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Young, Alicia R. *Social Media Rhetoric: An Analysis of Companies Marketing Probiotics through Facebook and Twitter*

Abstract

The purpose of this research study was to evaluate the message and methods that Culturelle, Garden of Life, and Renew Life dietary supplement companies use to market probiotic products through social networks. The goal was to identify the rhetorical strategies to educate consumers about the health benefits from science-based testing, build trust with followers that could influence buying choices. The analysis concludes with suggestions how companies can engage followers, educate consumers regarding the benefits and risks of probiotics, and advertise products. The research question is: What are the digital rhetorical strategies probiotic brands use to educate, inform, and influence purchasing decisions?

A qualitative research study design was selected for this topic. A total of 254 social network post updates were analyzed for three dietary supplement companies. Social network posts were divided into thematic categories according to textual and visual elements and post analytics were compared with each company (likes, comments, shares) to evaluate engagement and if content was consistent with brand identity.

The results revealed differences in post frequency, quality, consistency, and health topics among the companies. This study contributes to understanding the digital rhetoric strategies to market dietary supplements to a wide and varied audience.

Acknowledgments

This research study would not have occurred if I didn't experience health issues five years ago that prompted me to seek alternative methods using dietary supplements and probiotics to balance digestive issues and helped me lose weight.

My family was especially supportive while I attended classes for this degree program and the culminating final field project.

A special thank you to Dr. Kate Roberts Edenborg for mentoring me throughout this process. It has been an iterative experience and I learned more about social media marketing and marketing probiotics.

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Chapter I: Introduction

Probiotics have seen a significant increase in advertising and health claims over the last decade for both traditional and digital platforms. Sales have steadily increased over the past five years. Probiotic sales are expected to exceed \$64 billion by 2023, which include supplements, beverages, and functional foods (Johnson, 2017, p. 5). People are turning to search engines, like Google, to find information about alternative and natural products, especially dietary supplements in lieu of taking prescription drugs. A typical Google search for “probiotic supplement” returns over 72 million-page results. Probiotics are found in functional foods such as yogurt and kefir as well as supplement form, including powders, tablets, and liquids. Probiotics, as defined by the Food and Agriculture Organization (FAO) of the United Nations and the World Health Organization (WHO) are “live microorganisms which when administered in adequate amounts confer a health benefit to the host” (Rijkers, 2011, p. 1292).

Dietary supplement companies are marketing health benefits of probiotics that contain specific strains of bacteria, including *Lactobacillus* and *Bifidobacterium* to balance gut flora, improve skin health, alleviate arthritis pain, symptoms associated with auto-immune disorders, digestion associated with lactose intolerance and antibiotic use, obesity, and irregular bowels as well as numerous other health issues. Although the marketing of probiotics online has been generally directed toward healthy people who want to maintain “optimal health”, the primary audience is no longer only healthy individuals. A study by the Pew Internet & American Life Project, “found that 80 percent of Internet users in the U.S. search the Internet to obtain health-related information...and those who are living with a chronic disease report a slightly higher rate” (Brinich et al., 2013, p. 1).

Probiotic supplements are widely available to consumers, they are sold in grocery and health stores, as well as through online multi-level marketing companies, such as AdvoCare and Plexus Worldwide. According to the Journal of the American Medical Association (JAMA), there are over 90,000 probiotic products available (Manson et al., 2018). With such availability and variety, how do consumers decide which product will be the most effective for their needs? Since information regarding health benefits is inconsistent and consumers who do not have access to reliable resources are likely to choose a product that doesn't satisfy their health needs (McCann, 2005, p. 224). Therefore, consumers need a variety of available resources (online, print, radio) to access authoritative and trustworthy information to better understand product labels, ingredients, and bacteria strain efficacy.

Digital and social media marketing are popular and low-cost methods to advertise products and services, influence behaviors and buying decisions, and build a trusting community for consumers. Because more people are searching for health information online and through their personal networks, utilizing social networks as a marketing strategy is an ideal platform to inform and engage consumers. "Social networks encourage low-key, conversational marketing, and serve as a conduit for person-to-person buzz," states Funk (2013, p. 65). Businesses have the opportunity to directly connect with consumers and customers through social networks to build and maintain a trusting relationship, educate followers about the health benefits of probiotic supplements, and improve customer service.

Statement of the Problem

More people are using the Internet to search for health-related information to alleviate chronic illnesses, digestive problems, and other health concerns (Brinich, Mercer, & Sharp, 2013). However, customers are making buying decisions based on little knowledge about the

probiotic supplement they need. According to research (Rijkers et al. 2011; Thompson, 2007), consumers do not receive enough information about the specific bacteria strains for specific health issues, probiotic product labels, and whether the product has undergone scientific testing for effectiveness. Consumers are further misled about the benefits of probiotics because the FDA does not regulate dietary supplements as they do prescription drugs, which consumers are more aware of government regulation. Health claims are attached to many conventional and functional foods, and dietary supplements, specifically probiotics.

Social networks, such as Facebook and Twitter, provide a low-cost and effective method to market probiotics for a wider, and sometimes specific, audience. Consumers are influenced to buy certain products and services based on trust, online recommendations and referrals, and perceived health benefits. Companies marketing probiotic supplements have an opportunity to share science-based evidence how bacteria are beneficial for digestion and other health issues, differentiate regulations and health claims for drugs and dietary supplements, use and dosage recommendations, nutrition and healthy behavior, and engage consumers to maintain trust and build community. Companies marketing probiotic products can bridge this knowledge gap by connecting with consumers through social networks, such as Facebook and Twitter. How are companies using social media, such as Facebook and Twitter to inform consumers about the benefits of probiotics? What digital rhetorical strategies are probiotic brands using to educate, inform, and influence purchasing decisions?

Purpose of the Study

The purpose of this research study is to analyze the digital rhetoric of three popular dietary supplement brands that utilize social networks to market probiotic products. The study analyzed social network posts on Facebook and Twitter. The intended audiences are the brands

identified in this analysis, social media marketers that manage dietary supplement companies' social media profiles, health professionals, and technical communicators. Understanding the social media and digital rhetoric used to influence buying decisions, identifying engaging marketing strategies, analyzing post content and follower engagement will help companies improve their social media marketing methods, close the knowledge gap between health claims associated with drug and probiotics, influence buying decisions, and influence healthy behaviors

Assumptions of the Study

The following are the assumptions of this study.

1. The followers of the probiotic companies are interested in or knowledgeable about probiotics.
2. The probiotic brands are truthful and honest with the content posted on Facebook and Twitter and their respective company website
3. The probiotic brands are truthful and honest with the content posted on Facebook and Twitter and their respective company website.
4. The probiotic companies understand that all social network content is public information and available to anyone with access to the social network regardless if a person is a follower of the company's social network profile.
5. Each probiotic brand analyzed is compliant with Federal Drug Administration (FDA) and Federal Trade Commission (FTC) regulations for health claims and marketing associated with their respective probiotic dietary supplements.

Definition of Terms

The following terms have been defined to clarify their use throughout this research and are understand the difference between social marketing and scientific terminology.

Dietary supplements. According to the FDA, dietary supplements are in part taken by mouth to supplement a diet. Examples of supplements include vitamins, minerals, amino acids, herbs, and other substances used to supplement the diet.

Digital rhetoric. Refers to communication through different digital texts, such as websites, blogs, social networks, video, images that may be combined together or shared among other digital formats, and according to Du Plessis (2013), “digital media also allows users to comment, edit, share and even create digital content on various online platforms” (p. 6).

Food and Drug Administration (FDA). This government agency regulates health claims (see definition below), among other regulations for conventional and functional foods as well as prescription and over-the-counter (OTC) drugs. The FDA does not regulate dietary supplements for safety or effectiveness before reaching the consumer; however, labeling, including active ingredients are regulated, specifically that both are truthful and do not mislead the consumer. Unlike drugs, which are regulated and manufacturers must obtain FDA approval by providing convincing evidence that it is both safe and effective.

Gut health. This term is commonly used with online marketing of probiotics and specifically relates to the health of the upper and lower gastrointestinal (GI) tract, which includes the stomach and intestines. Scientists continue to study the gut and the role it plays on combating disease, viruses, aging, and overall health.

Health claims. This term describes a relationship between a food, food component, or dietary supplement ingredient to a disease or health-related condition (Sanders, 2011). Health claims can be in the form of text, visual (including video), or auditory, located on food labels, advertisements, or marketing materials (both print and digital).

Microbe(s) (microorganisms). Microbes are tiny living things, but invisible to the naked eye. Microbes decompose matter and can be either beneficial or harmful to ecosystems. There are different types of microbes: bacteria, fungi, algae, protozoa, amoebas, and slime molds. There are billions of bacterium microbes in the human digestive tract, which aid in digestion and maintain a healthy gut.

Probiotics. This dietary supplement are live organisms, which when administered in adequate amounts confer a health benefit on the host, according to the World Health Organization's (WHO) description. There is no legal definition of the term "probiotic" (Sanders, 2011, p. 89), at a minimum, a probiotic must be alive when administered, have undergone controlled evaluation to document health benefits in the target host (human), be a defined microbe or combination of microbes (see definition above), and be safe for its intended use. Ideally, a probiotic has health effects that are documented for the strain or combination of strains present at a specified dose.

Social media marketing. Social marketing, like traditional marketing focuses on product, price, promotion, and place; however, social marketing's advertised "product" is a behavior, such as a healthy diet, weight loss, or importance of preventive health screening (Suarez-Ahmazor, 2011, p. S462).

Social proof. A term that describes the visible indications that followers are engaging with the content. This engagement includes likes, comments, and sharing posts (re-Tweet) with their followers, thus increasing audience reach and demonstrates peer recommendation (Funk, 2013, p. 6). However, it may also refer to the recommendations and reviews from a consumer's social network, other consumers, and social media platforms.

Visual rhetoric. A type of rhetoric that analyzes visual language, including text and imagery, that evokes emotion, perception, and behavior. Visual texts can attract viewers to elicit a response by through a specific behavior, act, or thought (Fox, 2013).

Limitations of the Study

This study observed two social networks for three dietary supplement companies that sell at least one probiotic product for the previous 12 months. The results of this study may have been different if more social networks and companies were studied for a longer time period. The analysis is based on data that is readily available to anyone who follows the company's social network.

Methodology

A total of 254 social network posts were analyzed for three companies with social network activity during the analysis period. Culturelle, Garden of Life (U.S.), and Renew Life's Facebook company pages and Twitter profiles were analyzed from March 31, 2018 through March 31, 2019.

Chapter II: Literature Review

This section explores the differences between dietary supplements and drugs, including FDA regulations, health claims, and barriers consumers experience when choosing probiotic supplements. This section also highlights tenets of social media marketing and goals, consumer social influences, and the role of visual rhetoric in advertising and marketing.

Defining Probiotic Supplements

There is no legal definition of the term “probiotic”; however, the FAO/WHO definition is generally accepted. Mary Ellen Sanders authored a more extensive definition of probiotics in her article (2009), “How do we know when something called “probiotic” is really a probiotic? A guideline for consumers and healthcare professionals.” Sanders (2011) states, at a minimum a probiotic must be alive when administered, have undergone controlled evaluation to document health benefits in the target host (human), be a defined microbe or combination of microbes, and be safe for its intended use (p. 89). Johnson (2017) further explains that probiotics are live microorganisms that are found in mostly in a person’s gut, but also the digestive and urinary systems. The microorganisms help regulate healthy bacteria. There are many types of bacteria strains, some that have been tested to help balance gut issues and urinary tract health. According to Johnson (2017), there are bacteria strains that specifically target certain health issues and many support more than one health area. Notable bacteria strains include *Lactobacillus plantarum* that has been linked to having an effect on the immune system and support women’s health to absorb iron, and *Bacillus coagulan* has been effective at responding to viral respiratory infections (Johnson, 2017, p. 7). Probiotics are measured as colony forming units (CFU), which determine how much of the bacteria can divide into colonies. Conventional foods, such as yogurt

and kefir, and fermented foods, such as sauerkraut contain probiotics, but probiotics are also widely sold as a pill or liquid.

Bacteria strains, to be effective by the time it reaches store shelves, must be stable enough to endure the manufacturing process and storage during transportation. Heat, moisture, oxygen, and light are the most detrimental to killing bacteria during the manufacturing process, and manufacturers must carefully control these elements. Consumers, generally, are not knowledgeable about the factors that contribute to maintaining live bacteria strains and will be ineffective for their health needs.

Health claims: Drugs vs. dietary supplements. Regulatory agencies in the United States including the Federal Drug Administration (FDA) and Federal Trade Commission (FTC) define significant differences between dietary supplements and prescription or over-the-counter (OTC) drug health claims. Dietary supplement health claims are not regulated by the FDA, unless the claim is similar to a drug health claim. Health claims often state one of the following according to Lähteenmäki (2004), “claims for enhanced functions (or) claims for reduction of risk of disease” (p. 146). The misunderstanding of such claims and misuse of the term “probiotic” by traditional marketing methods (television, radio, print, etc.) when “in the absence of substantiation of human health benefits” (Sanders, 2011, p. 89) contribute to consumer cognitive bias. Dietary supplements can market the health benefits of products as long as it doesn’t “explicitly or implicitly link the claimed benefit to a disease” (p. 90). The FDA stipulates claims for active ingredients in dietary supplements, which include:

1. Claims should be truthful and not mislead consumers.
2. Active ingredients must be clearly identified and contained within a food (according to FDA definition).

3. Generally recognized as safe for consumption.
4. The benefit should come from the nutritive value of the active ingredient, with the exception of dietary supplements. (Sanders, 2011, p. 90)

As long as these structure/function claims state they “maintain” or “support” specific body structures or functions, no approval is required from the FDA. However, consumers are misinformed about the difference in regulating the active ingredients in dietary supplement, specifically its safety and effectiveness, because this information is not clearly stated on websites that promote or market such products, according to Brinich, Meyer, and Sharp (2013). According

Health claims for prescription drugs are more scrutinized and require extensive test trials about potential side-effects and health risks, often lasting several years. The FDA may seem to over-regulate prescribed drugs and under-regulate dietary supplements, according to Dr. Campbell, an internationally recognized Cardiologist who specializes in the diagnosis and treatment of heart rhythm disorders (Belbey, 2016). In contrast, the FDA is more focused on dietary supplements’ active ingredients and how they are marketed for human consumption than health claims.

Consumer decision-making barriers. This section identifies possible barriers consumers may encounter when choosing probiotic supplements.

Consumers are overloaded with contradictory information about the potential health benefits and science-based evidence of treating health issues with “good” bacteria. The information overload of probiotic advertisements through traditional and digital platforms, including websites and mobile applications as well as online customer reviews contribute to decision-making barriers when choosing a probiotic. The following are four plausible barriers:

1. Because consumers are familiar with the lengthy clinical test trials and regulations for drug health claims as well as the available documentation that the drug has been reviewed and approved by the FDA, they mistakenly apply this knowledge toward dietary supplements. This is especially true when consumers think dietary supplements are more like drugs than food (McCann, 2005, p. 220).
2. Consumers are learning about probiotics' health benefits from websites that provide inconsistent messages, such websites "failed to identify an author, indicate how current the information was, and lacked balance" (Brinich, et al. 2013, p. 6) as well as inconsistent messages about the risks and benefits of consumption (p. 5).
3. Dietary supplement companies (brands) are not adequately providing enough information about types of bacteria strains, how to select supplements for their health needs, difference between quantity and quality of active ingredients, relevance of colony forming units (CFUs), and recommended dosage.
4. Consumers' cognitive bias compares the benefits, cost-savings, side effects, availability and pose less risk due to "natural" ingredients of consuming dietary supplements instead of prescription or over-the-counter (OTC) drugs (McCann, 2005).

The barriers above prevent consumers from selecting and purchasing a high-quality probiotic product that meets their health needs. The varied marketing and health claims and misrepresentation of effectiveness of active ingredients could lead to negative online feedback and reviews on social networks. Sub-standard information may lead to dismissing the value of reliable information from reputable sources. According to Rijkers, et al. (2011), "scientists,

regulatory authorities, food and nutrition industry, and consumers” (p. 1295) are responsible for providing proven evidence of probiotic health claims.

Social Media Marketing

The sections below discuss social media marketing business goals and social influences. Social networks are quickly becoming a necessary marketing platform to reach a wider audience base and gain specific insight to consumers’ wants and needs, thus, influencing product availability and encouraging healthy behaviors through direct contact with consumers and potential customers.

Social marketing goals. According to social media marketing author Tom Funk (2013), “Social networks are a great place to pursue word-of-mouth marketing, build brand reputation, deepen your relationship with existing customers, and practice a soft sell” (p. 39). A combination of traditional and social media marketing is a necessity to fully capitalize a brand’s market share and increase audience scope. Companies that have not embraced the marketing potential of social networks are likely missing a business to customer (B2C) relationship, including establishing a community of trust and opportunity to increase customer relation management (CRM) service. However, companies should be diligent about establishing social media marketing goals and gather information about their customers first. Funk (2013) states that social media programs must establish goals, be able to measure progress, and execute goals through various social media strategies. Goals should include: brand engagement and loyalty, lead generation, sales, and customer service (p. 7). A variety of social media strategies should be employed to keep followers engaged and interested in the brand, which include both marketing products/services and appealing to the interests of followers. Where traditional marketing lags,

social media marketing fills the gap and provides an opportunity to personally engage with customers.

Likewise, marketing dietary supplements through social networks, especially Facebook, where 68 percent of consumers are spending their time (Cooper, 2018) is an ideal platform to connect to consumers because fans of company Facebook pages are spending twice as much than non-Facebook fans (Funk, 2013, p. 2). Dietary supplement brands are marketing the health benefits of probiotics, such as maintaining a healthy gut and gut flora, alleviating constipation and symptoms associated with irritable bowel syndrome (IBS), improving brain health, mental health, energy levels, and several other health-related or gut-related issues.

Social influences. What is important to consumers when looking for answers to their health questions online. Trust. According to the Pew Research Center (2013), approximately 77% of consumers are using a search engine first to locate information for a variety of health-related issues, such as weight loss, auto-immune disorders, digestion, mental and preventive health, pregnancy and childbirth, and many other health concerns. Moreover, people are using social media and social networks to connect with other people who have similar health questions and find support as they look for answers for specific health concerns. For example, a Facebook group “Easy Gluten-Free Recipes” not only includes members posting gluten-free recipes, but also includes which grocery stores have the best selection of gluten-free products and restaurants that offer a gluten-free menu. Members are sharing their knowledge and experiences with other members to help them find answers to health-related questions. The group, like many Facebook groups, have specific guidelines for posts, comments, and behavior. If any of the guidelines are violated, the member is removed from the group by the group’s administrator. These guidelines maintain a level of trust and respect, which builds community within the group and opportunity

to share information with the member's personal social network. This community of trust also is the foundation of building and maintaining a successful social media marketing campaign, such as Facebook business pages, which seek to connect with consumers who are looking for answers to health-related concerns, products/services to satisfy a need or want, and information to make informed buying decisions.

With speculation about spreading fake news across social media sites and unethical business practices, consumers are looking for reliable and consistent messaging about probiotics, so they can trust a company's marketing and health claims and make informed buying decisions. Consumers' trust about specific brands, products and/or services, is influenced by recommendations from family, friends, and online reviews. This social proof is even more influential on social networks. According to a Business2Community blog post by Melinda Curle (2019), "Trust Me: 3 Types of Social Proof that Drive Customers to Buy", customers are more likely to purchase a product when they read reviews and testimonials on a website or social network from customers, referrals from people they know and trust, and view the "suggested products that other customers viewed" that often appear below a product's description. Research states that "90% of consumers trust product reviews from people they know and 70% from people they don't know" (Funk, 2013, p. 2).

Chapter III: Methodology

Three companies were chosen for this study to compare their social network marketing rhetoric: Culturelle, Garden of Life, and Renew Life. Limiting the study to only two social networks allowed a closer analysis and comparison of content.

Subject Selection and Description

The following companies were selected based on a 2017 independent study of probiotics by *Labdoor* and social media activity on Facebook and Twitter during the analysis period between March 2019 and March 2018. Culturelle, received the highest quality rating of 98.1; Garden of Life, known for its vegan and organic plant-based and non-GMO certified ingredients received a quality ranking of 94.1 for its Primal Defense Ultra Probiotic Formula, and Renew Life, also recommended for their science-based quality bacteria strains received a quality rating of 78.6 for its Ultimate Flora Critical Care probiotic. The researcher seeks to answer the following questions about probiotics' social network marketing campaigns.

1. What rhetorical strategies are probiotic companies using to market products? The most successful social media marketing campaigns use multiple strategies to fulfill marketing goals that engage followers and increase brand visibility. Consumers are, according to Funk (2013), 51% more likely to make a purchase after they click the "Like" button (p. 2). People are more influenced by visual advertising whether it is through a social network or offline, such as television or a billboard as well as sweepstakes, coupons, testimonials, and social activities because this form of communication involves more cognitive processes than text alone (Negm and Tantawi, 2015). The researcher expected daily posts to keep followers engaged and

- informed about their products and company values, so that followers would see a post in their newsfeed every day and have more opportunities to engage with the company.
2. How are probiotic brands using social networks as a digital marketing tool to educate consumers about the health benefits of probiotics? Social networks are increasingly used as a digital marketing tool to sell products and services, but even more to educate and influence behaviors, notably healthy behaviors.
 3. Do probiotic brands provide a consistent message about their products and support their message with ethical and scientific evidence? Consumers are looking for evidence of ethical practices, truth in advertising about the manufacturing process, science-based documentation about bacteria strains, health benefits of consuming probiotics, and risks associated with the product. Consumers want answers to their health questions, but they also want to know that companies are ethical and truthful about the products they are selling.

Instrumentation

The researcher captured both numerical data and written annotations using a Microsoft Excel spreadsheet, which included text content for each social network post, number of likes, shares, comments, and video views as well as descriptions of visuals and video content. The researcher used TechSmith's SnagIt software to capture each company's social network profile statistics including total number of fans/followers, posts (including shared content), and page design before starting research. The researcher used her personal Facebook and Twitter profile to follow each company's social network page (profile for Twitter), so that all data was visible and documented.

Data Collection Procedure

Using TechSmith (SnagIt) software, the researcher captured post data for one year from March 31, 2018 to March 31, 2019. The following data was documented for Culturelle, Garden of Life (Raw), and Renew Life’s Facebook page and Twitter profile:

- Date of post
- Post content (visual, text, video, etc.)
- Rhetorical elements
 - Keywords, phrases
 - Hyperlinks (blogs, company website, shared content)
 - Visual type (photo, video, or hyperlink)
 - Hashtag (preceded by the “#” symbol)
 - Number of times post was shared (re-tweet for Twitter)
 - Number of Comments (includes both visual, such as emoticons and text)
 - Number of Likes (denoted by a heart on Twitter)
- Number of video views, if applicable (both external links to videos and direct upload to the fan page).

Categories were assigned according to common themes among each brand’s social network page or profile according to overall post message, which included the textual and visual elements. Posts were categorized individually by brand and social network and then compared for similarities as well as number of posts for each category. Initially, each post was categorized, but after analyzing the data, general categories were selected due to an insignificant number of posts for specific categories. For example, posts that included words such as “yoga can improve mental and physical health”, gut health or joint health were categorized as Exercise/Health

because there wasn't a significant number of posts about exercise across all company social network Facebook pages.

Data Analysis

The data observed includes qualitative and quantitative analyses. A qualitative analysis of each company's social network post content was categorized according to similar themes, based on textual and visual content of each social network post. This analysis evaluated both explicit and implicit information. Social network posts were analyzed by significant words and phrases that appeared in isolation, only one post of its type/category and posts which included repeated words and phrases. Categories were identified both by textual and visual elements. Quantitative analysis includes the number of updates and user engagement for each social network post as well as number of posts within each identified category.

Limitations

The analysis was limited to what was accessible to a fan or follower and not as a page administrator, which could include a more in-depth analysis of each post's audience reach. There is some margin of error since followers and new followers could increase or decrease the number of post views, comments, and shares after the researcher took note of the statistics. The analysis is limited to the previous 12 months, which does may not represent the company's average post count and engagement due to company or marketing company responsibilities to update social networks, achieve goals with social media marketing, or other factors for lack of consistent post counts.

Summary

The results of this research revealed that dietary supplement companies that sell at least one type of probiotic product and use social networks as part of their marketing strategy do not

adequately provide adequate information about the benefits, risks, and ingredients associated with the product. The differences in digital marketing strategies and engagement metrics among companies are not consistent enough to maintain a community of trust and influence purchasing decisions. Although Culturelle is a recommended brand by health professionals and have documented the results of scientific studies of health function claims, they did not provide a consistent presence throughout the analysis period on either Facebook or Twitter. Renew Life, likewise, did not provide consistent information regarding the health benefits of probiotics or engage followers on Facebook and Twitter although their products have been recommended by some health and nutrition authorities for their effective bacteria strains. Lastly, Garden of Life's social network presence was frequent, consistent, and provided a variety of rhetorical strategies to build brand trust and awareness, engage and educate followers about the quality of ingredients in their products, and appealed to interests of fans despite a significant backlash of negative comments on Facebook about Nestle S. A. acquiring Garden of Life in 2017.

Chapter IV: Results

A total of 254 social network posts were analyzed. Posts that were shared but didn't include additional textual content from the brand were not evaluated for rhetorical elements; however, they were included in engagement data. Comments were not evaluated during this observation and analysis. Post content, including textual and visual were analyzed and categorized according to similar recurring themes and then grouped together into more general categories if there wasn't a significant (<3) number of posts for individual categories. The following sections represent data observed for each probiotic brand and social network.

Item Analysis

Each social network post was analyzed for social engagement including number of "Likes," "Comments," "Shares," and video views, if applicable; rhetorical elements, such as direct marketing of products (including special discounts and sweepstake entries), health and exercise, healthy recipes including use of the promoted product, and visual rhetoric, including static images (with and without text) and videos.

Although the individual post metrics only comprise half of the overall analytics, the numerical data does provide a significant contrast of followers versus active engagement with the post content. Refer to Figure 1 for a comparison of each probiotic brand's social network fans/followers.

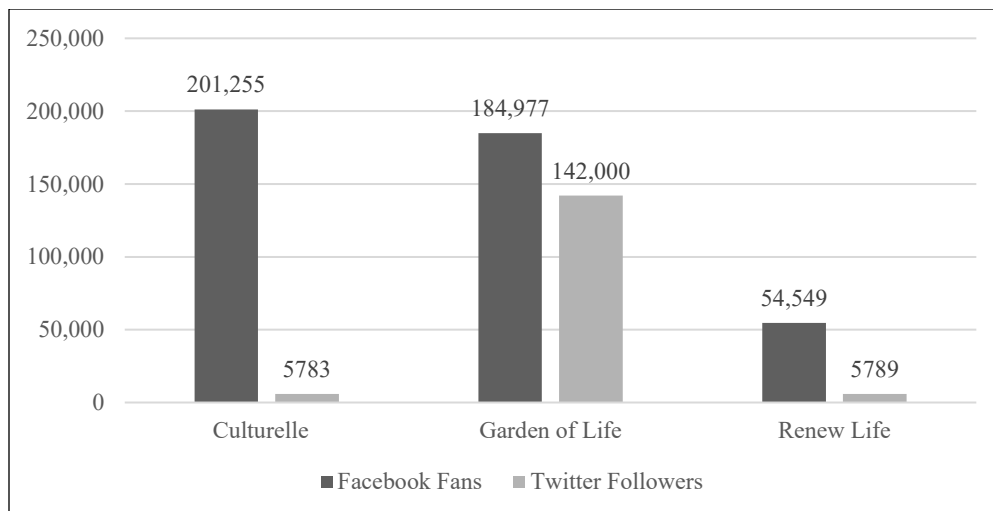


Figure 1. Social network fans and followers by probiotic brand.

Frequent (daily, weekly) post updates also keep loyal followers informed about products and interested in the brand as well as build community among followers and respond immediately to customer service feedback. Culturelle and Renew Life both had significantly less Facebook post updates (16 and 12 respectively) during the analysis period. Garden of Life had the most Facebook post updates (37) throughout the analysis period. Likewise, on Twitter, Culturelle and Renew Life had significantly lower post updates (25 and 38 respectively) than Garden of Life (126 total). In fact, Culturelle's Twitter posts only included four original posts and the remainder were retweets posted on the same day, May 2, 2018. Similarly, Renew Life's Twitter account only included five original updates and the remainder were retweets, which included 38 posts from paid partnerships. In contrast, Garden of Life's Twitter account had a total of 126 post updates, which included a variety of posts about its products, recipes that included at least one of their products, sports sponsorships, shared content from paid partnerships, and retweets from followers that tagged the Twitter account or included a hashtag. Refer to Figure 2 below for a comparison of number of posts by social network and probiotic brand.

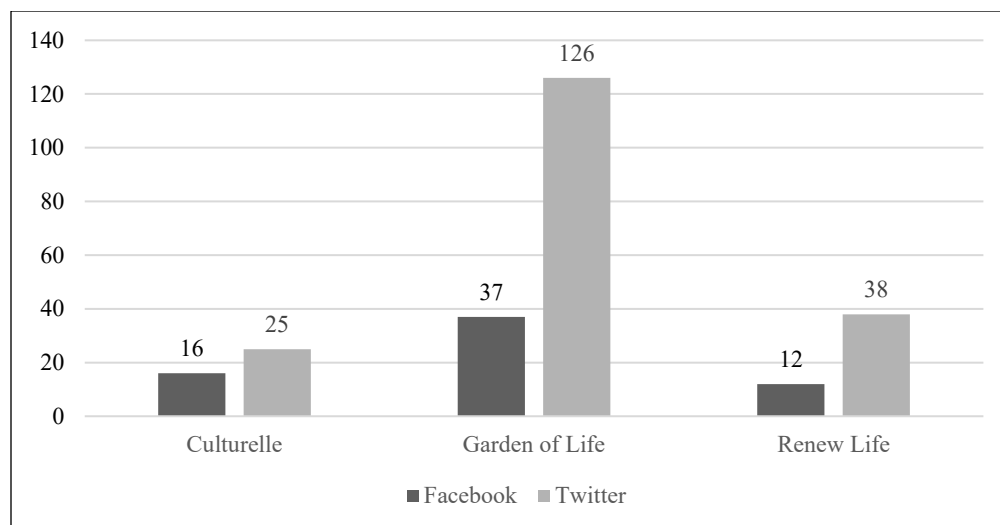


Figure 2. Number of posts by brand and social network.

The three social networks had similar themes based on both textual and visual elements, but the “share” feature on Twitter was significantly used more often for direct advertising and testimonials from company-sponsored partnerships such as *Mind Body Green* and food bloggers, like *Lemons and Lavender*. This “share” feature signifies a direct and purposeful engagement. It may indicate an acknowledgement of liking the content and desire to share the content with fan’s network of followers.

The following categories were identified for each company’s social network page:

- Facebook
 - Health/Exercise
 - Digestion
 - Food/Recipes
 - Authority/Influencers
 - Sweepstakes/Promotions/Sales
 - Product/Company
- Twitter

- Food/Recipe
- Paid advertisement/endorsement
- Product advertisement/product promotion
- Charity Promotion
- Product Specials/Sweepstakes
- Shared content

Health-related themes were selected to compare the number of posts by each company, which represent possible marketing goals to educate and inform followers thus influencing health behaviors. Each company appeared to have a specific marketing goal or focused content, such as Garden of Life's healthy recipes using at least one of their products in the ingredients or Renew Life sharing advertisements from its partners. Refer to Figure 3 and Figure 4 for a sample comparison of post content categories among Culturelle, Garden of Life, and Renew Life. Additional examples are located in Appendix A: Facebook Post Categories and Keywords/Phrases and Appendix B: Twitter Post Categories by Keyword/Phrase.

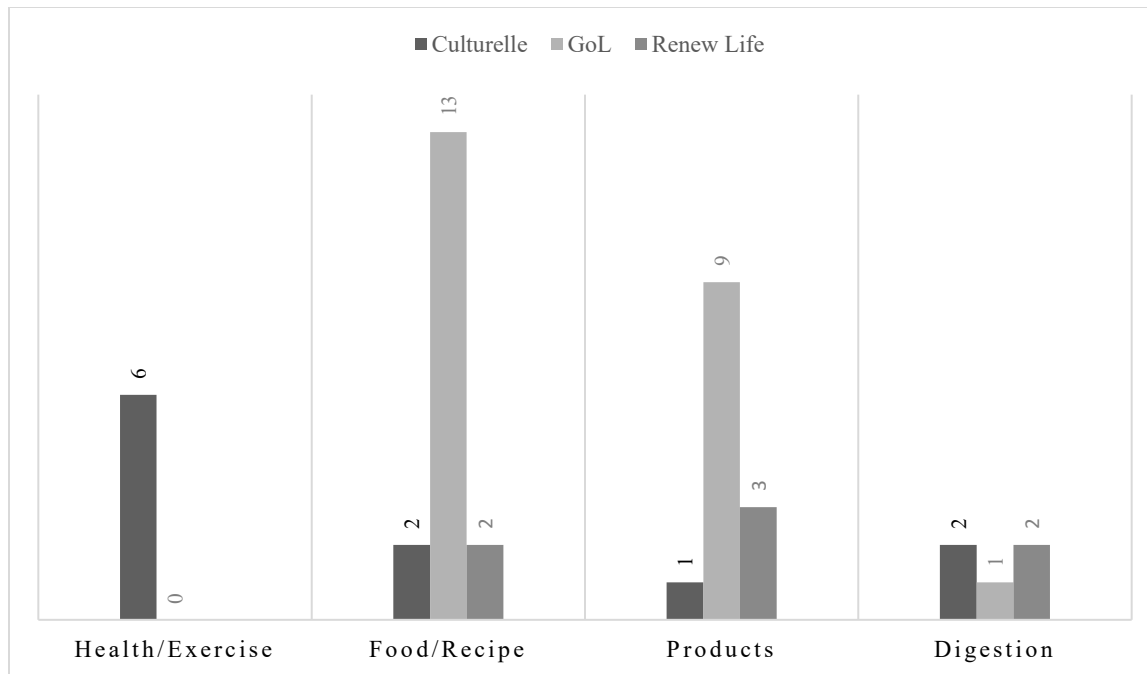


Figure 3. Comparison of content categories for Facebook.

In Figure 4 below, the shared content category on Twitter far exceeded other categories for quantity of posts. Shared content quality between Garden of Life and Renew Life were significantly different.

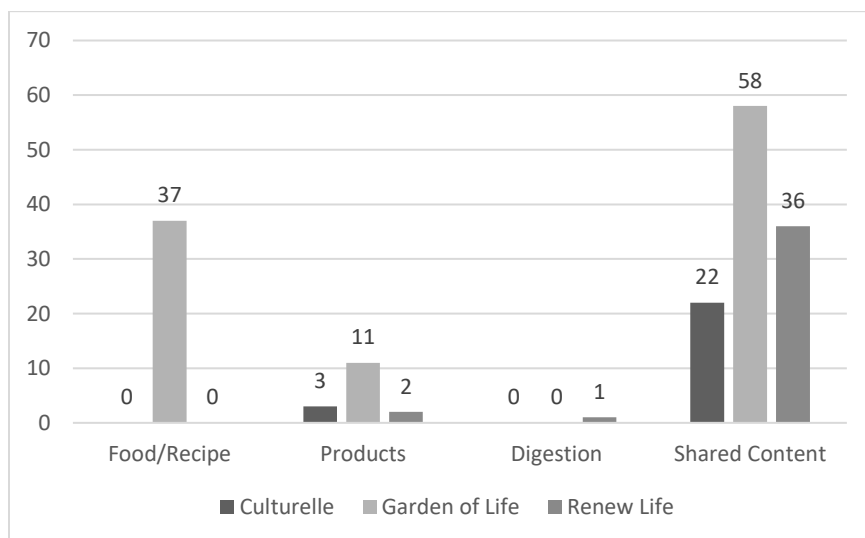


Figure 4. Comparison of content categories for Twitter.

Garden of Life shared (re-Tweet) more videos and blog links from paid partnerships (identified within the post) to better situate their brand and natural, farm-sourced ingredients in all their products. Products other than probiotics were included in shared content as well as original post updates. Specific products, such as the RAW Probiotic product line were not promoted though Facebook and Twitter as much as other Garden of Life products. Recipes dominated Garden of Life's Twitter feed with short videos how to make the recipe and a link to the company blog for more detailed information. Many recipe videos included one Garden of Life product as an ingredient. This type of "soft sell" advertising garnered more social engagement than the other two companies' "direct sell" advertisements. Surprisingly, digestion-related content was not evident during this analysis period.

Textual Analysis

This section discusses written content within social network posts, including keywords, phrases, and textual elements only found in digital formats, such as hashtags and URL links.

The written structure of text in each post could contribute to the amount of engagement as well as how often videos were seen. The structure and tone of marketing influences audience behaviors whether consumers feel a connection to the product or it satisfies a need. Refer to Figure 5 below for a sample of Facebook post categories and primary textual elements analyzed within each category.

Category	Culturelle	Garden of Life	Renew Life
Digestion	<ul style="list-style-type: none"> • Improve digestion • Stimulate digestion • Toxins • Gut • Digestive health • Digestive system • Irritate • Stress • Immune 	<ul style="list-style-type: none"> • Calming, soothing effect • Anti-inflammatory • Digestion 	<ul style="list-style-type: none"> • Help with bloating • Healthy gut • Gut • Stronger gut • Digestive health
Authority/Influencers	<ul style="list-style-type: none"> • Registered dietician • Nutritionist 	<ul style="list-style-type: none"> • MindBodyGreen, (paid partnership) • How Food is Grown, Your Food's Roots (with Garden of Life), paid partnership • Love and Lemons Chef (influencer) • What's in Your Vitamins • ATTN (Ad) 	<ul style="list-style-type: none"> • Blonde Bedhead (blogger) • Team up with Whole Foods Market and Whole Planet Foundation
Company Sponsored - Sweepstakes/Promotions/Sales	<ul style="list-style-type: none"> • Be Good Sweepstakes • Be Good Inside Sweepstakes 	N/A	<ul style="list-style-type: none"> • Save 20% promo code • 20% off all products • Black Friday

Figure 5. Facebook post categories (by keyword/word phrase).

Shared Content and Paid Partnership Analysis

Garden of Life's Facebook page shared content posted by paid partners such as MindBodyGreen.com and ATTN, whereas Culturelle and Renew Life did not share paid partnerships on their respective Facebook pages. According to Facebook's Branded Content Policy, "We define branded content as a creator or publisher's content that features or is influenced by a business partner for an exchange of value. For Facebook Pages and profiles and

Instagram accounts with access to the branded content tool, use the branded content tool to tag the featured third-party product, brand, or business partner” (Facebook, 2018). Additionally, the tagged third-party must give consent and the brand must not misrepresent itself or post any content that the brand did not create or was involved in the creation of such content. If the post was sharing a link to a paid partnership, it was identified with “Ad” in the post description or as text on the video advertisement. For Twitter, shared posts included links to other companies and/or blogs, brand endorsement videos, and “Mentions” that were identified with the “@” symbol preceding the company’s Twitter name (@GardenofLifeRAW), or a hashtag (#golbar).

Visual Analysis

Visual marketing plays a significant role in changing consumer behavior and influencing buying decisions. This visual rhetoric evokes more than one type of message and consumers’ response to the design and aesthetic elements within the visual itself. The level of comprehension, emotional response, and engagement affects a consumer’s perception of a company and the product advertised, according to Negm and Tantawi (2015), but more importantly it influences consumers’ buying decisions.

Garden of Life maximized the impact of visual advertising in all 126 Facebook posts during the analysis period. Every post contained a visual, such as a photo, video, advertised product, or photo from another post (shared content). Every post actively engaged the page’s followers by eliciting certain emotions, thoughts, perceptions, and judgement about what was represented. The most engaging visual was the use of short recipe videos and the popular “Your Food’s Roots” video series featuring Zoey Deschanel with the support and paid partnership of ATTN website. This video series provided more information about the products than any other social network post. Video views more than tripled for this series when shared on Garden of

Life's Facebook company page. The impact of having an actor promote the same message about where ingredients originate prove the company is truthful in its advertising of "organic and non-GMO" ingredients. Whereas Culturelle's near absent activity on Facebook, only had two videos posted during the same time period with minimal views from followers (about 2,000). Renew Life did not include any videos during the same period.

Chapter V: Discussion, Conclusion and Recommendations

This section discusses the differences and similarities that Culturelle, Garden of Life, and Renew Life are using Facebook and Twitter to inform consumers about the benefits of probiotics and the digital strategies used to educate, inform, and influence buying decisions for their products as well as concludes, and provides recommendations based on the results of the data collected.

Discussion

Garden of Life excelled by posting frequently on both Facebook and Twitter throughout the analysis period, used a variety of marketing strategies to stay connected with its followers, and promoted (both indirectly and directly) its RAW Probiotic line of products as well as several other dietary supplement products. This brand primarily utilized visual rhetoric to engage followers through visual imagery, most notably short videos for healthy recipes and the Your Foods Roots series. The visual images used with every Facebook post increased the amount of engagement, indicating its social proof throughout the analysis period. The consistency of both visual images and posts kept followers informed, educated, and influenced buying decision about Garden of Life's line of probiotics and other dietary supplements as well as the company's values and community involvement. Followers also learned more about the company's dedication to sourcing organic and non-GMO ingredients, providing a consistent message that builds trust within its network.

Renew Life had the least number of Facebook posts updates (12) that mostly directly advertised its products without adequate active ingredient information or the health benefits of their products. The direct sales approach, such as posts advertising product sweepstakes and online sales promotions were the only method of attracting fans to the page. Despite the

infrequency of post updates, the engagement was consistent with likes, comments, and sharing of content, which indicates its followers are engaged and interested in its products. Its Twitter post content mostly consisted of advertisements, which does not encourage response or engagement with the content. As a result, the comments, likes, and shares metrics were considerably lower than Culturelle and Garden of Life's Twitter updates.

Culturelle was less active than Garden of Life with Facebook posts (16) during the analysis period, despite its commercial success and quality ingredient ranking. This could have been due to a change with its marketing goals; however, the updates that were analyzed were mostly direct or "hard sell" marketing, which did not garner as much engagement and trust as Garden of Life and Renew Life. Its Twitter account also did not provide weekly updates throughout the year and primarily used this platform as a strategy to sell products or advertise coupons. The result was low engagement.

Conclusion

Probiotic dietary supplement brands, use social networks as a digital marketing platform to market products, advertise, build brand identity, and engage with consumers with the hope that it will influence buying decisions and increase product sales. However, without a consistent social network presence and multiple strategies to communicate health benefits of products, quality of ingredients, and connect with followers, companies are not providing an effective social media marketing campaign. Garden of Life used a variety of rhetorical strategies to engage the viewer and elicit a response, specifically videos that support brand identity, convey the benefits of probiotics, where ingredients are sourced, and why this is important when selecting products. Video marketing engages viewers in a variety of ways, including visual appeal and sensory responses. Videos provided the most engagement across all companies;

however, Garden of Life's video marketing was frequent and consistent, which resulted in the most successful social media campaigns. Companies that are genuinely interested in getting to know their audience, instead of directly selling products, are more likely to benefit and influence buying decisions.

Recommendations

Recommendations for future research would include more companies, both commercial and non-commercial (such as multi-level marketing companies) that may have a stronger social network presence; use a longer observation period that captures more post updates to monitor frequency and evaluate more thematic categories; compare social network content and rhetorical strategies with a company's website content and include an analysis of comments to better understand type of engagement. Analyzing the visual elements of specific categories may provide a more in-depth analysis of marketing messages.

Dietary supplement companies, social media marketers, health professionals, and technical communicators can use information from this analysis to increase their social media marketing strategies to inform and influence health behaviors for a wider audience about probiotics as well as evaluate the rhetorical elements to determine the best method to engage followers and gain trust.

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Appendix A: Facebook Post Categories and Keywords/Phrases

	Culturelle	Garden of Life	Renew Life
Health/Exercise	Yoga, yoga improve digestion, mental health, challenge yourself, health goals, workout	Joint health, gut health philosophy, extraordinary health-extraordinary ingredients, no added carrier oils or synthetic ingredients, gluten free, vegan, anti-inflammatory	Healthier you, renewing health
Digestion	Improve digestion, stimulate digestion, toxins, gut, digestive health, immune, irritate	NA	Help with bloating, healthy gut, stronger gut, digestive health
Food/Recipe	Recipe, fresh produce, weekly recipes, share recipes	Autumn Turmeric Cauliflower soup, keto-friendly, Keto Meal powdered shake, a meal in a glass, vegan chili stuffed sweet potato, gluten-free, dairy-free, recipe gluten free cupcakes	NA
Authority/Influencers	Registered dietician, nutritionist	Vitamin angels (charity) Mindbodygreen What's in Your Vitamins (Your Food's Roots, paid partnership) ATTN: (paid partnership)	Blonde Bedhead (blogger), Whole Foods Market, and Whole Planet Foundation
Sweepstakes/Promotions/Sales	Be Good Sweepstakes, Be Good Inside Sweepstakes	Giving Tuesday, vegan day	Save 20% promo code, Black Friday
Products/Company	NA	team received Pink Hammer Award from Habitat for Humanity of Palm	Benefits of probiotics/prebiotics, probiotics, support our brand

		Beach County Women Build 2018, mykind Organics Turmeric Boost Powder, clean ingredients, 183 certified USDA organic and non-gmo project verified (products) certified USDA organic, RAW organic meal, organic MCT powder, 80 certified vegan products	
Textual Elements (Hashtags)	#BeGoodInside	#goforthetheGoL #veganday #nationalcookieday	#StrongerForLife #PowerHour #fundherfuture

Appendix B: Twitter Post Categories by Keyword/Phrase

	Culturelle	Garden of Life	Renew Life
Charity Promotion		Vitamin Angels, Giving Tuesday,	NA
Food/Recipe	NA	Recipe, fudgy brownies, no bake maca snack bars, gluten-free, vegan, Keto shake, organic, dessert, meal prep inspiration, taco bowls	NA
Paid Advertisement/ Endorsement	NA	Real ingredients, #organic, Dr. Formulated 100% organic MCT Coconut oil	#BeingHumanTakesGuts, Renew Life Digest Smart Enzymes, 5 Tips for a Healthy and Happy Summer, KimsCravings, Julie Wunder, Camille Whiting, Clean Eating Couple (blog)
Product Advertisement/ Promotion	Congratulations today's winners, \$3 coupon next purchase, sign up for newsletter to receive expert tips, product info, coupons and more	GoL bars, organic and pure essential oils	Probiotic, gut health is easy, healthy gut, savings, Thanksgiving sale
Product Specials/ Sweepstakes	Women's Healthy Balance can support wellness	NA	#PowerHour, Enter for chance to win
Shared Content	NA	Vitamin Angels The Farm Project (with Zooney Deschanel), clean ingredients, plant based, #GOLSPORT, brand ambassador (PGA Tour)	Dietician probiotic (partnership), probiotics, travel-friendly probiotics, #Startstrong