communicate the true value of their findings using normal language.

Chapter 4

RESULTS

Focus Groups Demographics

The different demographics found in the focus groups played an important role in the understanding of the findings. Participants were asked their age, gender and college major. Each participant was asked to briefly introduce themselves. Through the information gathered from each individual's introductions, it was determined that 15 were born and raised in the U.S. and four participants were international students.

Table 2 Participants Demographics

Group	Pseudonym	Age	Gender
One	Terry	22	Male
One	Zack	19	Male
One	Simon	21	Male
One	Samuel	21	Male
One	Quasek	20	Male
One	Keedan	19	Male
Two	Sofie	21	Female
Two	Rob	23	Male
Two	Taylor	20	Female
Two	Sarah	23	Female
Two	Tiffany	19	Female

Two	Yasmin	21	Female
Three	Chase	25	Male
Three	Min	21	Male
Three	John	21	Male
Three	Sandy	20	Female
Three	Cindy	20	Female
Three	Monica	20	Female
Three	Jessica	23	Female

Beliefs Around Cannabis Leaves

Participants were asked to write down the first thing that comes to their minds after being exposed to a cannabis plant (See appendix A) presented on the screen and then share their thoughts with the group. There was a consensus around the meaning of the image being a representation of “weed” “cannabis” or “marijuana”. Some polarizing themes found were “smoking”, “drug”, “paraphernalia”, “authoritarian disapproval”, “dark”, and “complicated”; Positive themes involved “pain relief”, “medical”, “treatment”, “people’s rights” and “laughter”. However, most international students had a different opinion around the image, using words like “tropical theme”, “plant” and “leaves”, with no further connotation. Yasmine, for example wrote “nice green leaves, it reminds me [of] a tropical juice”. Overall, their verbal answers matched their written thoughts.

Beliefs Around the Cannabis Symbol

The second image presented was a single cannabis leaf (See appendix B). When they were asked what they think this image stands for, new concepts were shared around “getting high”, “legalization”, and “nature”; as well as adjectives like “stoner” and “pothead”. Chase mentioned that for him, “it’s a marijuana and drug culture. That symbol seems like the quintessential image”. Tiffany consider that it could stand for “community because people who smoke marijuana might associate it with being part of a group”. This idea was supported by other members of the group.

Samuel suggested the symbol “could be hemp”, however, Simon replied, “I wouldn’t think hemp at first”. Terry supported that idea stating, “that didn’t come to my mind until you said it”. When participants were asked where they have seen this symbol, they all agree that the image is heavily used in retail stores on socks, T-shirts and posters; in the advertisements of marijuana products in dispensaries, especially edibles and recreational marijuana containers; and in billboards and magazines. The Urban dictionary defines marijuana edibles as “any edible product that contains THC”. Participants were asked to define an edible in the context of our conversation. An example of the participants’ responses was that an edible was “a product infused with THC”.

One association that came up in two of the focus groups was the use of the symbol in the war against drugs. Cindy commented that she has seen it “in various posters and commercials once weed was legalized but also in the war against drugs they used the common picture”. Rob recall seen that symbol in signs that prohibit the consumption of marijuana, similar to the ones that prohibit vaping or smoking cigarettes. Yasmin, one of the international students felt like the symbol was very similar to the one presented in the middle of a national flag of a country she was not able to recall. Later in the conversation, the Canadian flag was brought up.

Social Norms Around the Cannabis Symbol

The questions that followed aimed to gather information around social norms and the connotations that people important to the participants, like family and friends, will have about that symbol. Although, most of the participants agreed that friends and peers tend to have a positive reaction towards the image, there were mixed reactions around what family, particularly parents will have about it. Samuel, a participant that shared his experience growing marijuana, stated that for his parents “that's like the devil's lettuce. They would be alarmed if they saw that somewhere that they didn't expect to”. Monica said,

My family is really positive about it, especially my dad. He did a lot of drugs when he was my age. So, he just finds it funny that it's very open now because even like weed was still like a harsh subject when he was my age. So, for example, there's a weed testing facility at CSU and he finds absolutely hilarious that a college campus has that.

Tiffany said,

I think my parents would disapprove of it. My dad has very strong opinions with marijuana. If he sees someone cut someone off while driving, he's like oh they're wasted on marijuana or something like that. But my friends I think they see it as positive. Like it could be a bonding experience to be a part of it.

Chase agreed stating, “among they will be just like Oh this is a druggy symbol, it's not thought highly in my family.” Jessica stated,

I remember being really surprised by some of my older friends in their 70s or 80s. They mentioned Oh well I use CBD oil for this and it's so great. I remember going like I should check my stereotypes because I would not think they would be into that.

Yasmin, one of the international students, said, “I don't think that this would be okay. For my family and friends. Cause again I think it's a cultural thing. Again, marijuana it's not allowed, it's not legal in Egypt. I'm from Egypt. So, I don't think that they would be ok with this. I think it's a cultural thing.”

Attitudes Around Hemp Food Packages

Hemp Candy

Each group was given the instruction to write down what catches their eye first after being exposed to the image of a hemp food package. The first product was the hemp pops (See appendix C). The big majority notice the “Hempy Pops” wording of the design first. Participants describe it as “bubbly letters”. Sofie, said, “I think the first thing I saw was the big lollipop in the middle, and then the word hempy, so I was like what does that mean?”. For others, like Sandy, it was more about the color contrast, she said,

I first noticed the peach just as the main base and then I noticed the green light against the background, but it wasn't immediately like Oh green means pot or leaf. It is the contrast that makes the light Candy first pop out.

Monica said, “Yeah I agree with that because even though I saw hempy first like I saw more of the pink I didn't even notice they had leaves in the back until a little later”. Even though, for some participants the presence of the cannabis symbol passed inadvertent, for some others it helped them to shape their perception around the product. Terry stated, “I was just looking at the Hempy and then the leaves in the background automatically it's like an edible or something like, that's the first thing that

comes to my mind”. Zack mentioned, “I just saw the watermelon and Hempy pops. So just all the words and all that I just thought oh Edible”. Keedan said, “Yeah. So first I saw the color and the candy. So, you think it's sweet or something. Then I saw the leaf and then I figured yeah it will taste weird”. According to Quasek, “those are not for kids”.

Previous knowledge around hemp influence participants responses.

However, participants on focus group one with more knowledge around hemp raised awareness about possible differences. Samuel stated, “Hempy was the first word that I saw, and I thought it's probably not psychoactive THC you know”. However he continued to say, “I’m just curious whether it has THC or not, or if it has CBD or even a purpose, but I think it more interest to me about the CBD because the Hempy speaks to me saying it is not THC”. Simon said,

At first, I was wondering if maybe the candy had something to do with the hemp or if it's the stem or whatever you call that the stick is made of hemp paper or something. That's what I was thinking”, but he followed with “at first, I wouldn't know if it's like a THC edible or just a regular candy.

After those responses were shared participants followed the same line of thought, for example, Zack thought about it more in terms of “CBD not so much THC”. For him it was just because “it sounds like Hemp”. He felt like hemp is “more associated with products like clothes and all sorts of things”. Quasek’s interest was focused on the target audience for the product. He said,

The thing that interests me is who are the buyers for this thing. Because the way they're presenting this product is different because they've got marijuana in the back with watermelon pops. So that's one thing I want to know.

Most participants from the other focus groups viewed the lollipops as an edible. For example, Sarah said,

I like watermelon flavor. Yeah sure I like that. That's appealing but I'm not comfortable with edibles. If it had THC, I probably wouldn't consume it just because I don't like edibles.

Sofie felt the same way stating, "I don't really like smoke or anything so it's just not appealing to me. Also, like to see the nutrition facts so that is something I would like to know if I were to try". For clarification the moderator asked if the leaf signal a psychoactive effect to her. She said "yes".

Participants' opinion on the package design.

Some participants saw this product as "youth oriented". For example, Monica said, "It's funny how they made it". She said, "it's definitely for younger people like our age roughly. College students because supposed to be like us...I feel like it has more of childish writing to it" but "it's just really colorful so I'll be at a store like I probably would look at that more than some other packaging.

Although, John supported this idea, he expressed some concerns, "I just thought as a little look funny as well, but I feel like it's kind of dangerous if a kid happens to just be like oh a lollipop. So, there's a danger. Because it appeals to younger kids".

Cindy stated, "I'd be a little more worried I think to try it like unless it was for medicinal purposes like if it included like anything else other just like candy purposes it seems a little contradictory almost like to want to consume that". Sandy brought back memories by saying,

It kind of brings up medicine to me because I have had my tonsils out and I had these pops that numbed my throat as you can almost be like a weird crossover between like oh it's candy but it's like any drug-related lollipops. I just also kind of danger for kids' thing like having them around.

Chase had similar ideas around medicine containers, and he explained, "When you talk about that just looking at it it really reminded me of like Pepto Bismol. It was not a pleasant thought but now that's what's sticking in my mind". Monica said, "I do agree it does look kind of medicinal"

Participants perception of other's opinion around the hemp candy.

The question that followed was what participant thought people that were not part of the conversation thought about the product. Samuel expressed, "I think it would be pretty confusing for people because it's like hidden in the background all these nice letters and it's kind of seems almost like target at kids and people might not like that". Simon brought up the idea of marijuana intoxication among young children. He said

Probably if my parents saw something like that they would think about the news and stories in the past about you know kids getting a hold of edible marijuana, those things that are advertised to look like candy and then children getting into it and then you know getting sick from that because they wouldn't know necessarily that it's a THC product. It's advertising towards kids and it's like you know that's probably I think a lot of people at least my parents would think about it.

Sofie, from focus group two, said, "My friends would be like I want to try that, because it looks like an edible some sort of yummy edible". Cindy said,

"Even though my parents are open to the idea. I think they'd be kind of shocked to see this on as I've maybe said like Wal-Mart. You know next to other Blow Pops or things like that I think they'd be

shocked to see I like hit the stores in this way rather than be like a separate store like we have to be 21 and older to enter and things like that. I think they'd be quite shocked”

Hemp Energy Drink

Same set of questions were asked, starting with what caught participant’s eye first. Across all focus groups participants attention went predominantly to the wording. Few participants prioritized the cannabis symbol on their first observations. However, participants were quick to make associations between the wording and the image. Simon said,

I saw hemp, but it also says Rocky Mountain high. I associate that with getting high THC specifically. So, I don't know if it's like this active THC or just like CBD. I think the more about high like the marijuana high though.

Yasmin shared her thoughts stating, “I think like weed and marijuana makes people high so I thought that this is a smart choice of words that they chose the leaf and the Rocky Mountain High just because it makes you high”. Jessica said, “just the words Rocky Mountain high. Good job for reference. I do wonder if it has THC because has high in it in”. Sarah “Yeah I saw the leaf first and then I saw Rocky Mountain High and I was trying to figure out what it was.” Sofie agreed that the product was “a drinkable edible for a high.”

The energy drink brought a feeling of uncertainty among participants. Zack wondered “what the effect of it would be, because it looks like it's a THC product but it's an energy drink”, he followed, “I don’t associate THC with like energy so much. So, what's the effect?”.

Previous knowledge around hemp influence wording assimilation.

Participants with more knowledge around the cannabis industry followed a different analysis approach. In Rob's words, "the word hemp stood out to me so that to me and to be straight up in pothead terms that basically means its CBD. And then the fact that says Rocky Mountain high it makes me think is local". For Tiffany, "It seems like a healthier energy drink", she explained that "sometimes energy drinks have really bad chemicals". For her and other participants "it's like a healthier version of a red bull or something that's bad for your heart". However, there were also some health concerns around its consumption. Sandy said, "It seems more dangerous because you are not supposed to have alcohol and energy drinks, and I don't know if that's the same with that". Monica agreed stating, "Yeah because energy drinks and THC do the opposite. So that's probably a bad idea."

Participants perception of other's opinion around the hemp energy drink.

When participants were asked about others' reactions to this product, a significant number thought that "they'll be confused". Quasek said, "what is this? There will be a lot of confusion because it's an energy drink with a leave and the Rocky Mountain high. There are several questions for me at least. I would say that some other people would think like that too". Sofie brought up an interesting analysis regarding the image design. She said, "I think they'll think it was psychoactive just because of how big the leaf is. That seems to be the main marketing point that is trying to make". Some answers pointed out different reactions among demographics and age groups. Taylor said,

I feel like a lot of my Colorado friends easily be willing to try but a lot of my friends back home in Texas would just kind of laugh at it. I mean weed isn't legal, so it's not like all we do is like smoke it. We don't have edibles or any of the cool stuff you have up here.

For some participants, like Sarah, regardless of the possibility of psychoactive components in the energy drink, for college students there is "excitement" around trying "new things" that have "marijuana/hemp associations". Yasmine said, "I actually have a question about the word hemp because I

don't really know what that is. And I saw it like on the previous product and again here. So now I started to correlate it with like getting high". In order to avoid participant bias and to get honest answers based on previous knowledge, the moderator avoided answering that question.

A significant number of participants had strong opinions around energy drinks in general. This group considered this product "iffy", "dangerous" and "unnecessary". When asked about important others' opinions around it, the consensus was that "they don't really like energy drinks very much. So, I don't think they would care more about the hemp about it being energy drink"

Participants' opinion on the package design.

Even Though some participants found the design "unappealing" and "gross". Others shared their likeness towards it. Chase said, "I personally think that the can looks appealing like the color scheme. I like the design. I like that it's kind of simple but yeah, the product itself I have questions about" Jessica state, "I would agree with the design. I just think it's clean and it just looks good and it's very clear what it is. Except for the THC part."

Hemp Oil

Same set of questions were asked to participants of each group. In every group comments were made concerning the wording, like artisan, non GMO, raw, cold press, vegan, gluten free, etc; Participants also highlighted the informational icons at the bottom of the bottle. There were mixed feelings around those informational elements. Participants of focus group one, characterized by only male participants, found those elements confusing and deceiving. Simon, particularly, had a very strong opinion around organic "healthier" product. He said, "they are buzz words that don't necessarily mean much. Like what does it mean to be artisan, or raw, or what is cold press". Simon's ideas were supported by other members

of the group. He shared his ideas of “false advertisement” and the “placebo effect” companies sell through their marketing. Simon continued,

I know people who would be interested in this like I worked in a grocery store in the summer and there was a whole huge section with a bunch of stuff like this with hemp and CBD and supplements and vitamins and so on. I know a lot of people believed in that stuff and would buy it. A lot claim it's like oh it works miracles and stuff. So I think there's definitely a demographic of people that would be very interested and might not really do a lot of research on what it does but just kind of see it in a store in this section and assume it's healthy and that it would be good for.

Meanwhile, participants from other focus groups had different point of view about this “healthier”, “natural” product. Sandy mentioned, “I immediately saw that symbol at the bottom and that's just very common on some products. That's a positive thing. Some people like to see that.” Sarah said,

I would definitely try it. I eat hemp seeds because they're super nutritious, nutritionally dense and yeah I'm vegetarian so I don't get a lot of protein sources, and that's one of them and so for sure to get all of those nutritional benefits. Yeah it seems, cool seems healthy.

Jessica shared, “when I read artisan, I thought it look fancy, must be luxurious. Yeah it just sounded cool. I didn't know what it meant though”. Sandy stated, “if it was a need of mine, I think it would be the correct advertising for that product. It's very appealing and I feel like the amount of information that they give you on the front kind of proves that it's safe to use and they're catering people not to be scared of it if you need that product”

However, there was a big confusion among all groups around the oil usage. Most participants agreed the oil was meant to be used in the skin for “pain relief for athletes”, “moisturizing” or “essential

oil for massages”. Very few saw it as a cooking oil or as a “Vegan alternative to fish oil”. For example, Tiffany said,

I saw hemp oil first and then like I saw foods alive and then artisan press and like omega 3 and like I don't know why but I associated it it just when I saw oil I thought it would be like you put it on your skin. And even though it says food like I thought it would be used on your body not in food.

Taylor agreed saying,

I agree with her, I thought it was something for your body like your skin or something versus food which eventually I saw foods alive and I realized it was for food.” she followed, “I don't know exactly what hemp is versus weed, but I really like to cook. I like to cook with avocado oil, coconut oil. I like to try a different oil so I might be interested and like my brother's gluten free. So that's a big part of it like my family using it or at least trying it.

The moderator asked if this product made it easier for her to make a distinction between marijuana and hemp and she said “not as much because it still does have the marijuana plant on it. So, I kind of associate it but it is also cooking oil so that I associate less with like getting high”. For Sandy it “seems harder to misuse because it says "per serving". She considered “it’s easier to follow and know how much you should consume instead of the energy drink or the lollipops. She said,

I know that some products that do contain pot can like you take a half of something and it's way too large of a dose whereas it's like you have no idea what was in the lollipop or the energy drink.

Participants perception of other’s opinion around the hemp oil.

Participants were asked about what other people that weren’t there might think about that product. Few shared thoughts on how confused people could feel about the information in the label. Terry expressed,

If my mom went in the store and saw this oil she will just be so confused, she'd be wondering like all a billion different questions about this. I feel like you (the brand) confuses a lot of people who don't know. I mean that confuses me. She will be confused but interested more just like curiosity out of lack of knowledge.

Rob said, “a bunch of my friends in the army have zero experience with it. They don't hate it or like it they don't know. A lot of my friends think it's something you get high off of”. Cindy said,

I think interests more like my mom's the same like she has back injuries like and she hasn't tried anything like this but I feel like she would be open to it, especially if it is super regulated again with like organic sign on it. I feel like she'd be more open to trying it for herself. Me personally I like I don't have any pain like that or anything so I probably wouldn't. it just looks safer I guess like not as frou frou or for fun like this just seems like for plain. it's not meant for the fun aspect of it, it's just there for the sole need of needing it.

Several participants supported the idea of this product having an “actual reason” to be used.

Participants’ opinion on the package design.

Regarding the design of the label, even though most participants found it very informative, a big number of participants find the design “unappealing”. Taylor said. “the label is not very appealing to me I don't know I'm not a big fan of the colors, but it does make the information stand out more. So like the brown stuff in the middle I'm guessing that's hemp. It took me a while to figure that out.” Yasmin shared,

“I don't know if this is related but I don't really like the design, the look or the appearance. So the design makes me disturbed.” Rob found the design “clinical.”

Hemp Seeds

Overall, the groups deemed the product as a “healthy”, “natural”, “organic” snack. While the majority of participants among groups saw the informational icons as something beneficial, a few members of focus group one had opposite reactions. Quasek said, “the whole bottom thing is very confusing. What does that mean on the bottom right. I'll be confused. What is a certified for and what does that mean?”. Simon mentioned,

I think that it would actually disinterest me that it says non-GMO. To my knowledge, I'm pretty sure there's not actually any consumer available GMO hemp in the first place so I don't know how it could be non-GMO if there isn't a GMO version.

Terry brought up Simon’s previous thought about placebo effect, stating, “I think is almost like a placebo thing, like you're going to eat this, and you will feel better. Related to health.” No participant in focus group one was interested in trying this product.

Participants’ opinion on the package design.

Participants from the other groups developed more on their opinion around the design and the visual elements. Sofie found herself attracted by the color green used in the label. Rob was quick to point out it was a snack and compared it to “pumpkin seeds”. Jessica find the design “appealing”, “artistic”, “well proportioned” and “balanced”. She said,

There's drawings and kind of art with it but then it also has the legitimizing things that we saw on the last product with that organic superfoods and the list of things at the bottom. I just found a nice balance between the design and the legitimation.

However, Yasmin was not happy with the hands visual and the cannabis leaves. She considered them “creepy”. After her observation many realized for the first time those were cannabis leaves in the background. Rob stated, “to be honest I didn't notice the marijuana leaves until she said it”. For Sarah the design was too loaded. Sha said,

My eyes are like popping all over the place because there's so much on it. I still can't really focus on any one thing; I'm trying to read all this stuff and like I can't really there's just so much to look at.

For Min, “the package itself is good because they show how the product looks like and that is great”, he followed, “I feel they're really confident about their product”.

Although participants shared the idea that “it looks healthy because it says Superfoods”, for one participant there was still confusion. John shared, “I guess because I don't know if that will get you high or it just looks like quinoa or something almost.” Sandy acknowledge John's feelings and said, “I think there's a reason for the confusion. It's just like hemp is overused. So, you don't know if it's like from a marijuana, some substance or just like approaching it like something you put in a smoothie or a granola bar”.

Participants perception of other's opinion around the hemp seeds.

What they thought people they know may think about this product was mostly positive since it is tailored as “snacks for health-conscious people”. Cindy said, “I think people that are able to afford the products that are organic, they definitely if they saw this on the shelf they'd be willing to try it. Just

because health is such an important factor these days like everyone's talking about like exercising and eating right". On the other hand, John shared, "my mom is just very health conscious so I feel like she would definitely be drawn towards that but are those pot lives on it? I can't tell. Because that might scare her away. My parents are like pretty anti weed."

Hemp Granola

In every group, comments were done concerning the "healthy" and "natural" look of the granola. Most students were interested in the use of words "hemp hearts" and wondered about the meaning of it. Very few thought the taste of the granola will not be appealing, for example Simon said,

Probably doesn't taste good but it's healthier. I'd rather just have Captain Crunch". Most of their attention was focused on the bowl with strawberries and applaud the design. Taylor said, "I like the packaging. It seems healthy and the strawberries make a lot more appealing. The colors and the contrast is not overwhelming. It has the necessary information on it". Sandy agreed adding, "the way it's advertised it could be just feel like a family thing and just keep it like a cereal. A kid could eat it in the morning. It's just like it doesn't look like you have to be a certain age do it"

Cannabis leaves passing unnoticed by participants.

Some participants did not notice the cannabis leaf in the packaging until someone else mentions it. Jessica said, "It's interesting how high contrast the granola and the fruit is and then how the marijuana leaf it's just kind of green on green kind of in the corner." To what Cindy replied, "I didn't even notice the leaf Honestly until just now. Yeah. The green on green. I just didn't even see it". Sandy added, "it's not something to fear (cannabis leaf) but like if I were to see it on the energy drink or the pops, I would think more about it. I don't know just because it's more like a healthier product is how it appears to me"

Other interesting comment came around the actual existence of the products. For example, Yasmin said, “I don't know if all these products are real products but this one gave me the impression that this is real life vs some of the products that we saw but I think that this one exists”

Participants perception of other’s opinion around the hemp granola.

There was a general consensus around people they know trying this product. The big majority said friend and family will or have tried it before. The participants that did not shared this opinion, based their comments on health habits and preferences for non-healthy meals.

Social Norms Around Hemp Food Packages

The set of questions that follow intended to determine significant others and their opinion about participants consuming these products. All the products were projected on screen so participants could point out and refer to them as desired. An interesting approach was taken were across groups participants separate the two first products (Hedonic), lollipops and energy drink, from the three that follow (Utilitarian).



Figure 6 Hemp Food Products Organized by Participants

Through the conversation participants refer to them as the ones in the right and the ones on the left (See Figure 1). An example of a participant’s response was, “I think like the two on the left are more like the psychoactive component of THC or cannabis and I feel like the ones towards the right are more like health oriented.”

People Whose Opinion Participants Value

Most participants identified parents, siblings, grandmothers, friends and bosses as significant other whose opinion they value.

There was a general agreement that friends are more likely to support and encourage the consumption of hemp lollipops and the energy drinks, while parents or superiors could be less likely to accept or approve its consumption. These are examples of comments done regarding significant others opinion around participants consuming the presented products. Samuel said,

The two products on the left my parents wouldn't like them because they associate that with negative things you know they don't really like marijuana and it's clearly depicted and not so much as straightforward like food you know vs the two on the right are more perceived as food. Just like the lack of the possibility of additives and the lack of THC being present you know even though the three on the left may not have any they still would associate that at first glance negative thoughts.

When Samuel was asked if the opinion of the people, he care about would affect his decision to try the ones on the left he responded,

Yes. If I were around them, definitely not something that I drank in front of them. I would buy, it just depends on the time of the year. And like if I'm going to be seeing them, I wouldn't want them to see me consuming it.

Simon shared his opinion about what his friends will think if they saw him consuming “organic” “healthier” products. He said,

I think my friends would probably make fun of me for eating the ones on the right because they'd be like Why are you wasting your money on that. If my friends saw me eating the ones on the right, they'd be like oh he's changed, his he's an organic guru kind of guy now. I mean probably the first two (lollipops and energy drink) my friends probably think it was you know THC at first and then they'd be like okay whatever.

Yasmin,

So, my mother would be a bit cautious about it but like she would let me take the ones on the far right, because it seems healthier and it doesn't really symbolize or give the impression of getting high. For example, compared to the Rocky Mountain high. My best friend would be like Let's try the Rocky Mountain High together.”

Tiffany said,

So, from the left to the right, my best friend would like the two on the left. Oh that's pretty cool. Then the three on the right, she would really like, it would just be like Oh you know you're making healthier decisions. My dad wouldn't really approve of the two on the left. Just because it looks like it associates by getting high. He doesn't really like that but then the three on the right he really likes organic, healthy foods. I think it's also like me being healthy. But then my Baba (Grandmother), for all of the three on the right she'd be like What is this, why just eat regular granola, what do you try to prove by eating this specific type of hemp granola or like hemp seeds. She wouldn't understand why I would be using those. I think to her the ones on the left would look like you know it looks like unhealthy Candy and if I told her what hemp is and where it comes from, she would be like oh that's terrible, you know mixing Candy and this. She would disapprove of like the combination of both together.

Important Others' Opinion Influence on Participants Purchase Intention

Tiffany was asked if the opinion of those people will affect or influence her decision to buy those products. She said,

The two on the left would make me a little uncomfortable if I was drinking or eating that around them but the three on the right I would just explain to them that they were my life decisions. If my best friend didn't approve of one of them. I would consume it but not in front of her because I still respect her. But it's different with your parents and grandparents because I don't want them to see me like getting a hemp pop or something if they don't like that.

Chase, a participant whose dad “did a lot of research into hemp before” shared what he thinks his dad reaction will be with the hemp energy drink. He said, “if my dad just saw it, he'd be like oh this is straight THC energy drink and then maybe if he read it and saw hemp energy drink, he'd be ok with it”. The same was perceived for the hempy pops, “If they just saw the package, I think my sister and my dad would be like oh you're a druggie now”

Although some participants accepted that parent's opinion could affect their decision to consume the lollipops and the energy drink, others believed their parents would not only respect their curiosity and desire to “try new things”, but also encourage them to be their “own person”. Very few participants shared that they would try those products regardless of the disapproval of their parents, and only a couple of participants shared their ability to try those products with a member of their family, like a dad or siblings.

Perceived Behavioral Control Around Hemp Food Packages

Accessibility Perception

Participants were asked where they think they can find these products. For the hemp lollipops and the energy drink, the consensus across groups was in dispensaries., “definitely the first two would be found at a dispensary, just because they're different. They're really branding out that it contains marijuana”. Other participants agreed stating, “I would say like dispensaries because just because the big leaf kind of feels like that's what would be in a dispensary.” Very few participants with more apparent knowledge around hemp thought the candy could be sold in gas stations and the energy drink in Whole Foods or “fancy organic stores”. One participant even called the energy drink “the next kombucha”.

The oil was perceived as an “over the counter supplement” that could be found in Trader Joes or Whole Foods. The same was found for the hemp seeds and the granola. An example of a participant's response was,

I think you will probably only find it in like a health food store. Whole Foods like natural grocers or something like that. I think that if you shop at those stores that you might already be more in the culture of consuming hemp.

Perceived Advantages

The oil, seeds and granola were the products where the most advantages were perceived. Overall, those foods were found “nutritious”, “good for you”, and “great alternatives for vegans/vegetarians”. More specifically, according to the participants the packages of those products were very informative and trustworthy. Participants mentioned that the best part was how “regulated” the product seemed to be, referring to the food symbols present on those designs. Participants emphasized the importance of

knowing “exactly what you're purchasing and what's in it.” Sandy said, “the benefits of those packaging are that labels everything out for you”. Sandy shared,

I like having the organic symbol or anything that would definitely make you more comforted knowing that it was put out by a company that knows exactly what they're talking about and has no reason to hide anything in their product.

To what Cindy replied,

I agree with that, just the more information on it I feel like that can not necessarily all of the information would comfort each individual but certain things would help each person so I feel like the more that you do put on it purposefully could help people be more comfortable with buying it. I like the serving size or the different emblems of the organic and stuff like that can definitely help.

For Min the ability to see the “real image” on the package of the hemp seeds makes it more “appealing”.

There were very few advantages identified for the lollipops and the energy drink. Participants were more curious about the effects those products could have. Participants had more comments on the design of the package than on the benefits of the product itself. For Taylor, “the play on words could also be a good thing”. Participants agreed “it's either like love or hate thing”. Sarah suggested that “they could make it look healthier like the ones on the right.”

Perceived Disadvantages

The disadvantages found in the healthier products were more related to finances. Simon said, “if any I feel like a disadvantage to your wallet because they're probably pretty expensive more expensive than a normal version. Because they're all organic. I think almost all of them say organic or all natural or raw and just speaking from experience. I worked in an organic grocery store. Everything's like 25 to 50 percent more expensive. I just I don't think it's worth it.” Participants in all groups agreed with this idea.

Participants brought up several disadvantages based on the packaging of the hedonic products. When participants were asked about their perception of the hemp lollipops and the energy drink Quasek said “it's assembling those marijuana and everything with hemp I don't have much knowledge about it so I'll be cautious about it and then just try it at home.” For Samuel “it really doesn't specify what kind of product is.” Terry shared, “Looking at it looking I'd say the three on the left the oil the energy drink and the pops. I just feel like they are straight intentionally trying to insinuate something about high or you know something that I've always so it's not something I'd be like oh this could be good for me or something like that.”

Participants Further Interest About the Products

When participants were asked what they would like to know about the products, many questioned the purpose of the lollipops and the energy drink. An example of a participants response was, “I'm more curious if they do make you high, yeah that's the main thing. Also like if it doesn't make you high, I'm just curious what exactly does make it special but versus other lollipops or energy drinks. Like if it doesn't make you high. Does it help for pain? Is it just there because for the name? like I don't know”

Effective Branding Perception

Participants were asked which of these designs and branding are more effective in driving their comfort with purchasing these products. Jerry shared,

The two on the right. They just like well like you can tell they're very thought out made to make you feel comfortable consuming that and then like the two on the left they just look like they just threw it on and didn't put too much thought into it.

Samuel said,

It doesn't have the stereotypical look the second one from the right the hemp seeds. You can't really see any five-point leaves or anything. So if someone didn't know they would just assume it's just like healthy seeds.

Cindy agreed stating,

On the right, it was the words is what you see first because it's more of like at least with hemp oil and hemp seeds it's like a lot together, which kind of makes it seem like more natural just like green any kind of stuff and then the granola. That mean I just like the granola you know it's just a breakfast cereal like I need to get somewhere else but like with the Pops and the can it's more like that's the first thing that you see kind of like it's like one of the only main components whereas the other three on the right you have more going on and the labels are more complicated whereas I feel like they definitely like even if it's not the first thing you see on the pops like how you mostly saw the like lollipops first but it's one of the only aspects of it. So I feel like that draws more attention to it and then makes you think about it more just having the packaging so simple.

Jessica supported that idea saying,

That's a really good point that the three on the right are just so busy and there it's almost as if they're adding the leaves in on those three on the right. But as an afterthought or as purposefully to the side or minimized whereas the other two are much more overt.

Purchase Intention Around Hemp Food Products

Across groups participants felt more interested in purchasing and trying the utilitarian products compared to the hedonic. Participant reasoning on not wanting to purchase the hedonic products was based on the lack of information and constant confusion around the purpose of the product rather than a lack of interest.

Participants were asked if the cannabis leave presented on the package influenced their decision to purchase the products or not. Terry said, "I can say it just increase curiosity because now you're wondering how this could be infused into this product. So, you may be more inclined to just you know give it a try and see how that experience is like." Keedan shared, "I would love to buy this product but put the picture of cannabis it just makes me wonder if it's good for health or if it's going to make me high. It's going to make me be cautious of some things". Sandy said, "I feel like on the three to the right they all seem like the healthy like growing all together like what it's a single leaf it looks more like the drugs like a drug symbol." However, Chase mentioned,

I think it would influence my decision if I just saw the symbol. It doesn't attract me to the product but if I notice that it's hemp then I'm way more ok with it. If you just see a leaf then the first thing I always think of is marijuana. The fact that they're differentiating it here as hemp would make me reconsider it.

Influence of the Cannabis Symbol on Purchase Intention

The question that followed asked participants if they will feel more comfortable purchasing a hemp product if it doesn't contain the cannabis symbol. Some students like Elijah had positive reactions. He said, "Yeah. Especially like the second one with the can it says the word high. That just screams like mental stuff you know like psychoactive attributes to it. Somewhat interesting but I wouldn't want to be surprised. Simon focused on the perception others can have. He mentioned,

Yes, like some judgment. You know when you go to checkout cashiers and the people around you. Judge you a little bit based on the fact that like oh he's got weed in his car or whatever. You could even be misconstrued as like actual psychoactive THC. I definitely wouldn't want to be drinking in public.

Others shared how their personal background shape their perceptions. Jessica shared,

I grew up very sheltered and pot was like no never. But then I've done the research and I've realized that hemp is somewhat different, doesn't have the THC. When I see hemp I am comforted in a way. And I'm more willing to try it.

On the same lines Monica agreed saying,

The word hemp doesn't really bother me. And like if I see hemp with the leaf I'm kind of not as... the only one that's kind of just weird to me is the one on the far left because it just like I just don't know just hempy just seems really weird to me this doesn't feel like he's like serious like this is healthy this is good for you feel.

For Nada the cannabis leaf “it's not the only factor” but it’s removal will make her “more comfortable with buying it.”

Participant’s Advice for Marketing Hemp-based Products

The last question encouraged participants to give advice to someone in charge of marketing hemp-based product. Most suggestions were focused on “being clear about what it is that your product does”. Jerry said, “I feel like with three of the left you're just confused, or you don't know what's going to happen or what it's about.” Other participants suggested “for the pops include more information on the front or maybe a little disclaimer” like “a tiny symbol that says zero percent THC”. Tiffany emphasized the importance of communicating the benefits of hemp since “some people don't know what hemp is or what health benefits it could have”. Other suggestions included the creation of “standardized symbols and informational icons that people can understand.” Lindsay said,

I think because of the stigma around Marijuana that you have to have to be some kind of educational part of your packaging, no matter what. Whether you're messaging people who knows what hemp is or if you're trying to expand the market there has to be some kind of explanation some kind of clear differentiation or something.

Simon commented,

I think the best advice I would think even though I hate it, it will be to throw all those buzzwords you can because people eat it all up. You know they love that stuff. You know artisanal and cold pressed, just throw them all in there and then don't prominently feature the weed leaf because then that confuses the market, I guess.

Tiffany added, “if you're trying to sell something that is hemp emphasized the plant part of it rather confuse it with THC or marijuana, so making it look more like a natural plant instead of something that gets you high.” Nada followed,

To add on what she's saying, don't make it the centerpiece of the centerpiece of your marketing or your picture for example. The bigger things are more important in design. For example, the energy drink if you're putting a big plant my eye is going to look directly at the bigger plant. This may actually negatively affect your marketing if you're doing this to make people buy more. I think it could have declined the purchasing of the product.

Other participants agreed on using a “design style more discrete” were the cannabis symbol is “less prominent on the packaging. So it's not so much about like the weed itself it's just about like health”. Chase suggested that “minimizing the leaf would help make people feel way more comfortable” versus having it as “the main focus” like the product on the left were it is “definitely way more overt.”

A participant considered that “everyone still sees Reagan and the 70s campaign”, so the moderator asked participants if they’ll recommend using the cannabis leaves in non-THC products. The group tended to agree that the use of the cannabis leaves is not the problem, but the way it’s been used. Some participant’s responses were,

I think about how you use it. Like we talked about this already but with the energy drink just that one right, they kind of screams marijuana in my opinion whereas all the other ones on the right aren't as or it just looks more like organic or natural or plant based. Not really drug related.

Another participant said,

I think that the one on the right looks the healthiest. I guess like in that way it's good but like the Rocky Mountain high energy drink, I think it's how you make it look because that looks like the ones you see on t shirts or socks that represent like getting high whereas the one on the right really just looks like a plant. So, it's not triggering that symbol, it goes unnoticed.

Very few thoughts removing the symbol would be beneficial. An example of a response was,

I feel like the hemp seeds image would almost be just as effective, it kind of looks like common hands if they were to just delete the leaves and do something like a waterfall. So, I feel like it would feel it will be just like organic and like calming. Kind of like that to me that packaging has caught me at least on the seeds. I feel avoiding it would not harm that. So, it's best to avoid it.

Chapter 5

DISCUSSION

This final chapter exhibits the key findings, recommendations and conclusions based on the data gathered for this research study. Three focus groups were conducted with a total of 19 Colorado State University students in order to evaluate the interpretations and implications of the use of cannabis leaves on packaging of foods with hemp-derived ingredients. Semiotics studies and theory of planned behavior were used as a foundation for examining concepts like beliefs, attitudes, social norms, perceived behavioral control and purchase intention. To evaluate these concepts, the researcher posed the following five research questions:

Research Question 1: From the late Z generation' perspective, what are people's beliefs around visuals like the cannabis leaves and the cannabis symbol?

Research Question 2: What are people's attitudes pertaining to the cannabis leaf or symbol when used in association with consumable hemp products?

Research Question 3: What are people's subjective norms pertaining to the cannabis leaf or symbol when used in association with consumable hemp products?

Research Question 4: What are people's perceived behavioral control pertaining to the cannabis leaf or symbol when used in association with consumable hemp products?

Research Question 3: What are people's purchase intention pertaining consumable hemp products that have associations to the cannabis leaf or symbol?

Key Findings

Overall, the participants who decide to partake in the research study had different beliefs around the cannabis visuals, most of them related to marijuana consumption. Beliefs had polarizing connotations

like “drug” and “medicine”. International students saw the visuals as simple plants. Common themes were manifest by the end of the researcher’s data collection process. Participants that were marijuana users had a better attitude towards the hemp hedonic products, while participants that were not marijuana users showed a positive attitude towards the utilitarian. However, most participants expressed distrust in the design used for the hedonic products not only because of the visuals but also the wording. Associations were made with marijuana edibles branding, according to participants characterized by colorful youth oriented looking packages. Participants also expressed convincing motives for and against the purchase of hemp derived food products. The two food categories used, hedonics and utilitarian, showed big limitations particularly regarding behavioral control and social norms. According to participants the hedonic products lack information and its consumption in public will not be socially accepted. Utilitarian products were perceived as expensive and unnecessary. Positive aspects regarding hedonics were their ability to generate “curiosity”, compared to the utilitarian products that had several positive health benefits.

As suggested by Kim and Mark (2018) participants showed a lack of knowledge around hemp food products. However, consumers’ perceptions of hemp-based products are not entirely a knowledge-deficit issue. The purpose of this research is to explore consumers’ interpretation of hemp-based food products that use the cannabis symbol on its package and intent to purchase those products. This study also aims to determine how those factors take shape perceived subjective norms and behavioral control. Data shows that Late Z generation consumers lack knowledge of the hemp industry as a whole. Participants beliefs around the signs and symbols presented in the packages had an impact in their attitudes towards the product. The cannabis symbol had connotations that were mostly related to marijuana consumption. When this symbol is used in hedonic food products, they are directly associated with THC edibles. The cannabis plant passed unnoticed when use with other visual elements. Low behavioral control was one of the main limitations they considered when deciding whether to purchase hemp food products. Social norms had a great impact on participant’s purchase intention, even for participants that showed excitement and interest in purchasing those products. Consumers self-described

habits and past behavior were more strongly connected to their behavioral intention compared to attitudes. This research found that self-efficacy was the most important factor to initiate behavioral intention. It is believed that if the hedonic product would have had more informative elements on the package, more participants would have been interested in trying it.

It is important to mention interesting observations that separated the first image interpretations, an asymmetric cannabis plant with multiple branches and leaves, from the second one symmetrical seven points leaf.



Figure 7 Cannabis Leaves



Figure 8 Cannabis Symbol

Most participants referred to the first image as “weed”, “smoking”, “drug”, and “people’s rights”. On the other hand, the second image was defined as “marijuana and drug culture”, and was described with words like “druggy symbol”, “quintessential image”, and “community”. In the participants’ own words, the second image represented a “symbol”. It can be concluded that in modern society, the symmetric seven-point cannabis leaf represents a cultural symbol, with positive negative and neutral connotations. A couple of participants across the focus groups brought up “hemp” as a concept to define the second image. However, participants stated that that word wouldn’t be the first thing they’ll think of or that it didn’t come to my mind until someone mentioned it. Overall, most participants agreed that important others, especially parents would have polarized reactions when exposed to that symbol.

Using semiotic theory through the observation of signs (words) and symbols (images) words used in the hedonic products like “Hempy” and “Rocky Mountain High”, and images like the green cannabis symbol present on the package design shaped consumer’s perception of the product’s nature. For most participants, those cues were associated with “edible” and “psychoactive effects”. For the hemp candy, only a couple of participants had a clear understanding of the meaning of the word hemp, and even though they were sure hemp does not have THC, they were still unclear about the purpose and the effects of the product. For the energy drink, only one participant made the association of “Rocky Mountain High” being a Colorado reference for a “local” company. The rest of the participants associate the wording with “getting high”. One participant applauded the choice of words considering, according to her, that the product “gets you high”. Silayoi and Speece (2007) concept of segmentation applies considering not all consumer evaluate package attributes the same way. Overall, the hedonic products were interpreted to be THC edibles by nearly all focus group participants. It is important to consider that on these products the cannabis leaf and the name of the product were the main visual cues of these packages. This suggest that the words and images used in those packages are not achieving the goal of VC communication which ideally aims to send a message avoiding various interpretations. If individual feel insecure about the information presented in the packages and have an erroneous idea on what the product is for this can represent a control factor that can stop them to perform the behavior of purchasing or trying those products. This is important for designers to consider in order to increase costumer behavioral control.

Utilitarian products were considered healthier vegan alternatives. Signifiers like “artisan”, “non-GMO”, “raw”, “vegan”, “gluten free” presented as informational icons helped shape consumer’s perception of the product’s nature. Participants defined those products as “healthy” and “natural”. A few polarizing associations linked to hedonic products were “expensive”, “placebo”, “buzzwords”, “unnecessary”, and “distasteful”. Interestingly, several participants didn’t notice the cannabis leaves present on the utilitarian packages. In their own words, participant felt the packages were “busy” and their eyes were “all over the place”, enabling them to focus their attention on specific visual cues. However,

the information presented was not only overwhelming but comforting and reassuring for most. This suggest that the more information is placed in a package as main elements, the least attention is directed to specific elements that can be perceived different if presented by their own, like the cannabis plant. On the utilitarian packages, the cannabis plant was not placed as the main element of the package, but as complementary visuals to provoke a natural and holistic style.

Going back to Ricoeur (1974) definition of interpretation, it is clear the relationship made by participants between the signifier, both the wording and the visuals, and the signified, referring to polarizing mental conceptualizations like “smoking”, “stoner”, “pothead”, and “drug”; and positive like “medicine”, “pain relief”, “organic”, “laughter”. These concepts support Blumer (1986) first premise, “human beings act towards things based on the meanings that the things have for them” (p. 2). However, as stated in Barbose de Almeida (2015) symbols only depend on individual perception. International students attributed meanings like “plant”, “nature” or a “tropical theme” to the cannabis leaves, so it took listening to other participants observations for international students to associate the image with marijuana. These support Blumer’s second premise, “the meaning of things is derived from or arises out of, the social interaction that one has with one’s fellows” (p. 2). International students reiterated that, where they are from because marijuana it’s not legal, the level of exposure to those signs and symbols is minimal. They emphasized the “cultural difference” that have related to their peers. These observations can be linked to Baran and Davis (2015) observations on communication changing and adapting to cultural structures in order to define reality. One of the international participants mentioned, “I actually have a question about the word hemp because I don't really know what that is. And I saw it like on the previous product and again here. So now I started to correlate it with like getting high”. The third Blumer premise is that these meanings are handled in and modified through an interpretative process used by the person in dealing with the things he encounters” (Blumer, 1986, p. 2). Thus, this participant formed a conception about the word hemp based on the comments others were making about it.

A common theme was the presence of this symbol in marijuana products, especially edibles. One of the participants mentioned the stories of intoxications that have been circulating around edibles

consumption. He developed on the idea shared by MacCoun (2015) that marijuana companies are branding edibles like candies, opening the door for confusion and bad experiences when kids get a hold on them.

More than one student mentioned the influence of Reagan and the 70s campaign against marijuana. Those participants elaborated on the way the media covered and sprayed the propaganda using similar visuals. As Mastin (2008) declared those images disseminated to form ideological views are ingrained in people's minds even today. Thus, it can be inferred that after 90 year since the antimarijuana propaganda, late Z generation is familiar with that part of history and the dissemination of those ideological views are still affecting the perception of signs and symbols used today. This idea is fascinating considering that the media used during that campaign is no longer promoted in traditional or new media. However, it is important to acknowledge late Z generation is an internet savvy population and have quick access to information.

Attitudes Around Hemp Food Packages

Attitudes towards hedonic products were polarizing. Several participants found the packages colorful and attractive. Although some felt curiosity about the audience, others consider it intentionally “childish” to target young people like college students. Some others raise their concerns regarding how “youth oriented” the products were. They believed the design was meant to target at kids, particularly the hemp candy. For most participants the hedonic product were considered THC edibles even though they were not. Although some people had previous knowledge around hemp it was hard for them to determine whether or not they were THC derived product. Very few participants expressed that they could be CBD products but they did not have enough information to make an affirmation. Small and Marcus (2002) mentioned that a number of American hemp companies exploit the association with marijuana in their advertising. A participant brought up this idea stating that the use of marijuana cues in hemp is

“overused”. Most participants agreed with Owen (2012) in that the “sexiness of hemp” can work in your favor, but for the most part it, works against the product.

Participants showed mostly positive attitudes towards utilitarian products. There was some confusion about the hemp oil use, at first sight participants believed it was a type of essential oil used for massages and muscle relaxation. Although some participants perceived the design as busy and crowded, most find the information very useful and reliable. The utilitarian products were perceived to be more expensive and for a health-driven audience.

Based on Kraus (1995), to some extent, if consumer have previous attitudes towards a product, attitudes are stronger predictors of purchase intention. Neither participant had previously tried nothing similar to the hedonic products and the intention to buy or try was lower. Overall, participant that mentioned had experience hemp food products like granola and hemp seeds had a positive attitude to buy the utilitarian hemp related products. They also believed significant others that had tried other hemp food products will be open to try the utilitarian products.

According to Blackwell, Miniard and Engel (2006) attitude towards behavior is believed to be linked with one’s beliefs that performing a behavior will lead to positive outcomes. Regarding the hedonic products, participants felt either confused about the outcome of the consumption of said products; interested in experiencing with them in the company a close friend; or not into “edibles” or “getting high”. There were not tangible outcomes identified from the consumption of those products, besides the excitement of trying something new. Overall, participants that were marijuana users felt more likely to try the hedonic products. These group of participants also had more knowledge on CBD and hemp in general. However, this study suggests that while late Z generation have some knowledge on the cannabis industry, their perceptions for their beliefs are sometimes inaccurate. Hence, designers might need to consider educating not only marijuana users but other population, like non-marijuana users that can be easily triggered by the marijuana associations.

This research shows that the lack of benefits perceived from consuming the hedonic products and the very limited information provided affected the participants attitudes as a hole. In order to retarget non-

marijuana users, positive outcomes of consumption could be the main elements of the design. That being said, some participants admitted feeling “curious” about those products and identified college students as the target population. Thus, the design strategy might not be communicating accordingly, but might be designed to target mostly young people that are part of the marijuana community and will be more open to purchase it regardless of the effects that the product could have.

Regarding utilitarian products, the majority consider them healthy options that can have several positive outcomes in health. Participants attitudes were indeed linked to the attributes the products were believed to have. Even though they were seen as more expensive alternatives, the attitudes were positive in general. This study demonstrates that the more informed the costumer is on possible outcomes around the consumption of an unknown product, the better the attitude towards that product will be. Thus, products that are new on the market should emphasize the benefits from consumption and avoid wording or visuals that can generate confusion and doubt. It is important to notice that even though some of the words used on the utilitarian products were not understood by the participants (artisan, cold press, Non-GMO), their presence generate a sense of validation that strengthen participants intention to try them.

Subjective norms

According to most participants important other’s expectations are likely to influence their decision to try or purchase hemp products. Participants that had positive attitudes towards cannabis as a whole agreed they’ll avoid being associated with the purchase of products that use the cannabis symbol based on social pressure. This supports Ajzen (1991) analysis regarding individual attitudes being independent from subjective norms towards a behavior.

Even though on the hedonic products utility was not clearly identified, some participants responses insinuated that social environment have more weight when considering the purchase of said products. This idea was diffused by Levi (1959) and Solomon (1983) when arguing that product adoption does not only rely on functionality but social meanings. A participant’s comment was, “for college

students there is “excitement” around trying “new things” that have “marijuana/hemp associations”. This reflects the perception about what others in their social or personal network are doing and the social pressure college students feels to perform or not a particular behavior. There is a sense of motivation to comply based on social expectations.

Perceived behavioral control

The lack of information was a limitation participants found when observing the hedonic products. Most participants found them “unnecessary”. The only advantage participants mentioned was the “novelty” of the product. Advantages of the product itself were not identified. There was a strong feeling of uncertainty on what will they be consuming. This was a big limitation when asked if they’ll try the product. Some participants were inclined to perform the behavior; however, the control was perceived as low; thus, their intention decreased and it was not enough to predict behavior. As Vermeir and Verbeke (2008) suggested consumers intention to purchase a product would increase if the information presented on the package makes them feel more confident.

Control factors perceived on the behavior of purchasing the utilitarian products were price, considered by most participants as expensive; feeling uninformed on the way to use; and lack of experience around taste and flavor. Several health advantages were identified in the utilitarian products. Because packages were informative, participants had a strong feeling of knowledge around what exactly they are consuming, even though many shared their lack of knowledge around what the informational icons actually meant. Overall, participants felt more secure and safe to consume the utilitarian products. It can be inferred that participants that felt more knowledgeable about the products’ benefits and nature were more in control to perform the behavior. Thus, perceived behavioral control increased participants intention to try utilitarian products even though they were unknow products for most. This is important to consider in the designing process in order to be able to identify the information necessary to make the customer feel confidence in their ability to take action.

Purchase intention

Participants shared their intention to purchase the hedonic and utilitarian products based on the information presented in the front of the packages and the ideas shared in the conversation. Utilitarian products were perceived as more reliable and thoroughly thought of. The design of those products made participants feel more comfortable consuming them. Participants appreciated that those products didn't have the "stereotypical look" of the leaves, giving them a more natural appearance and for the most part unnoticed. Some participants had previous experience consuming similar products so they were open to purchase the brands presented. Although most participants were open to try them if offered as a free sample, many expressed they would buy them.

Hedonic products generated a lot of curiosity, few participants shared they will "give it a try and see how that experience is like". However, most participants did not feel the interest to try them until receiving more information and some others were not interested at all. Participants explained there will be a feeling of judgment, some examples of comments were, "when you go to checkout cashiers and the people around you" and "I definitely wouldn't want to be drinking in public". The ones that expressed no interest based their opinion on the lack of perceived benefits compared to known brands. Considering the hemp food industry is still working on gaining recognition it will be important to emphasize on the advantages that consumers get from choosing a hemp-based brand vs the other ones on the market. Some participants mentioned the cannabis symbol is not the only factor influencing their purchase intention, but it would make them feel better if it'll be to be removed. It can be inferred that purchase intention overall relied on several factors that were and were not presented on the packages. For the hedonic products, the visuals worked as triggers that evoked previous conceptions and the wording helped frame those ideas. The lack of information regarding functionality reinforced the marijuana edibles stereotypes.

Limitations

This study has potential limitations, one of them being the research method used. In focus groups, there is the possibility that participants, when not familiar with a topic, may make up answers instead of admitting lack of knowledge, thus “focus group tends to give us a picture of how the consumer wants to be seen by others, as opposed to their actual lives” (Krueger & Casey, 2009, p. 14). Peer pressure and perceptions of others around one’s self are limitations regarding college student’s population. Social norms are a factor that can alter student’s participation and response in a group discussion. Krueger and Casey (2009) noted that peer pressure is an element that the moderator might find challenging to control because of how susceptible and influenceable this population might be. “Concerns regarding participants’ trust, honesty, conformity, and self-reflection are just some of the issues a moderator faces when conducting student focus groups” (Billups, 2012, p. 6).

Group dynamic was considered as a factor that can endanger the validity and reliability of the present research. Participants of focus groups tend to portray themselves as rational, intellectual and thoughtful individuals when discussing about past experiences or decisions they’ve made. However, behavioral research has shown that 95% of the decisions made by consumers are unconscious (Krueger & Casey, 2009). On the other hand, “Groupthink”, also known as groups polarization, the influence of dominant voices that can persuade and shape others’ responses, or passivity among participants, can produce conformity and reduce the ability for the discussion to take new directions (Johnson et al., 2000).

The presence of international students is an important factor to consider. Different countries have different stories and the interpretation of symbols can vary. Even though their opinion was appreciated, they might not be as relevant considering this study is based on the United States history and current approaches around the cannabis industry. It is important as well to mention that generalization cannot be made regarding international students’ knowledge around this topic.

Even though a manageable number of participants was aimed for this research (19), the number of participants can represent a limitation. “Critics of this method argue that the small number of participants selected in this manner are not representative of the target population. Moreover, they say, the lack of quantification allows for undue subjectivity on the part of the researcher in analyzing results and arriving at conclusions” (Bertrand et al., 1992, p. 199). Thus, the findings from a sample of 19 college students cannot be generalized for that population.

Limitations regarding the stimuli were found where it is important to notice that other relevant elements in the decision-making process of purchasing hemp food products are not being considered for this analysis. Specifically talking about packaging design, even though a general analysis was made, layout, composition, colors, alignment and typography are not factors that were cover in this research. Further research is needed to address those elements that are fundamental influences on the consumer’s perception of food packages.

After a complete analysis of the research findings it was realized that the manner in which the stimuli were presented might have limit the ability to conduct an accurate analysis of some of the results. A participant brought up an important observation around the repetitive exposure of the cannabis images at the beginning of the discussion, priming them to direct their focus on the cannabis visual when asked “what is the first thing that caught your eye?”. This might have not only manipulated the way participants process the stimuli but also their understanding of the research purpose. It is a possibility that participants were trying to guess the real goal of the study; thus, they were likely to base their behavior on what they were guessing. Based on social bias, participants tend to answer questions in a way that will be viewed as positive by others. Participants could feel that pleasing the moderator and providing “satisfying” answers to the questions based on what they think the research is about would be beneficial them. Hence, hypothesis guessing, and social desirability bias could represent a threat to construct validity (Trochim, 2020)

One limitation that could be covered on future research could be the fact that at the end participants were asked to provide suggestion to marketers that were in charge of designing the packages of hemp food products. However, some participants still didn't have a clear understanding on the effects of some of the products, specially the hedonics, so their suggestions may not be based on knowledgeable opinions.

The model performed better in explaining the purchase intentions of utilitarian products than hedonics. There are several possible reasons for this. First, the hedonic products were unfamiliar to all participants, while some of the hedonic products were familiar for more than two participants. Considering attitudes are often stronger predictors when the consumers have prior experience or knowledge on the behavior, hedonic product had an advantage. Second, most participants were not interested on energy drinks and candy as a whole, so their general attitude towards that type of products affected their intention to try the hemp options. Third, the design of both hedonic products was very different from the utilitarian so it is hard to tell if participants would have the same reaction if the hedonic products would have a used other elements that characterized the utilitarian products. It will be important to have different type of designs under the same product category.

Finally, the grocery store environment plays an important role when consumers are processing information about a product. This factor was not analyzed in this study; however, it is believed that the placement of hemp food products can affect the interpretation of the product. For example, if hedonic product used for this study will be placed in the candy aisle in a well known grocery store, customers might be less likely to think that the products are THC edibles, compared to positioning the same products on a marijuana dispensary. There could even be a difference in perspective from placing the hedonic product in the candy aisle than placing them in the pharmacy/vitamin aisle. From this study only assumption can be made about grocery store environment effects on hemp food products purchase decisions; hence, it is recommended that future studies tackle this factor to better understand consumers behavior around hemp food products.

Recommendations for Practice

Participants were quick to identify graphic design factors that helped them define the products. However, the information collected on the focus groups showed that the wording presented on the hedonic products portrait incorrect meanings for most participants. Several participants felt as though the package design was sending contradictory information. Participants expressed their desire to know more about the nature of the products, their benefits, and possible effects after consumption. For one participant the size of the big leaf on the energy drink was a way for designers to emphasize on the psychoactive effects. As mentioned in García-Madariaga et al. (2019) the images presented in a product are likely to help consumers understand faster the nature of the product when the knowledge of the product is low. Addressing beliefs, attitudes and social norms are important factors that the industry should target for its own benefit. As Smith et al. (2008) suggested, marketers should present information regarding social approval for consumption. Making the customers feel informed about what they are consuming can increase interest, generate loyalty and create real expectations.

Participant also mentioned to be more willing to try products that have the word hemp by itself with no implicit visuals of the cannabis symbol. The placement and design of the cannabis leaves passed mostly unnoticed and did not triggered marijuana associations. These products were a good example of a balanced design were the cannabis leaves were not the main visual and worked as complementary elements of the design. It is suggested to work on a balanced design where customers can focus on the most important information and can appreciate an elaborated design with some extrinsic visual elements. It is important to notice participants did not recommend removing the cannabis leaves but use them strategically, aiming to evoke naturalness and harmony.

The word “hemp” seemed to have positive associations, however, when placed together with the cannabis symbol, it lost its previous meaning and a different conception related to marijuana was made. The “hempy” wording of the hemp candy made participants feel tricked and not taken seriously. The

same can be said about the “Rocky Mountain High”, were only one participant made the “Colorado local” association versus the rest perceiving it as “getting high”. Finally, observations about the colors used on the hemp candy were made, they all agree that THC edibles tend to have “childish” colorful appearance. In a future, this information can be considered to use colors, signs and symbols in a more tactical manner.

While some participants find themselves overwhelmed with the amount of information found on the utilitarian packages, some participants expressed feeling “comforted” by the icons found on the package, even though many did not know what they meant. Self-efficacy and perceived behavioral control are likely the most important factors for regulators and policymakers to address because their role is to help protect consumers and ensure the marketplace is somewhat fair. It is recommended that policymakers address the branding of hemp food products and ensure consumers are not being deceived. This approach can help in the creation of a more transparent industry and more educated consumers.

Recommendations for Future Research

Future studies are needed to continue exploring the purchase intention on hemp derived food products and how they are being branded. It is suggested to construct the same research in a new context, location and/or culture. It would be important to study a different population like Millennials or Generation X considering they might have a different take on symbols interpretation and purchase decisions related to hemp food products. It is also recommended to analyze a different research method that can contribute with objective data. Qualitative methods can enable researcher to work with a bigger sample that can represent the target populations. It is possible that developing the research in other type of environment can assure participants answers are not based on peer pressure or subjective norms. This can also avoid the influence of dominant voices over the rest of participants.

This study noticed that gender role was an important factor when analyzing participants responses and opinions, specifically around the consumption of healthy food in general. The first focus group had only male participants; As a whole, participants in this group did not showed much interested in healthy

food or healthier eating habits. The second group had only female participants and they appeared to be more enthusiastic about clean eating and organic products. In both groups there might have been a sense of gender pressure were participants could have modified their answer to try to fit it with their male/female peers. Finally, the third group had a good balance between both genders; Overall the discussion felt more open and more points of views were shared. Future research should consider the role that gender plays in focus groups settings were interactions can shape the conversation based on gender preferences and the pressure to go along with what the majority agrees with.

Participants voluntarily shared whether or not they were marijuana users. Based on this experience, it is recommended that future studies analyze marijuana users and non-marijuana users separately. This can benefit the conversation and contribute with new data on each group's knowledge and interests around hemp food. Also, this can avoid participants influencing each other answers and perceptions.

Regarding the stimuli, based on a participant's observation regarding the constant exposure to the cannabis cues, it is recommended to use other products that do not have cannabis associations so researchers can gather more accurate data. It is suggested to analyze hedonics and utilitarian products separately to have a deeper understanding on each instead of a comparison between them. It is also important to consider other design elements that were not consider in this study since they can have an impact on how participants process the information.

There is a need for future researchers to revise and maybe include missing elements on this study like provide participants clear factual information about the products that were erroneously perceived at the end before asking for their recommendation regarding the design for hemp food products.

Conclusion

From a marketing design standpoint, understanding how late Z generation responds to hemp food packages is vital to the development and success of the industry considering this population will continue to have a significant role in the consumption of products with hemp-derived ingredients (Kim & Mark, 2018). Determining this generation's understanding of hemp and the process they follow to decode visual cues will help the industry tailor its message to satisfy late Z generation needs. The result of this research implies late Z generation consumers lack knowledge of the hemp industry as a whole. Participant's previous knowledge of the cannabis industry comes from rap songs, movies, and retail that mostly portray the controversial side of marijuana consumption. Participant's beliefs around the signs and symbols presented in the packages had an impact in their attitudes towards the product. However, the cannabis leaves and the cannabis symbol were perceived differently. The cannabis symbol had connotations that were mostly related to marijuana consumption. When this symbol is used in food products, they are directly associated with THC edibles. The cannabis plant, on the other hand, passed unnoticed when used with other visual elements.

Whether it was based on the absence of information or on its abundance, low behavioral control was one of the main limitations they considered when deciding whether to purchase hemp food products. Confusion was a major factor that affected participants' intention, particularly with the hedonic products. As suggested by Smith et al. (2008) respondents who reported a more positive attitude toward purchasing hemp products and who perceived support for consumption from those around them reported significantly stronger purchase intentions. Almost all participants agreed significant others and even strangers will not support the consumption of the hedonic products, especially in public places. Thus, social norms had a great impact on participant's purchase intention, even for participants that showed excitement and interest in purchasing those products. Lack of information in the front of the packages was the main control factor

of hedonic products. Very few participants expressed moderate to low purchase intention towards hedonic products.

Gender role was a significant factor that influenced participants responses. For the utilitarian products, mostly male participants had polarizing attitudes, mostly based on the “organic guru” trend characterized by expensive products, or not been into healthy eating. However, the rest of participants, heavily characterized by females, shared their positive attitudes toward healthier and vegan options. For the most part participants were open to try a sample if offered. Most participants expressed their belief about significant other’s attitude being supportive and encouraging towards its consumption. Even though this increased participant’s purchase intention, price and flavor were the biggest control factors.

In conclusion, these consumers self-described habits and past behavior were more strongly connected to their behavioral intention compared to attitudes. Social norms were an additional motivator of behavior intention and they should not be underestimated by hemp food companies, especially when deciding what visual should represent the product. This research found that self-efficacy was the most important factor to initiate behavioral intention. It is believed that if the hedonic product would have had more informative elements on the package, more participants would have been interested in trying it.

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Appendix A

Inviting Participants

Step 1 – Sona extra credit email Invite before June 1st

Subject line: Food Packaging Study Participation, reply by June 1st

Dear [first name]:

Last week, you registered in Sona to participate in our study on food products for extra credits in your JTC300 class. You satisfied all of our criteria to be a part of the study and were randomly selected to participate! We are able to accommodate your preferred time of [6:00 to 7:30 p.m., Monday, June 10; 3:30 to 5:00 p.m., Tuesday, June 11 or Wednesday, June 12].

You would be participating in a group discussion with about 7 other students like you about your opinion on food packages. Pizza and drinks will be provided.

If you are still available and willing to participate, please reply to this email or call me, Carolina, at (970)893-0804 by 9 p.m., Saturday June 1st. If you are not available, please also let me know so we can identify another person to take your place. After 9 p.m., June 1, your spot will be given to another person.

Once you confirm your intent to participate, I will provide you directions to the location on campus and further instructions. Do not hesitate to ask me any questions.

Sincerely,

Carolina Del Pozo

(970)893-0804

Step 2a – If they confirm, provide the following

Subject line: Food Packaging Study Participation, confirmed

Dear [first name]:

Great! I have you confirmed for the [6:00 to 7:30 p.m., Monday, June 10; 3:30 to 5:00 p.m., Tuesday, June 11 or Wednesday, June 12].

Please arrive to the building no later than [5:45 p.m./3:15 p.m.] for check-in. If you arrive later than [6:10 p.m./3:40 p.m.], you will not be allowed to participate nor receive any extra credit.

The location is the CSU campus, Clark C located at: 600 Hughes Way, Fort Collins, CO 80521.
Classroom XX.

In the meantime, if anything changes and you will not be able to attend, please contact me as soon as possible so I can secure someone else to take your place. We look forward to meeting you!

Sincerely,

Carolina

Step 2b – If they decline, provide the following

Subject line: Food Packaging Study Participation, declined

Dear [first name]:

Thank you for letting me know. We will find someone to take your place.

Sincerely,

Carolina

Step 3 – Reminder email on Sunday, June 9

Hello [Name]!

This email is to remind you about the focus group study on food packaging you are participating in on [Monday/Tuesday/Wednesday].

Remember to plan so that you can be to the building for check-in by [5:45 p.m./3:15 p.m.]. Also, remember that we cannot allow you to participate or receive extra credit if you arrive more than 10 minutes after your focus group has begun at [6 p.m./3:30 p.m.].

See you there!

-Carolina

Appendix B

Focus Group Moderator's Guide

CSU Student's Perception of Visuals on Food-based Hemp Products Packaging

Moderator reads: Hello and welcome! Thank you for coming and taking time to join our discussion about how you perceive some visual elements on food, and our focus will be on foods with hemp-derived ingredients. My name is Carolina and I will be guiding our discussion here today. You have been invited here because we want to understand how you perceive some symbols used to market some products. This is not marketing research and we are not trying to help companies sell to you. We simply want to better understand how you interpret information on the packaging and make the decision to purchase.

Before we begin, let me share some things that will make our discussions easier and more productive. There are no right or wrong answers, but rather differing points of view. Please feel free to share your point of view or experience even if it differs from what others have said. The goal of our focus group is to understand the variety of opinions and experiences rather than come to a complete consensus. Please speak up and only one person should talk at a time. We're voice recording the session because we don't want to miss any of your comments. We'll be on a first-name basis, and in our later reports there will not be any names attached to comments. You may be assured of confidentiality.

My role here is to ask questions and listen. I won't be participating in the conversation, but I want you to feel free to talk with one another. I'll be asking questions, and I'll be moving the discussion from one question to the next. There is a tendency in these discussions for some people to talk a lot and some people not to say much. But it is important for us to hear from each of you today because you have different experiences. So, if one of you is sharing a lot, I may ask you to let others respond. And if you aren't saying much, I may ask for your opinion.

Our session will last about an hour and a half. If you have your cell phone and need to leave it on, please leave the room when you get a call and return as quickly as possible.

Let's begin by getting to know more about you. Let's go around the room and have everyone introduce themselves. Please tell us your name, your major and your favorite food.

Beliefs and Associations with Cannabis Leaf:

1. "Please write down the first thoughts or words that come to your mind when you see the following image"

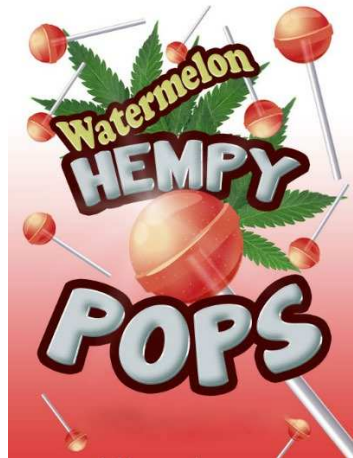
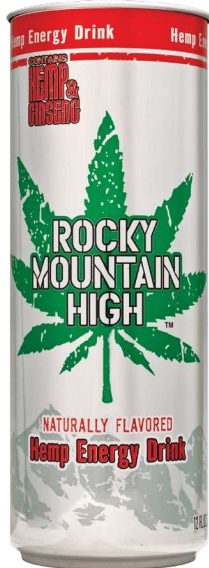
An image of the cannabis plant with several leaves will be projected in the screen (see appendix D 1). The leaves will have natural appearance. Participants will write their responses in a piece of paper provided at the beginning of the session. This paper will be collected at the end of each session. After one minute, they'll be asked to share their response and will be encouraged to develop on their ideas.

2. "Who would like to share first", "who had similar ideas", "Who had different ideas", "Who had other ideas". All participants will be encouraged to share.

A single cannabis leaf will be presented symmetrically with organic appearance (see appendix D 2)

3. "What do you believe this image stand for"
 - a. Prompt: "Where have you seen this symbol?"
 - b. Prompt: "What type of products do you think uses this symbol"
 - c. Prompt: "What type of products do you think could use this symbol"
4. "What connotations do you think people important to you (parents, friends, etc.) will have about this symbol"
5. Where does your memories from this symbol come from?
 - a. Prompt: "Have you had any experience around the presence of this symbol you want to share?"

“Now I’m going to have you look at some package fronts of food products”. The products will be shown one at a time. Same series of questions for each product picture.



6. “From this image, write down what catches your eye first?”
7. “Who would like to share first”, “who had similar ideas”, “Who had different ideas”, “Who had other ideas”. All participant will be encouraged to share.

Attitudes

8. “At first sight, what do you think about this product?”
 - a. Prompt: “Who do you think this product is for?”, “Who do you think would buy this product?”
9. “What aspects of this product interest you?”
 - a. Prompt: “What aspects are unappealing?”
10. “What do you think other people who maybe aren’t here in this room might think about this product?”
11. “What three adjectives would you use to describe this product?”
 - a. Prompt: “What do you think is the purpose of this product?”
12. “If offered a free sample, would you try it?”

15-minute break

Social Norms

Let’s talk about how you suspect other people in your life would react to seeing you consuming this product. Think of some of the people important to you --whose opinion you value.

13. “Who are the 3 people in your life whose opinions you value?” You don’t have to name names, but just describe their relationship to you.
 - a. Prompt: “Who are the 3 people in your life that influence the food and snacks you purchase for yourself?”
14. “What impressions could you imagine they would have if they saw you consuming this?”
 - a. Prompt: How does the package design and its branding relate to their perceptions?
15. “Would their opinion about you consuming this product can affect your decision to buy it?”
 - a. Prompt: if your best friend, your parents or your partner wouldn’t like you consuming this product, would you still do it or not?

Perceived behavioral control

16. Under what circumstances or for what reasons would you purchase this product? If you would never purchase it, that's fine, just let me know.
 - a. Prompt: "What do you think are the advantages of this product? What do you think are the disadvantages of this product?"
 - b. Prompt: "What goals would this product help you achieve?"
17. "What would you like to know about this product?"
 - a. Prompt: "What type of information would you look for on the package?"
 - b. Prompt: "What other information from the Internet or a store associate might you ask about?"
18. "Where do you think you can buy this product?"
 - a. Prompt: "How likely would you be to buy it from there?"
 - b. Prompt: "Do you think it would be affordable or worth the cost?"
19. "What factors may prevent you from purchasing this product?"

Purchase intention

20. "Is this a product you would buy?", "Why or why not?"
 - a. Prompt: "Did the cannabis symbol present on the package influencing your decision to purchase this product?"
 - b. Prompt: "Would you feel more comfortable purchasing or trying a hemp food product that does not contain the cannabis symbol?"
21. "Which of these designs and branding are more effective in driving your comfort with purchasing these products?"
 - a. Prompt: "As a consumer, is there a reason in which you would find the more "fun"/marijuana culture referents appealing?"

Ending Questions

22. “If you could give an advice to someone in charge of the marketing of a hemp-based food product, what would it be?”

“We’re about ready to wrap up today’s discussion”. Along the way, the moderator and assistant have taken some notes and will check with the group on some of the main points many of them made to check understanding. Participant will be asked to let them know if there’s something misunderstood or needs to be added. [Summarize key points by question]

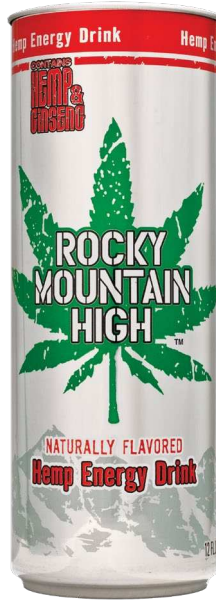
23. “Was there anything I misunderstood or need to add from our discussion?”
24. “Last, I want to check with the group to see if other experiences or opinions have come to mind that relate to our discussion today that you did not have a chance to share or would like to clarify/reiterate?”

“Thank you for your participation and a wonderful discussion!”

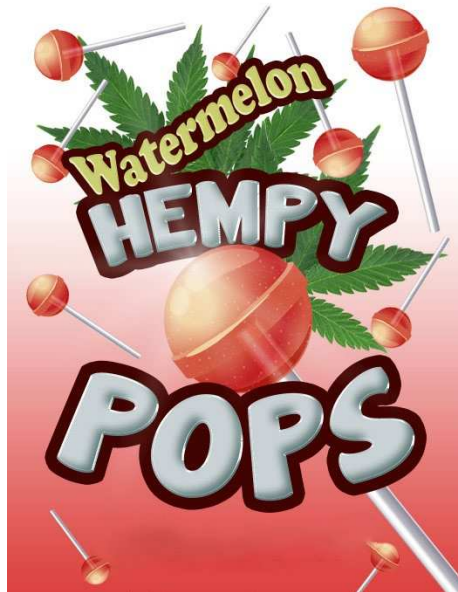
Appendix C

Product Images

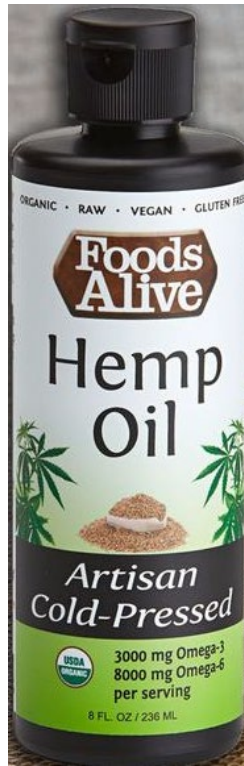
Hemp Energy Drinks



Hemp Candy



Hemp Oil



Hemp Seeds



Hemp Granola



Appendix D

Cannabis Leaves

1.



2.

