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Storytelling Health: A Content Analysis of Narrative Transportation and Identification Cues in Direct-to-Consumer Advertisements

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STORYTELLING HEALTH: A CONTENT ANALYSIS OF NARRATIVE TRANSPORTATION AND IDENTIFICATION CUES IN DIRECT-TO-CONSUMER ADVERTISEMENTS

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Abstract

Using qualitative content analysis, I studied the visual and verbal narratives in DTCAs and analyzed transportation and identification cues that are described in narrative persuasion. My DTCAs were mined from the top ten programs (Neilsen Ratings), during the last three months of originally aired shows of the 2016 and 2018 season.

All of the narratives are either a classic drama or vignette and are messages that communicate wellness or a restoration of health. Other results show a distinct difference between the narratives that are communicated visually versus verbally, with the majority of transportation and identification cues contained in the visual information. Differences between visual and verbal information resulted in incongruent messages about the story. The ads contained transportation cues in the form of vivid images as well as novel strategies. The most frequent identification cues were activities that included self-care and recreation, enjoyment, healthy and happy relationships with family, and third person perspectives.

Some of the novel cues in the ads blur the lines between reality and fiction. Additionally, the stories are of individuals with health conditions whose health and joy has been restored as a result of taking the advertised medicine. There are few interactions with practitioners which promotes self-diagnosis and fosters an exclusive relationship between the consumer and pharmaceutical. I also found that there are skewed representation of women and men in the ads.

This study is beneficial to consumers and practitioners. DTCA literacy improves consumer knowledge about these unique types of health messages. The study also provides insight for practitioners about the influential strategies used on viewers when their patients request a medication.

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Chapter 1: Introduction

"Just say no" This public health message from the 90s was intended to discourage drug use among teenagers. I questioned the persuasiveness of the message then and wondered if it would indeed have an impact on drug use. Now, I am intrigued by a new mediated message about drugs "Ask your doctor…" I am interested in prescription medication use for personal reasons and, in addition, am intellectually interested in the ability of media to persuade through stories, the representation of individuals in advertising, and messages communicated about health. I was introduced to media studies many years ago and began to question the impact that stories in media had on individual beliefs and actions, and interpersonal relationships. My interest was further cultivated in my master's program as I added race and gender representation in media and advertisements to my research interests. It was in my doctoral coursework, though, that my intellectual and personal interests culminated and converged on direct to consumer ads (DTCAs). During my program I focused my research efforts on these unique advertisements in my coursework.

There are three types of DTCAs: product claim ads, reminder ads, and help-seeking ads. The product claim ads are the most prominent, and the focus of my research interests. One of the most startling observations I have had was the incongruent messages between side-effects and the visual behavior of the actor in these ads. For example, in a Belsomra commercial the narrator talks about leg weakness as a side-effect, while the actor climbs a set of stairs. I also noticed that when I talked to others about DTCAs most would quickly conjure a specific ad, or category of ads, and have a very visceral reaction. One colleague even told me, with disdain, "I realized they were talking to ***me…"*** I have devoted the last six years studying and learning about DTCAs, and so my knowledge, as well as my intellectual curiosity and background, uniquely positions me to

explore the strategies that DTCAs use to persuade individuals that they need a particular medicine. The stories that DTCAs tell, the way they are structured, and precise moments in the ads will provide insight about the messages that these advertisements communicate about health and being healthy.

Narratives, regardless of their modality, complexity, or medium, are influential in changing attitudes and behaviors (see for example Graesser et al., 2003). Narrative theory is ideal for analyzing DTCAs because narratives are persuasive, DTCAs are intended to persuade, and narratives are used in DTCAs to persuade viewers to ask their doctor to prescribe a particular prescription drug. Narrative studies have included both literary (Labov & Waletsky, 1967; Labov & Waletsky, 1997) and visual perspectives (Chatman, 1978); however, Fisher (1985) explained that Narrative Paradigm is a way to understand the nuances of narrative and its legitimacy through rationality and probability. Fisher (1984) claimed that humans are natural storytellers and explained the persuasive nature of narrative. He stated that the "narrative paradigm seeks to account for how people come to adopt stories that guide behavior" (Fisher, 1985, p. 348).

Narrative persuasion has garnered more research in the past few decades. Two criteria have emerged as pathways to persuasion within narratives: transportation and identification. Transportation and identification have roots in psychology; however, they have both been used to study communication through narrative and mediated messages (see for example Messaris, 1997; Green & Brock, 2002). Transportation is "a distinct mental process, an integrative melding of attention, imagery, and feelings" (Green & Brock, 2000, p. 701) which results in a viewer being completely absorbed in the story. Identification is the process of losing self-awareness, having a heightened emotional and cognitive connection with the character, resulting in viewers sharing the character's perspectives and feelings as their own. These concepts increase the

likelihood that the viewer or reader will adopt the behaviors and attitudes of the protagonist, the leading character, and have been central to much research in narrative persuasion.

I have analyzed a series of DTCAs using visual and verbal aspects of narrative theory, to explore the stories of health and healthy living communicated in a DTCA. I focused on the spoken word to assess narrative cues, and story development through characters' actions and other visual elements to assess the visual narrative cues. I used content analysis to isolate, compare, and illuminate the specific messages and the stories they communicate about health. My data is derived from DTCAs that were broadcast in the top ten programs on network and cable television, according to Neilsen Ratings, during the 2016 and 2018 seasons. Advertisements that aired during these programs in the last two months of their seasons, culminating in the season finale, were included in the analysis. Narrative theory has been used to examine the impact of health messages, as well as advertisements; however, little has been done to isolate and examine the visual and verbal narratives in DTCAs and their relationship to each other. Further, a great deal of research has examined the persuasive strategies used in advertising, some of which focuses on DTCAs (see for example Ledford, 2009; Mastin, 2007; Welch-Cline & Young, 2004); however, little research has examined narrative persuasive strategies in DTCAs. In this qualitative content analysis, I am not defining or measuring the effects of these persuasive strategies on the audience. Rather, I have located them in the ads, as identified in the literature (advertising and health communication), and identified the transportation and identification cues. This goal leads to the following questions:

RQ1: What transportation cues are used in the stories in DTCAs?

RQ2: What identification cues are used in the stories in DTCAs?

DTCAs are a unique type of advertisement, and they deviate in significant ways from commercials designed to sell a product directly to the consumer. Consumers cannot purchase a medication without a physician's prescription, so patients must not only be persuaded, they are also required to remember to "ask their doctor" about the drug until a subsequent medical visit, which often relies on long-term memory stores. As such, pharmaceutical advertisement appeals are tailored to highlight specific needs (Young & Cline, 2005), and individuals who directly deal with the illness or its symptoms respond differently to the message claims in the advertisement than those who do not (see for example Delbaere & Willis, 2015). DTCAs are atypical of other product advertisements because of the duration of their message. DTCAs range in length from one to two minutes, with the average pharmaceutical ad lasting one and a half minutes; other types of product advertisements are approximately 30 seconds or less. The extended length allows for more complex character and story development. There is an abundance of research on narratives, health, advertisements, and persuasion (see for example Escalas, 2007; Stewart, 2008; Chen et al., 2016; and Basaran et al., 2019), but very little on narratives and DTCAs. Ball and Applequist (2019) are among the few researchers to identify narratives in DTCAs and they confirm that all DTCAs include narrative elements. Even so, these researchers, as well as many others who have studied narratives in advertisements, included the visual elements without analyzing them as a separate entity. Few have isolated the visual and verbal messages in narratives and none have examined the cues distinctly.

Ball and Applequist (2019) believe understanding the narratives in DTCAs will serve as a guide to health scholars, practitioners, and policymakers. This study is informative to health communication scholars because it reveals the way that health is scripted and communicated in these advertisements in both visual and verbal narrative forms. Previous work on narrative,

health, and advertising has focused on narrative in general; however, analyzing the two delivery methods, visual and verbal, used to communicate a narrative and assessing the rationality and trustworthiness of the health story that is communicated in each provides a very detailed analysis. Additionally, future research can build from this detailed analysis.

In the next chapter I briefly discuss the history of DTCAs, the evolution to current regulations, and the different perspectives on the benefits and costs of advertising prescription medication. Following that overview is a review of the pertinent literature, including a lengthy discussion of the background, constructs, and framework for narrative theory. In Chapter 3 I explain Content Analysis, details about my data and collection methods, and the code book used for analysis. I present the results of my data collection in Chapter 4, my analysis and discussion in Chapter 5, and I close with conclusions in Chapter 6.

Chapter 2: Literature Review

> Daffy's Elixir Salutis, very good, at four shillings and sixpence per half pint Bottle: And good Hungary Water…To be Sold by Nicholhs Boone at the Sign of the Bible in Cornhill, near School-street. Where any that want a quantity of either, may be supply'd very Reasonably. *The Boston News-Letter*. September 27 - October 4, 1708

This early advertisement for a patent medicine was printed when the newspaper industry was still in its infancy. A newspaper's success relied heavily on the revenue that the early patent medicine ads generated, and the ads were prolific (Donohue, 2006). Larson (1937) stated that patent medicines rose to prominence because of these "widespread advertising campaigns" (p. 333). Over time, the ads became more creative (Applegate, 2012); their appeal strategies began to incorporate language and pictures of Native Americans, as well as testimonials from cured consumers, both of which generated trust in the product (Larson, 1937). Eventually, multiple concerns about the effect of the advertisements on the unsuspecting public began being expressed. Young (1953) revealed that in 1830 the *Illinois Intelligencer* lobbied one criticism stating that the "advertising methods were dishonest: only cures were published; all cases of failure or injury inflicted were suppressed" (p. 264). There are many similarities between these early advertisements and today's DTCAs. This chapter looks more closely at the evolution of DTCAs, from early advertising of drugs which led to current regulation, and the different viewpoints on the usefulness and detriment of these unique advertisements to patients, caregivers, and physicians. Following that section is a discussion of the precepts and constructs of narrative theory.

History and Theory of DTCAs

Direct-to-consumer advertisements (DTCAs) appear in magazines, on television, and on the internet; these advertisements are for prescription medicines and are an extension of ads that used to appear only in medical journals. By definition, DTCAs appeal directly to patients, irrespective of the physician's role in the process of acquiring the medicine. Their purpose is to prompt potential patients to consider their own health issues and to see the advertised medicine as a solution. Because these ads are for medicines only available through a physician's prescription, members of the target audience cannot make an independent decision to purchase the drug; therefore, pharmaceutical companies must script the ads to persuade viewers to talk to their physicians about the medicine. Specifically, many of these ads end with the statement, "Ask your doctor if XYZ is right for you."

History

Patent medicine advertisements began flooding newspapers in the mid to late 1800s. The stories in the advertisements were outlandish and the patent medicines claimed to be a panacea of all that ailed the stricken reader. The American Medical Association became concerned about the bombastic claims and began investigating. Eventually an enlightened public demanded more vigorous laws protecting consumers (Address before The Annual Convention of the Proprietary Association, 1938) and in 1938 the Food, Drug, and Cosmetic Act was established by Congress. This act required the Food and Drug Administration to test and approve drugs prior to their marketing (Donohue, 2006). The 1938 Wheeler-Lea Act gave the Federal Trade Commission (FTC) jurisdiction over pharmaceutical advertising. The act specifically addressed the "…abuses of advertising; the imposition upon the unsuspecting; and the downright criminality of preying upon the sick as well as the consuming public through fraudulent, false, or subtle misleading

advertisements" (The Wheeler-Lea Act, FTC, 2016). In 1951 under the Durham-Humphrey Amendment to the 1938 Food, Drug, and Cosmetic Act, drugs that could not be safely used without medical supervision were identified and the relationship between physician, patient and medicine was transformed. For the first time in history, a physician became the only means of access a patient had to a prescription drug and advertisements directed at consumers ceased while marketing efforts by pharmaceutical companies shifted to focus solely on physicians (Donohue, 2006).

Contemporary Advertisements. After years of an advertising hiatus, pharmaceutical companies began marketing their drugs to the consumer again during the 1980s. Booth Pharmaceuticals created the first contemporary DTCA, which was a print ad published in U.S. newspapers (Kalyanara & Phelan, 2011). Concerns quickly arose about the impact that the ads would have on the public, and the American Pharmaceutical Association called for pharmaceutical companies to stop their advertisements as the FDA, which had assumed jurisdiction over pharmaceutical ads in the 50s, reviewed their regulations. Subsequently, the FDA called for a voluntary moratorium until a policy could be created to address the concerns (Bell et al., 2000; Donohue, 2006). They ultimately eased their moratorium on print ads, explaining that they did not have adequate staff to monitor them, and that the ads did not appear to pose an immediate public health risk (Kalyanara & Phelan, 2011). The FDA did hold fast to their strict regulation of broadcast advertisements, requiring full disclosure of the risks, benefits, and details about the drug; this proved daunting to advertisers' ability to meet the requirements in the short time allotted, so pharmaceutical companies continued exclusively with print advertising (Donohue, 2006). In 1996 the FDA lifted its strict regulation on televised advertisements and shortened the time required to communicate side effects by allowing

marketers various ways to disclose them, e.g. verbal ***and*** textual, as well as providing contact information for further information about risks (Weinmeyer, 2013). The first broadcast advertisement since the ban was for Claritin; it was released in 1997. Soon after, the FDA created the Office of Prescription Drug Promotion (OPDP) and charged it with supervision of the advertisements. The department currently monitors companies that sell prescription drugs to ensure that they provide information that is truthful, balanced, and accurate.

Current Regulation. Regulation by the FDA seeks to ensure consumer protection through fair and balanced information: labeling laws guide FDA regulation of pharmaceutical advertisements in both print and televised form (Arnold & Oakley, 2013; Plank, 2011). However, different media require different communication practices. Broadcast advertisements are required to "include information relating to the major side effects and contraindications of the advertised drugs in the audio or audio and visual parts of the presentation and unless adequate provision is made for dissemination of the approved or permitted package labeling in connection with the broadcast presentation shall contain a brief summary of all necessary information related to side effects and contraindications" (21 CFR202.1(e)(1), 2020). Adequate provision means that the ads "are not false or misleading in any respect," provide balanced information about benefits and risks of use, include all of the product's major risks, and use "consumer friendly language" (USFDA Guidance Document,1999).

The FDA distinguishes three types of advertisements: product claim ads, reminder ads, and help seeking ads (Goyal & Basal, 2015). Each has different requirements for its disclosures and claims. Product claim ads are the most thoroughly regulated and are the ads identified in the *Code of Federal Regulations, Title 21*. These advertisements, which are the most common, include the drugs' risks and benefits, and are required to demonstrate "fair balance" between risk

and benefit (Goyal & Bansal, 2015). Fair Balance is the FDA's term for information that is not distorted through the presentation of information in a biased manner (21 CFR 202.7). The second type is reminder ads, which make no claims about the product's usefulness or indications, but instead only identify the name of the drug (21 CFR 202.1 (e) (2) (i); Goyal & Bansal, 2013). Reminder ads are exempt from federal regulation. The last type of advertisement is help-seeking ads. These advertisements create awareness of health conditions, indicate that a treatment is available, and encourage discussions with a physician. But they do not mention a specific pharmaceutical (see Goyal & Bansal, 2015; Lyles, 2002; Young & Cline, 2005). Help-seeking ads are also exempt from federal regulation. The focus of this research is on product claim ads because of their pervasiveness in comparison to the other ad types and their persuasive intent. There are diverse perspectives about product claim ads' impact on the consumer, specifically their benefits versus risks. Some of the opposing perspectives can be found in the literature of advertising, business and economic, health communication, medical, and sociology.

Advantages and Disadvantages of DTCAs

Proponents claim DTCAs provide various benefits, whereas opponents claim that they harm the consumer and negatively impact the relationship between physicians and patients. Paradoxically, many arguments heralded in support of DTCAs are also those cited as evidence of their harmfulness. For example, the American Medical Association states that the advertisements are driving prescription prices up; yet industry leaders claim that the increased competition that the ads facilitate are driving costs down. Even the medical and health communities do not agree on whether DTCAs are advantageous or disadvantageous. Some physicians and professors believe that DTCAs help prevent the undertreatment of conditions. Kravitz et al. (2005) conducted a randomized control trial studying physician interactions and prescribing behaviors.

One hundred and fifty-two physicians agreed to the study and were told that they would see two patients over a two-month period; researchers took extra measures to ensure that the identity of the patient actor was not revealed. Actors were trained as patients to assume one of three roles and present with symptoms of either major depression, an adjustment order, or no symptoms at all and request medication (in general) for the symptoms, request a specific medication linked to a DTCA, or make no request for medication. The hidden recordings of the office visit revealed that the prescriptions for the specific drug request by patients presenting with major depression increased, leading these researchers to conclude that DTCAs prevented the undertreatment of the condition. In contrast, Frosch's et al. (2007) grounded theory and content analysis of print ads found that they were not educational as proponents of DTCA claim. They also assert that the limited information about risk factors, populations affected by the condition, and the prevalence of the condition creates ambiguity that may translate into a misunderstanding about who is actually at risk and would benefit from treatment. Articles in economic and business journals tout the benefits of the advertisements claiming that they reduce costs (Kalynara & Phelan, 2011) and reduce non-compliance with medical advice (Armantier & Namoro, 2006). Many articles published in medical journals claim that the ads compromise the patient, physician and the patient/physician relationship (Grow et al., 2006) and create a medical consumer (Berg, 2008). Some health communication literature indicates that they are not accomplishing their various goals, such as education (Macias et al., 2007). A fuller discussion of the health communication literature begins on page thirteen. This multiplicity of perspectives complicates understanding the overall impact of the ads.

Benefits. Several researchers have documented the positive impact of DTCAs. Armantier and Namoro (2006) found that DTCAs decreased patient noncompliance for anti-glaucoma

drugs. They explain that anti-glaucoma drugs have a high rate of refills that are not picked up or filled by patients. Their findings indicated that DTCAs increase compliance because they serve as prompts and reminders. Others argue that DTCAs help educate and raise awareness for consumers about a disease or issue and about various treatment options (Goyal et al., 2015; Weissman et al., 2003; Zachry & Ginsburg, 2001). Sometimes this knowledge and exposure serve to reduce stigma and counter stereotypes associated with the malady (Goyal et al., 2015; McKeever, 2014). Likewise, other reported benefits include patients being more active in their healthcare by encouraging autonomous choice, seeking help for untreated or undiagnosed issues, and promoting proactive communication with their doctor (Block, 2007; Goyal et al., 2015; McKeever, 2014; Zachry & Ginsburg, 2001). Pharmaceutical companies claim that DTCAs serve a necessary function because they provide "accurate, balanced, and scientific information" to consumers, which results in safer use of medication and autonomous and appropriate management of individual health (Rubinelli et al., 2008, p. 49).

Costs. Opponents of DTCAs claim that they create a variety of issues. Some of the issues associated with DTCAs include: disease mongering and medicalization (Waite, 2012), self-diagnosis (Arney & Menjivar, 2014; Conrad & Leiter, 2008; Donohue, 2006; Mintzes, 2012), incomplete information (Goyal & Bansal, 2015), damage to patient autonomy (Germeni et al., 2013), and misleading information (Fischer, et al., 2009; Frosch, et al., 2010). Disease mongering occurs when an advertisement convinces otherwise healthy people that they are sick or individuals that are somewhat sick that they are very ill. Some researchers claim that DTCAs market sickness by creating stress and tension in consumers and prey on their fears and insecurities; the drug, in turn, is presented as the remedy for the heightened response (Llamas, 2016; Waite, 2012). Another way that DTCAs negatively impact individuals is medicalization;

this occurs when natural human conditions are perceived as medical conditions. For example, Moynihan and Cassels (2005) argue that the normal emotional changes that occur prior to menstruation now indicate that they may be a sign of an underlying psychiatric condition.

Additionally, the emphasis placed on the benefits of a drug in comparison to its side effects may mislead some consumers (Goyal et al., 2012; Zachry & Ginsburg, 2001). Slick advertising increases this influence on consumers as actors in white coats convey credibility and increase trust where illusory claims are made that make the brand appear more innovative, even when older and less expensive drugs might be more practical and beneficial (Zachry & Ginsburg, 2001). Other arguments include complicating the physician/patient relationship. There are reports of increased tension between physicians and patients, and indications that physicians are more likely to prescribe a requested drug (Goyal et al., 2012; Mintzes, 2004). Sometimes a patient's request, especially when inappropriate, results in longer visits (Shah et al., 2005). Furthermore, an increased sense of entitlement to a requested drug compromises the patient/physician relationship when physician credibility and authority is questioned (Germeni, et al., 2013). DTCAs are a type of communication imbued with visual and verbal information about health that connect it to the reading and viewing audience; therefore, it is important to explore the work of health communication scholars.

Health Communication Perspectives

Health communication scholars have studied DTCAs from various angles and contribute positive and negative perceptions about the potential cost versus benefit of these ads. Many health communication studies on DTCAs include participant survey research; some others have used content analysis. Variables such as age, culture, and pre-existing conditions on the perception and influence of DTCAs and risk perceptions have been examined. Other research has

concentrated on the message itself through content analysis, comparing and exploring persuasive strategies, visual appeals, population appeals, and types of narratives.

Participant research. A large body of literature reports on the use of participant research to explore DTCAS. Some of these studies focus on understanding the individual and persuasiveness of exposure, with concentrations on trust and the way that age, culture, and risk of disease or a pre-existing condition impact participant perception of DTCAs.

Trust. Trust in DTCAs is a common theme in health communication studies, and research has revealed that several individual factors affect the level of trust or distrust in DTCAs. Ball et al. (2016) used socioemotional selectivity theory, which is the "confident belief that prescription drug advertising has been created with competence, benevolence, and integrity," to study DTCA trust (p. 17). These researchers looked at the way different age groups processed and responded to DTCAs. A relationship was found in all age categories between attention to the ad and attitudes, and behavioral intentions. However, DTCA trust in older individuals is contingent on an interpersonal relationship with a physician. When older individuals have a good relationship with their physician, they tend to trust the information in a DTCA less, but this affect was not present in younger participants. Manika et al. (2014) also looked at age factors and trust. Their research focused on associations between young women, HPV vaccination intention, and DTCAs of the brand Gardasil. Using the Health Belief Model, they surveyed young women and found that exposure to Gardasil ads were not directly related to decisions to be vaccinated. However, individuals who had already been vaccinated communicated more trust in the ads than those who were not vaccinated.

One's culture also affects the perception of DTCAs. Jisu et al. (2010) surveyed Korean and White Americans about their perceptions of various sources of prescription drug

information. They included DTCAs as one source of information for information and compared perceptions about their usefulness (DTCAs). They found that Korean Americans evaluated the usefulness of mass media sources to find additional information about drugs advertised in DTCAs more positively than White Americans, regardless of acculturation. On the other hand, Adams et al. (2019) found skepticism across cultural lines. They conducted focus groups of English-speaking minorities, Spanish-speaking minorities, and Whites to understand their views on DTCAs. All groups reported questions of accuracy and saw the television ads (more than the print ads in the study) as product promotion intended to generate a profit. They believed that pursuit of profit could result in manipulative advertisement that did not adequately convey information. Other negative perceptions of DTCAs were communicated in all groups. They believed that some information is not clear, the ads promoted a tendency to overuse, and they increase the potential for addiction. Differences arose between the groups at the point of treatment options. English-speaking and Spanish-speaking minorities believed that DTCAs revolved around the tendency of American culture to rely on prescription drugs as a primary health treatment. However, English and Spanish-speaking minorities view prescription treatment as only one of many treatment options. This differing cultural perspective on health treatment impacts the ability of DTCAs to persuade in those groups.

In addition to age and culture, other research has identified types of consumers and their levels of trust in DTCAs. Arney et al. (2013) conducted extensive interviews of consumers who were both magazine readers familiar with DTCAs and anti-depressant medication users. Their grounded theory work resulted in the establishment of the following consumer types who trust DTCAs: the lay physician who uses DTCAs to diagnose themselves or others, the informed shopper who uses DTCAs to make important health care decisions, and the voyeur who reads

DTCAs as a way to learn about the world. In contrast, the evader consumer type distrusts DTCAs. This consumer avoids DTCAs for two reasons: they are not interested in information about prescriptions or they distrust the information. Those who distrust the information are not necessarily disinterested in DTCAs but they believe that the information in them is biased and does not apply to them. Trust is an important component in persuasion and DTCAs. Other participant research is more specific to the psychology of the consumer and looks at risk and optimism.

Risk Analysis. Several health studies have looked at the attenuating response of risk because of exposure to DTCAs. Some research exploring risk theory and optimism bias with DTCA exposure has looked at depression (Park et al., 2014), cognition processing (Ju & Park, 2018), and DTCA uncertainty in older populations (DeLorme & Huh, 2009). Other approaches have focused on diet and exercise behaviors and perceived disease risk (Frosch et al., 2011; Park et al., 2016).

Risk compensation theory, also known as the Peltzman Effect, assesses behavioral responses based on a sense that increased safety and security protects an individual from risk (Kasperson et al., 1988). Risk compensation theory has been studied in public health with driving laws, such as mandatory seatbelt use (Mackay, 1985), and in various health areas such as HIV/AIDS prevention (Kalichman et al., 2018), smoking (Augustine et al., 1989), and opioid treatment (Winograd et al., 2020). There are arguments that rebut risk compensation theory (see Pless, 2016); however, it has garnered interesting results in health communication. For example, Niederdeppe et al. (2017) combined social cognitive theory and risk compensation theory to measure behavioral responses to DTCAs. They compared statin (medicines to lower cholesterol) DTCA exposure to exercise frequency and fast food consumption and discovered that exposure

to statin DTCAs only slightly increased frequency of exercise. However, they found that increased exposure to statin DTCAs increased visits to fast food restaurants by 4.5%. They speculate from the content of the ads that statin DTCAs are more likely to show physically active characters opposed to low-fat food; indicating that the way characteristics were scripted in characters reduced concern that the viewer had about fast food consumption. It leads to the faulty impression that diet is irrelevant and they note that this discovery suggests that a large population of otherwise healthy people could potentially be at risk because of exposure to statin DTCAs. Other research may further explain this interesting finding. For example, Adam and Harder's (2018) content analysis revealed that DTCAs seem to communicate that drug compliance is the key behavioral and lifestyle change; the ads most often present characters living a healthy lifestyle and rarely living an unhealthy one. Results from both of these studies suggest that the events and elements included in the setting (or the lack thereof) in the DTCA may impact the way that the viewer processes health messages.

Analyses have also focused on the way that optimism affects risk perceptions. Optimism bias is a self-serving, fear-reducing mechanism that individuals employ to mitigate risk (Weinstein, 1989). An individual's tendency to feel less at risk of experiencing disease than their peers is one component of the theory. Using optimism bias, Park and Ju (2016) studied the impact that Alzheimer's Disease (AD) DTCAs have on a participant's belief that they are at risk of a future diagnosis of AD. They found that the more knowledge an individual had about AD, the less DTCA exposure affected their optimism that they were not at risk. In other words, the more they knew about AD the less likely it was that a DTCA would diminish their perceived risk of contracting the disease. Conversely, individuals with little knowledge of AD who were exposed to AD DTCAs were more optimistic that they were not at risk in the future for AD;

these individuals felt like they were not at risk after the DTCA exposure. These results indicate that individuals who are exposed to AD DTCAs are more likely to perceive risk when they are not as literate about the disease.

Knowledge beyond the disease or conditions targeted by the DTCA also impact participant assessments of the ads. Ju and Park (2020) assessed participant knowledge about DTCA regulation and participant's ability to recall and recognize potential side effects of a fictitious medicine. Participant knowledge of DTCA regulation was measured and then compared to the recall and recognition of the risks communicated about the advertised drug. They found that consumers who were very knowledgeable about federal advertising guidelines paid more attention to the risk information in ads. They believe that DTCAs have the potential to contribute to public health as a valuable source of information, but that the FDA should make a concerted effort to educate the public more about the regulations around DTCAs and how viewers should assess them.

Content Analysis. Fewer studies have used non-participant research to explore the content in DTCAs. Most of these, and most relevant to this research, have used content analysis. These studies explore the design of persuasive appeals to specific populations, the visual cues as a persuasive tool, the evolution of DTCA's adherence to regulations and policy over specific time periods, and narrative presence.

Populations. Ledford's (2009) content analysis of online prescription marketing studied the way that DTCAs were structured to appeal to women searching for contraceptive information. She used the social amplification of risk framework and the elaboration likelihood model. The social amplification model explains the way risk information interacts with social, psychological, institutional, and cultural processes to produce behavioral responses (Kasperson

et al., 1988). Petty and Cacioppo's (1986) elaboration likelihood model explain the different pathways an individual might use to process a persuasive message. Ledford (2009) studied specific websites that had been advertised as a source for more information identified in either a Google search or a DTCA. The first page of the website was analyzed for readability and the use of risk communication. The first pages indicated a disproportionate presentation of benefits versus risks, and risk information was inconsistent. She states that the readability score on these websites exceed the literacy recommendation and more guidelines should be established by the FDA regarding the presentation of risks and benefits on websites. She also explains that individuals who seek more information on websites about health use visual and textual cues to ascertain credibility; these cues represent trust in the information, credibility derived from character portrayals, and similarities with the lived experience of patients. These representation cues include physicians and women taking the medication.

Mastin et al. (2007) looked at DTCAs that were advertised in Black, women's, news, and entertainment magazines from 1992 – 2002. These ads were analyzed to determine the models used, the health conditions, and the roles that were portrayed. They used social identity theory to frame their study, which is a sense of personal identity based on group affiliation. They found that DTCAs in Black magazines increased exponentially after 1997, Black magazines were more likely to contain ads of black models, ads for STDs were primarily in Black magazines, there were no ads for heart disease in Black magazines, and a wide variety of drugs were advertised to women. These results indicate that pharmaceutical companies' vigorous marketing strategies targeted specific communities and reinforced specific beliefs about those communities. For example, at the time of the publication black men and women were more likely to die from heart disease than white men and women, yet the ads in black magazines focused on STDs and not

heart disease. Additionally, the targeting and broad range of medicines that were advertised to women reinforced a role as caregiver.

Welch-Cline and Young (2004) analyzed DTCAs in magazines from 1998 and 1999. Using social cognitive theory, they analyzed the visual features in print ads: the prevalence and demographic of the models and visual cues offering identity and relational motivators/ rewards. They found that the images in the ads communicated health and an active lifestyle, regardless of the debilitating symptoms of the illness. Social or relational contexts were depicted by two or more people, which carry additional social messages. For example, ads for Viagra depict a man and a woman; they urge readers to consider the difference between this depiction and depicting a man alone or two men. In contrast, women were primarily alone in ads for contraceptives, reinforcing the social norm that women are largely responsible for preventing unwanted pregnancies. The presence or absence of others in these ads communicate diverse meanings about social norms and expectations.

Regulation Adherence. Several studies have analyzed DTCA content for adherence to federal regulations. Kim (2015) reviewed warning letters and notices of violations of online DTCAs given to pharmaceutical manufacturers from 2005 – 2014. They categorized the following violations: risk information, efficacy information, indication information, product labeling, material information issues, and approval issues. The majority of these violations were lack of risk information or misrepresentation of efficacy information. Arnold and Oakley (2013) used the guiding principles from the PhRMA Office of Accountability website to evaluate highly advertised pharmaceuticals either in print or on television between January 2006 and December 2009. They analyzed the communication of the risk information included in the advertisements for Viagara, Cialis, and Levitra and found that in most of the ads almost all major risks were

communicated. They also looked at the PhRMA guiding principle to communicate alternative treatment options for the prescription. Other than surgery as an alternative to using Viagra, no ads in any format or associated website contained alternative treatment options. Avery et al. (2012) examined fair balance in the communication of benefit and risk information in antidepressant DTCAs in magazines and on television between 1995 and 2007. They found that magazine ads were twice as likely to list risks in order of their prevalence and not severity, and television ads were nine times more likely to place risks according to prevalence. They revealed narratives in televised ads were presented at either a slower or regular speed (in comparison to risk information), which increases comprehension of the narrative. Also important is their finding that a positive visual message was communicated simultaneously with the verbal explanation of risk information.

Recent comparisons of peer reviewed articles between 2000 and 2013 determined that there has been more research attention given to non-health studies and narrative than health studies and narrative (Dahlstrom, 2017). However, more work on health and narratives in DTCAs is beginning to emerge. Kaphingst et al. (2004) conducted an exploratory content analysis of broadcast DTCAs. They looked at regulation, educational content, and narrative; however, regulation and educational content were explored in depth while exploration of narrative was limited. They found that consumers were limited in the amount of time allowed to ponder benefits versus risks and were exposed to excessive complex contextual information. These affect the ability of the consumer to assess risk. Additionally, details of risk were clustered into one segment instead of dispersed throughout the ad, which minimizes the perception of risk. The ads also provided superficial coverage of educational information, and incongruent information between the story's audio and visual components. Narratives in DTCAs were not

explored as a singular approach until much later. Ball and Applequist (2019) used narrative theory to classify the types of narrative that are present in ads. They categorized DTCAs as either classic drama, vignette, first person, second person, or third person based on the language and format used by the narrator (indicated by narrative style). Classic drama includes one exemplar and one storyline; whereas vignette includes more than one exemplar and one or more emerging narratives. Ball and Applequist (2019) concluded in post-hoc observations that all DTCAs contained narrative elements, whereas a few included both narrative and non-narrative elements (e.g. graphs or charts). Barbatsis (2005) argues that communication scholars should view emerging stories not only from a linguistic perspective, but also from the way they are crafted pictorially as a holistic approach to understanding the narrative.

Narrative Theory

Narratives have the potential to transport readers into a fictional world where conflict is resolved, and they are provided closure to tension. Narratives provide hope through the evolution of transformation to a better place. Stories also help readers connect and understand the world. DTCAs are a unique type of advertisement that use narratives and health stories. These ads are potentially persuasive to the lay physician, the informed shopper, and the voyeur (see Arney et al., 2013). Therefore, it is important to analyze the health stories that are being communicated. Transformations are a hallmark of narrative that contribute to sense-making; therefore, these transformations from illness to health and interactions between characters are important to understand (see for example Barbatsis, 2005).

Narrative Theory Defined. Narratives are a type of communication that explores human experiences (Chatman, 1978; Fisher, 1985), including love and loss, birth and death, conquest and defeat (Slater, 2002). Meaning making is central to narrative theory, which deals with the

effort to understand the meaning created through the interaction of events in a story in relation to each of its segments (Puckett, 2016), referred to by some as plot. The basic premise of narrative is that the meaning created in a story is done so through the way that the story is told and the way that an event or series of events is represented (Abbott, 2002). The coherent structuring of those events organizes meaning (Cohn, 2013). Narrative structure positions a story along a time continuum (not necessarily in chronological order) indicated by an ebb and flow of situations and conflict that is ultimately resolved. Story content in narratives are evaluative (Labov & Waletzy, 1997) and they "establish a meaningful life-world…as a way of relating a truth about the human condition" (Fisher, 1985, p. 6). Fisher (1985) claimed that an important element of narrative is that it must be rational; a rational story is one that should be accepted and is deemed trustworthy as a guide to belief and action. It is communicated through the discourse, which adds emotional meaning to the information in the story (Cohn, 2013; Marković , 2012). Narratives raise awareness of certain issues and attributes causality (Niederdeppe, et al., 2008; Niederdeppe, et al., 2012). Additionally, the connection to the reader (or viewer) is made through that representation of human experience (Chatman, 1978), a composite of the "events, characters, settings…" (Labov & Waletzky, 1997, p. 13), but it must be both believable and probable to be considered an effective narrative (Fisher, 1985).

Visual Narrative Defined. Visual narratives create meaning in multiple ways. Visual narrative is defined by Pimenta and Poovaiah (2010) as the explicit telling of events through visual means, seen and understood by the human eye. Visual narratives are demonstrated through the events, the setting in which the events transpire, the demographic that the lead character(s) represents, the temporal elements communicated through cinematic frames and behavior of the protagonist (Sibierska, 2017), and, in film or video recordings, inferred gaze communicated

through camera angles and character eye direction (McVee & Carse, 2016). Meaning is also created in visual stories through the behaviors of the characters, including their movements, gestures, and facial expressions (Barbatsis & Guy, 1991; Bell, 2004; Chatman, 1978; Messaris, 1997; Ryan, 1992; Sibierska, 2017). Two specific ways that narratives, both visual and verbal (audible or spoken), create meaning is through their structure and the individual agents that contribute to the narrative.

Narrative Precepts. Numerous authors have contributed to narrative theory; however, this research focuses on the persuasive strategies of transportation and identification in the visual and verbal narrative in fictional works. Before discussing the persuasive strategies in more depth, it is important to define and discuss the various agents to understand their contribution to meaning making in the narrative.

Agents in Narrative. Chatman (1978) explains that narrative, as communication, infers a sender and receiver. Although communication is more complex than this, mediated stories (in film and television) have a distinct sender and a distinct receiver, the viewer. Various elements included in the development of the messages should be examined more closely for meaning construction. The following agents have been identified in both text and visual narratives. They include an author (Chatman, 1978; Sibierska, 2017), a narrator, a narratee, the audience (Barbatsis, 2005; Chatman, 1978; Graesser et al., 2003; Sibierska, 2017), and characters as agents in the event(s) (Graesser et al., 2003). One of the most audience-influencing agents in the narrative is the protagonist (Cohn, 2013), which may sometimes be an exemplar, a personified example of the agent "used to illustrate a particular threatening condition" (Niederdeppe et al., 2008). Exemplar has also been used to refer to the entire story as a representation (Shaffer, et al., 2018; Slater, 2002), so to prevent confusion, the term exemplar will be used to indicate the

protagonist, main, or perspectivizing character. A perspectivizing character is the character through which the perspective of the story is told (Hoeken et al., 2016). Following is a brief explanation of each of the agents.

To begin, the author writes the narrative. They are the individuals who compose the narrative, choose the information that is important, and make distinct choices about the dialogue, the events to convey, the information communicated through the events, and the order and structure of the events (Chatman, 1978). The real author is separate from the narrator, and the two should not be confused (Chatman, 1978; Graesser et al., 2003); however, the narrator is sometimes manifested as the implied author, or the one who appears to have composed the story (Abbott, 2002; Skains, 2015). The narrator is the person telling the story (Abbott, 2002) and is identified by the point of view, at times referred to as character perspective, that is crafted in the story. Point of view is linguistically communicated through first person, second person, and third person language choices (Graesser, et al., 2003); it is visually communicated by camera angles and sometimes eye direction of the exemplar (Chatman, 1978). The narratee is the object of the narrators' dialogue. It is the imaginary recipient (Graesser et al., 2003; Green & Brock, 2002) or the listening presence (Barbatsis, 2005), someone whom the narrator addresses (Phelan, 1994).

Point of view is not limited to the narrator; it also indicates the relationship an author is encouraging between an exemplar, and the audience. Chatman (1978) refers to audience as reader, listener, or viewer, and delineates a real reader, listener, viewer and implied reader, listener, or viewer. He explains that the real reader is the actual individual who is exposed to the message, while the implied reader is the reader that the author had in mind when creating the content. Rabinowitz (1987) expands this notion of audience by defining and identifying four distinct types: the actual or flesh-and-blood audience, the authorial audience, the narrative

audience, and the ideal narrative audience. The actual audience is the "real" audience, the in-person readers, listeners, or viewers consuming the narrative. This audience has "idiosyncratic particularities and socially constructed identities" (p. 353). The authorial audience is the hypothetical audience that the work is designed for and includes assumptions about what members know and believe. The narrative audience is the imaginary audience for which the work is written and who a set of beliefs and body of knowledge is projected onto. The ideal narrative audience is the audience that the writer wishes they were writing for – this audience "accepts every statement…as true and reliable" (Phelan, 1994, p. 353). Chatman (1978) explains that the "narratee-character is only one device by which the implied author informs the real reader how to perform as the implied reader" (p. 150).

Primary Agent. Last is the exemplar. The exemplar is the hero of the narrative (Abbott, 2002) and the main character agent (Graesser et al., 2003). They have specific goals they are trying to achieve (Cohn, 2013), and connect the audience to the narrative in a very personal and persuasive way (see Chen et al., 2016; Dal Cin et al., 2004; Hoeken et al., 2016). In visual narratives the cinematic "eye" communicates very specific information about the interaction between the character(s), audience, and narrator. Manipulations in the camera focus viewer's attention to specific places (Loschky et al., 2020), communicate intimacy and naturalness (Barbatsis, 2005), reveals authority figures in the shot, and suggest a specific relationship with the viewer (Kress & van Leeuwen, 2006). These contribute to a convincing visual narrative, which fosters a sense of realism, which Fisher (1985) claimed make narratives believable and probable and enable them to serve as a guide for action and behavior.

Narrative Persuasion. Narratives have extraordinary persuasive potential because of their highly interactive process between the audience (or viewer in the case of this research) and

the narration. Research has shown that narrative persuasive messages are incredibly powerful and are more influential than argumentative or analytical persuasive messages (Dal Cin et al., 2004; Green & Brock, 2000; Hoeken & Fikkers, 2014).

Persuasive Effects. Immersion in a narrative can affect individuals on many levels. It enhances memory of the message (Graesser et al., 2003; Loschky et al., 2020; Niederdeppe et al., 2008; Slater & Rouner, 2002), reduces counterarguing or critical, analytical processing, and distracts from weaker arguments (Bilandzic & Busselle, 2013; Green & Brock, 2000; Hoeken & Fikkers, 2014; Slater & Rouner, 2002). Additionally, educational content is better understood when it is interwoven into a narrative (Hoeken & Fikkers, 2014). Narrative persuasion has also been shown to sway attitudes and behavior (Murphy et al., 2011; Castonguay et al., 2016). Some scholars argue that narrative heightens the emotional response of viewers (Green & Brock, 2002; Slater, 2011; Tseng & Huang, 2015); others claim that the rich set of cues (visual, auditory, and cognitive) increase interactivity with the narrative as it arouses and stimulates the senses (Bateman & Wildfeuer, 2014; Ching et al., 2013; Marković, 2012; McVee & Carse, 2016). Two conditions necessary for persuasion to occur is transportation, also referred to by some as absorption, (Escalas, 2007; Green & Brock, 2000) and identification (Cohen, 2001). Igartua and Casanova (2016) claim that transportation and identification are the most critical elements in narrative persuasion.

Transportation. Narratives are powerful because of their ability to transport readers, listeners, or viewers into a story and create a connection between them and the main character. Transportation is defined theoretically as "a process of narrative information processing in which a person not only attends to information but is also absorbed into the flow of a story in a pleasurable and active way" (Wang & Calder, 2006, p. 160). Viewers are transported when they

are wholly involved in the narrative and become lost in the unfolding events, context, or plot, either cognitively, emotionally, or both cognitively and emotionally (Chen & Lin, 2014; Ching et al., 2013; Green & Fitzgerald, 2017; Igartua & Casanova, 2016; Tukachinsky, 2014). Viewer immersion in a story heightens cognitive and affective engagement (Neil et al., 2018) through visual cues, dramatic plot structures, and outcomes, prompting viewers to relate the information to their own experiences (Ching et al., 2013; Krakow et al., 2017; Slater, 2011). Transportation reduces counterarguing in engaged audience members because of mental engagement or distraction (Green & Brock, 2000; Slater, 2002) as members "pay closer attention to the unfolding drama" (Murphy et al., 2011).

Several factors contribute to transportability, the tendency to be transported into a narrative (Green & Fitzgerald, 2017). Individual factors include the viewer's ability to picture themselves in the scene of events, a desire to know how the scene ended, mental and emotional involvement in the story (Chen & Lin, 2014; Lane et al., 2013), and a "loss of awareness that the fictional world is mediated" (Tukachinsky, 2014, p. 4). Other factors that heighten transportability include its structure, emotional content, and perspective. Chronologically ordered narratives transport more readily (Green & Fitzgerald, 2017) as well as stories with defined cause and effects (Tukachinsky, 2014).

Transportation also occurs through emotional content in a story. Elements that contribute to emotional content in a narrative include emotional portrayals or behaviors of the characters, such as warmth (Cho et al., 2014; Tukachinsky, 2014), vivid, dramatic, or humorous content (Ching et al., 2013), and sometimes narrative consistency (storyline appeal) and high-quality production (Cho et al, 2014). Vividness is the richness in the formal features of mediated content that engages emotions through the way information is presented to the senses, which increases

the perception of the narrative as pleasurable (Ching et al., 2013). Other factors that promote transportation include provoking imagery (Chen et al., 2013), and character ability to navigate the fictional environment (Tukachinsky, 2014).

Cho et al. (2014) explain that realism is necessary to stimulate emotional involvement in a narrative. Green and Fitzgerald (2017) explain that perceived realism in narrative is based on viewer perception of the plausibility of characters, character responses to events, realistic settings, and situations in a story. Weber and Wirth (2014) claim that typicality is a focus of perceived realism. Typicality is what might be expected from an exemplar, in the case of health, for example, the display of illness symptoms. Typicality is effective because of its representation of real world or commonly occurring events (e.g. cooking in the kitchen or driving a car). Examples of uncommon events would be avalanche or murder. Novelty, on the other hand, is a divergence from expectations; the presentation of information is engaging, interesting, and unanticipated by the viewer. Han and Lou (2021) found that typicality and novelty both enhance message persuasiveness.

Transportation and identification are distinct, yet interdependent concepts in narrative persuasion. Some scholars argue that transportation is necessary for identification to occur (Cohen, 2001). Green and Clark (2013) argue that transportation reduces counterarguing, which facilitates identification. They identify transportation as separate and include identification as part of it. Green and Fitzgerald (2017) claim that transportation is a more general immersion into the narrative, whereas identification occurs when viewers experience the narrative through the character's perspective" (p. 6). They continue stating that even though identification and transportation are separate processes, they are interrelated by the fact that transported individuals are more likely to identify with the exemplar.

Identification. Identification has early roots in psychology and sociology, and is a fundamental social ability enabling individuals to identify with others and adopt their behaviors early in life (Cohen, 2001). Identification in narrative persuasion is a crucial mechanism (Hoeken et al., 2016; Igarta & Casanova, 2016) that encourages elaboration of a message, which can evoke positive feelings and attitudes (Cohen, 2001). Identification with the exemplar is necessary for a successful narrative and is powerful because of its ability to make an emotional connection with audience members (Hoekens & Sinkeldam, 2014; Tukachinsky, 2014). It is defined as the extent to which an individual perceives similarity to the character (Neil et al., 2018; Tukachinsky, 2014), takes on the character's perspective (Cohen, 2001; Moyer & Guse, 2008), and experiences the narrative through that character perspective (Green & Fitzgerald, 2017). The results are increased likeability and sense of knowing the character (Neil et al., 2018). Cohen (2001) adds that it is the process of feeling *with* the character, rather than *toward* the character. Character perspective taking is partially a cognitive process (Moyer-Guse, 2008), but identification is also accomplished through emotional processes. The emotional processes involved in identification can include taking on a character's perspective, but it is also sharing the character's feelings through empathic response (Tukachinsky, 2014), which results in assuming the role of the character (Moyer-Guse, 2008). It is important to understand that in identification the target is the connection to the source of the message, not necessarily the message itself (Cohen, 2001) and effectiveness is measured by the empathic response that is evoked in relation to the character's experience (Slater & Rouner, 2002).

Like transportation, identification increases positive perceptions, influencing norms and behavioral intentions (Basaran et al., 2019). The bond the viewer creates with the character disables counterarguing and a critical reading of the message because the individual has

empathized with (Cohen, 2001) and related to the goals of the exemplar (Igartua & Casanova, 2016). There are different ways that identification can occur: shared perspectives, attitudes, goals and motivations, and identities. Identification with an exemplar or perspectivizing character (a character intended to represent the perspective of the audience member) is accomplished by similar attitudes (Hoeken & Fikkers, 2014), demographic identities and, in health, shared illness identities (Neil et al., 2018). It is interesting to note three unique consequences of identification. The first is that an exemplar's perspective eclipses identification in the narrative: a viewer will identify with an exemplar with a dissimilar attitude rather than an antagonist with a similar attitude (Hoeken & Fikkers, 2014). Second, viewers can still take on an exemplar's perspective even when the viewer has not had the same experience or is not able to have the same experience, by trying on the alternate identity, known as vicarious experience (Cohen, 2001). They may also simply have a desire to possess the same attributes or perform the same actions as a character to identify with them – this process is referred to as wishful identification (Tukachinsky, 2014). Last, in health contexts, viewers identify more readily with a shared illness identity rather than demographic identity (Neil et al., 2018).

Cohen (2001) explains that media characters are carefully constructed to evoke identification, but Cho et al. (2014) claim that the message characteristics of identification have yet to be investigated. Several factors encourage identification between a viewer and exemplar: cognitive and emotional empathy, similarity, perspective sharing (may include goals), and vicarious experience. These concepts are not clearly distinguished from each other, but instead tend to blend and merge at various points.

Another way identification is made is through perceived similarity. Similarity can be perceived through matching situations (Cohen, 2001; Hoeken et al., 2016), experiences,

demographics (Tukachinsky, 2014), attributes, similar goals, and expression of similar feelings (Cohen, 2001). As previously noted, shared demographics are less powerful in identification than a shared illness identity; Hoekken et al. (2016) also state that psychological matching is more significant than demographics. One last way that identification is encouraged is through the point of view through which the narrative is presented. Story perspective is the standpoint through which the story is told – the point of view through the narration (Hoekken et al., 2016). Green and Fitzgerald (2017) claim that first person perspectives encourage identification more than third person, and third person more than second person approaches; however, other scholars claim that there is no difference between the persuasiveness of first person versus third person approaches (see for example Chen et al., 2015).

The ability for a viewer to be consumed by a narrative and relate their lived experiences to the exemplar illustrate the power narrative persuasion wields through scripted perspectives.

Combining Visual and Verbal Narrative

Chatman (1978) argued that a full analysis of narrative required a combination of verbal and visual elements, and he chastised literary critics' tendency to think exclusively of verbal narration, "disregarding their consumption of stories through other genres" (p. 9). Visual and verbal narratives are distinct; however, the interplay between them creates engaging stories, and it is recommended that their intersection be more thoroughly researched (Bilandzic & Busselle, 2013; Lirola & Chovanec, 2012). Slater and Rouner (2002) liken the quality of audio-visual context in PSAs to entertainment-education applications (p. 182), which potentially impacts the emotional and persuasive effects of visual narrative on the individual. Green and Brock (2002) argue that mental imagery promotes transportation into a narrative and identification with an exemplar or protagonist, more so than when an image is provided; however, subsequent research

on visual elements supports the persuasive power on transportation and identification (e.g. Ching et al., 2013; Slater, 2011). Ledford (2009) explains that "many narratives *are* visual representations," [emphasis added] which increases transportation – a prerequisite to narrative persuasion. The persuasive potential of visual narratives is well-documented (Bilandzic & Busselle, 2013; Cohen et al., 2018; Weber & Wirth, 2014), and it is understood that images function persuasively to invite generalization and causal interpretations, as well as highlighting contrasts and creating analogies (Messaris, 1997; Niederdeppe et al., 2008). For example, Messaris (1997) clearly communicates that photographs are evidence in advertising claims. Visual cues in advertising increase persuasion when there is a little knowledge of a product and the consumer is not highly involved (Kim et al., 2017), visual literacy is low (Lazard et al., 2020), and the image encourages elaboration on its own, without verbal accompaniment (Jeong, 2008).

Other studies have demonstrated the effectiveness of combining traditional verbal and visual narrative theory to understand phenomena (see for example Barker, 2011; Niederdeppe et al., 2008; Skains, 2015; Weber & Wirth, 2014). Barbatsis' (2005) combination of linguistic and visual elements in narrative theory illustrates Fisher's narrative logic as a way to make sense of the world through the process of transformation to a new place, to theoretical understandings of meaning-making through spatial orientation; the visual elements immediately express meaning in a way that words do not. She argues that communication scholars should view emerging stories not only from a linguistic perspective, but also from the way they are crafted pictorially to wholly understand the narrative. Buga (2013) agrees and applies the argument directly to general advertisements, explaining that they should be analyzed at both the verbal and the visual levels.

There is a paucity of research in the health literature on the visual elements in DTCAs since Welch Cline and Young's (2004) early work on visual cues. Recent work, however, has begun to isolate and explore the visual elements that contribute to meaning making in health messages. For example, Foreman (2019) studied reaction to visual metaphors in DTCAs. A visual metaphor is a comparison "whereby one domain (a pictured entity or imagined concept) is understood in terms of another" (Peterson, 2019). Visual metaphor comprehension relies on imagination and elaboration; imaginative processing and elaboration are common techniques in consumer research. They tested participant's propensity to imagine and their comprehension of different types of visual metaphors, and compared fused images to juxtaposed images. A fused image is one that features the source and target merged together as one; whereas a juxtaposed image presents the source and target side by side. Their results indicate that comprehension and a high propensity to imagine were positively related. Visual metaphors impact participant understanding, increasing comprehensive of the message. Willis (2017) found that the visual elements in a DTCA affect processing of the message and the perception of the health issues. She found that regardless of the actions of the character, participants understood that the overall message in an arthritis DTCA communicated health and wellness. She argues that visual elements have not been sufficiently examined in the health literature, even though research has suggested that the visual cues in DTCAs affect perception of health and treatment option.

Narrative Theory and Health Communication

Bálint and Bilandzic (2017) define health narratives as "a specific form of persuasive communication in which a health message is presented in the form of a fictional or non-fictional story" (p. 4859). Some health narratives have included HIV/AIDS prevention and intervention (Basaran & Christensen, 2019), cancer clinical trial participation (Neil et al., 2018), HPV

vaccination and cervical cancer (Krakow et al., 2017), weight issues (Niederdeppe et al., 2014; Sarge & Knobloch-Westernick, 2017), and non-prescription drug use (Shaffer & Sherer, 2018).

Research indicates that transportation, identification, and similarity affect individual responses to narrative messages in a context of health. Transportation affects counterarguing and increases emotional responses; it can also influence information seeking behaviors (de Graaf et al., 2016). Studies consistently confirm that transportation into a narrative is essential for attitudinal and behavioral change. Some studies have linked successful narratives to behavioral change. For example, reading survival stories online increased some women's intentions to be vaccinated for HPV (Krakow et al., 2017). Reading a news story about a rare reaction to ibuprofen use resulted in individual avoidance for taking ibuprofen by some, at least for a short amount of time (Shaffer et al., 2018).

Successful narratives also increase identification with the exemplar. Some individuals processed highly personal stories more closely in a social media post and believed that the poster was more similar to them (Malloch & Zhang, 2019). De Graaf et al. (2014) found that exemplar similarity "increased risk perceptions of getting the disease and intentions to enact preventive behaviors" (p. 76). Identification also increases self-referencing, which refers to the viewer replaying memories of similar stories, transporting an individual to past events, which consumes cognitive resources that might otherwise be used to scrutinize the message (Escalas, 2007). Identification and self-referencing, alike, increase an audience member's perceived severity with an illness in health narratives (Chen et al., 2016; Hoeken et al., 2014).

Narrative Medicine

The value of narrative research and training has been well documented in medicine, particularly in the training of medical residents. Charon (2007), who founded the subdiscipline of

narrative medicine, says that it is "medicine practised [sic] by someone who knows what to do with stories" (p. 1265). This growing body of research recognizes the importance of narrative as an ethical, literate, and relational component of medicine. Narrative use in medicine has the potential to build trust, credibility, and healing and creates a unique situation that unites a teller and listener, a sufferer and a helper, in a real or imagined world (Charon, 2009a). Charon (2009b) discusses the inherent dialectical tensions between able-bodied/ disabled and sick/healthy in works and promotes the recognition, interrogation, and triangulation that a "postmodern telling of the self" can stabilize and free us from (p. 198).

Narrative medicine was born from the realization that patient experiences with their physician while technically adequate were gravely deficient (Charon et al., 2017). Charon brought medicine and the humanities together based on her belief that the body and mind could be healed through a deeper and innovative approach. She is a "Harvard trained physician" (Jefferson Lecture, 2018) who solicited the English department at Columbia University to teach her how to read and write. She claims that they welcomed her in and "conferred a PhD in English" on her in the process (Charon, 2009a). Charon and her colleagues began by teaching health professionals how to create and write narrative in order to better understand all aspects of a patient's illness, which often lead to new discoveries (Charon, 2005). They attribute much of the success of narrative medicine to the fresh dimensions that the graduate students in their program helped them discover (Charon et al., 2017).

Charon (2006b) laments that competent medicine alone cannot help the patient deal with "the loss of health and find meaning in illness and dying" (p. 3). A new level of discovery relies on attentive and intentional listening, a close read of the messages communicated, and confirmation and validation through the response. Charon et al. (2017) explains the importance

of listening to a patient's story and everything that they tell through their "words, silences, gestures, position, mood, prior utterances" without judgment and then telling the teller a "representation of what was heard" (p 157). She communicates the importance of listening attentively to the health stories; and conducting a close reading of those stories (Charon et al., 2017). This process serves as a check and sometimes provides an epiphany for the patient. She states that the information (stories) have always been discussed by patients; however, their stories have not always been allowed to be explored or developed.

In her early work, Charon (2004) tells of her first encounter with a Dominican patient experiencing back pain. She prompted the interaction with the question "Could he tell me whatever he thinks I should know about his situation" and then she just listened (p. 862). No notes, no interruptions; she just listened. This was a process that she changed in her office routine with all new patients (Charon, 2009a). She emphasized three parts of his emerging narrative: the content, structure, and performance, which she defines as the visual cues exhibited, such as expression and gestures. After a few moments the man began to cry and said, "no one has ever let me do this before" (Charon, 2004, p. 862).

Narrative medicine provides the space for the meaning of an illness to be explored and understood by both the physician and patient, moving both to a new place of illness knowledge (Charon, 2006a). This new place of knowledge can sometimes translate to healing. Charon (2006b) discussed her interaction with an 89-year-old African American woman with several comorbidities. It took the woman twenty years to trust someone (Charon) enough to share the secret that she was raped by a white boy when she was twelve. She held that secret, telling no one, for seventy-seven years. Once she told her story, her health improved. Charon (2006b) asserts that narratives give voice to patients regarding what they endure as well as a means to

frame the illness in order to "escape dominion by it" (p. 66). However, it is not just the words in the story that communicate meaning; the nonverbal communication or visual elements are just as important as the verbal elements. She was seeing a new patient who had been to multiple physicians about severe and relentless abdominal pain, but they could find nothing wrong. As the patient discussed her father's experience with liver cancer with Charon, she noticed that the woman made the same hand gestures over her abdomen about her own illness symptoms. When she brought it to the young woman's attention she realized that her own pain and suffering was really about her father.

The other side in narrative medicine is the impact that it has on medical personnel. Anyaegbunam et al. (2013) explain that medical students are taught about science and practice, but their moral and personal development is often overshadowed. Medical students who have undergone narrative training are able to consider other avenues of inquiry for health information about a patient, which is necessary for their (medical student) growth. Medical students who have been trained to improve their narrative skills are able to make distinctions between treating a patient and healing a patient. The significance of that narrative training results in an ability to pen and tell their patient's illness story from a perspective deeply rooted in their patient's humanity (Charon, 2007). Learning how to conduct a close read of fictional literature is an important part of narrative medicine education (Charon, 2005). Charon (2006) expresses that the act of telling and listening empowers individuals and gives them voice, even in fiction. DTCAs, are fictional stories of health and wellness (e.g. Ball & Applequist, 2019; Frosch et al., 2011; Willis, 2017) that influence viewer perceptions about an illness (Arney, 2013; Ball, 2016; Niederdeppe, 2017).

Narrative and Health Literacy

Narratives also improve health literacy levels. Health literacy is the ability of an individual to locate, understand, evaluate, and use health information to make informed decisions that lead to reduced health risks and improvement in one's quality of life (Zarcadoolas et al., 2003) and low health literacy is associated with low health outcomes (Shaffer et al., 2018). Mackert and Love (2011) analyzed DTCAs for content that required other types of literacy (functional, scientific, and cultural). They determined that all of the ads (82) contained nonstandard font, which is considered problematic for low literate audiences. They also found that many ads included scientific information that may be difficult to understand and that there was only a small percentage of minority representation. In their introduction to narrative medicine, Charon and DasGupta (2011) claim that the "introduction of the arts, humanities and qualitative social sciences into the clinical realm has contributed deeply" to various fields, one of which is health literacy (p. viii). Health narratives have the ability to increase health literacy (Talley, 2016) which affects understanding of a health-related message and impacts behavioral change. Talley (2016) further argues that being competent in both functional literacy and health literacy requires competence in narrative and metaphor. She explains that the signs of narrative and metaphor include the spoken, audio, stationary and moving visual images, and actions. Adams (2020) explains that narratives make a message more accessible to individuals with low health literacy in contrast to unfamiliar, overwhelming, and cold scientific data. She explains that storytelling, in comparison, is a friendly way of teaching and sharing information through entertainment-education, which is most effective for those with low health literacy.

Health literacy in narratives has also been studied in news stories. Shaffer et al. (2018) tested the way that health information in news articles influenced health behaviors. They had

participants read a health article published in *The New York Times* about the onset of a severe skin disorder that develops from medication use, (Stevens Johnson Syndrome), in one woman after she took ibuprofen. The participants who read the article (which increased their health literacy about Stevens Johnsons Syndrome) were more likely to reduce their use of ibuprofen immediately and over time. They highlight the ethical importance of careful consideration of the use of narratives to convey health information because of narratives ability to alter intentions. Other work has compared the effects of narrative ads versus argument ads. Argument advertisements present information based in fact and uses logical arguments to persuade (Ching et al., 2013). Chang (2008) measured reader sympathy and immersion in narrative and argument advertisements. Participants watched either a narrative or an argument advertisement about depression, which was created by a professional ad agency. Results showed that individuals who watched the narrative ad about depression were more empathetic toward people suffering depression and directed less stigma toward them as opposed to those who watched the argument ad. Other results suggested that those who watched the narrative ad were more likely to be transported into the ad.

Other health literacy studies have focused on print DTCAs. Segal (2020) compared patent medicine advertisement to recent day DTCAs. She states that 19th and 21st century health consumers do not differ in their level of health, necessarily, but that individuals today lack the social structure that helped 19th century health consumers understand more about illness. Willis (2017) studied the visual elements in DTCAs and their influence on participant understanding. She recruited individuals who had arthritis and had them watch only the visual elements in DTCA arthritis ads. Their goals were to "(a) identify the ad's message (as understood by the patient); (b) to receive feedback on the visual elements of the ad; and (c) to understand how the

visual elements of the ad fit with what the patients knew about arthritis and/or the pharmaceutical drug" (p. 7, 8). She asked if they learned any new information and the response was no. She suggests that DTCAs use visual elements to teach expectations of the drug and that the advertisements communicate health and independence.

Narrative Theory and Advertising

A variety of studies have explored narrative theory in the context of advertising. Buga (2011) explored the relationships between "the storyteller, consumer, and main character" or agents (p. 54), finding that advertisements rely on creating a strong connection between the product, brand, and consumer. She states that narrative messages delivered by the exemplar, which follows a character through a conflict to resolution, increases the credibility of the message. Stewart (2008) has demonstrated the power that message structure has on crafting meaning to persuade different cognitive types of audiences. In a study focusing on transportation in narrative theory, Chen and Chang (2017) confirmed that incorporating transportation into a narrative ad is the "the best predictor of changes in attitude and behavior" while others have found that narratives intensify positive perceptions of a product (Dal Cin et al., 2004; Escalas, 2007). Ching et al. (2013) suggest increasing identification through "highly interactive, vivid, [and] entertaining" advertisements.

Narrative Theory and Health Advertising

For this research, I have defined narrative health advertisements as advertisements that use health narratives as a strategy for persuading a consumer to buy a health product, change a health behavior, or change a belief. Studies on health narrative advertisements have focused on depression (Castonguay et al., 2016), public service announcements (Cho et al., 2014; Hoeken & Sinkeldam, 2014; Murphy et al., 2011), raising awareness about social determinants of health

(Niederdeppe et al., 2008), and HPV vaccinations (Bálint & Bilandzic, 2017; Krakow et al., 2017). Most recently, Ball and Applequist (2019) identified health narratives in DTCAs, establishing that DTCAs include both narrative and nonnarrative elements, and that all DTCAs have some form of a narrative. They categorized types of narratives and the point of view used in the ad based on the language and format used by the narrator, making ancillary references to the visual elements in the ads. Combining narrative modes (visual and verbal) is not uncommon in health narrative advertising research, with many scholars mentioning both visual and verbal forms. However, specific analysis of the visual narratives in televised DTCAs has not been addressed. Welch Cline and Young (2004) analyzed the visual cues in print DTCAs, but claimed that focusing on the visual cues only was a limitation because of the potential to take them out of context. Willis (2017) also explored the visual elements in print DTCAs, conducting both a content analysis and interviewing participants. To the best of my knowledge, these are the only works that study the visual elements in DTCAs as a separate entity, but they were print advertisements. One of Willis' (2017) recommendations for future research is to expand the work to other mediums such as broadcast television.

This content analysis of DTCAs addresses the gap in the literature by identifying and analyzing the visual and verbal narrative cues and the ways that they are intertwined. Content analysis (CA) is a way to determine the important and salient, as well as trivial information of a text (Bell, 2004). In the analysis of health-related texts, including narratives, CA is a useful tool in discovering patterns and identifying areas in the text that are misleading or challenging to understand (Zolnoori, 2019). The analysis of the visual and verbal narratives in DTCAs will further elucidate the messages used to communicate health and wellness, as well as the way that

their structure intends to persuade. Specifically, I will explore the research questions identified in Chapter One:

RQ1: What transportation cues are used in the stories in DTCAs?

RQ2: What identification cues are used in the stories in DTCAs?

The next chapter, Methods, discusses content analysis and the methods I used to analyze the visual and verbal narratives in DTCAs.

Chapter 3: Methods

My study is a content analysis of the narrative cues in DCTAs from the 2016 and 2018 broadcast season. Specifically, I examined the visual and verbal health narratives by identifying transportation and identification cues in the advertisements. I compared the information communicated in the visual and verbal content, but also analyzed the visual and verbal content independently of each other in order to fully understand the health stories that are communicated in each format. My research questions were:

RQ1: What transportation cues are used in the stories in DTCAs?

RQ2: What identification cues are used in the stories in DTCAs?

This chapter describes content analysis as an optimal method to analyze the ads, the data that was collected, and my codebook structure.

Content Analysis

There are many DTCAs and many stories communicated through DTCAs. As such, the best method to research these stories is one that is methodical and directed. Analyzing data in an orderly fashion provides enough flexibility to allow a full exploration of embedded content for latent meaning, contributes to the trustworthiness of the results (Elo et al., 2014), and allows other researchers to replicate the results (Krippendorff, 2004). Researchers have used content analysis (CA) extensively in health research, including studies of informative and educational texts (Morimoto, 2017; Toth & Witt-Enderby, 2013), health care relationships (Welch Cline & Young, 2004), policy adherence (Arnold & Oakley, 2013), and many more.

Historical Background

Krippendorff (2004) dates content analysis back to 18th century Sweden, when a feud developed over the religious content in a new compilation of hymns. The controversy began with fears that the *Songs of Zion* was encouraging dissention in the church. To prove, or disprove as some goals were, scholars categorized and analyzed the religious symbols and their meanings in the songs of the new hymnal. Content analysis (CA) allowed scholars to determine that the new hymnal was not any different in content than other popular hymnals. Over the years CA has been deemed a valuable methodological tool in a variety of disciplines. It experienced heightened popularity in sociology and psychology, especially with increasing interest in propaganda (Yu et.al, 2011). A little-known fact is that Max Weber, renowned sociologist, promoted the use of CA as a tool to understand mass media. During the late twentieth century it was predominantly used in journalism and communication research (Krippendorff, 2004). More recent examples look at health information in media studies and include reproductive studies (Molyneaux, 2009; van der Pijl et al., 2020) and scholars have addressed the need for new approaches in the analysis of content in interactive media (Skalski et al., 2017).

Overview

Content analysis has been defined as a systematic research technique that allows the interpretation of content through a process of coding and identifying themes or patterns (Hseih & Shannon, 2005). It is a collection of data from a form of communication (e.g. speeches, television programs, newspaper articles, advertisements) that is approached empirically, and is systematically compared and contrasted, with the purpose of coding and identifying themes or patterns to surmise core consistencies and meanings (Leedy & Ormrod, 2001; Zhang & Wildemuth, 2009). Additionally, CA is able to show what is prioritized and what is not (Bell,

2004). More specifically in regard to health communication, it is useful to describe health patterns, phenomena, and problematic areas (Zolnoori, 2019).

There are two approaches to CA: quantitative and qualitative. Quantitative and qualitative content analyses are both systematic methods of organizing information in a scientific manner; however, quantitative approaches are based on statistical information and frequency. In contrast, qualitative content analysis (QCA) deals with subjective content and social realities (Zhang & Wildemuth, 2009; Hseih & Shannon, 2005). Some scholars claim that all content analyses have roots in qualitative understanding by arguing that subjective selections of text (qualitative data) are converted to numbers (see for example Krippendorff, 2004). For this project, I have conducted a qualitative content analysis, exploring the stories and persuasive strategies in the visual and verbal elements of the ads. I identified transportation and identification cues in DTCAs in order to understand the way that health is communicated in these ads.

A closer review of CA reveals three succinct categories: conventional, summative, and directive. Hseih and Shannon (2005) suggest that researchers decide on the appropriate approach before beginning the work in order to increase trustworthiness and reliability. Conventional CA describes phenomenon that emerge from the data and is open-ended; summative CA includes quantitative elements in the counting of words used, as well as qualitative elements that put them into context (Zhang & Wildemuth, 2009). Directed content analysis is guided by the tenets of a predetermined theory, which provides the framework for the analysis. Predetermined theory helps the researcher to create an *a priori* coding framework based on the key concepts and constructs of the theory (Hseih & Shannon, 2005). Once theoretical concepts are identified, they can be used as parameters and applied to the data. Directed CA is the best approach to analyze DTCA verbal and visual narratives because of the subjective nature of meaning in stories and the

need for systematic analysis to make the data manageable. Furthermore, the assigning of codes throughout the process ensures consistency. The precepts of Narrative Theory provided the insight and framework to develop the coding framework for this analysis.

Procedural Elements

The most logical reason for using qualitative CA for my research is its systematic features. There are clear-cut parameters to help stay on goal, and using theory to develop the coding frame increases dependability, which corresponds to reliability in qualitative research (Lincoln and Guba, 1985) and trustworthiness, which corresponds to both reliability and validity (Seale, 1999). This section outlines the steps of conducting CA, as well as the definitions of each step.

To begin, there is agreement among scholars on the basic stages of CA:

1. Selection of the text
2. Preparation of the text
3. Defining units of analysis
4. The development of codes and rules for coding
5. The application of codes
6. Analyze the results and draw conclusions

Selection of the text

The first step in beginning a CA is selecting a text, or body of work, to be studied. Leedy and Ormrod (2001) indicate that in circumstances where a text is quite large, researchers should choose samples of a work, such as a specific time frame, instead the entire volume.

Preparation of the Text

It is important to spend time properly preparing the text for analysis. Zhang and Wildemuth (2009) explain that this also includes preparing a justification for why a particular text was chosen. Audiovisual preparation is even more complicated. Wang et al. (2000) explain that multimedia text must be segmented into scenes so that each "corresponds to a story unit" (p. 12).

Defining Units of Analysis

The unit of analysis is the specific phenomena in the text that a researcher wants to study (Zhang & Wildemuth, 2009) and is the smallest element (Wimmer & Dominick, 2014). A unit could be a word or symbol, a sentence, a paragraph, or an entire story or document (Zhang & Wildemuth, 2009, p. 3; Wimmer & Dominick, 2014). A clear definition and rules for what constitutes a unit of analysis should be clarified at this stage in order to ensure close agreement among coders (Zhang & Wildemuth, 2009).

Development of Codes

Researchers create a set of codes (or categories) to systematically apply to a set of data (Swandt, 2007), which allows the data to be compared and analyzed (Kripendorff, 2004) for the purpose of "pattern detection, categorization, assertion or proposition development…and other analytical processes" (Saldaña, 2016, p.4). Codes can be developed from the data, from previous studies, and from theory (Zhang & Wildemuth, 2009). Saldaña (2012) identifies different types of coding, one of which is narrative coding. He states that narrative coding blends the concepts of many disciplines, including humanities and social sciences. Some narrative categories and corresponding codes he has identified include: story type, such as survivor narrative or epiphany narrative; genre, such as tragedy or melodrama; tone, such as optimistic or pessimistic; setting,

such as locale, environment, or artifacts; time, such as season, year, order, duration, or frequency; plot, such as episodic, vignette, or scene; storyline, such as chronological or Labovian; point of view, such as first-person, third-person, or witness; character type, such as narrator, exemplar, or antagonist; characterization, such as gender, ethnicity, or physical description; theme, such as moral, life lesson, or significant insight; and conversation interactions, such as greetings, turn-taking, or repair mechanisms. Once a set of codes is decided upon, they are situated within a hierarchy (i.e. codes and sub-codes).

Application of Codes (codifying)

A coding framework must be tested on a sample set of data before coding the entire text in order to discover any problems or inconsistencies (Schreier, 2012). At this point, the coding framework is tested on a subset of data with three coders to see if there is agreement on applying the codes. Once that benchmark has been reached, the data can be coded independently.

Before coding the main body of data, researchers often upload it into a qualitative software package, along with the coding framework. At this point, the researcher can assign a code (from the already tested coding framework) to each text unit or image. The software can then make calculations, identify patterns and relationships, and other functions.

Analyze the Results and Draw Conclusions

Once the coding is completed, units are categorized according to their assigned code, which is often done with the help of the qualitative analysis software. The researcher then looks for patterns in the data and connects those results to the relevant research question. Inferences can then be made about meaning and relationship (Zhang and Wildemuth, 2009).

Content Analysis and DTCAs

Historically, CA has been applied most often to textual information; however, scholars have expanded its use to a variety of communication artifacts, including pharmaceutical advertising (Mackert & Love, 2011; McKeever, 2014; Kim et al., 2016; Applequist & Ball, 2018; Ball & Applequist, 2019; Wright et al., 2020). Few scholars have used CA to analyze the narratives in DTCAs (see for example Ball & Applequist, 2019), and none to date have used it to isolate the visual and verbal forms of narrative persuasive cues for analysis. I used CA to determine the health stories that are being communicated through the transportation and identification cues of the visual elements (which includes the written text on the screen) and the spoken word.

I chose television advertisements (rather than print or online advertisements) because of their large viewership, broad audience, and potential reach. Likewise, broadcast DTCAs have the most diverse audience, in comparison to other platforms, which means that broadcast DTCAs are likely to have more diverse strategies and complex narratives to study.

Procedures

I used a directed qualitative CA, with an *a priori* deductive coding framework from the narrative theory concepts of transportation and identification.

Selection of Material

I chose to look for the advertisements in well-liked, newly aired television programs, not syndicated, and focused on the last few weeks of their spring season and their season finales in the 2016 and 2018 season. According to Nielsen Ratings, the combined top ten programs from network and cable television during those years were: *The Big Bang Theory* (both years), *The Voice* (both Monday and Tuesday nights of both years), *NCIS* (both years), *Little Big Shots,*

Empire, Dancing with the Stars, Blue Bloods, 60 Minutes, The Good Doctor, Grey's Anatomy, Young Sheldon, Bull, and NCIS New Orleans. I recorded the programs and then identified all of the DTCAs that were broadcast during each program. There were 62 DTCAs, 10 of which were duplicates, which left 52 individual ads. I created an excel spreadsheet for each of the ads and found a hyperlink to them on iSpot.tv. iSpot.tv is a television advertisement performance management platform. It provides details about an advertisement that includes: a synopsis of the ad, title of the ad, actors in the ad, the advertiser, contact information for the advertised drug, advertising agency, songs in the ad, url for the advertised product and screenshots from the video. Prior to 2020 iSpot.tv provided metric data that includes the first air date, last air date, national airings, estimated money spent, and other information for free. Currently there is a fee to access that information. Three of the independent 52 ads had been edited at the end of the ad to include information about Covid-19 so they were removed from the list, leaving 49 total DTCAs for analysis.

Preparation of the Text

My second step was preparing my data for analysis. There were several details about the ads that needed to be done in preparation. These included the determination of scenes in each ad (time spans), transcription for each scene, the assumed gender of the exemplar in each scene, and the assumed gender of the speaker in each scene. General details about the ads also needed to be determined. These included symptoms associated with the conditions (emotional, psychological, and social), determining the condition being treated, category of the condition (e.g. respiratory, cardiovascular), and the type of narrative in the ad (classic drama or vignette). It was necessary to determine the most common symptoms associated with all the illness conditions in order to create codes for identification (see Appendix C).

In an Excel spreadsheet I created two books: one for the 2016 ads and one for the 2018 ads. In each book I created sheets for each ad with the associated hyperlink to the corresponding iSpot.tv video, a row for each scene in the ad, a column for the speaker in each scene, a column of the corresponding transcriptions of the spoken word for each scene, and a column for my thoughts. I watched each ad as many times as necessary until each scene was individually identified, the time span created, and the verbal text transcribed in each scene. A scene is identified by the Brooklyn College Film Department (2020) as a "dramatic action consisting of one or more shots and taking place in more or less continuous time and space." The scenes in my study contain the same exemplar in continuous movement through the same setting and event. I understand that identification of race and gender are determined by the individual; however, assessing the perceived race and gender of the exemplar is important because of the different populations that may have a higher incidence of health-related issues associated with the disease that the DTCA targets. There are two units of analysis for each scene: the visual (all that is viewed in the scene, including the written text) and verbal (spoken word).

Using NViVO for my dataset required several other preliminary steps. I chose NViVO after comparing and reading reviews for other software programs. One of the benefits of NViVO is its ability to organize and code large sets of video at specific time points, it is widely used, there are trainers available (for a fee), and it is cost effective for students. NViVO was initially built in Windows and was later built in Mac as an afterthought, so there are some compatibility issues and slight differences between Windows and Mac. The differences provided some challenges with one of my coders, but they were overcome with some additional steps.

Preparing my data for NViVO required that I first record and save the advertisements to my computer so that they could be imported to my NViVO project. Once all of the ads were

recorded and saved, I imported them into my NViVO project titled Dissertation Data. The next steps were to create the timespans for each scene on the video, add the transcriptions for each scene, and identify the speakers in each scene.

NViVO has preset columns for Timespan, Content, and Speaker. The steps to create a timespan in NViVO are: 1. Edit, 2. Select the transcription icon to begin playing the video and mark the time, 3. Select the transcription icon again to mark the end time.

The times on the scenes were not exact and there was some overlap, so I went over all of the scenes in all of the ads and corrected the timespans by manually adjusting the time on the specific cell. This is a time-consuming but necessary step. Two scenes overlapping creates confusion and makes it difficult to code when a portion of the previous scene is part of the current scene to be coded. The scenes vary in length from very short to extended and the only content that should be in each scene is the content for that scene, so getting this correct is imperative. Also, the scenes are precise to $1/10^{th}$ of a second for a frame and NViVO currently is not able to clearly delineate the scene at such a precise measurement. Therefore, there will be times when there is more than ½ a second lapse between two scenes to prevent overlap. In other words, one scene may begin at 5.0 and end at 5.4, but the subsequent scene may not begin until 5.8 or 5.9.

After each scene was accurately timestamped, I created two file folders and duplicated each ad so that there were two of each. I titled the two folders Video files without transcription and Video files with verbal transcription. It was necessary to create a copy of each ad and a separate folder so that the visual cues could be coded independently from the verbal cues. When the visual information is coded in a scene, and data coded to a code is retrieved, it includes the entire verbal transcription for that scene. This made it confusing and difficult to discern specific

visual codes in the scene. Therefore, it was necessary to have a copy without any verbal transcription in order to distinguish the visual codes independent of the verbal. I saved each ad to one of the two folders and changed the title of the ads in the transcription folder to reflect that designation. Advertisements that would include the verbal transcription were titled with the medicine, title for the ad, and WVT at the end, e.g. Breo The Many Pieces WVT.

Once the ads were in a folder I added transcriptions to each scene for the ads in the transcription folder. I had already transcribed all of the spoken text for each scene in an excel spreadsheet, so I simply copied and pasted each scene's transcription into the corresponding timespan of the associated scene in NViVO. I checked each scene again and corrected the transcription where necessary. NViVO will automatically transcribe; however, it transcribes the audio as an entire unit and not to specific time spans, which was necessary for my work. When words were spoken across two scenes I did not break the word between the two scenes; instead I put the entire word in the scene where most of the word was spoken.

Cases have to be created from the files in NViVO in order to run queries. On the advice of an NViVO trainer, I used the ad with the transcription to create a base case for each individual DTCA. However, since I wanted to be able to analyze the visual and verbal data separately, but still be able to compare the two, I needed them to be combined in one case. I coded the entire advertisement with the video (no transcription) to the case that had been created for the corresponding ad with the transcription.

Additionally, I created a case classification titled General Details to document the descriptive information in the advertisements. Case classifications are general folders that allow for more detailed categories, also called attributes. I added the following attributes to General

Details: categories of illness, number of scenes, exemplar gender, ad length, number of exemplars, type of narrative, speaker, and condition being treated.

After creating the attributes, I added values to each of the attributes. Values are details about specific attributes. Values for the categories of illness were based on the illness category that the prescription was advertised to ameliorate. Those values were:

- blood
- respiratory
- general health
- skin
- musculoskeletal
- cardiovascular
- oral and gastrointestinal
- metabolic and endocrine
- infection
- inflammatory and immune system
- cancer
- mental health
- pain relief
- prevention
- neurological

I took the complete transcription (not divided by scene) for each ad, counted the number of scenes in each ad, identified the gender of each exemplar to the best of my ability, and the gender and role of each speaker (i.e. narrator) to the best of my ability. In NViVO, I added the

number of scenes for each ad, which ranged from 5 to 32. Exemplar gender was based on my perception of demographic details and included: women/ woman, men/ man, girl/ girls, boy/ boys, mixed women and men, and animation. Speaker values were female actor not exemplar (Fane), female caregiver (FC), female exemplar (FE), female exemplar voiceover (FEV), female narrator (FN), male actor not exemplar (Mane), male exemplar (ME), male exemplar voiceover (MEV), and male narrator (MN) (see Appendix A for an explanation of these abbreviations). Last, the values for the condition identified in the advertisements were:

- asthma
- smoking cessation
- psoriasis
- DVT and PE blood clot
- psoriatic arthritis
- heart failure
- ulcerative colitis or Chron's disease
- eczema
- type II diabetes
- hepC
- rheumatoid arthritis
- advanced non-small cell lung cancer
- diabetic ketoacidosis
- bipolar depression
- IBS constipation
- fibromyalgia pain

- diabetic nerve pain
- afib
- pneumococcal pneumonia prevention
- depression
- relapsing MS
- metastatic breast cancer
- Chron's disease
- diabetes

Several diseases share categories with each other so I used the primary disease classification identified in the UK Health Research Classification Collaboration to categorize the advertisement. For example, asthma is both a respiratory and immune disease, but according to the classification system would be classified only as respiratory since inflammation is a response to asthma. See Appendix B for a concise table of the details for each specific advertisement. It includes the title of the ad with a link to the video on iSpot.tv, the year of the first air (2016 or 2018), the length of the ad, number of scenes, condition the ad treats, health category, exemplar gender, speaker gender, ad agency, manufacturing company, and summaries and averages at the bottom.

In order to address RQ2 (What identification cues are used in the stories in DTCAs?) I first had to determine the most common symptoms associated with the condition. I created a table for each condition and searched for their physiological, emotional, social, relational and psychological symptoms. Emotional and psychological symptoms would often overlap, so I combined the two and labeled them emotional. I found that there were similar symptoms for all

of the issues, the most consistent being depression, sadness, and anxiety for emotional, pain and limited mobility for physiological, and intimacy issues for relational (see Appendix C).

Development of Codes

The third step was developing the codes using an *a priori*, deductive approach. Using a deductive approach with an *a priori* coding framework from the literature allowed me to parse the data into category nodes. After completing the deductive coding framework, I randomly selected five ads to test my codes. After several iterations of working on the five ads, I tested the codes on the initial five ads afresh and added another five ads, so that all codes were applied to a total of ten ads. The items listed under each category are subcodes, or level 2 codes. Some items are level 3 or level 4 codes. Below are the steps I followed for each RQ:

To address RQ1 (What transportation cues are used in the stories in DTCAS?) cues that evoke cognitive and emotional engagement were identified. These included novelty, vivid images, vivid language (not included in side effects), vivid sensory appeal, and vividness created through the emphasis of the written word (on the screen) and the spoken word (visual and verbal consistency).

Cognitive cues in a story deals with the logic of events or realism (Busselle & Bilandzic, 2009; Green & Fitzgerald, 2017), or its counterpart novelty (Han & Lou, 2021), vividness in increased interactivity through sensory stimulation (Bateman & Wildfleur, 2014; Ching et al., 2013; Marković, 2012; McVee & Carse, 2016) and vividness through provoking imagery (Ching et al., 2013). Niederdeppe et al. (2018) further explains that graphic imagery is used to draw a viewer's attention and transport viewers into the narrative. Some examples of visual graphic imagery are a beautiful landscape, or the words sleep and awake in the form of a dog or cat.

For RQ2 (What identification cues are used in the stories of DTC), I created a deductive coding framework with categories that identified point of view and the depiction of physical, emotional, psychological and relational illness related symptoms. The emerging codes were: activity, emotion, health event, point of view, and relationship interaction.

Point of view (POV) in health narratives encourages identification through first-person, second-person, or third-person language choices (Chen et al., 2016). Point of view is expressed visually through camera angles and character gaze. For example, a camera angle that shows a portion of the exemplar (perhaps part of her shoulder) as if the viewer is looking through the eyes of an exemplar is first-person. Second person POV occurs when the exemplar is talking directly to the viewer or making direct eye contact with the camera. Third person POV occurs when the viewer is positioned as an onlooker.

Physical symptoms are the physiological reactions to the illness, such as swelling or pain. Emotional symptoms and psychological symptoms overlap. They include the positive or negative feelings associated with the condition, which may include sadness or anger, that affect functioning or daily living. Relational symptoms are the interference with interpersonal interactions, such as isolation or withdrawal. For example, Humira is a prescription medicine for psoriasis, a skin disease that causes redness, dry cracked skin that may bleed, itching, burning or soreness (Mayo Clinic, 2019). Potential emotional or psychological reactions that sufferers may experience with the illness include anxiety, depression, loss of joy, anger, frustration, and embarrassment (Leavitt, 2015). The coding for identification in the Humira advertisement would document conversation or exemplar statements about living with psoriasis, along with vivid images of the exemplar with red patches, dry skin, and expressions of soreness, as well as body

language and facial expressions that indicate anger, frustration, or embarrassment. See Appendix C for a list of symptoms for the targeted diseases in the DTCAs used for analysis in this work.

Below is the deductive, *a priori* coding framework that I used for my analysis.

RQ1: What transportation cues are used in the stories in DTCAs?

1. Cognitive engagement
    A. Typicality (I omitted this from my coding scheme for simplicity because scenes that were not typical were novel)
    B. Novelty
2. Emotional engagement
    A. Vividness
        a. Intense imagery
            i. Chart, graphs, simulated artist rendering
            ii. Vivid textual display written on the screen
            iii. Provoking and graphic imagery
        b. Vivid language
    B. Sensory appeals
        a. Balance
        b. Pain
        c. Sight
        d. Smell
        e. Sound
        f. Taste
        g. Temperature

h. Touch

C. Visual and spoken consistency

RQ2: What identification cues are used in the stories in DTCAs?

1. Condition related symptoms

A. Activity

1. Food related

a. At home

b. In public

2. Participating in games or play

3. Participating in sports

4. Sitting

5. Standing

6. Walking or sightseeing

7. Watching as an onlooker

8. Working

a. Home related work

b. Occupation related work

B. Emotion

1. Anger/ frustration

2. Enjoyment

3. Fear

4. Sadness

5. Surprise

C. Relationship interactions

1. Co-worker(s)
2. Family
3. Friend(s)
4. Isolated or alone
5. Other interactions

2. Health event

A. Identification of condition

B. Doctor exemplar interaction

1. Active doctor/ exemplar interaction
2. Interactive doctor/ exemplar interaction
3. Passive doctor/ exemplar interaction

C. Medicine interaction

1. Direct interaction with the medicine
2. Indirect interaction with the medicine

3. Point of view

A. First person POV

B. Second person POV

1. Direct communication with the viewer using language you, your(s)
2. Directly facing the camera and making direct eye contact
3. Second person language (you, your(s))written on the screen

C. Third person POV

I created a detailed codebook for all of the codes. Each code was divided into two categories, visual and verbal. I provided definitions for each code and subcode and examples for each subcode from the data set. See Appendix D for my codebook.

Application of Codes

My first step was to test my coding framework through coding. I coded five DTCAs for their visual and verbal content. It was during this time that I discovered that coding for typicality and novelty was redundant, a scene was either typical or novel. Since the majority of the exemplar actions and events were typical, I maintained novelty. I revised some of my definitions so that they were clear and distinct. Once I was satisfied with my codes, I coded an additional five advertisements to confirm my choices. I randomly ordered all of the ads using random.org and designated the first ten for inter-rater agreement (IRA) assessment, and divided the remaining 39 ads by three, one set of 13 for each coder.

I met with an NViVO trainer to teach me how to query results and hired two other coders, HPER (health, physical education, and recreation) graduate students at the University of North Alabama. Their training took place over two sessions: in the first session I taught them the theory I was using and gave them information about DTCAs and content analysis, went over my coding framework, provided them with a printed and digital copy so that they could become familiar with the codes, and gave them a copy of my project on a flash drive for them to upload to NViVO. I gave them an overview on coding by coding the ad Eliquis Painting (this advertisement was not used to establish IRA). During this session I also set them up with their own NViVO account so that they could work independently and have access to my project. During the second session, I reviewed the coding framework again, provided them with a summary sheet of the codes for easy access, and I taught them how to use NViVO to assign

codes. We coded one advertisement at the same time but independently (Cosentyx See Me) in order to give them an opportunity to ask any questions about the process. After coding the DTCA we discussed the process and I answered their questions. We did not make changes to any discrepant codes. I instructed the coders to keep notes on any observations they made about the advertisements.

Inter-rater Agreement

Coding IRA occurred in two phases. Out of 49 ads, we all coded the same ten ads, 20% of the entire data set. I created a separate project in NViVO and uploaded their results to determine consistency. The NViVO trainer explained that I could not use the coder comparison for video because even if the coding is the same in a scene, unless it is marked in the exact same time spot, NViVO does not recognize it as coded the same. I used the coding comparison in NViVO, but isolated discrepancies in video and manually assessed each one. Once I had determined that our codes for the 10 ads were over 80% consistent, we coded our randomly divided individual ads. The coders completed their 13 ads, saved their project to the flash drive, and I uploaded their results to my project.

Analysis of Findings and Drawing Conclusions

The fifth step was analysis of the findings. Research questions 1 and 2 address narrative theory specifically through an examination of persuasive content, based on research in narrative persuasion. To address RQ1 (transportation cues), I looked for patterns that emerged from the visual and verbal text, in the presentation of the information in the ad intended to engage the viewer cognitively and emotionally. To address RQ2 (identification cues) I looked for patterns in the visual and verbal symptoms for the related condition through the exemplar's activities,

emotional displays, and relational interactions. I also looked for patterns in the POV of the visual and verbal text, as well as patterns of health interactions with a physician or the medicine.

Content analysis is a systematic procedure that is useful for analyzing large sets of qualitative data. Through CA I created a coding framework for visual and verbal cues in narratives intended to evoke transportation and identification in viewers, using NViVO to code my results. This framework was based on cognitive and emotional cues for transportation and the lived experience of sufferers and perspective presentation for identification. Several iterations of the coding scheme resulted in a succinct and clear set of codes. The codes were then applied by multiple coders and inter-rater agreement was reached. The next chapter covers the findings from the data.

Chapter 4: Results

This chapter includes the findings of my content analysis from 2016 and 2018 broadcast DTCAs. Transportation and identification cues from narrative theory were identified in each scene of the 49 ads. These findings address the following research questions:

RQ1: What transportation cues are used in the stories in DTCAs?

RQ2: What identification cues are used in the stories in DTCAs?

Following is an overview of the frequency of transportation and identification codes, details about the most frequently occurring codes, their occurrence in visual and verbal contexts, their occurrence in specific narrative types (classic drama or vignette), and their occurrence according to the illness category of the advertisement. I also compare the differences and similarities of the following: each of the visual and verbal codes, the codes used in the narrative types, and the codes used in each illness category.

Visual versus Verbal Narratives

Ball and Applequist (2019) concluded that all DTCAs include a narrative, either visually, verbally, or both. Distinguishing between narratives in visual and verbal contexts was not their objective, but they suggest that future research look at each of these narrative formats (visual and verbal) independently. Furthermore, several scholars have recommended that visual and verbal narratives be examined independently of each other (see for example Chatman, 1978). I have identified the transportation and identification cues in the visual and verbal content of DTCAs that aired in the 2016 and 2018 season. The results provide insight into the cues that advertisers use both visually and verbally to persuade consumers. This information is beneficial to health practitioners because it provides insight about the health strategies pharmaceutical companies use in their advertisements to influence patients to request a specific medication.

The first step was to identify whether an advertisement narrative was visual, verbal, or both. A visual story was identified in an ad if it showed a chronological progression of events of one or more exemplars. A spoken narrative was identified by the use of first person or third person language (see Ball & Applequist, 2019; de Graaf et al., 2016). Classic drama narratives are ordered and show one exemplar. The majority of classic drama visual narratives in these ads have a chronological progression of one exemplar through a day. Vignettes are several stories with more than one exemplar, within one narrative. The majority of vignettes in the ads have an assumed conflict (illness or condition) and the story begins after resolution of the issue, an inference that the medication had been prescribed and taken.

Visual Narratives

All the advertisements include some form of a visual narrative. For example, the DTCA for Entyvio had multiple individual stories. Entyvio is advertised to treat ulcerative colitis or Chron's disease. Ulcerative colitis is chronic inflammation of the large intestine, whereas Chron's disease is chronic inflammation of the gastrointestinal tract. Both are autoimmune diseases. Symptoms for both can include abdominal pain, cramps, persistent diarrhea, rectal bleeding, constipation, urgent need to move bowels, fever, loss of appetite, weight loss, fatigue, night sweats, and loss of normal menstrual cycle (Chron's & Colitis, 2020). One of the narratives in this vignette is of an exemplar and his son. The exemplar is first shown sitting on a park bench as his son runs up to him from behind with a football in his hand, looking at and purchasing movie tickets on his phone as his son watches on, walking down the street hand-in-hand with his son, and then approaching a movie theater holding his son's hand (see Figure 1).

Figure 1
Visual Narrative: (*Entyvio Time for a Change* (2018, 35.8).

There are several details about the visual narratives that are important to observe. First is the type of narrative that is created, classic drama or vignette. Second, the assumed gender of the exemplar. Third, the condition the medication intends to treat. Fourth, the name of the drug. Last, the number of ads in my data set for that particular combination (see Table 1). The following information lists the frequency of the gender of the exemplar overall and the frequency of their presence in a classic drama or vignette.

A summary of the information reveals that there are 78 adult female exemplars, 3 girl exemplars, 47 adult male exemplars, and 4 boy exemplars in the 2016 and 2018 DTCAs. Women are featured almost three times more frequently than men in classic dramas (14:5), are the only gender exclusively in vignettes (4:0), and the only gender as exemplars that are also featured with children exemplars (1:0). Last, speakers are divided into the following categories: female exemplar, female voiceover (exemplar narrating a scene), female narrator, male exemplar, male voiceover (exemplar narrating a scene), and male narrator. There are 30 male narrators, 21 female narrators, 21 female voiceovers, and 11 male voiceovers.

Table 1

Itemization of the Visual Narratives in 2016 and 2018 DTCAs: Type of Narrative, Gender of the Exemplar, Condition Treated by the Drug, Drug Name, and the Number of DTCAs with the Related Details.

Narrative Type	Exemplar	Conditions Treated by Drug	Drug Name	Number of Advertisements
Classic Drama	Female exemplar (FE) only	Advanced non-small cell lung cancer, asthma, bipolar depression, depression, fibromyalgia pain, relapsing MS, rheumatoid arthritis, smoking cessation, type II diabetes, ulcerative colitis	Keytruda, Breo, Latuda, Lyrica, Tecfidera, Humira, Chantix, Toujeo	13
	Male exemplar (ME) only	Advanced non-small cell lung cancer, diabetic nerve pain, DVT and PE blood clot, psoriatic arthritis, smoking cessation	Keytruda, Lyrica, Eliquis, Enbrel, Chantix	5
Vignette	Female exemplars (FEs) only	Fibromyalgia pain, metastatic breast cancer	Lyrica, Verzenio	4

Table 1 (Continued)
Itemization of the Visual Narratives in 2016 and 2018 DTCAs: Type of Narrative, Gender of the Exemplar, Condition Treated by the Drug, Drug Name, and the Number of DTCAs with the Related Details.

Narrative Type	Exemplar	Conditions Treated by Drug	Drug Name	Number of Advertisements
Vignette	FEs and Male Exemplars (MEs)	Advanced non-small cell lung cancer, asthma, diabetes, diabetic ketoacidosis, DVT and PE blood clot, psoriasis, heart failure, hepC, IBS constipation, type II diabetes, pneumococcal pneumonia vaccination, rheumatoid arthritis, ulcerative colitis or Chron's disease	Opdivo, Fasenra, Victoza, Lantus, Farxiga, Jardiance, Xarelto, Otezla, Taltz, Cosentyx, Entresto, Harvoni, Stelara, Xarelto, Januvia, Prevanar 13, Humira, Entyvio	24
	FEs, Child exemplars (CEs)	Eczema	Eucrisa	1
	CEs only	Eczema	Eucrisa	1

Note. Some medicines treat different conditions and some conditions are treated by multiple medicines. Conditions and prescription names were only listed once, regardless of repeated occurrence.

Verbal Narratives

There are only 34 verbal narratives. Advertisements without a narrative only provided verbal information about the drug. I distinguished verbal narratives from information advertisements by first person or third person language use (excluding the section of the ad that gave information about the drug or its side effects). For example, the DTCA for Latuda features a woman discussing her bipolar depression. Bipolar depression is a mental health condition that causes individuals to have periods of depression and then periods of emotional highs. In the United States, the disorder affects nearly the same number of women (2.8% of the population) as

it does men (2.9%) (NIMH, 2021). In the advertisement she states, “it [bipolar depression] makes it hard to be there for the people I love. So I talked to my doctor and she prescribed Latuda” (*Latuda Maya’s Story*, 2018, 11.6).

It is also important to analyze details about the way that the narrative is structured (classic drama or vignette), the speaker in the narrative (the actor, narrator, or actor performing as narrator), the condition the medication treats, the drug advertised to treat the condition, and the frequency of the ads with the previous details. There were twice as many male narrators (11:5), although illnesses that predominantly affect women (metastatic breast cancer and fibromyalgia) only include female voices – exemplar and narrator alike (see Table 2).

Table 2

Itemization of the Verbal Narratives in 2016 and 2018 DTCAs: Type of Narrative, Gender of the Speaker and Narrator(s), Condition that the Medicine Treats, Drug Name, and the Number of DTCAs with the Related Details.

Narrative Type	Speaker	Condition treated by the Drug	Prescribed Drug	Number of Advertisements	
Classic Drama	Female Speakers Only				
	Female exemplar (FE), female exemplar voiceover (FEV), female narrator (FN)	Bipolar depression, fibromyalgia, ulcerative colitis	Latuda, Lyrica, Humira,	4	
	Narration only				
	FEV	Relapsing multiple sclerosis	Tecfidera	1	
	Mixed Speakers				
	FE, FEV, male narrator (MN)	Asthma, advanced non-small cell lung cancer, depression, smoking cessation	Fasenra, Keytruda, Rexulti, Chantix	4	
		Psoriatic arthritis			
	Male exemplar (ME), female caregiver (FC), FN	Diabetes, rheumatoid arthritis	Enbrel	1	
	Narration Only				
	FEV, MN		Jardiance, Humira	3	

Table 2 (Continued)
Itemization of the Verbal Narratives in 2016 and 2018 DTCAs: Type of Narrative, Gender of the Speaker and Narrator(s), Condition that the Medicine Treats, Drug Name, and the Number of DTCAs with the Related Details.

Narrative Type	Speaker	Condition treated by the Drug	Prescribed Drug	Number of Advertisements
Classic Drama	Male Speakers Only			
	ME, male exemplar voiceover (MEV), MN	Advanced non-small cell lung cancer, diabetic nerve pain, DVT & PE blood clot, smoking cessation	Keytruda, Lyrica, Eliquis, Chantix	4
Vignette	Female Speakers Only			
	FE, FN	Metastatic breast cancer	Verzenio	1
	FE, FEV, FN	Fibromyalgia	Cosentyx	2
	Mixed Speakers			
	FEV, MN	HepC	Harvoni	1
	FE, ME(child), FN	Eczema	Eucrisa	2
	FE, ME, FN, Male acting as interviewer/ narrator (MIN)	Type II diabetes	Jardiance	1
	FE, ME, MN	Heart failure, pneumococcal pneumonia vaccination, type II diabetes	Entresto, Prevnar 13, Farxiga	3
	FEV, MEV, MN	HepC	Harvoni	1
	FE, FEV, ME, MEV, MN	DVT & PE blood clot, psoriasis	Xarelto, Cosentyx	4
	Male Speakers Only			
	ME, MEV, MN	Type II diabetes	Victoza	2

The first step in the process of narrative persuasion is transportation. Transportation carries viewers into a story, and advertisement creators use multiple transportation cues to reach potential consumers.

Transportation

Transportation cues are strategies advertisers use to engage an audience so that they become absorbed in the emerging narrative. There are two categories in transportation: realism and vividness. Realism includes typicality and novelty. Typicality refers to usual responses that would occur in a particular setting or event (Green & Fitzgerald, 2017). One example is an individual riding a horse outdoors (see Figure 2). I omitted typicality from the coding scheme for the sake of simplicity; if an event or presentation of an event was not typical, then it was novel.

Figure 2
Typicality in a DTCA (Harvoni I am Ready, 2016, 25.9).

Novelty

My data set includes 137 novelty cues out of 687 scenes, with 117 novel visual cues and 15 novel verbal cues in 32 ads. Visual and verbal consistency occurs in 479 scenes and in all the

ads. Vivid images occur 397 times, and text vividness occurs 263 times in 46 ads. There are only six vivid language cues spoken. See Table 3 for more details.

Table 3
Novelty and Vividness Cue Frequency

Code	Visual frequency	Verbal frequency	Total references	Total unique ads
Novelty	117	15	137	32
Visual and Verbal consistency	-	-	479	49
Vivid images	397		397	46
Text on screen vivid	263		263	46
Charts, graphs, or simulated drawings	17		17	13
Vivid language		6	6	3

Note. An advertisement is only counted once when it is coded for the same visual and verbal cue. Also, visual and verbal consistency include both visual and verbal information and so there are not separate frequency counts.

Visual Novelty. In looking at Breo's ad as an example, we see the entire advertisement is novel. Each scene was formatted like a puzzle, with pieces falling into place from outside the visual field (see Figure 3). In one scene the advertised inhaler was its own puzzle piece, and as the scene progressed, it fell into place in the center of the screen. This image of the advertised medicine was the only scene in the entire advertisement that was a completed puzzle.

Figure 3
Novelty: Advertisement as an Interactive Puzzle (*Breo The Many Pieces*, 2016, 2.4)

Verbal Novelty. Six ads use novel cues as a strategy and three of the six ads use a familiar or catchy song with lyrics that emphasize the message they are communicating. For example, *Lantus Stay Together* (2018) tells a story of remaining in a committed relationship. The advertisement opens with a female narrator saying "trust and loyalty" and in the next scene "you, and Lantus." The spoken remarks are not coded as novel, but the use of the familiar song *Stay Together* by Al Green is coded as novel. The music plays in the background throughout the entire ad, and in scene 8 and scene 15 (the last scene) "stay together" is sung (*Lantus Stay Together*, 2018, 8.6).

Vividness

Vividness is another element in transportation; it includes vivid language choices (not part of the side effect information), intense imagery, and sensory appeals. Vivid visual images include close-ups, charts, graphs, simulated drawings, text on the screen presented in a bold or attention gaining manner, breathtaking scenery, bright colors, or visual and spoken consistency.

Vividness also includes sensory cues such as balance, pain, sight, smell, sound, taste temperature, and touch.

Visual and Verbal Vividness. I found that there were times when the information presented visually was also stated verbally, which made the words on the screen stand out. Visual and verbal vividness occurs when there is consistency between what is seen on screen and simultaneously spoken by the exemplar or narrator. It is vivid because it highlights and emphasizes specific words and phrases. Visual and spoken consistency is the most frequently occurring code of all and was present in every ad. The name of the advertised drug is seen and spoken more frequently than any other combination, occurring 167 times. The potential benefit of taking the drug occurs 138 times, while the condition the drug is intended to ameliorate occurs 85 times.

A second person general reference is a word or statement that instructs the viewer in some way, e.g. "Talk to your doctor about Tecfidera." (*Tecfidera*, 2016, 55.9). A second person warning is a warning related to taking the drug, e.g. "use caution before driving or operating machinery." Second personal general occurs 23 times and second person warnings occur 19 times. I differentiated second person warning from side effects because of the tentative language used in second person warnings. Side effects were clearly expressed as a potential effect of taking the drug. For example, "Fasenra may cause headaches, sore throat, and allergic reactions" (*Fasenra Targeted Treatment for Asthma*, 2018, 34.4). Side effect visual and verbal consistency occurs 19 times (See Table 4).

Table 4
Visual and Verbal Consistency in DTCAs

Code	Number of instances
Drug name	167
Drug benefit	138
Disease identification	85
Second person general	23
Second person warning	19
Drug side effect	19

Note. The drug name and drug benefit occur more frequently than any other combination when what is seen on the screen is also spoken.

Visual Vividness. Vivid imagery is the second most common transportation cue. These cues include close-ups, charts, graphs, simulated drawings, and written text that is distinct, large, or presented in an interesting font. Common strategies include showing close-up shots of the exemplar (see Figure 4), drawings superimposed over a body part (see Figure 5), and large fonts in a text box that takes up a large portion of the screen (see Figure 6).

Figure 4
Vivid Imagery: Close-up of Exemplar (*Harvoni – I am Ready,* 2016, 7.1)

Figure 5
Vivid Imagery: Simulated Drawing and Bright Colors (Humira – Chase What You Love, 2018, 21.9)

Figure 6
Vivid Text Displayed on the Screen (*Cosentyx Feat. Cyndi Lauper*, 2018, 27.5)

Vivid Sensory Cues. Cues that elicit sensory information are another category of vividness (see Hurdley & Dicks, 2011). Touch occurs 177 times in 44 ads and is the most frequent sensory cue. Balance is the second most frequent sensory cue, but only has 20 instances. The least occurring sensory cue is smell, with one instance (see Table 5).

Table 5
Transportation: Vividness and Sensory Cues

Code	Number of instances	Visual frequency	Verbal frequency	Number of ads
Touch	177	175	2	42
Balance	20	20		6
Sight	18	5	13	7
Pain	15	11	4	6
Sound	7	6	1	5
Taste	6	6		5
Temperature	2	2		2
Smell	1	1		1

Vivid Visual Sensory Cues. Visual sensory cues are determined by the focus in the advertisement on the sensory cue. As stated above, touch is the most prominent sensory cue in the scenes. The advertisement *Taltz Touch Shows How We Really Feel* (2018) uses touch throughout the ad. Toward the end of the advertisement, touch is emphasized with a close-up of two hands touching against a serene background (see Figure 7).

Figure 7

Vividness and Sensory Cue: Touch (*Taltz Touch Shows How We Really Feel,* 2018, 43.4*).*

Vivid Verbal Sensory Cues. Verbal sensory cues occur in a limited number of scenes. They are determined by words that identify one of the senses. Sight is the most frequent verbal cue in the ads. For example, the advertisement for psoriasis, *Cosentyx See Me* (2016), repeats the word "see" and the phrase "see me" six times.

The purposes of transportation is to allow the viewer to be able to identify with the exemplar. The next section includes the results of the identification cues in the ads.

Identification

Illness identification is the process of a viewer relating their health experiences to an exemplar. As stated previously, a viewer likely identifies with the illness of an exemplar, more so than demographic information about the exemplar. Neil et al. (2018) refer to this as a shared illness identity. Poor health and especially chronic illness affect an individual physically, emotionally, and socially (HealthyPeople2020). I identified identification cues in the exemplar's activities, emotions, health events, and relationship interactions in the ads. Additionally, the point of view used to communicate a message affects identification; first and third person points

of view are most persuasive (Chen et al., 2015). The codes for identification are established based on condition symptoms that affect activity, doctor interactions, emotions, and relationships. I also created them based on the point of view of the visual and verbal communication: first, second, or third person.

My first step to determining the codes for identification was to identify the categories of illness in all 49 ads. The various illness categories in the advertisements and their frequency are: blood (2), cancer and neuroplasms (4), cardiovascular (2), infection (2), inflammatory and immune system (5), mental health (2), metabolic and endocrine (8), musculoskeletal (4), neurological (2), oral and gastrointestinal (4), respiratory (2), skin (8), and general health (4). Common illness categories that I did not see in my data set are congenital, ear, eye, renal and urogenital, reproductive health and childbirth, and stroke. I am aware, however, that some of these categories are targeted by other ads.

Health-related quality of life (HRQOL) relates to an individual's ability to move through their day with an optimal level of health and wellness (CDC, 2021). Areas affected when experiencing an illness are physical, emotional and mental, and social functioning (Office of Disease Prevention and Health Promotion, 2020). I determined the physiological, social/ relational, and emotional/psychological symptoms associated with each category and specific illness. The most frequently occurring impairments to QOL in my data set are:

- decrease or change in activities
- changes or loss of work
- feelings of loss
- depression
- pain

- anxiety
- fatigue
- guilt
- worry
- anger
- hopelessness
- shame
- avoidance
- sleep issues
- isolation
- mood and esteem issues
- impaired social interactions
- sexual difficulties
- relational strain and intimacy issues

I derived the categories of activities, emotions, and relationship interactions from this list. In addition, I coded the health information conveyed in each ad, as well as the point of view used to relay the information, which indicates the perspective that the writer of the advertisement has chosen to allow viewers to picture themselves. The remainder of the chapter presents the results of the activities, emotions, health events, point of view, and relationship interactions of the exemplar.

Activity

The exemplars in the scenes engage in several different activities. I wanted to make sure that individual activities were not coded more than once for different events. To better clarify the specific codes, I made the following distinctions as primary goals of the action of the exemplar. Visually, direct interaction with the camera, whether the exemplar is sitting or standing, is coded as second person point of view. If an exemplar is watching an event then the scene is coded as watching. Furthermore, the activity that is prominent in the scene is the one that is coded. For example, in *Fasenra Targeted Treatment for Asthma* (2018) the exemplar is working at home while watching a television program about the medicine. The activity is coded as working at home (See Figure 8).

Figure 8
Identification: Activity Working at Home (*Fasenra Targeted Treatment for Asthma,* 2018, 13.9)

The data include 279 visual and 8 verbal references to activities. The most frequent identification cues for activity are walking, sightseeing, participating in games, and play (see Table 6).

Activities that were coded fewer than ten times are omitted. They included shopping, picture taking, and car related activities (driving or riding).

Table 6
Identification: Activity Frequency in Scenes

Activity	Visual frequency	Verbal frequency	Total frequency	Total ads
Walking/ sightseeing	64		64	27
Participating in games/ play	52	3	55	22
Working at home	26		26	14
Working at workplace	24		24	10
Watching	23		23	12
Food related at home	16		16	12
Standing	15		15	9
Participating in sports	10	5	15	10
Food related in public	14		14	8
Sitting	12		12	7

Emotions

Ekman and Friesen (1971) identified seven basic emotions: anger, enjoyment, fear, sadness, surprise, contempt, and disgust. The visual or verbal emotional display of anger (frustration), enjoyment, fear, sadness, and surprise were used to create codes for emotional identification cues (there are not any visual or verbal displays of contempt and only one for disgust, so they have been omitted from the analysis). What I coded for displays of anger were actually mild to moderate frustration, so I changed the term from anger to frustration. Each of the emotional expressions are listed as symptoms of the conditions except enjoyment. However, enjoyment is expected with the relief of symptoms, so it is included. Each code was a range of

the emotion. For example, enjoyment could be as simple as a smile or as intense as overjoyed, such as jumping up and down. Visually, enjoyment is portrayed 388 times, sadness 57 times, surprise 11 times, frustration 5 times, and fear 10 times. Verbally, enjoyment is expressed 34 times, sadness 8 times, anger 15 times, and fear 8 times. Surprise is only expressed once verbally. See Table 7 for more details.

Table 7
Identification: Emotion Frequency in Scenes

Emotion	Visual frequency	Verbal frequency	Total frequency	Total ads
Enjoyment	388	34	422	48
Sadness	56	8	64	24
Frustration	6	15	21	11
Surprise	10	1	11	6
Fear	2	8	10	6

Enjoyment. Enjoyment is expressed significantly more than all other emotions. It is displayed in every ad except Pradaxa, which is an animation of fish. There are 388 visual references and 34 verbal references.

Visual portrayal of enjoyment. Visual expressions of enjoyment are more frequent than verbal expressions. Some visual expressions of enjoyment include exemplars smiling directly at the camera (see Figure 9) or smiling while performing some activity (see Figure 10).

Figure 9
Identification: Visual Portrayal of Enjoyment (*Lyrica A Day at the Park*, 2018, 18.1).

Figure 10
Identification: Visual Portrayal of Enjoyment During Activity (*Entresto Tomorrow*, 2016, 14.6).

Verbal expression of enjoyment. Verbal enjoyment is expressed in 19 ads and is phrased in many ways. Some are hopeful: "Now I have less diabetic nerve pain. These feet would like to keep the beat going" (*Lyrica Keep the Beat Going*, 2016, 53.7*)* and "Ready for a chance at 100% clear skin?" (*Taltz Touch is How We Communicate*, 2018, 51.7). Others are more direct: "I am glad my doctor prescribed Lyrica" (*Lyrica Babysitter*, 2018, 18.3. Another exemplar begins the ad saying "It felt great not having HepC" (*Harvoni Let Go*, 2018, 0.0).

Sadness. Sadness is listed as a symptom that sufferers experience in all of the illness categories represented in the ads. Like the other emotions, it is more likely to be displayed visually than verbally.

Visual portrayal of sadness. Sadness is displayed in 58 scenes. The emotional display ranges from an exemplar looking directly at the camera shedding a tear (see Figure 11) to an exemplar being led by her daughter as she walks down a city street (see Figure 12).

Figure 11
Identification: Visual Portrayal of Sadness (*Cosentyx See Me*, 2016, 2.1).

Figure 12
Identification: Visual Portrayal of Sadness (*Opdivo Most Prescribed Immunotherapy*, 2016, 3.9).

***Verbal Expression of Sadness*.** Sadness is only expressed verbally eight times and in five ads. Each of the mental health ads expresses sadness both visually and verbally. In *Rexulti Living Behind the Mask* (2018, 14.0), the exemplar says "I didn't want to let people down. So, I hid my real feelings behind a mask."

Frustration. frustration diverges from the pattern of the other expressions of emotions and occurs more frequently verbally than visually.

Visual Portrayal of Frustration. Frustration is displayed visually in three ads. The expressions are not extreme and are often represented as mild to moderate frustration. In one ad the exemplar appears to be pleading (see Figure 13).

Figure 13
Identification: Visual Portrayal of Frustration (*Cosentyx See Me*, 2016, 3.6). This is the same advertisement as Figure 11, but a different exemplar with a different emotional expression.

Verbal Expressions of Frustration. Frustration was more easily identified in the spoken word. Phrases that indicate frustration with the disease and perception of the disease were more likely, e.g. "Don't stare at me" (*Cosentyx See Me*, 2016 4.3) and "struggling with my diabetes. I do my best to manage, but it's hard to keep up with" (*Toujeo Journal*, 2016, 5.5).

Surprise. Surprise in the advertisements is not related to shock regarding the disease, but rather the capability of the treatment.

Visual Portrayal of Surprise. The portrayal of surprise in the ads is a positive emotional response (see Figure 14).

Figure 14
Identification: Visual Portrayal of Surprise (*Jardiance Good News,* 2018, 15.1).

Verbal Expression of Surprise. The only verbal expression of surprise is also from the image above (Figure 14). The woman in the scene states **"**It can't be true, can it?" (*Jardiance Good News*, 2018, 13.4).

Fear. A fear response in exemplars was not common and tended to be related to fear of social humiliation.

Visual Portrayal of Fear. There were only two ads that visually displayed fear and they both related to gastrointestinal issues. The portrayal of fear related to the ability to find an accessible bathroom in a timely manner (see Figure 15).

Figure 15
Identification: Visual Portrayal of Fear (*Humira – A Day at the Fair,* 2016, 14.6 & 15.1)

Verbal Expression of Fear. There are more verbal expressions of fear than visual portrayals, although there are only four. These expressions center around the illness onset or the health incident happening again. One exemplar states "I was scared" (*Xarelto Selective*, 2018, 11:2) and "…and could this happen again?" (*Eliquis DVT and PE Blood Clot*, 2016, 9.2).

Health Event

Illness identification is one way that viewers relate their experiences to and are persuaded by an exemplar's behaviors. Cues related to an illness include the disclosure of the issue, interaction with a physician, and interaction with medication.

Disclosure of Health Issue. The health issue is disclosed 222 times in the ads. It is visually written on the screen 93 times, portrayed by an exemplar 14 times, and verbally disclosed 109 times.

Visual Portrayal of Illness. I distinguished between a visual portrayal of the illness and the illness being disclosed in writing on the screen. There are 99 times that the health issue is written on the screen, and it occurs in 48 ads. The only advertisement that does not include a written (visual) disclosure of the health issue is *Rexulti Living Behind the Mask* (2018), a prescription for depression.

The health condition portrayed by the exemplar is coded when the condition or disease is clearly acted out or shown on the actor (see Figure 16).

Figure 16
Identification: Visual Portrayal of Psoriasis (*Cosentyx – Feat. Cyndi Lauper,* 2016, 8.3).

There are 14 times in 10 ads where the health condition appears visually. The conditions shown are psoriasis, eczema, rheumatoid arthritis, IBS constipation, ulcerative colitis, fibromyalgia, and diabetic nerve pain (see Table 8). Females are almost twice as likely to demonstrate the condition (9:5). Additionally, the majority of these portrayals occur early in the advertisement and before the information about the advertised drug is presented.

Table 8
Health Condition Portrayal by Exemplar

Health Condition	Advertisement	Location in the Ad (seconds)
Psoriasis	Cosentyx Feat. Cyndi Lauper (2018)	3.5, 7.4
	Otezla Little Things Can be a Big Deal (2018)	3.1
	Taltz Touch Shows How We Really Feel (2018)	12.4
Eczema	Eucrisa, On Almost Everybody (2018)	11.2, 14.5
	Eucrisa Steroid Free (2018)	7.1, 14.0, 15.5
Rheumatoid Arthritis	Humira Your Wake-up Call (2018)	13.9
IBS Constipation	Linzess Yes (2018)	0.0, 4.6
Ulcerative Colitis	Humira A Day at the Fair (2016)	13.4
Fibromyalgia	Lyrica Babysitter (2018)	9.8
	Lyrica Coach (2016)	7.8
Diabetic Nerve Pain	Lyrica Keep the Beat Going (2016)	5.1

Verbal Disclosure of Illness. The illness is disclosed when an exemplar states the condition that they are experiencing or the narrator states the issue that the medication is intended to treat in the specific advertisement. Some medicines treat more than one illness. For example, Lyrica is advertised to treat fibromyalgia pain in *Lyrica Carpenter* (2016) and diabetic nerve pain in *Lyrica Keep the Beat Going* (2016). The only advertisement that does not disclose the health issue verbally is *Lantus Stay Together* (2018). The intention of this ad is not to persuade a consumer to begin taking the medicine, but instead for current consumers to remain loyal and not change from Lantus to another brand. Examples of verbal disclosures are “If you

have afib, an irregular heartbeat, that may put you at five times greater risk of stroke" (*Pradaxa Fish,* 2016, 6:1) and "How do you chase what you love with moderate to severe rheumatoid arthritis?" (*Humira Chase What You Love*, 2018, 4.0).

Physician Interaction. A physician plays an essential role in the diagnosis and treatment plan for an illness. Physicians, advanced practice nurse practitioners, or physician assistants are the only access a patient has to the advertised medication. There are six visual interactions and fifteen verbal interactions with a physician. I coded three types of health interactions: active, interactive, and passive. An active interaction is coded when the exemplar leads the interaction; an interactive physician interaction is coded when the exemplar and physician exchange is equal (see Figure 17); a passive interaction is coded when the exemplar is listening to and taking direction from the physician.

Visual Interaction with Physician. There are six visual interactions; four are interactive and two are passive.

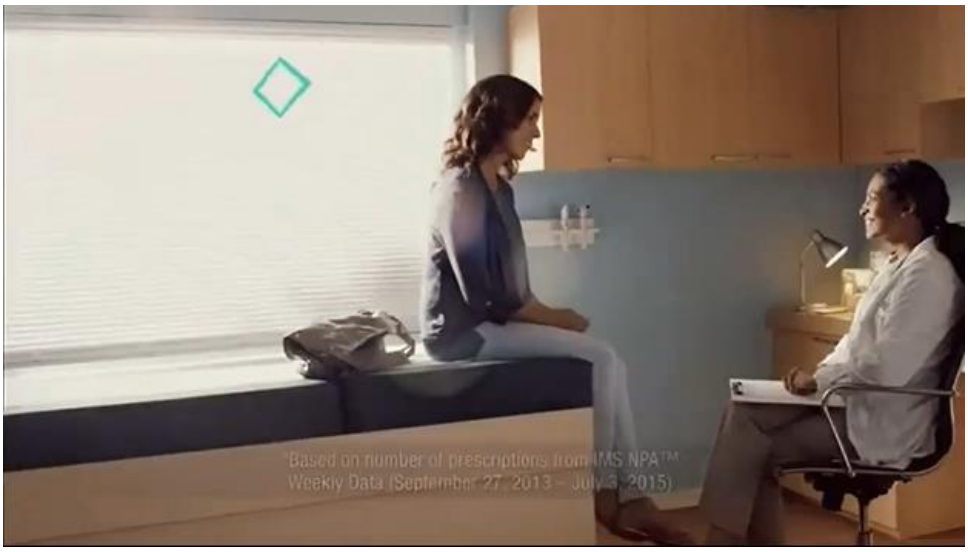

Figure 17
Identification: Visual Portrayal of an Interactive Exchange with Physician (*Tecfidera – Relapsing MS,* 2016, 50.0).

Verbal Physician Interaction. There are five active exemplar/ physician interactions, five interactive interactions, and five passive interactions. An active verbal interaction is coded when the exemplar initiates the interaction with the physician "I asked my doctor about Victoza" (*Victoza Feat. Dominique Wilkins*, 2018, 14.9). An interactive exchange is coded when the exemplar discusses talking to the physician and the physician's response. For example, "I talked to my doctor and he prescribed Lyrica" (*Lyrica Keep the Beat Going*, 2016, 11.3) and "I spoke to my doctor and she told me about Eliquis" (*Eliquis DVT and PE Blood Clot*, 2016, 15.3).

Prescription Interaction. A direct prescription interaction is coded when the exemplar has direct contact with the medication or talks about taking the medication. An indirect prescription interaction is coded when the medicine is shown in the same scene as the exemplar but the exemplar does not touch, use, or consume it. The advertised medication is infrequently shown or spoken about in the advertisements; visually 18 times and verbally twice.

Visual Prescription Interaction. There are sixteen direct interactions with the prescription (see Figure 18) and three indirect interactions (see Figure 19). In the indirection interaction scenes the medication is in the same picture with the exemplar, but there has not been any direct interaction.

Figure 18
Identification: Visual Portrayal of Direct Interaction with Prescription (*Eucrisa On Almost Everybody*, 2018, 12.7).

Figure 19
Identification: Indirect Interaction with Prescription Medication (*Tecfidera Relapsing MS*, 2016, 9.8).

Verbal Prescription Interaction. Verbal interactions only occur twice in the ads: "My doctor said I could start on Keytruda, so I did" (*Keytruda It's True Roger's Story*, 2018, 13.5) and "[this is] Humira helping to relieve my pain" (*Humira Go Further*, 2016, 9.5).

Relationship Interactions

Relationship interactions are familiar interactions between the exemplar and another human being. Exemplars in the DTCAs are presented as alone, with family, with friends, and with others (such as customers or students). If an exemplar is standing with a group of people who they are not interacting with or do not seem to know, then the interaction was coded as isolated or alone. Relationships with partners and children are coded as family. Friends are coded when the exemplar is interacting with a group of people who do not appear to be family or when the majority of individuals are friends even when a family member is present (see *Breo The Many Pieces*, 2016, 44.7). The majority of references are the exemplar alone and with family. There are 244 scenes of the exemplar alone, 203 scenes where the exemplar is interacting with family, and 35 scenes where the exemplar is interacting with friends. See Table 9 for more details.

Table 9
Identification: Relationship Interaction Frequency

Relationship	Visual frequency	Verbal frequency	Total frequency	Total ads
Alone/ isolated	244		244	43
Family	199	4	203	42
Friends	35		35	17
Other	62		62	19

Alone or Isolated. There are times when the exemplar is the only person in the scene. Other times they are with others, yet not engaged with them. All codes of the exemplar not engaged in a meaningful interaction are coded as alone or isolated.

Visual Isolation. Alone is coded when the exemplar is alone or if there are others in the scene, but the exemplar is somehow isolated from them (see Figure 20). All the coding for isolation is visual.

Figure 20
Identification: Isolation (*Latuda – Maya's Story*, 2018, 15.7).

Verbal Isolation. There are not any verbal references to being alone or isolated.

Family. Family interaction is coded when the exemplar visually interacts in some way with a partner, child(ren), or partner and child(ren) and verbally when the exemplar mentions a family member. There are 199 visual scenes with the exemplar and family. There are four verbal references.

Visual Family Interaction. The majority of family interactions are visual. They range from one partner, a partner with children (see Figure 21), to extended family.

Figure 21
Identification: Family Interaction (*Lyrica Babysitter,* 2018, 53.1).
The image has been brightened for clarity.

Verbal Family Interaction. There are only four verbal family interactions. Verbal interactions are coded if the exemplar speaks directly about a partner, child, or other family member or when they reference their role in a family. For example, "What about my wife?" (*Eliquis DVT and PE Blood Clot*, 2016, 5.7) and "I learned the horn from my dad" (*Lyrica Keep the Beat Going*, 2016, 7.7). Roger, in *Keytruda It's True Roger's Story* (2018) is coded for both types of verbal interactions "all of the things I want to teach my kids" (8.6) and "Being a good father is important to me" (0.0).

Friends. Friends are the least coded of the three primary relationship groups. There are 35 references and they are all visual.

Visual Friend Interaction. A relationship is coded as friend if the exemplar is interacting with a group of people who do not appear to be family (see Figure 22). The scene is coded as friend instead of family if there is a majority of friends. An interesting occurrence is that friends do not appear in the ads until closer to the end, with the exception of one, *Farxiga Everyday People* (2016, 6.7 & 16.5).

Figure 22
Identification: Friend Interaction (Rexulti, Living Behind the Mask, 2018, 56.2).

Verbal Friend Interaction. There are not any verbal references to friends.

Point of View (POV)

The point of view is the perspective that the scene is presented from and the language used to communicate the information. There are 16 visual first person perspectives and 112 verbal first person language choices; visually 98 exemplar direct interaction with the camera (second person POV) and 143 second person POV writings on the screen, and 273 verbal second person POV references; there are 472 visual third person references and 12 verbal third person references.

First Person POV. First person POV has been documented as the most persuasive POV in narrative theory (Chen et al., 2015, found that first person and third person POVs did not differ in their persuasive impact). First person POV is presented directly from the exemplar's perspective. There are 16 visual first person POV perspectives and 112 verbal first person POV perspectives.

Visual First Person POV. Visual first person POV are camera frames that imply whose viewpoint the scene should be perceived through. It includes views that are presented in such a way that the exemplar appears to see the scene and the viewer is able to experience the exemplar's world through his/ her own eyes (see Figure 15 and Figure 23).

Figure 23
Identification: First Person POV (*Opdivo – Most Prescribed Immunotherapy*, 2016, 37.9).

Verbal First Person POV. There are 112 verbal first person POV references. Verbally, first person POV is determined by the use of I, me, my or the plural forms we, us, our, or ours. For example, "Over a year ago I was diagnosed with advanced non-small cell lung cancer" (*Keytruda It's True Donna's Story*, 2016, 0.0) and "I don't want to live with the uncertainties of Hep C" (*Harvoni I am Ready*, 2016, 0.0).

Second Person POV. There are three categories of second person POVs. Two are visual; the exemplar looking directly at the screen as if they are talking to a second person 'you' and second person language written on the screen. The other second person POV is verbal and is determined by the use of you or your(s). There are 98 second person direct interactions, 143 second person written perspectives, and 273 verbal second person perspectives.

Visual Second Person POV. The first visual second person POV category is the exemplar making direct contact with the camera (see Figure 24). The second visual second person POV category is written on the screen (see Figure 25). There are 98 times that an exemplar interacts directly with the camera and there are 143 second person writings on the screen.

Figure 24
Identification: Second Person POV (*Lyrica – Keep the Beat Going*, 2016, 3.8).

Visual Second Person POV Written. Second person references written on the screen are language that uses you or your(s). They are coded as visual because they are seen and not heard, although there may times when the second person language is both written on the screen and simultaneously spoken.

Figure 25
Identification: Second Person POV Written on Screen (*Jardiance – Around the Clock*, 2016, 30.8).

Verbal Second Person POV. Verbal second person POV is language using you or your(s) by the exemplar, exemplar as narrator, or narrator. There are 273 scenes that use second person language. For example, "Type II Diabetes doesn't care who you are…or where you're from" (*Farxiga Everyday People*, 2016, 0.0, 7.5) and "Do what I did, ask your doctor about Humira" (*Humira Chase What You Love*, 2018, 7.3). The coded scenes do include second person instructions to the consumer that are in the information, warning, and side effect section of the ad because they are often embedded in the visual storyline and speak directly to the consumer, e.g. "See if Cosentyx can make a difference for you" (*Cosentyx Feat. Cyndi Lauper*, 2018, 22.1). This Cosentyx advertisement is 1:00 minute long in its entirety, but this call to action to the consumer is communicated early in the ad at 22.1 seconds.

Third Person POV. Third person point of view is the perspective of an onlooker visually and is verbally communicated with the language usage s/he, it, her, his, him or plural forms they, them, their/theirs. There are 474 scenes from a third person perspective and 12 verbal third

person references. All ads include at least two scenes that are communicated from a visual third person POV.

Visual Third Person POV. Third person visual POV positions the viewer as an onlooker of an event or action of the exemplar (see Figure 26). As stated above, all ads contain at least two scenes presented from a third person POV.

Figure 26
Identification: Third Person POV (*Otezla – Little Things Can be a Big Deal*, 2018, 8.9).

Verbal Third Person POV. There are only six ads that speak from a third person POV. Three of the references refer to a doctor and are not specific to the exemplar experience "He said Victoza works differently than pills, and comes in a pen" (*Victoza Across the Country*, 2016, 14.8), two are in the same ad and they are a daughter discussing her father's disease "To most he's Phil Mickelson...So, when his joint pain from psoriatic arthritis got really bad" (*Enbrel Feat. Phil Mickelson*, 0.0, 6.6), and the remaining eight refer to a patient in general, e.g. "For adults with advanced, non-small cell lung cancer" (*Opdivo Most Prescribed Immunotherapy*, 2016, 0.0).

In summary, transportation and identification cues within health messages are communicated visually and verbally, and the majority of health narratives in DTCAs are communicated visually, with just a few exceptions. The most frequently occurring transportation cues are visual and verbal consistency between what is written in the scene and simultaneously spoken, vivid imagery, and touch. The most frequently occurring codes for identification cues are enjoyment, standing, family interactions, and third person POV. Interestingly, there are few interactions with a physician, even though one is required for the prescription, and few emotional displays of living with the symptoms of the condition. There are more vignettes than classic dramas, and no male exemplars are displayed in vignettes with children exemplars, nor are there male exemplars in DTCAs for mental health. The majority of exemplars are women, but the majority of narrators (not exemplar voiceovers) are men. The next chapter presents the patterns and themes that emerged from these findings.

Chapter 5: Analysis and Discussion

This chapter presents the analysis of my findings from Chapter Four. Here I analyze the visual and verbal transportation and identification cues. The first part of the chapter is an analysis of the narratives in the advertisements and the comparison and contrast of the visual versus verbal information. The remainder of the chapter is an analysis of the persuasive strategies used in the transportation cues (novelty, vividness, and sensory data) and identification cues (activity, positive emotions, relationships, health events, and point of view). My results suggest that the ads rely on inference and positive portrayals that overstate the drugs' efficacy. The ads are scripted in a way that is engaging and that encourages a direct and independent relationship between the viewer and drug company. Additionally, I have found several omissions in the ads that are outside the purview of my research questions but still warrant discussion. The analysis of my data set has raised additional questions that need further exploration and research. Those questions are more fully addressed in Chapter Six.

Narrative Message

Two kinds of messages emerge from the stories in my data set: wellness and restored health. From my experience, a common misconception is that these ads always start off with the illness. However, over half of the ads in my data set are wellness stories, which is an advertisement that shows the exemplar happy and healthy from the beginning of the ad to the end. In restored health stories, the conflict (medical condition and its difficulties) and resolution from the health condition are revealed visually and verbally. The majority of stories in the advertisements are wellness messages (see Appendix E). Messages of wellness and restored health associate the advertised medicine to a superior health-related quality of life.

Wellness

Wellness stories include distinct visual and verbal messages that do not align. The visual story is one that is free from visible signs of a condition or the portrayal of symptoms. The verbal message discusses the condition and concerns. For example, in *Keytruda It's True: Donna's Story* Donna wakes up, wakes up her grandchildren (who she appears to be raising), gets them ready for school, drops them off, and then goes to work. The visual story is about a woman who is beginning her day. On the other hand, the verbal message begins with the exemplar voiceover saying "Over a year ago I was diagnosed with advanced non-small cell lung cancer." A narrator interjects "A true story with Keytruda…" Wellness visual stories present exemplars living their unimpeded lives as they express joy, health and wellness through their activities and relationships. Exemplars display these positive characteristics at the beginning of the ad, and they continue demonstrating them through the remainder of the ad.

Narratives in wellness stories are only connected to health because of the information delivered in the verbal cues. For example, in the DTCA *Chantix – Ginny*, the exemplar sits on a couch talking to someone off camera, then goes to a nursery (in different clothes), looks at trees, loads a tree in the back of her truck, drives her truck, and then unloads and plants the tree in her yard. The visual story is not related to any health condition. If it were not for Ginny talking about her struggles to quit smoking until she took the medication and was able to quit, and the textual information written on the screen, I would not have known that this was a DTCA. The visual actions communicate a story about a woman wanting to plant a tree in her yard. In order to make sense out of the narrative in its entirety, inferences must be made about any gap between the visual and verbal.

The findings in my data set are congruent with research by Cohn (2019), who identified bridging inferences, which are "backward-looking inferences" that cause a viewer to fill in the gaps of unstated information based on prior and current information (pp. 68). In wellness stories, the health condition is revealed exclusively in the verbal text, and the conflict in the story (the condition) happened at a previous time, before the advertised drug was taken. Additionally, causal inferences are made in many wellness stories between the effectiveness of the medicine and the resulting happy and healthy exemplar. For example, in *Humira Go Further,* the visual narrative is about a woman going to visit her sister and newborn niece (female is assumed because of pink in the ad) and her journey of reconnecting with her family. The advertised drug is for rheumatoid arthritis. The exemplar freely moves about, crouching down at one point to paint with a child on the floor, and later assembles a stroller. The inference is that the exemplar is able to move freely without pain because she took Humira.

Prompting an individual to make inferences about content is an effective persuasive strategy that distracts from "careful scrutiny" of the message (Petty & Cacioppo, 1986). Wellness messages in DTCAs invite inference which distracts from careful contemplation of message credibility and validity. Petty and Cacioppo (1986) state that these types of distractions are directly related to peripheral appeals that engage the emotions. Wellness stories are about the exemplar's life after treatment with a medicine, and without the verbal context or written information on the screen, there is no connection to a health condition.

Restored Health

The other kind of message in the stories is restored health. These narratives present an individual suffering at first (conflict introduced), but then the condition is resolved and health is restored. Restored health stories differ from wellness stories because the conflict is

communicated both visually and verbally. However, like wellness stories, restored health stories rely on causal inference. Welch-Cline and Young (2004) found in one of the first and few studies on visual information in DTCAs that there was a tendency to present individuals as happy, healthy, and active. My data suggest that this is still true, 14 years later. This satisfactory state occurs after the mention of the medicine at the informative part of the verbal text, which occurs early in the ad, leaving a large portion of the ad with a happy, healthy, and restored exemplar. The viewer is encouraged to infer that the medication is the specific reason for all that the exemplar is able to accomplish and enjoy. Researchers have found that positive visual information in a message creates a distraction that uses up cognitive resources otherwise needed to make critical assessments about a message, leading to a reduction in counterarguing (see Neiderdeppe et al., 2012; Petty & Cacioppo, 1986; Rubinelli, 2008; Shapiro & Kim, 2012).

Visual Cue Dominance

I found overall that the majority of transportation and identification cues are communicated through visual presentation. In the DTCAs, the visual narrative continues to unfold while information about the drug, which includes benefits, interaction warnings, and side effects are presented (see Appendix F for a list of visual cues delivered during the verbal information about the drug).

Kreuter (2007) argues that viewers are more likely to cognitively attend to an unfolding visual story, using up resources needed to counterargue a verbal message. In other words, visual messages are more likely to be processed than verbal messages. Most of the narratives in my data set are presented through visual cues, with over half of the verbal content about drug information. For example, the *Harvoni I am Ready* advertisement has a total of 181 words in it: 127 convey the benefits, side effects, and interaction complications with the drug. The FDA

requires pharmaceutical companies to disclose accurate and balanced information regarding risks and benefits of the drug. The visual information about positivity, health, and wellness communicates benefits of the drug. Sullivan et al. (2021) found that these types of positive images increase perceptions about a drug's efficacy, which affects consumer abilities to make informed health decisions.

The narratives in wellness and restored health DTCAs communicate stories about illness and health, primarily through visual cues. They are structured so that inferences must be made about the condition and the connection between the positive behaviors of the exemplar and the medication, which distracts and disables cognitive resources needed for critically evaluating a message.

The remainder of this chapter is an analysis and discussion of the transportation and identification cues in my data set.

Transportation Cues

The following discussion addresses RQ 1 (transportation cues in DTCA stories). The transportation cues included in this analysis are novelty, vividness, touch, and written and spoken consistency. These cues are intended to captivate a viewer's attention, which can result in disengaged critical evaluations, fewer counter-arguments, more positive perceptions of the advertisement and brand, and more favorable emotions toward the product (Ching et al., 2013).

Blurred Lines

Persuasive strategies that appear to be unscripted blur the lines between reality and fiction. Several ads use strategies that mimic an interview or live event to deliver their message. One, for example, is *Jardiance Good News.* In the ad an actor/journalist asks seemingly random people on the street, who have type II diabetes, how much they know about the disease. He then

proceeds to update their knowledge, and makes the claim that Jardiance solves those unknown issues. The actor begins the ad by orienting the viewer to the purpose of his actions of "…testing people's knowledge…" (see Figure 26). Then the scene changes, and he speaks directly to the exemplar: "So you have type II diabetes…" (3.4). The scenes change quickly from one exemplar to the next, leaving little time to contemplate the authenticity of the information. The advertisement is a novel approach to delivering information in a way that seems real and not scripted (not be confused with Fisher's (1985) realism, which is concerned with the events, setting, and actor's actions in a narrative being believable).

This structure of advertisements as if they are framed on editorial inquiry raise serious ethical questions. This approach is misleading and falsely increases the credibility of the medication through a fictional association with a respected field. Additionally, several ads in my data set reveal the exemplar's name and indicate they are not an actor. This strategy is also misleading because it communicates that real-world sufferers have resolved their health issues because of the superiority of the medication, in lieu of or without the combination of other behaviors that improve health. These novel approaches imply a truthfulness to the claims made, which again enhance the credibility of the medicine.

Figure 27
Blurred Lines (*Jardiance Good News*, 2018, 0.0)

Engaging Cues

Slater and Rouner (2002) explain that that engaged audience members are more likely to believe messages when cognitive resources are disabled by engaging content. Some cues in the ads are surprising and shocking, and they arouse curiosity. For example, an ad for an IBS medication begins by showing exemplars in their bathrooms, sitting on their toilets trying to have a bowel movement (see Figure 27). This shocking strategy is captivating, if not slightly obtrusive, and is a bold and creative approach that publicizes the private. In this ad specifically, the image provides a glimpse into a very private moment and reveals the exemplar's angst with his facial expression. The use of strong emotional appeals, like this one, do not provide genuine education and are distracting.

Figure 28
Engaging Cues (*Linzess Yes*, 2018, 5.1)

Other perspectives look at positive information in ads communicating hope. Delbaere and Willis (2015) argue that when sufferers of chronic conditions view ads that are positive, they view the ad as a communication of hope. Several ads in my data set use novel cues of familiar songs that evoke hope. One is "Tomorrow" from *Annie* in the *Entresto Tomorrow* advertisement. The ad is about heart failure and living to see another day. The exemplars sing the familiar parts of the song when the narrator is not speaking, and next, the instrumentals carry the tune in the background while the narrator is speaking. The lyrics communicate a clear message about living in hope for a better day. Serving as transportation cues, familiar songs that are joyous, uplifting, and engaging can improve mood and motivate behavioral intentions (Strick et al., 2015). Unfortunately, it could be inferred that the medicine and not behavioral change in tandem with a medication, is the catalyst for change since the ad highlights no other health intervention. According to the US Food and Drug Administration (2009), misleading impressions are facilitated through the use of music in ads when risk information is being presented. They state "the audio disclosure [of risk information] may not adequately communicate risks because of the

discordant visuals and distracting music" (p. 5). The FDA is currently looking into other ways that the ads are structured to persuade viewers.

These ads are creative and use strategies that include shocking visuals or familiar songs, which disengages critical processing (Slate and Rouner, 2002). Other transportation cues highlight the benefits of a drug through vivid strategies.

Emphasis on Drug Benefits

The last transportation cues are vividness through textual information presented on the screen and visual (written on screen) and verbal (spoken simultaneously) consistency. These cues highlight and emphasize positive information about the medication. On the screen, text is presented in a way to make the information stand out. Strategies include varying font sizes, bold lettering, and a sizeable amount of space taken up on the screen with the positive information (see Figure 28). In this example the drug's benefit is presented on over half of the screen. The large size of the ad focuses attention on the wording, but the exemplar's back to the camera likely directs attention to the other half of screen. This design creates an imbalance between the presentation of the benefits and risks of taking the drug. The FDA claims that the bolded presentation of drug benefits in the visual text on the screen contributes to an imbalance of benefit versus risk. The imbalance is deceptive because it implies that the drug has more benefits than risks.

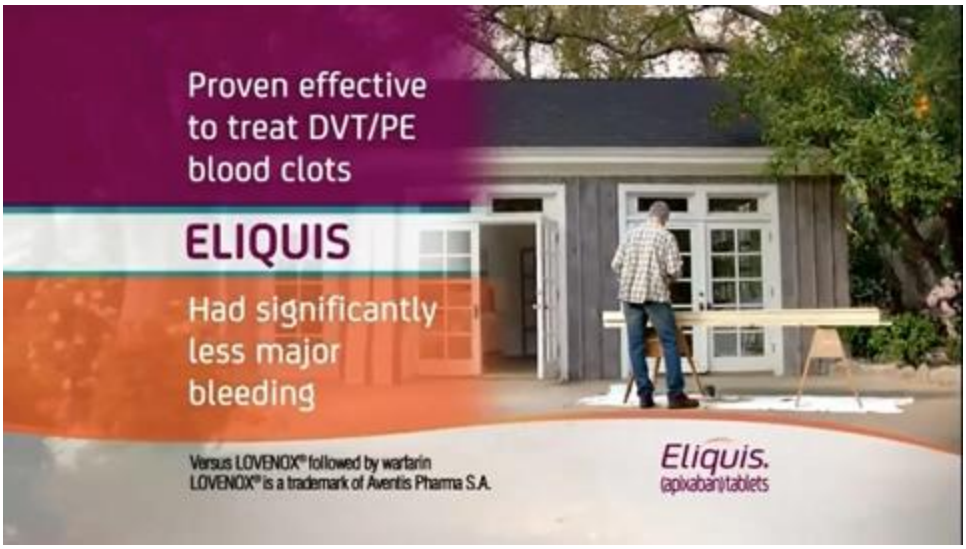

Figure 29
Emphasis on Positive Drug Information (*Eliquis Painting*, 2016, 29.4)

Vivid text on the screen is not the only way that a drug's benefit or effectiveness is emphasized. Every advertisement contains several visual and verbal consistency cues. The most frequent combination of visual text and verbal text is the drug's name, which is a mnemonic device that improves memorability and increases familiarity through repetition. The second most frequent simultaneously occurring phrase is the benefit of the drug. Speaking a drug's benefit while it is written on the screen reinforces not only the positive visual information that is being viewed, but it also reinforces the audible message that is heard about the drug's effectiveness and benefit (see Figure 29 and Figure 30). Figure 30 is from the same ad pictured in Figure 28, but the time locations in the ad are different. One timespan in the ad is at 29.4 and the other is at 1:07.0. Benefits of taking the drug are communicated visually through the exemplar's actions, visually on the screen, and verbally through the narration. The presentation in all three ways reinforces the message of the drug's benefits and is another way that the ads communicate more benefits of the drug than risks. An additional problem is that the simultaneous combination of these channels to communicate drug benefits circumvents the FDA's assessment of balance.

Recent research by reviewers in the Office of Prescription Drug Promotion, an office at the FDA, found that visual images increase positive perceptions about a drug's efficacy (Sullivan et al., 2021). The FDA is aware of this problem and is looking at other ways that drug benefits are conveyed in these ads.

Figure 30
Visual and Verbal Consistency in *Keytruda It's True: Donna's Story* (2018, 1:22.00)
Note. The spoken words by the male narrator are "Living longer is possible"

Figure 31
Visual and Verbal Consistency in *Eliquis Painting* (2016, 1:07.0)
Note. The spoken words (delivered by the exemplar) are "Eliquis treats DVT and PE blood clots…had less major bleeding."

Novel and vivid cues grab attention and are transportive. They sculpt a positive world that captivates attention, distracts from critical processing, and facilitates identification.

Identification Cues

The following discussion addresses RQ 2 (identification cues in DTCA stories). The identification cues included in this analysis are activity, enjoyment, health events, and first and third person POV. These cues are intended to forge a shared illness connection between exemplar and viewer, which results in a cohesive narrative (see Neil et al., 2018).

Active Exemplars

A predominant message in the ads is that complications from a condition do not necessarily impede activity. These cues of activity communicate an active and healthy lifestyle after interaction with the drug. Welch Cline and Young (2004) found an abundance of active exemplars in print ads, which communicates a promise that the prescription can restore health and an active lifestyle. In my data set there is also an abundance of active exemplars who are able to work and enjoy recreational activities, take care of responsibilities in the home, and enjoy

life at pre-condition levels. These exemplars model positive behaviors that can create perceptions of unrealistic abilities of the drug, including an implication that happiness is achieved when one takes the medication. Adams and Harder (2018) note that exemplars in DTCAs that are fit and living an active lifestyle conflate "condition management with drug management" (pp. 443). Arney and Menjivar (2014) explain that women who are attractive and healthy are usually used as models to convey the message that common people can acquire similar results by using the medication. I argue that the use of attractive and healthy exemplars is manipulative because it communicates that regular men and women can obtain the same benefit from using the product.

There are benefits that can be observed when active exemplars promote physical and social self-care. Self-care can be accomplished in several ways, including exercise or quality time with significant others. Showing an exemplar taking care of their body positions them as a potential role model to motivate viewers to be more active and engaged. Contrary to Adams and Harder's (2018) findings, some of my exemplars engaged in self-care did not fit the standard perception of fitness, that is, being thin. Although there are several thin exemplars, there are also active exemplars who are heavier and appear to have an unhealthy BMI. The representation of all body types in these ads is an encouraging step, for women and men alike. Women, specifically, have long been expected to maintain an ideal beauty standard of perfection, thinness, and youthfulness. These diverse examples and representation of more realistic bodies is a move in the right direction by advertisers. However, they need to make sure that a diversity of women and men of all colors, shapes, and sizes are represented.

Positive Emotions

The most prominent emotion displayed by exemplars in my data set is enjoyment. DTCAs have a history of using presentations of happy people in advertisements (see Welch

Cline & Young, 2004). Applequist and Ball (2018) found that positive emotions were on the rise in DTCAs whereas negative emotions were declining. My data support their finding with excessive portrayals of joy and minimal expressions of negative emotions. Even in restored health ads, where the exemplar exhibits condition symptoms in the beginning, happiness is portrayed after the introduction of the medicine and information about the drug commences, before the end of the ad. A significant amount of time is spent viewing the exemplar in a happy state. Just like positive cue engagement with music, these positive emotional cues may serve as a prompt that encourages hope. However, they detract attention from the negative symptoms of a condition and correlate happiness in life with taking their product. This correlation can be deceptive, manipulative, and unethical because it misleads consumers, which affects one's ability to make informed health decisions

Family First

One of the most surprising results from my data was family interactions. Relationships are affected by illness, especially chronic illness. The changes that take place when someone is ill do not only affect the individual, but the changes also disrupt the entire family system. Individuals with chronic illness suffer diminished intimacy, guilt, and often strained family relationships (see Martire & Helgeson, 2017). Family is in the majority of scenes in my data set. Likewise, only six advertisements do not include some form of family interactions. Interactions with family members are presented as healthy and rewarding. The relationship interactions in the ads are portrayed as pleasant and burden free, associating healthy relationships with the medication. The medicine is presented not only to the resolve the condition, but also to promise happy families. But only in certain family types. Grandparents are taking care of grandchildren, men are taking care of children, and there is diverse racial compositions in families. However,

interracial and gay or lesbian families are not portrayed in any of the ads. The exclusion of these groups contributes white heteronormativity and communicates a lack of concern for the health of diverse families.

I discovered a significant pattern in the most frequent identification codes (enjoyment, playing games and walking or sightseeing) when compared to the most frequent transportation sensory code (touch). The majority of touch codes in the ads were found during family interactions (101 out of 177). The majority of the most frequent activity code (playing games, walking or sightseeing) were also coded during family interactions. Last, enjoyment codes occurred most frequently during family interactions. The associations of all of these frequent cues implies a relationship among all of these factors. A large body of literature extols the positive effects of touch in general and in significant relationships especially. Jakubiak and Feeney (2017) explain that affectionate touch between individuals in a relationship buffers stress for the recipient and improves relational, physical, and psychological well-being. The results of the combination of these cues seem to communicate that medicine is an answer for a chronic illness sufferer who wants do more with their family and have affectionate interactions with them. The excessive amount of joy and touch portrayed during family interactions further contributes to messages of improved physical, relational, and emotional wellbeing as a result of the advertised medication. I argue that presenting this correlation is ethically questionable because it suggests that the onus for improved relationships is upon the sufferer. In discussing the burdens of end-of-life care, den Hartogh (2018) argues that illness sufferers have no "duty to die" and that burden-sharing between sufferers and family is complex when dealing with any serious medical condition. Clearly, taking a particular medicine cannot define that relationship.

Family support is important when dealing with a health condition. However, the portrayal of happy families compared to the few representations of a caregiver in these ads suggest that the manner to acquire healthy families is by treating the condition with the medicine independent of family interaction. The message implies that family members do not have to be burdened if the sufferer self-manages their condition with the medication.

Courting the Viewer

Having a condition that needs to be treated by a medication requires interaction with health practitioners, subsequent treatment, and behavior change. The ads in my data set depict only six interactions with physicians. I suggest that this paucity of patient/provider interactions communicates specific messages about practitioner roles in health management. Positively, it frames approaches to healthcare as the viewer's responsibility and encourages patients to be agents in their own healthcare. However, it also communicates that a physician does not have to be part of initial treatment discussions. It encourages self-diagnosis and fosters a relationship between the pharmaceutical company and the viewer that is direct and independent from the practitioner. Conrad and Leiter (2008) explain that this direct and independent relationship between the drug industry and consumers is fueled by a shift in advertising activities. Primary advertising initiatives were reallocated from the physician to the consumer beginning in 1997, when the FDA relaxed their requirements on broadcast DTCAs. This change in regulations opened a new market for the pharmaceutical industry, the consumer. Comparisons of persuasive strategies used in physician-facing ads versus consumer-consumer facing ads should be conducted to understand the differences as well as the similarities between the two. Pharmaceutical advertisements that encourage a direct relationship between the consumer and

pharmaceutical company may downplay a practitioner's role in the treatment discussions, at least initially, with their patient.

DTCAs also court the viewer by using an exemplar to make direct contact with the camera, as though they are talking directly to the viewer. Researchers have not investigated the role of second person perspectives in DTCAs. However, this perspective does demand attention because of the natural inclination to return a gaze, as if establishing face-to-face contact (Kress & van Leeuwen, 2006), which creates a physical closeness (see Lister and Wells, 2004). Kress and van Leeuwen (2006) explain that these direct addresses to the viewer demand that they "enter some kind of imaginary relation with them" (pp. 118). Advertisements that are scripted with exemplars speaking directly to the viewer foster a symbiotic relationship between the exemplar, viewer, and pharmaceutical company (see Figure 31). Teambuilding efforts such as this imply that there is a group of individuals, the pharmaceutical company, exemplar and viewer, working toward a common goal of health restoration, outside the purview of the physician.

Figure 31
Courting the Viewer: Second Person POV (*Verzenio Relentless*, 2018, 4.5)

Separation from Condition

Within my data set, few ads show the exemplar actually using the medicine. One exception is the ad for Eucrisa, an ointment used to treat eczema, which shows an adult applying the medicine to a child's face. In other ads, the exemplar simply holds the medicine, but does not use or consume it. In all of those examples the exemplar is active, happy, or both and disconnected from the symptoms of the condition (see Figure 27). I searched through regulations and ultimately contacted the FDA and the U.S. Federal Communications Commission to ask them if there were restrictions about consuming a medication on broadcast television (similar to previous regulations that restricted individuals from consuming alcohol on television). Neither agency has any regulation preventing the portrayal of medicine consumption in advertisements intended for broadcast television (personal communication, September 28, 2021). I am surprised that the advertisements do not show an exemplar taking the medication and am interested in understanding this omission. It seems that showing an exemplar take the medication would link the medicine to the remediation of symptoms, which would add credibility to the product's claims, especially if conditions improve afterward. So far, this question has not been explored in the literature. Conversely, many public service announcements aimed at persuading viewers to get a COVID-19 vaccine show individuals getting the shot. The absence of the medicine in the advertisement may serve to separate reminders of the condition from the viewer in order to focus the benefits of the advertised drug after the fact. This supposition is not not explored in literature and warrants further research.

Figure 32
Separation from Condition (*Tecfidera Relapsing MS*, 2016, 16.2)

Gender Representation

Even a cursory search of advertising literature shows that researchers have long bemoaned the skewed gender representation in advertisements. In DTCA research, overrepresentation and underrepresentation is well documented (see for example Molyneaux, 2009; Ransom, 2017). A stark example of gender inequality is cardiovascular ads that largely ignore women and mental health ads that omit men. Neil et al. (2008) found that shared illness narratives are more effective at generating identification than demographic similarities. However, it is still important to look at gender representation in the ads.

Women. Women have long been targeted in advertising and DTCAs (Mitzes, 2012). The majority of exemplars in my data set are women, even though the majority of narrators are men. This imbalance suggests that women are more vulnerable to some illnesses and men have the answers. The representation of women's health is also misleading. In his work from 2011, Barker explains that women were frustrated with the representation of Lyrica, a medicine to treat fibromyalgia, which does disproportionately affect women. In interviews, participants stated that

one of the side effects of Lyrica is significant weight gain, yet the female exemplars in the ads are “too beautiful, too fit, too active, and too transformed by the medication” (p. 839). Seven years later, this representation had not changed in Lyrica advertisements for fibromyalgia. The women are all still beautiful, mostly fit, still active, with healthy relationships and lives that have been completely transformed by the medication. However, one other criticism that Barker (2011) had was that the exemplars did not communicate that fibromyalgia is a real condition. In my data set of ads from 2016 and 2018, every ad for Lyrica states that fibromyalgia pain is real. This shift reflects the gradual recognition among medical professionals that fibromyalgia is a legitimate diagnosis.

Cardiovascular and mental health ads also have problematic representations of women. Ahmed et al. (2004) looked at print advertisements in medical journals and found women to be grossly underrepresented in cardiovascular ads. According to the CDC (2021), one in five women and one in four men died from heart disease in 2017, suggesting that cardiovascular ads should reflect this proportion. The sole cardiovascular ad in my data set shows two female exemplars and five male exemplars, showing some improvement in gender representation. But the imbalance of women and men suggests a similar imbalance in who suffers with the condition.

Ads for antidepressants are also problematic in gender representation. In my data set, the two ads for antidepressants have only a female exemplar. According to Fogel and Teichman (2014), the omission of male exemplars from antidepressant ads further supports the negative stereotyping of depression and bipolar disorder mostly affecting women – a stereotype that could exacerbate underdiagnosis in men.

Men. Men and women alike are affected by mental health issues. Yet in my data, men do not appear as exemplars. In many of these ads we see women interacting. But no ads show a

group of men. Men are only shown sick when other women are sick, with the exception of classic drama where there is only one exemplar.

Black men's representation in the ads is also problematic. Black male exemplars are only in six ads. They are alone in three out of those six ads. Black men are both underrepresented and misrepresented. The two significant interactions of a black man with another individual include a man teaching his son to grill and another playing softball with who appears to be his grandchild. Another male exemplar is basketball star Dominique Wilkins. He is shown ending a basketball game with a friend and quickly turning to speak to the camera. Family interactions in my data set are numerous and yet there are only three interactions out of 687 scenes that include a black male exemplar interacting with family. Portraying black males so infrequently with family, in consideration that a majority of the interactions and almost all of the ads include family interactions, is a gross underrepresentation of a large group of people.

Omissions

Other insight from this data are highlights of what was *not* there. An immediate and obvious problem is the omission of people of color, which could reflect the severe health disparities we see in the United States. While a casual observance of DTCAs suggests that people of color are often excluded, an analysis of my ads confirms that. For example, Neilsen ratings identified *Empire* as one of the top ten programs in the 2018 season. *Empire,* aired on Fox, is a musical drama focused on a hip-hop artist and the activities that take place in a music company. The cast consists of predominantly black actors. Interestingly, no DTCAs aired during the broadcast of *Empire's* 2018 finale. The absence of a DTCA in *Empire* suggests that pharmaceutical companies may not be concerned with reaching black audiences. However, I only captured two episodes of *Empire,* so it would be worthwhile to look at television shows,

viewership, and health advertisements to explore this informal hypothesis. Additional omissions include representation of LGBTQ+ individuals or families, people in varying socio-economic situations, people practicing cultural norms outside of the stereotypical white experiences.

Other omissions relate to health categories. No ads in my data addressed the following conditions: reproductive health and childbirth, congenital issues, renal and urogenital, eye, ear, stroke, or HIV. Advertisements for specific categories of illness seem to have waxed and waned over the years. In my experience, for example, several years ago there were multiple advertisements for erectile dysfunction. I have communicated with others who recall many advertisements for birth control and urogenital conditions. Further research should look at the decisions that pharmaceutical companies make about the markets they advertise specific drugs in and the changes that have taken place over the years. Comparing the information to societal trends or changes may reveal interesting trends and patterns.

In summary, transportation and identification cues are predominantly visual cues in DTCAs. The DTCAs in my data set use a variety of strategies to engage viewers, promote the advertised drug's benefits, and promote their drug as an essential component of health, happiness, and healthy family relationships. The use of engaging cues and stories of wellness have been shown to use up cognitive resources needed for a critical analysis of information. The story script and use of second person POV techniques encourage a direct relationship between the viewer and pharmaceutical company through the omission of a visual representation of a practitioner. Last, the representation of women and men in the ads are skewed, depending on the condition. The representation of women in advertisement has been a general criticism of advertising in general, and is perpetuated in these DTCAs. The following chapter highlights my ideas for future research, limitations of this study, and my concluding thoughts.

Chapter 6: Conclusion

This study is the first to isolate transportation and identification cues in the visual and verbal messages in DTCAs. After culling DTCAs from primetime shows in the 2016 and 2018 television seasons, I considered various research approaches and questions. Ultimately, I decided to start at the beginning – what are the cues in the narratives within these ads. After segmenting all of the ads into individual scenes, I developed a coding scheme which included the cues of novelty, vividness, and touch (transportation cues) and playing games, walking or sightseeing, displays of enjoyment, family relationships, second person POV, and health events (identification cues). Analysis of the scenes coded for these cues sheds light on the way that health messages in DTCAs are communicated visually and verbally. Furthermore, this project addresses recommendations from other researchers to study the visual narrative messages in a body of work in isolation from the spoken words (see Buga, 2011; Barbatsis, 2005; Chatman, 1978). Little research has addressed the visual elements in DTCAs independently. However, positive visual information in DTCAs has recently been studied by a team of reviewers at the FDA to better assess balance in these ads (see Sullivan et al., 2021). Their findings indicate that as positive visual information increases, the perception of a drug's efficacy also increases.

Two types of narrative messages emerged from this research: wellness stories and restored health stories. Wellness stories begin with the exemplar healthy and recovered from a previous condition. The health condition is not revealed through the visual information, but only through the verbal text. As a result, viewers must make inferences and fill in any gaps between the discrepant visual and verbal information. Making inferences about information in a narrative affects an individual's ability to carefully contemplate the message's credibility (Petty &

Cacioppo, 1986). Exemplars in these wellness stories portray health, happiness, healthy relationships, and active lifestyles throughout the entire advertisement.

Restored health is the other kind of story in these ads. Exemplars portray symptoms of a health condition at the beginning of the advertisement and once the narrator begins speaking about drug information (in most advertisements) subsequent actions by the exemplar communicate their health has been restored. Stories about restored health have consistent visual and verbal information at the beginning of the ad, unlike wellness stories. Exemplars do portray happy, healthy, active, and restored lives after the condition has been treated with the advertised medicine. Wellness and restored health stories ultimately present an exemplar with a life that is unaffected by symptoms of illness. Research has shown that positive messages, such as these, distract from counterarguments and critical assessments about message validity (see Neiderdeppe et al. 2012; Rubinelli, 2008; Shapiro & Kim, 2012). Wellness and restored health messages communicate positive messages about being healthy or acquiring health after an illness. The appearance of healthy exemplars, unimpeded by illness symptoms, is a distraction from evaluating other avenues to health other than the prescribed medicine.

Visual and verbal cues comprise the entirety of a message, but narratives in these DTCAs are mainly presented through the visual portrayals of exemplars. Hence, the majority of transportation and identification cues in the DTCAs are visual. The verbal message in the ad is mostly information about the drug. The visual story, however, continues to unfold while the verbal information is communicated. Kreuter (2007) suggests that viewers are more likely to allocate their attention to the visual message rather than verbal information. Therefore, it is important to understand the visual message that is communicated. Visual messages in the advertisements communicate positive messages about the exemplar's experience and their

resolution of a health condition because of the advertised medicine. The association between medicine and recovery is not directly stated, but instead implied through the exemplar's actions and behaviors. Making inferences and processing positive visual information distracts attention and affects a viewer's ability to critically process a message.

Transportation captivates and focuses a viewer's attention on the developing story. Novelty, vividness, and touch are the most frequent transportation cues in this study. Several themes emerged from these cues in this data: blurred lines between reality and scripted portrayals, highly engaging cues, emphasis on the benefits of the advertised drug, and visual/ verbal consistency. Strategies such as interviewing and testimonials from real patients blur the lines between fiction and reality because they present as genuine rather than being scripted by the ad's writer. The portrayal of an association with a respected field (journalism) and testimony of a recovered patient strongly implies that benefit claims of the drug are reliable and truthful. Strong emotional appeals are used both visually and verbally. Visually, exemplars portray situations that are unusual to see in advertising, such as sitting on a toilet seemingly constipated and, by the look on the exemplar's face, frustrated. Verbally, familiar lyrics sung by exemplars communicate hope for a healthy future with the prescribed treatment. Music increases transportation and behavioral intentions (Strick et al., 2015). Cues that are extraordinarily engaging can communicate a message of hope, and also be a distraction from critically processing a message (see Slater & Rouner, 2002).

Vividness is another important transportation cue. Two primary modes of vividness emerged: vivid text on the screen visually, and the consistency through the simultaneous presentation of information written on the screen and the narrator's words. Vivid text on the screen makes the information stand out. Varying font sizes, bold lettering, and large amounts of

screen space are strategies used to draw attention to the specific information presented. Other vivid approaches include information written on the screen and simultaneously spoken. Information that is communicated simultaneously but through different channels infers importance and reinforces the message. Drug benefits are the second most frequent information communicated in this way (drug name is the most frequent). Vivid text and vivid consistency (written and spoken) is deceptive and manipulative because it overemphasizes the benefits of taking the drug. The DTCAs in this data are structured to transport viewers through engaging strategies, scripting content to increase perceptions of trustworthiness, and vivid communication of drug benefits through multiple channels, which amplify benefits over risks.

Identification cues highlight connections between exemplars and viewers, which allows a viewer to experience the narrative through the exemplar's perspective. Visual identification cues forge a connection between the viewer and exemplar and encourage elaboration of the exemplar's behaviors, which can evoke positive feelings and attitudes in a viewer (Cohen, 2001). The behaviors communicated by exemplars in this data are active, such as participating in games and sports or taking a carefree stroll alone or with family. Exemplars depict recovery and restoration through displays of enjoyment, the most prominent emotional cue, and an active lifestyle that includes healthy family relationships. The ads separate the exemplars from the condition they are intended to represent. One way is through the overwhelming display of positive emotions and another is through the lack of visual presentation of an interaction with a practitioner or the medicine. The surprising visual absence of a practitioner in the majority of ads and absence of exemplar interaction with the medicine suggest that the health story begins when the illness is in the past. Wellness stories do begin with restoration of health, but the advertisement omissions circumvent the process of restoring health. Even though a physician is a

necessary decision-maker in acquiring the medication, researchers have stated that DTCAs present a utopian picture of health, wellness, activity free from restraint, and overall happiness apart from the physician's involvement (see for example Adam & Harder, 2018; Welch-Cline & Young, 2004*).* The abundance of cues in these ads are positive and present an image of a healthy and happy exemplar. Positive cues and healthy exemplars overemphasize the promise of the drug's ability to provide those specific results.

Another surprising result was the exemplar's interaction with family members. Flourishing family relationships show the exemplar with support systems that are unaffected by the challenges that illness often brings. In a surprise finding, when the most frequent identification and transportation cues were cross-referenced with relationships, those frequent cues (enjoyment, playing games or walking/ sightseeing, and touch) all correlated with family interactions. When the exemplar interacted with their family the result was joy, touch, games/ play, and walking/sightseeing. Mostly absent in these family relationships, however, are caregivers. The portrayal of exemplars that are able to navigate complex family relationships with ease indicate that the medication facilitates healthy or rewarding family interactions. The representation of healthy family relationships, albeit a positive message, implies that the sufferer can mediate family challenges that accompany illness through the medication. The exemplar's restored health from the medication implies that they can interact freely and fully with their family without the struggles of their previous illness and without burdening family members.

Other persuasive strategies are obvious through the absence of identification cues. Neil et al. (2008) explained that viewers will relate to an exemplar with a shared illness more readily than demographic similarities. The majority of conditions depicted in the ads require some form of medical intervention, including interaction with a practitioner. However, the portrayal of a

physician in the ads occurs only six times. The absence of a physician in the ads minimizes the role of physician in the health process. The consumer is spoken to directly with few visual reminders of a doctor, which promotes self-diagnosis and a direct relationship (i.e. buying the product) between the viewer and pharmaceutical company. Reminders that the physician is an important part of the process of improved health are almost exclusively delivered in the verbal information. Even then, the doctor is referenced during the informative material and not in the delivery of the visual narrative, the most captivating segment of the ad. The absence of a physician seems to communicate the pharmaceutical company's desire to foster a direct relationship with the consumer by promising improved health, and happy lives if only the viewer buys their medicine.

The narrative transportation and identification cues in this set of DTCAs reveal several strategies used by pharmaceutical advertisers. The transportation cues in this research, predominantly visual cues, are positive messaging, engaging content, tactics that rely on inference, and encourage hope. Research has shown that the impact of these types of strategies is clear. Cues, such as the ones revealed in this research, increase perceptions of drug efficacy (see Sullivan et al., 2012) and distract viewers, which prevents critical processing and counterarguments (see Neiderdeppe et al. 2012; Rubinelli, 2008; Shapiro & Kim, 2012; Slate & Rouner, 2002). Strategies observed in the identification cues from this research indicate that the advertised medicine transforms illness and promises active, healthy, and happy encounters and family relationships. Exemplar actions and interactions demonstrate the possibility of restoration at pre-condition levels with use of the advertised medication. The bulk of identification cues visually communicate what advertisers cannot verbally state – promises of a better health quality of life with their medicine (see Messaris, 1997).

Future Research

This study sets the stage for future research of transportation and identification cues. I used sensory information as a cue for transportation based on transportation research with participants (see for example Bateman & Wildfeuer, 2014; Ching et al., 2013; Marković, 2012; McVee & Carse, 2016). However, sensory information may be more fluid and fall somewhere between transportation and identification, or perhaps be a facilitator of both. Future studies could address the significance of sensory information in DTCAs in order to better understand the implications of their presence in the ads. Touch emerged as the top sensory cue and its positive effects on health are well documented. Future studies should specifically focus on touch and the impact of seeing touch within the context of a DTCA

My analysis reveals several other areas that have yet to be addressed in the literature, but warrant further investigation. They include the role of the second person POV, trends for advertising to specific conditions, and the absence of physician and medication. The role of second person POVs in DTCAs and its effects of exemplars speaking directly to a viewer should be explored in order to understand ways that this form of connection persuades viewers. Other cues that encourage a direct relationship with the pharmaceutical company and the viewer through transportation and identification should be explored, such as the influence that seeing a physician or medicine has on viewer intentions. Last, there is an observable ebb and flow of advertising for specific conditions. Future research should look at the decisions that pharmaceutical companies make about the markets they advertise specific drugs in and the changes that have taken place over the years, as well as the impact that advertising about specific conditions has on perceptions of health in the larger community.

Several studies have addressed gender disparity in DTCAs. The results of this study indicate that women are still more visually present in the ads, yet men's voices are more frequently heard. This unanticipated finding is not surprising, but raises further questions. First, is this trend seen in current ads? How does the trend of including more men's voices have on the health decisions made by women and men? What does the increased inclusion of men's voices communicate to men and women about their health and what does it communicate about who should seek treatment, and from whom.

Future research should also explore the impact of the lack of representation of LGBTQ+ individuals and families, and individuals from various socio-economic backgrounds, and various cultural experiences. The omission ignores people, their voices, larger communities and it is irresponsible and discriminatory. For one, it communicates perceptions of who is or should be allowed access to health care. Writers clearly communicate the audiences they desire to reach and in doing so create a perception of "standard" through the use of exemplars that are heterosexual, middle-class, and participants involved in activities such as yoga and softball. The advertisers in this group missed the opportunity to be a driving force for positive cultural change promoting social acceptance through inclusive representation of LGBTQ+ individuals and families.

Limitations

The most obvious limitation is that my ads are from 2016 and 2018, which is three to five years ago. Newer DTCAs may reveal changes that answer the issues discovered in this research. Another limit is that not all ads broadcast during the last three months of the season were included because I believed the sample size was sufficient. In retrospect, including all DTCAs during a broadcast season would provide a larger sample from which to draw conclusions.

Nevertheless, this study is the first to explore transportation and identification cues in DTCA narratives. This novel study confirms previous research and offers new insights in narrative persuasion and DTCA research. The DTCAs in this study communicate messages of wellness and restoration of health through the exemplars' behaviors and expressions. The ads use strategies intended to grab viewers and transport them to a world where exemplars are active, healthy, and happy, and have flourishing family relationships. The results of this work lay a foundation for more extensive study of persuasion strategies in DTCAs, and could eventually be used to educate consumers to better recognize and understand these strategies, thus making more informed decisions. Such an approach could also lead to physician trainings so that they, too, could recognize these strategies and be better prepared to discuss medications with their patients. Many DTCAs suggest that patients talk their doctors about the medication. My results offer a framework on which to build guidelines for these patient/provider interactions.

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Appendix A

Abbreviations

FAne: the person speaking is female, an actor, but not the exemplar or caregiver

FC: the person speaking is an actor and a female caregiver, but not the exemplar

FE: the person speaking directly to the camera, is the exemplar and a female (multiple actors are designated as 1,2,3… in order of appearance)

FEV: the person speaking is the exemplar and a female, spoken as a voiceover

FEV assumed: the person speaking is assumed to the be the exemplar and narrator. The actor never speaks, so the assumption that it is the assumed narrator is based on the visual cues (see Tecfidera ad)

FN: the person speaking is a narrator and a female

MAne: the person speaking is male, an actor, but not the exemplar or caregiver

ME: the person speaking directly to the camera is the exemplar and a male (multiple actors are designated as 1,2,3… in order of appearance)

MEV: the person speaking is the exemplar and a male, spoken as a voiceover

MIN: the person speaking is interviewing as narration, but is an actor who is not the exemplar

MN: the person speaking is a narrator and a male

POV: point of view

WVT: next to each ad in NViVO means video file with spoken transcript

Operational Definitions

Actions: the behaviors and movement of the exemplar. Example, exemplar taking a medicine.

Active: this relates to the interaction with the doctor. An active exemplar would be in charge of the visit, maybe asking a lot of questions or taking charge of the interaction.

Activities: the activities that are talked about in relation to the exemplar or engaged in by the exemplar. Examples, a doctor's visit or playing a sport

Bridging inference: "a backward-looking inference…[that] fill in unstated information based on prior and current information" Cohn (2019)

Causality: events are directly related and connected to one another as cause/ effect. (Green and Brock argue that narratives may be chronologically ordered, but still include causality). Example, being in pain before taking a medication and then being active after taking it.

Chronological order: events are related in a time directed way, indicated by a passage of time. Each event builds on the previous one to create a time ordered story. A clear beginning, middle,

and end. Example, a trip would be a woman packs her bags, boards and airplane, takes a taxi to a home.

Close-up: a detailed view of an object up close that generally does not include any context

Coherence: the links between events, actions of characters, and context are clear and sensible. Desired behaviors or decisions are represented or modeled clearly and comprehensibly. Example, each segment of the ad is linked and makes sense.

Context: the setting or location and event. Example, a woman with asthma working outdoors at a nursery.

Emotional displays: the language or images that are intended to evoke or portray emotions. The universal emotions identified by Paul Ekman are anger, fear, sadness, surprise, and enjoyment. He included disgust and contempt, but scholars still debate contempt so I omitted it.

Exemplar: the character that is the representative of the candidate for the medicine being advertised. This may be the main character or the protagonist.

First person POV: story perspective is being told from the exemplar's experience. Examples, words such as I, me, my, we, our, or us; images such as camera angle from behind exemplar or exemplar speaking directly to the camera.

Identification: the extent to which an individual perceives similarity to the character

Illness narrative: "a genre wherein an illness and its effect on the patient's life are told as an autobiographical or biographical account" Le, Miller, and McMullin (2019)

Initiating event: the event that introduces the conflict, it may have occurred before the story.

Interactive: this relates to the interaction with the doctor. The exemplar and doctor exchange is balanced and both are taking equal parts in the interaction. This can be distinguished from active and passive by looking at the conversational rhythm through body language and facial expressions.

Intense imagery: words and images that don't appeal to the sense, but that are intended to evoke a strong or intense reaction. Example, what about my wife and all that we had built together

Medicine interaction: this is the interaction that the exemplar has with the medicine. They are either holding it, looking at, pictured with it (visual), or mention the name (textual).

Novelty: an interesting and unexpected divergence from expectations. This is different from atypical, which is defined as events that would not happen in a scenario (swimming in a volcano). Example, my leg did not look right.

Passive doctor interaction: this relates to the interaction with the doctor. The exemplar is silently listening without taking much of a role in the interaction.

Plot development: sequences of events builds toward climax and resolution. Shows the passage of time and overcoming barriers through an introduction to the character/ situation, conflict that

is either explicitly or implicitly communicated, and resolution from the conflict, either explicitly or implicitly communicated.

Point of view: language choices, camera frames, and eye direction that imply the person's whose viewpoint the story is told through. Point of view (POV) consists of first person, second person, and third person.

Realism: a story's plausibility – represents real people and real live events or situations. It includes typicality and novelty.

Relationship: this refers to the others in the scene with which the exemplar is engaged and interacting with

Scene: a scene is the same actor, in the same setting, doing the same action and continuous activity, at the same event. When one of these changes, the scene changes. The camera shots may change, but the background does not.

Second person POV: story perspective is being told about an exemplar from an outsider. Examples, language choices such as you or yours. It is lecture or editorial in nature; image choices actor giving instruction or directing the viewer.

Sensory appeals: appeals targeted to the senses (sight, touch, taste, smell, sound, balance, temperature, and pain). Example, the ups and downs of A1C appeals to balance.

Sequence: plot development and coherence

Social interactions: the interactions that the exemplar has with others. It includes activities, health events, and relationships.

Split screen: two or more images on the screen at the same time. The image on the screen is split between different images that may or may not be related and are obviously located in different locations (or in some cases the screen may be split with an activity on one side and writing on the other)

Structure: the way that the events in a narrative are ordered, e.g. chronological

Third person POV: telling a story about another person. Examples, language choices such as s/he, her/ him, it/its, they, them, their/ theirs. Examples, to most he's Phil Mickelson, pro golfer; image caregiver talking to the exemplar

Transportation: the process of an individual attending to and becoming engrossed into a story. It is both active and pleasurable.

Typicality: events that are likely to happen in a scenario. Example, spending too much time in the bathroom with recurring constipation and belly pain

Vividness: representational richness or intensity that engages the senses. It is clear, vivid, and lifelike and includes clarity of images, compatibility between virtual and real experiences, and it appeals to the senses. Example, a chart or graph.

Appendix B
Ad Details

AD	Year	Length	Total scenes	Flesch-Kinkaid	Condition	Health category	Exemplar	Speaker	Ad Agency	Mfg Co.
Breo – The Many Pieces	2016	1:00	14	8.9	Asthma	Respiratory	1 woman	FE, FEV, MN	MediaRadar	GSK
Chantix – Ginny	2018	1:00	9	6.8	Smoking cessation	General health	1 woman	FE, FEV, MN	Carat	Pfizer
Chantix – Mark's Dogs	2018	1:00	10	7.3	Smoking cessation	General health	1 man	MEV, ME, MN	Carat	Pfizer
Cosentyx – Feat. Cyndi Lauper	2018	1:00	29	4.5	Psoriasis	Skin	2 women 1 man	ME, MEV, FE, FEV, FEV, FE, MN	Starcom	Novartis
Cosentyx – See Me	2016	1:00	32	8.7	Psoriasis	Skin	3 women 2 men	FE, MEV, ME, FEV, MN	Starcom	Novartis
Cosentyx – Watch Me	2018	1:00	23	5.5	Psoriasis	Skin	2 women 1 man	FEV, MEV, FE, ME, MN	Hill Holliday Health	Novartis
Eliquis DVT and PE Blood Clot – Painting	2016	1:15	13	7.2	DVT and PE Blood clot	Blood	1 man	MEV, MN, ME	Publicis	Bristol Meyers Squibb
Enbrel – Feat. Phil Mickelson	2018	1:00	12	6.7	Psoriatic Arthritis	Inflammatory and Immune System OR Skin	1 man	FC, ME, FN	Abelson-Taylor (Creative), Hearts & Science (Media)	Immunex Corporation
Entresto – Tomorrow	2016	1:00	12	10.0	Heart failure	Cardiovascular	2 women 5 men 1 couple can't tell	FE, ME, MN	Starcom	Novartis

							the exemplar			
AD	**Year**	**Length**	**Total scenes**	**Flesch-Kinkaid**	**Condition**	**Health category**	**Exemplar**	**Speaker**	**Ad Agency**	**Mfg Co.**
Entyvio – Time for a Change	2018	1:00	10	10.3	Ulcerative colitis or Chron's	Oral and Gastrointestinal	3 women 2 men	MN	BBDO New York	Takeda
Eucrisa – On Almost Everybody	2018	:30	9	6.6	Eczema	Skin	2 girls 2 boys	FN, ME, FE	Carat	Anacor Pharmaceuticals, Inc
Eucrisa – Steroid Free	2018	:30	9	6.6	Eczema	Skin	2 women 1 girl 2 boys	FN, ME, FE	Carat	Anacor Pharmaceuticals, Inc
Farxiga – Everyday People	2016	1:30	26	10.6	Type II Diabetes	Metabolic and Endocrine	4 women 3 men	FE, ME, MN,	Digitas Health LifeBrands	AstraZeneca and Bristol Meyers Squibb
Fasenra – Targeted Treatment for Ashtma	2018	1:00	11	8.9	Asthma	Respiratory	3 women 2 men 2 couples – one elderly, one young adult – couldn't tell exemplar	FAne, MAne, MN	Digitas Health LifeBrands	AstraZeneca
Harvoni – I ME Ready	2016	1:00	14	6.0	HepC	Infection	3 women 3 men	MEV, FEV, MN	Horizon Media, Inc.	Gilead Sciences, Inc.
Harvoni – Let Go	2018	1:00	18	8.5	HepC	Infection	3 women 2 men maybe	FEV, MN	Horizon Media, Inc.	Gilead Sciences, Inc.
Humira – A Day at the Fair	2016	1:00	9	8.9	Ulcerative Colitis	Oral and Gastrointestinal	1 woman	FEV, FE, FN	Publicis (Creative and Digital), Spark Foundry (Media)	AbbVie
Humira – Chase What You Love	2018	1:00	13	9.1	RA	Inflammatory and Immune System	1 woman	FEV, MN	Publicis (Creative and Digital), Spark	AbbVie

									Foundry (Media)	
AD	**Year**	**Length**	**Total scenes**	**Flesch-Kinkaid**	**Condition**	**Health category**	**Exemplar**	**Speaker**	**Ad Agency**	**Mfg Co.**
Humira – Go Further	2016	1:00	16	8.4	RA	Inflammatory and Immune System	1 woman	FEV, MN	Publicis (Creative and Digital), Spark Foundry (Media)	AbbVie
Humira – You're Wakeup Call	2018	1:00	25	8.4	RA	Inflammatory and Immune System	2 women 1 man	FN, MN	Publicis (Creative and Digital), Spark Foundry (Media)	AbbVie
Januvia – Seesaw	2016	1:32	16	9.2	Type II Diabetes	Metabolic and Endocrine	2 women 1 man	FN	Foote, Cone & Belding, Initiative (Media)	Merck
Jardiance – Around the Clock	2016	2:00	10	8.1	Type II Diabetes	Metabolic and Endocrine	2 women 2 men	FN	OMD	Boehringer Ingelheim and Eli Lilly and Company
Jardiance – Good News	2018	1:30	23	9.2	Type II Diabetes	Metabolic and Endocrine	1 woman 1 man 2 couples – can't tell exemplar	MAne, ME, FN, FE	OMD	Boehringer Ingelheim and Eli Lilly and Company
Keytruda – It's True Donna's Story	2018	1:30	22	9.0	Advanced non-small cell lung cancer	Cancer and Neoplasms	1 woman	FE, MN, FEV	Initiative	Merck
Keytruda – It's True Roger's Story	2018	1:30	26	8.9	Advanced non-small cell lung cancer	Cancer and Neoplasms	1 man	MEV, ME, MN	Initiative	Merck
Lantus – Stay Together	2018	1:00	15	7	Diabetic Ketoacidosis	Metabolic and Endocrine	1 woman 1 man	FN	*Couldn't find*	Sanofi

							1 couple can't tell exemplar			
AD	**Year**	**Length**	**Total scenes**	**Flesch-Kinkaid**	**Condition**	**Health category**	**Exemplar**	**Speaker**	**Ad Agency**	**Mfg Co.**
Latuda – Maya's Story	2018	1:00	9	9.1	Bipolar depression	Mental health	1 woman	FE, FEV, FN	*Couldn't find*	Lupin
Linzess – Yes	2018	1:00	10	6.8	IBS Constipation	Oral and Gastrointestinal	1 woman 1 man	FN	Mindshare	Ironwood and Allergan plc
Lyrica – A Day at the Park	2018	1:00	8	7.6	Fibromyalgia pain	Musculoskeletal	1 woman	FE, FEV, FN	Kaplan Thaler Group	Pfizer
Lyrica – Babysitter	2018	1:00	12	7.6	Fibromyalgia pain	Musculoskeletal	1 woman	FE, FEV, FN	Kaplan Thaler Group	Pfizer
Lyrica – Carpenter	2016	1:00	8	8.8	Fibromyalgia pain	Musculoskeletal	2 women	FE, FEV, FN	Kaplan Thaler Group	Pfizer
Lyrica – Coach	2016	1:00	12	8.8	Fibromyalgia pain	Musculoskeletal	2 women	FE, FEV, FN	Kaplan Thaler Group	Pfizer
Lyrica – Keep the Beat Going	2016	1:00	9	8.6	Diabetic nerve pain	Neurological	1 man	ME, MEV, FN	Kaplan Thaler Group	Pfizer
Opdivo – Most Prescribed Immunotherapy	2016	1:30	12	12.5	Advanced non-small cell lung cancer	Cancer and Neoplasms	1 woman 2 men	MN		Bristol Meyers Squibb
Otezla – Little Things Can be a Big Deal	2018	1:00	6	8.9	Psoriasis	Skin	2 women 1 man	FN	Mindshare	Celgene Corporation
Pradaxa – Fish	2016	1:30	5	8.8	Afib	Cardiovascular	None	MN, FN	GSWhttps://www.fiercepharma.com/dtc-advertising/fishing-for-market-share-boehringer-ingelheim-casts-a-new-	Boehringer Ingelheim Pharmaceuticals, Inc.

									cMEpaign-for-pradaxa	
AD	**Year**	**Length**	**Total scenes**	**Flesch-Kinkaid**	**Condition**	**Health category**	**Exemplar**	**Speaker**	**Ad Agency**	**Mfg Co.**
PrevNar13 – Increased Risk	2018	201:00	5	11.0	Pneumococcal Pneumonia vaccine	General health	2 women 1 man	MN	RTC Relationship Marketing	Wyeth Pharmaceuticals LLC
PrevNar13 – One Step	2016	1:00	8	8.2	Pneumococcal Pneumonia prevention	General health	2 women 2 men	MN, ME, FE	RTC Relationship Marketing	Wyeth Pharmaceuticals LLC
Rexulti – Living Behind the Mask	2018	1:30	9	6.7	Depression	Mental health	1 woman	FE FEV, MN	Wavemaker	Otsuka MEerica Pharmaceuticals, Inc.
Stelara – Chron's Disease	2018	1:00	9	8.9	Chron's disease	Oral and Gastrointestinal	1 woman 2 man	MN, FN	OMD	Janssen Biotech, Inc.
Taltz – Touch is How We Communicate	2018	1:02	15	7.0	Psoriasis	Skin	3 women	MN	OMD	Eli Lilly and Company
Taltz – Touch Shows How We Really Feel	2018	46:0	12	7.3	Psoriasis	Skin	2 women 2 men	MN	OMD	Eli Lilly and Company
Tecfidera – Relapsing MS	2016	1:00	10	8.6	Relapsing MS	Neurological	1 woman	FEV	CDMiConnect (creative) CMI and WPP's MEC (media buying)	Mylan?
Toujeo – Journal	2016	2:00	14	8.9	Type II Diabetes	Metabolic and Endocrine	1 woman	FEV, MN		Sanofi
Verzenio – Relentless	2018	1:33	17	9.1	MBC	Cancers and Neoplasms	3 Women	FE, FN	OMD	Eli Lilly and Company

AD	Year	Length	Total scenes	Flesch-Kinkaid	Condition	Health category	Exemplar	Speaker	Ad Agency	Mfg Co.
Victoza – Across the Country	2016	2:00	19	9.0	Type II Diabetes	Metabolic and Endocrine	3 women 2 men	MN, ME, MEV		Novo Nordisk
Victoza Feat. Dominique Wilkins	2018	1:00	16	9.1	Diabetes	Metabolic and Endocrine	3 women 3 men	MN, ME, MEV		Novo Nordisk
Xarelto – Selective	2018	1:17	24	6.3	DVT&PE Blood clot	Blood	1 woman 1 man	MEV, ME, FEV, FE, MN	J3	Janssen Pharmaceuticals, Inc.
Xeljanz XR - Cactus	2018	1:00	12	10.0	RA	Inflammatory and Immune System	1 woman	FN	Carat	Pfizer

	Year	Length	Total scenes	Flesch-Kinkaid score	Condition	Health category	Exemplar	Speaker	Ad Agency	Mfg Co.
Summary	2016=19 2018=30	56.25 total time	687	422.2	See table below	See table below	78 Women 3 Girls 48 Men 4 Boys <u>Classic drama</u> 14 women 5 men <u>Vignette</u> 10 women only in 4 ads 0 men only 54 women 42 men in 24 ads	FE=30 FEV=21 FN=21 ME=17 MEV=11 MN=30	See table below	See table below
Average		1.125	13.86	8.44						

Condition treated	Frequency
Asthma	2
Smoking cessation	2
Psoriasis	6
DVT and PE Blood clot	2
Psoriatic Arthritis	1
Heart failure	1
Ulcerative colitis or Chron's	2
Eczema	2
Type II Diabetes or Diabetes	7
HepC	2
RA	4
Advanced non-small cell lung cancer	3
Diabetic Ketoacidosis	1
Bipolar depression	1
IBS Constipation	1
Fibromyalgia pain	4
Diabetic nerve pain	1
Afib	1
Pneumococcal Pneumonia vaccine	2
Depression	1
Relapsing MS	1
MBC	1

Illness category	Frequency
Blood	2
Cancer and Neuroplasms	4
Cardiovascular	2
General Health	4
Infection	2
Inflammatory and Immune System	5
Mental Health	2
Metabolic and Endocrine	8
Musculoskeletal	4
Neurological	2
Oral and Gastrointestinal	4
Respiratory	2
Skin	8
Total Ads	49

Ad Agency	Frequency
MediaRadar	1
Carat	5
Starcom	3
Hill Holliday Health	1
Abelson-Taylor (Creative), Hearts & Science (Media)	1
BBDO New York	1
Digitas Health LifeBrands	2
Horizon Media, Inc.	2
Publicis (Creative and Digital), Spark Foundry (Media)	5
Foote, Cone & Belding, Initiative (Media)	1
OMD	6
Initiative	2
Mindshare	2
Kaplan Thaler Group	5
GSW	1
RTC Relationship Marketing	2
Wavemaker	1
CDMiConnect (creative) CMI and WPP's MEC (media buying)	1
J3	1

Manufacturing Company	Frequency
GSK	1
Pfizer	8
Novartis	4
Bristol Meyers Squibb	3
Immunex Corporation	1
Takeda	1
Anacor Pharmaceuticals, Inc	2
AstraZeneca	2
Gilead Sciences, Inc.	2
AbbVie	4
Merck	3
Boehringer Ingelheim Pharmaceuticals, Inc.	3
Sanofi	2
Lupin	1
Ironwood	1
Celgene Corporation	1
Wyeth Pharmaceuticals LLC	2
Otsuka MEerica Pharmaceuticals, Inc.	1
Janssen Biotech, Inc.	1
Janssen Pharmaceuticals, Inc.	1
Eli Lilly and Company	5
Mylan	1
Novo Nordisk	2

Appendix C

Illness	Symptoms	Citation
Advanced non-small cell lung cancer	Signs and symptoms of lung cancer may include: A new cough that doesn't go away Coughing up blood, even a small amount, Shortness of breath, Chest pain, Hoarseness, Losing weight without trying, Bone pain, Headache	https://www.mayoclinic.org/diseases-conditions/lung-cancer/symptoms-causes/syc-20374620
AFib, not caused by heart valve problem	Palpitations, which are sensations of a racing, uncomfortable, irregular heartbeat or a flip-flopping in your chest Weakness Reduced ability to exercise Fatigue Lightheadedness Dizziness Confusion Shortness of breath Chest pain	https://www.mayoclinic.org/diseases-conditions/atrial-fibrillation/symptoms-causes/syc-20350624
Asthma	Shortness of breath Chest tightness or pain Trouble sleeping caused by shortness of breath, coughing or wheezing A whistling or wheezing sound when exhaling (wheezing is a common sign of asthma in children) Coughing or wheezing attacks that are worsened by a respiratory virus, such as a cold or the flu	https://www.mayoclinic.org/diseases-conditions/asthma/symptoms-causes/syc-20369653
Bipolar depression	Both a manic and a hypomanic episode include three or more of these symptoms: Abnormally upbeat, jumpy or wired, Increased activity, energy or agitation, Exaggerated sense of well-being and self-confidence (euphoria), Decreased need for sleep, Unusual talkativeness, Racing thoughts, Distractibility Poor decision-making — for example, going on buying sprees, taking sexual risks or making foolish investments **Major depressive episode:**A major depressive episode includes symptoms that are severe enough to cause noticeable difficulty in day-to-day activities, such as work, school, social activities or relationships. An episode includes five or more of these symptoms: Depressed mood, such as feeling sad, empty, hopeless or tearful (in children and teens, depressed mood can appear as irritability), Marked loss of interest or feeling no pleasure in all — or almost all — activities, Significant weight loss when not dieting, weight gain, or decrease or increase in appetite (in children, failure to gain weight as expected can be a sign of depression) Either insomnia or sleeping too much, Either restlessness or slowed behavior, Fatigue or loss of energy, Feelings of worthlessness or excessive or inappropriate guilt, Decreased ability to think or concentrate, or indecisiveness, Thinking about, planning or attempting suicide	https://www.mayoclinic.org/diseases-conditions/bipolar-disorder/symptoms-causes/syc-20355955

Illness	Symptoms	Citation
Depression	emotional symptoms (tearfulness, sadness, brooding, blues, irritability, anxiety) behavioural/cognitive symptoms (indecision, lack of concentration, trouble focusing, withdrawal from social and work activities, decreased personal care such as grooming) physical symptoms (changes in sleep patterns, weight, or appetite; fatigue; complaints of pain, which can include headache, stomach pain, and other unexplained pain)	https://www.medbroadcast.com/channel/depression/symptoms-of-depression/what-are-the-symptoms-of-depression
Diabetes	Increased thirst Frequent urination Extreme hunger Unexplained weight loss Presence of ketones in the urine (ketones are a byproduct of the breakdown of muscle and fat that happens when there's not enough available insulin) Fatigue Irritability Blurred vision Slow-healing sores Frequent infections, such as gums or skin infections and vaginal infections	https://www.mayoclinic.org/diseases-conditions/diabetes/symptoms-causes/syc-20371444
DVT and PE blood clot	Swelling in the affected leg. Rarely, there's swelling in both legs. Pain in your leg. The pain often starts in your calf and can feel like cramping or soreness. Red or discolored skin on the leg. A feeling of warmth in the affected leg	https://www.mayoclinic.org/diseases-conditions/deep-vein-thrombosis/symptoms-causes/syc-20352557
Eczema	Atopic dermatitis (eczema) signs and symptoms vary widely from person to person and include: Dry skin, Itching, which may be severe, especially at night, Red to brownish-gray patches, especially on the hands, feet, ankles, wrists, neck, upper chest, eyelids, inside the bend of the elbows and knees, and in infants, the face and scalp, Small, raised bumps, which may leak fluid and crust over when scratched, Thickened, cracked, scaly skin, Raw, sensitive, swollen skin from scratching	https://www.mayoclinic.org/diseases-conditions/atopic-dermatitis-eczema/symptoms-causes/syc-20353273

Illness	Symptoms	Citation
Fibromyalgia	**Widespread pain.** The pain associated with fibromyalgia often is described as a constant dull ache that has lasted for at least three months. To be considered widespread, the pain must occur on both sides of your body and above and below your waist. **Fatigue.** People with fibromyalgia often awaken tired, even though they report sleeping for long periods of time. Sleep is often disrupted by pain, and many patients with fibromyalgia have other sleep disorders, such as restless legs syndrome and sleep apnea. **Cognitive difficulties.** A symptom commonly referred to as "fibro fog" impairs the ability to focus, pay attention and concentrate on mental tasks. Fibromyalgia often co-exists with other painful conditions, such as: Irritable bowel syndrome, Migraine and other types of headaches, Interstitial cystitis or painful bladder syndrome, Temporomandibular joint disorders	https://www.mayoclinic.org/diseases-conditions/fibromyalgia/symptoms-causes/syc-20354780
Hep C	Bleeding easily Bruising easily Fatigue Poor appetite Yellow discoloration of the skin and eyes (jaundice) Dark-colored urine Itchy skin Fluid buildup in your abdomen (ascites) Swelling in your legs Weight loss Confusion, drowsiness and slurred speech (hepatic encephalopathy) Spider-like blood vessels on your skin (spider angiomas)	https://www.mayoclinic.org/diseases-conditions/hepatitis-c/symptoms-causes/syc-20354278
Hepatitis B	Abdominal pain Dark urine Fever Joint pain Loss of appetite Nausea and vomiting Weakness and fatigue Yellowing of your skin and the whites of your eyes (jaundice)	https://www.mayoclinic.org/diseases-conditions/hepatitis-b/symptoms-causes/syc-20366802
IBS	Abdominal pain, cramping or bloating that is typically relieved or partially relieved by passing a bowel movement Excess gas Diarrhea or constipation — sometimes alternating bouts of diarrhea and constipation Mucus in the stool	https://www.mayoclinic.org/diseases-conditions/irritable-bowel-syndrome/symptoms-causes/syc-20360016

Illness	Symptoms	Citation
Metastatic breast cancer	**Local recurrence** In a local recurrence, cancer reappears in the same area as your original cancer. If you've undergone a lumpectomy, the cancer could recur in the remaining breast tissue. If you've undergone a mastectomy, the cancer could recur in the tissue that lines the chest wall or in the skin. Signs and symptoms of local recurrence within the same breast may include: A new lump in your breast or irregular area of firmness, Changes to the skin of your breast, Skin inflammation or area of redness, Nipple discharge Signs and symptoms of local recurrence on the chest wall after a mastectomy may include: One or more painless nodules on or under the skin of your chest wall, A new area of thickening along or near the mastectomy scar **Regional recurrence** A regional breast cancer recurrence means the cancer has come back in the nearby lymph nodes. Signs and symptoms of regional recurrence may include a lump or swelling in the lymph nodes located: Under your arm, Near your collarbone, In the groove above your collarbone, In your neck **Distant recurrence** A distant (metastatic) recurrence means the cancer has traveled to distant parts of the body, most commonly the bones, liver and lungs. Signs and symptoms include: Persistent and worsening pain, such as chest or bone pain, Persistent cough, Difficulty breathing, Loss of appetite, Weight loss, Severe headaches, Seizures	https://www.mayoclinic.org/diseases-conditions/recurrent-breast-cancer/symptoms-causes/syc-20377135
Plaque psoriasis	The most common form, plaque psoriasis causes dry, raised, red skin lesions (plaques) covered with silvery scales. The plaques might be itchy or painful and there may be few or many. They can occur anywhere on your body, including your genitals and the soft tissue inside your mouth.	https://www.mayoclinic.org/diseases-conditions/psoriasis/symptoms-causes/syc-20355840
Prevention of pneumococcal pneumonia	Chest pain when you breathe or cough Confusion or changes in mental awareness (in adults age 65 and older) Cough, which may produce phlegm Fatigue Fever, sweating and shaking chills Lower than normal body temperature (in adults older than age 65 and people with weak immune systems) Nausea, vomiting or diarrhea Shortness of breath	https://www.mayoclinic.org/diseases-conditions/pneumonia/symptoms-causes/syc-20354204

Illness	Symptoms	Citation
Psoriasis	Red patches of skin covered with thick, silvery scales Small scaling spots (commonly seen in children) Dry, cracked skin that may bleed Itching, burning or soreness Thickened, pitted or ridged nails Swollen and stiff joints Psoriasis patches can range from a few spots of dandruff-like scaling to major eruptions that cover large areas. Most types of psoriasis go through cycles, flaring for a few weeks or months, then subsiding for a time or even going into complete remission.	https://www.mayoclinic.org/diseases-conditions/psoriasis/symptoms-causes/syc-20355840
psoriatic arthritis	Painful, swollen joints of ankles, knees, fingers, toes, and lower back. Joint stiffness, thick, red skin with flaky, silver-white scaly patches. Pitted nails, fatigue, reduced range of motion, eye problems	https://www.arthritis.org/about-arthritis/types/psoriatic-arthritis/symptoms.php
Relapsing Multiple sclerosis	Numbness or weakness in one or more limbs that typically occurs on one side of your body at a time, or the legs and trunk Electric-shock sensations that occur with certain neck movements, especially bending the neck forward (Lhermitte sign) Tremor, lack of coordination or unsteady gait Vision problems are also common, including: Partial or complete loss of vision, usually in one eye at a time, often with pain during eye movement Prolonged double vision Blurry vision Multiple sclerosis symptoms may also include: Slurred speech Fatigue Dizziness Tingling or pain in parts of your body Problems with sexual, bowel and bladder function	https://www.mayoclinic.org/diseases-conditions/multiple-sclerosis/symptoms-causes/syc-20350269

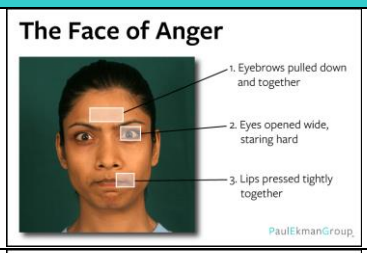
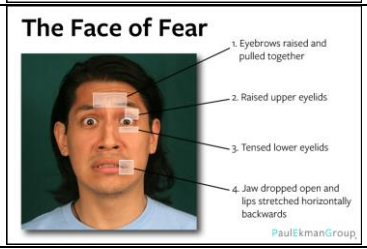
Illness	Symptoms	Citation
Rheumatoid arthritis	Tender, warm, swollen joints Joint stiffness that is usually worse in the mornings and after inactivity Fatigue, fever and loss of appetite Early rheumatoid arthritis tends to affect your smaller joints first — particularly the joints that attach your fingers to your hands and your toes to your feet. As the disease progresses, symptoms often spread to the wrists, knees, ankles, elbows, hips and shoulders. In most cases, symptoms occur in the same joints on both sides of your body. About 40 percent of the people who have rheumatoid arthritis also experience signs and symptoms that don't involve the joints. Rheumatoid arthritis can affect many nonjoint structures, including: Skin, Eyes, Lungs, Heart, Kidneys, Salivary glands, Nerve tissue, Bone marrow, Blood vessels, Rheumatoid arthritis signs and symptoms may vary in severity and may even come and go. Periods of increased disease activity, called flares, alternate with periods of relative remission — when the swelling and pain fade or disappear. Over time, rheumatoid arthritis can cause joints to deform and shift out of place	https://www.mayoclinic.org/diseases-conditions/rheumatoid-arthritis/symptoms-causes/syc-20353648
Smoking cessation	Having cravings for cigarettes Feeling down or sad Having trouble sleeping Feeling irritable, on edge, or grouchy Having trouble thinking clearly and concentrating Feeling restless and jumpy Having a slower heart rate Feeling more hungry or gaining weight	https://smokefree.gov/challenges-when-quitting/withdrawal/managing-withdrawal
Ulcerative colitis or Chron's	Diarrhea, often with blood or pus, Abdominal pain and cramping, Rectal pain, Rectal bleeding — passing small amount of blood with stool, Urgency to defecate, Inability to defecate despite urgency, Weight loss, Fatigue, Fever Chron's Disease: Diarrhea, Fever, Fatigue, Abdominal pain and cramping, Blood in your stool, Mouth sores, Reduced appetite and weight loss, Pain or drainage near or around the anus due to inflammation from a tunnel into the skin (fistula)	https://www.mayoclinic.org/diseases-conditions/ulcerative-colitis/symptoms-causes/syc-20353326 https://www.mayoclinic.org/diseases-conditions/crohns-disease/symptoms-causes/syc-20353304

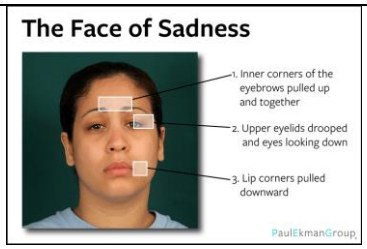
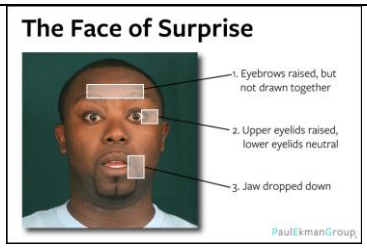
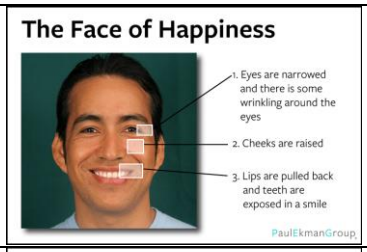
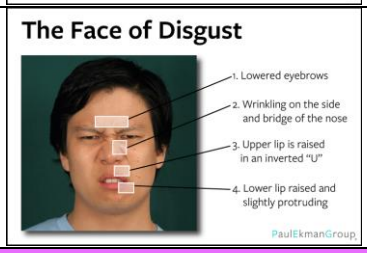
Appendix D
Codebook for Narrative Persuasion

Code	Definition	Example
1. Transportation	The process of being absorbed into a story in a pleasurable and active way.	
1. A. Realism	A story's plausibility – represents real people and real live events/ situations- characters and their response to events are perceived as realistic	
1.A.i. Textual/ spoken realism		
1.A.i.a. Novelty	A divergence from expectations, yet interesting and unanticipated.	My leg did not look right
1.A.ii. Visual realism		
1.A.ii.a. Novelty	A divergence from expectations, yet interesting and unanticipated. Presenting the information in an unexpected way.	Showing a split screen with the sick person on one side in bed, watching their family member eat out with friends.
1.B. Vividness	Representational richness or intensity of mediated environments that engages the senses. It includes the number of senses engaged as well as the quality or proximation to human senses. It is clear, vivid, and lifelike. It includes clarity of images, compatibility between virtual and real experiences, appeals to the senses	
1.B.i. Textual/ spoken vividness	Concrete and/ or descriptive words that stand out or appeal to the senses. The language is used to produce a clear image or powerful feeling.	
1.B.i.a. Sensory appeals	Descriptive words that appeal to the sense of sight, touch, taste, smell, sound, balance, temperature, or pain.	Bright: The medicine brightened her complexion Soft: the medicine softened the skin on her hands Bitter: the taste of cigarette smoke becomes bitter after taking Chantix Smell: she was able to smell roses again without sneezing Bang: the banging in my head was excrutiating Seesaw: ups and downs of A1C like being on a seesaw Red hot: my fever was red hot
1.B.i.b. Intense imagery not related to the senses	Words that don't appeal to the senses, but that are powerful and emphasized	What about my wife and all that we had built together?
1.B.ii. Visual vividness	Images that appeal to the senses. The images are used in a way to promote a clear image or powerful feeling.	

Code	Definition	Example
1.B.ii.a. Sensory appeals	Images that that appeal to the sense of sight, touch, taste, smell, sound, balance, temperature, or pain. This is specific to the exemplar	Sight: Bright colors and squinting eyes Touch: Stroking the back of one's neck Taste: eating food Sound: an alarm clock or popular song playing Balance: exemplar on a seesaw Temperature: exemplar shivering Pain: hands on the head as if in pain, squinted eyes, or painful facial expression – or all of these in combination
1.B.ii.b. Intense imagery not related to the senses	Images that don't necessarily appeal to the senses, but are powerful and emphasized.	The close-up of the product or exemplar, or emphasis that is placed on the name of the product. Charts, graphs, simulated drawing, or information on split screen with exemplar. A dog or cat shaped like the words sleep or awake. The back of an exemplar that has an artist's rendering of overactive nerves
2. Identification	The extent to which an individual perceives similarity to the exemplar	
2.A. Point of view (POV)	Language choices, camera frames, and eye direction that imply who is telling the story	
2.A.i. Textual/ Spoken POV		
2.A.i.a. First person singular or plural	Language using the singular form I, me, my, and/or mine: plural form we, us, our, ours	I don't want to live with the uncertainties of HepC
2.A.i.b. Second person	Language using the singular form you, your, yours: plural form you, you, yours. Lecture or editorial in nature.	Tell your doctor if you've had a liver transplant
2.A.i.c. Third person	Language using the words he, she, it, him, her, it, his/his, her/hers, it/ its: plural form they, them, their/ theirs	To most he's Phil Mickelson, pro golfer. To me he's, well, Dad.
2.A.ii. Visual POV	Camera frames and eye direction that imply whose viewpoint the story should be perceived through – i.e. who is telling the story.	

Code	Definition	Example
2.A.ii.a. First person	Views of the exemplar as if the viewer is looking at something, sometimes the person's hands or feet will be shown.	Camera shot showing the hands of a person, but not any other part of the body. These scenes from Silence of the Lambs 
2.A.ii.b. Second person	Actor speaking directly to the camera or viewer.	Actor speaking and looking directly at the camera indicating that they are speaking to the viewer. They may gesture at something out of view, or point directly at the camera to indicate that they are instructing, informing, or guiding the viewer. House of cards uses this method often. https://www.youtube.com/watch?v=mC8QoRa8y_Q
2.A.ii.c. Third person	Close up of another actor looking at the exemplar. A scene of the exemplar engaged in an activity alone or with others.	Caregiver talking to the exemplar See the link above for all POV examples
2.B. Emotional displays	Emotional displays in the ad.	Go to www.paulekman.com/universal- emotions for more help
2.B.i. Textual/ Spoken emotional similarity	The emotions listed should be viewed as a range of emotion with the identified emotion the center point.	
2.B.i.a. Anger	Word choices such as anger, agitation, frustration, irritability, jealousy, resentment. The complete range would be from *frustration* on the lower end of anger to *furious* on the upper end.	I'm struggling with my Diabetes I kept on fighting Fibromyalgia may be invisible to others, but my pain is real

Code	Definition	Example
2.B.i.b. Fear	Word choices such as anxiety, fear, helplessness, overwhelmed, poor self-esteem, poor self-worth, worthlessness, worry. This does not include language related to the side effects that are not part of the emergent story. The complete range would be from *concerned* on the lower end to *frightened* on the upper end.	When his joint pain from psoriatic arthritis got really bad, it scared me I was scared
2.B.i.c. Sadness	Word choices such as abandoned, avoidance, burdensome, depression, embarrassment, grief, guilt, hopelessness, isolation, sadness, shame, suicide/ suicidal ideation, tearful. The complete range would be from *disappointed* on the lower end to *depressed* on the upper end.	People would stare It's tough getting out on stage
2.B.i.d. Surprise	Word choices such as confusion, shock. The complete range would be from *unexpected* on the lower end to *shocked* on the upper end.	I'm on an antidepressant, why do I still have depression symptoms?
2.B.i.e. Enjoyment	Word choices such as peace, wonder, joy, relief, excitement. The complete range would be from *contentment* on the lower end to *overjoyed or ecstatic* on the upper end.	It was a relief to talk to my doctor about my pain
2.B.i.f. Disgust	Words such as loathing, revulsion, aversion, dislike. The complete range would be from *avoided* on the lower end to *repulsed* on the upper end.	I loathed my body for failing me
2.B.ii. Visual emotional similarity		
2.B.ii.a. Anger	In the face: brows lowered and drawn together with vertical lines, lower lids tensed and may or may not be lowered, eyes hard stare and bulging, lips pursed or open and squared. Body language: clenched fists, leaning forward with head/ chin jutting forward, puffing their chest or body to appear larger	
2.B.ii.b. Fear	In the face brows are raised and drawn together, wrinkles in the forehead at the center (not across entire forehead), upper eyelid raised, lower lid tensed and drawn up, mouth is open, lips either slightly tensed and drawn back or stretched and drawn back. In the body freezing or moving away.	

Code	Definition	Example
2.B.ii.c. Sadness	In the face: inner corners of brows draw up, skin below the brow is triangulated with inner corner up, corners of lips are down, or the lips are trembling. In the body: lowered or hunched posture, looking away and/ or downward	 Actor sighing
2.B.ii.d. Surprise	In the face: brows are raised and curved high, skin below the eye is stretched, and horizontal wrinkles across the forehead. White of the eyes are shown, jaw drops and the lips and teeth are parted. In the body: moving the head, bringing the hands up to shield the face, and/or stepping backwards away from surprising object	
2.B.ii.e. Enjoyment	In the face: eyes are narrowed and there is wrinkling around the eyes, cheeks are raised, lips are pulled back and teeth are exposed. In the body: upright and elevated posture, or still and relaxed	
2.B.ii.f. Disgust	In the face: lowered eyebrows, wrinkling on the side of the nose, upper lip raised in an inverted U, lower lip raised and slightly protruding. In the body: head or body turned away from the source, covering the nose or mouth and hunching over	
2.C. Activities	Social functioning as communicated in the ad	
2.C.i. Textual/ spoken activities	Words that indicate activity that are not part of the side effects: could be changes in routine activities, limiting activities, and inability to participate.	
2.C.i.a. Car related	Words that relate to a vehicle	It was difficult to drive myself to work
2.C.i.b. Food related	Words related to consuming food or anticipation of consuming food	Eat, dine, lunch, breakfast, meal, buffet, snack, refreshment
2.C.i.b.i. At home	Words related to consuming food or the anticipation of consuming food at home	The above words associated with dining room, kitchen, breakfast area
Code	**Definition**	**Example**

Code	Definition	Example
2.C.i.b.ii. In public	Words related to consuming food or the anticipation of consuming food at a restaurant	The above words associated with restaurant, fast food, going out to eat
2.C.i.c. Participating in games or play	Words related to participating in any play or activity for fun. Could be active game or sedentary game.	I couldn't play poker because of my arthritis pain. I used to enjoy jumping in mud puddles with my girls, but fibromyalgia pain restricted me…
2.C.i.d. Participating in sports	Words that are related to playing or participating in a sport	I was a top-notch basketball player before diabetic nerve pain.
2.C.i.e. Shopping	Words related to shopping or anticipating shopping.	I used to love antique shopping
2.C.i.f. Walking or sightseeing	Words related to walking or sightseeing	Walk through downtown during the day
2.C.i.g. Watching	Words related to being any type of spectator.	Watching her daughter play soccer.
2.C.i.h. Working	Work related language.	Effort, exertion, labor, toil, creation
2.C.i.h.i. Home	Work related language in the home.	Clean the kitchen, sweep the porch
2.C.i.h.ii. Workplace	Work related language in the workplace	Run the report, assist the customer,
2.C.ii. Visual activities	The activities that the exemplar is acting out.	
2.C.ii.a. Car related	Activities considered to be leisurely, not work related	Scene of an exemplar driving, riding, or sitting in a vehicle
2.C.ii.b. Food related	The activity of purchasing or consuming food. The exemplar is directly involved with a meal that s/he is eating or intending to eat	
2.C.ii.b.i. At home	Exemplar consuming a meal or snack, or intending to consume a meal or snack in a home.	Scene of exemplar at a dinner party at someone's home
2.C.ii.b.ii. In public	Exemplar eating or preparing to consume a meal or snack in a restaurant, fast food place, food truck, or other public place	Scene of exemplar eating in restaurant, bistro, café, food truck, or fast food establishment
2.C.ii.c. Participating in games or play	Exemplar playing with others	Scene of playing with family in the backyard sprinkler Scene of playing cards with family
2.C.ii.d. Participating in sports	Exemplar participating in sports as a player or guide (coach)	Scene of exemplar meeting with a team of softball players
2.C.ii.e. Shopping	Exemplar shopping or window shopping for a product	Scene of exemplar walking into a store, wandering through a store, looking at items in a store
2.C.ii.f. Walking or sightseeing	Exemplar taking a leisurely walk without a destination, or leisurely looking at sights	Scene of exemplar walking their dog. Scene of exemplar looking at a building.

Code	Definition	Example
2.C.ii.g. Watching	Exemplar watching an activity as an onlooker while others are actively engaged. This does not include watching that might be associated with guiding others. There is no directive, the exemplar has no role in the activity	Scene of exemplar watching child play in a wading pool, but not interacting with him.
2.C.ii.h. Working	Work related activities	
2.C.ii.h.i. Home	Exemplar working on home related things	Scene of exemplar cooking a meal or planting a tree at home
2.C.ii.h.ii. Workplace	Exemplar working on anything occupation related. The location could be outside of the workplace itself	Scene of exemplar catering a wedding
2.D. Health Event		
2.D.i. Textual/ spoken Health Event	Any language related to health and wellness	
2.D.i.a. Disease, illness, or condition identified	Times when the disease, illness, or condition is specified	If you have asthma
2.D.i.b. Doctor interaction	Times when there is an interaction with a doctor	
2.D.i.b.i. Active doctor interaction	Language that indicates the exemplar took initiative to interact with the doctor	I asked my doctor about Enbrel
2.D.i.b.ii. Interactive doctor interaction	Language that indicates the exemplar and doctor had an equal exchange	My doctor and I decided that Entyvio was the best option for me
2.D.i.b.iii. Passive doctor interaction	Language that indicates that the doctor was in control of the interaction and the exemplar passively accepted the doctor's direction	My doctor told me that I needed Breo
2.D.i.c Medicine interaction	Language that indicates a level interaction with the advertised medicine	
2.D.i.c.i. Direct interaction with the medicine	Language that indicates the exemplar directly interacted with the advertised medicine.	I took Enbrel and my pain went away
2.D.i.c.ii. Indirect interaction with the medicine	Language that indicates the exemplar had an indirect interaction with the advertised medication	I thought about taking Enbrel for my arthritis pain.
2.D.ii. Visual Health Event	Any activity related to the health and well-being of the exemplar	
2.D.ii.a. Disease, illness, or condition identified	Image of the ailment that the exemplar is experiencing	Showing a patch of skin that is red on the exemplar or the exemplar rubbing their knee
Code	**Definition**	**Example**

Code	Definition	Example
2.D.ii.b. Doctor interaction	Exemplar directly interacting with a doctor. Does not have to be in the doctor's office	
2.D.ii.b.i. Active doctor interaction	Exemplar is taking an active role and leading the interaction.	Body language, facial expressions, and talking indicates that the exemplar is more active than the doctor. The exemplar is doing the majority of talking in the scene
2.D.ii.b.ii. Interactive doctor interaction	The interaction between exemplar is fairly evenly split.	The exemplar and doctor are actively engaged. The body language of both indicates good posture and interest in the interaction. Exemplar asking questions and doctor answering them
2.D.ii.b.iii. Passive doctor interaction	The exemplar is listening and not responding.	Body posture of the exemplar is relaxed with little to no facial expression. May be nodding head in agreement or understanding.
2.D.ii.c. Medicine interaction	The exemplar's interaction with the advertised medication	
2.D.ii.c.i. Direct interaction with the medicine	The exemplar holding or taking the medicine	A doctor passes an inhaler to the exemplar or the exemplar shown holding a pill
2.D.ii.c.ii. Indirect interaction with the medicine	The exemplar does not have a direct interaction with the medicine, but it is pictured alongside the exemplar. This does not include the name of the medication on the screen at the same time as the exemplar	A picture of a pill being held in the same frame as the exemplar
2.E. Relationships		
2.E.i. Textual/ spoken relationship	Words that indicate relationship experiences, interactions with others, or isolated.	I didn't want to let people down so I hid my real feelings behind a mask It makes it hard to be there for the people I love
2.E.i.a. Isolated or alone	Words that communicate isolation from others	Separation, lonely, seclusion…
2.E.i.b. Co-worker(s)	Words that communicate interaction with co-worker	Others at work, coworker, colleague, associate, assistant, partner, collaborator, workmate, workfellow, fellow worker
2.E.i.c. Family	Words that communicate interaction with a family member	Mother, father, daughter, son, aunt, uncle, niece, nephew, grandparent, brother, sister
2.E.i.d. Friend(s)	Words that communicate interaction with friend(s)	Pal, companion, buddy
2.E.i.e Other	Words that communicate interaction with someone that doesn't fit any of the above categories, may be a caregiver	Caretaker, nurse, student, customer
2.E.ii. Visual relationship	Scenes that indicate relationship experiences, interactions with others, or isolated.	
2.E.ii.a. Isolated or alone	The exemplar is pictured alone, without anyone else in the scene or is pictured isolated, others in the scene that they are not interacting with	A woman at work, talking to the camera, while there are others in the background that are not part of the story.

Code	Definition	Example
2.E.ii.c. Co-worker(s)	Interactions that the exemplar has with co-workers	A woman at work showing an employee how to stack apples in a bin
2.E.ii.d. Family	Interactions that the exemplar has with family member(s)	A woman who comes home and cooks with her husband in the kitchen
2.E.ii.e. Other	Interactions that the exemplar has with someone other than a family member or friend	A women at work interacting with a customer or student

Appendix E
Story Summaries

Ad title	**Visual story**	**Visual story type**	**Verbal story**	**Verbal story type**	**Ad goal**	**Congruency**	**Narrative type**
Breo The Many pieces	*Visual:* asthma medicine helps woman go about her daily routine and enjoy friends at the end of the day	*Wellness*	*Verbal:* asthma medicine was not enough on its own	Restored health	Add medicine	IC	CD
Chantix Ginny	*Visual:* woman is interviewed and shops for, transports home, and plants a tree in her front yard	*Wellness*	*Verbal:* woman needed to quit smoking and was able to do so with help from the medicine	Restored health	Start medicine	IC	CD
Chantix Mark's Dogs	*Visual:* man is interviewed and enjoys time at the dog park with his wife	*Wellness*	*Verbal:* man is a long time smoker and surprised everyone by quitting with help from the medicine	Restored health	Start medicine	IC	CD

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Cosentyx Feat. Cyndi Lauper	*Visual:* People are embarrassed to work or enjoy recreational activities with their friends with psoriasis. They try to hide it until they get help. After medicine they enjoy their fans, friends, and loved ones.	*Restored health*	*Verbal:* Same as visual	Restored health	Superior medicine	C	V
Cosentyx See Me	*Visual:* Having psoriasis makes a person sad, it makes it difficult to be motivated, but also angry at people's reaction who don't understand it	*Restored health*	*Verbal:* Same as above except they are motivated to fix the issue and they have found the medicine to solve the problem	Restored health	Superior medicine	C	V
Cosentyx Watch Me	*Visual:* Daily life enjoying family and football, friends at the arcade, and yoga for self-care. Psoriasis doesn't affect enjoying all facets of one's life – family friend and self	*Wellness*	*Verbal:* being independent, a fighter, overcomer, and unstoppable	wellness	Superior medicine	C	V

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Eliquis Painting	*Visual:* a man contemplatively prods through life after a hospital stay, finally relinquishing his fears and accomplishing desired goals of building a studio for his wife	*Restored health*	*Verbal:* man leaves the hospital and is scared that if he doesn't' have the right medicine he isn't going to be able to finish his dreams with his wife because he could have another DVT or PE Blood clot	Restored health	Superior medicine direct compariso n	C	CD
Enbrel Feat. Phil Mickelson	*Visual:* A father is going through morning routine of making breakfast and getting his daughter off to school while she draws a series of pictures of him, the first of him winning a golf round, the next of him holding his hands and an empty basketball court with a cap on the ground, and of him fixing breakfast. He then goes to play a round of golf.	*Wellness*	*Verbal:* a daughter is scared for the health of her father, but after he takes the medication he is back to normal, being dad.	Restored health	Start medicine	IC	CD

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Entresto Tomorrow	*Visual:* daily rituals with responsibilities, self-care, work, and family can go when you have a heart condition	*Restored health, Wellness*	*Verbal:* this advertisement provides information about a heart study and medicine only. There is no story in the verbal except for the song "tomorrow"	Restored health	Superior medicine	C	V
Entyvio Time for a Change	*Visual:* inability to plan or enjoy recreation or entertainment until after the medicine is introduced	*Restored health*	*Verbal:* other treatment might not be sufficient to treat symptoms of UC or Chron's	Restored health	Change medicine	C	V
Eucrisa On Almost Everybody	*Visual:* children with eczema are happy, confident, enjoy being active and doing things at school and with friends, also in need of a loving caregiver.	*Wellness*	*Verbal:* no matter where your condition is there is treatment for it	Restored health	Start medicine	IC	V
Eucrisa Steroid Free	*Visual:* fishing, working, needlepoint, and going to bed at night are not affected by eczema	*Wellness*	*Verbal:* no matter where you have eczema it can be treated	Restored health	Start medicine	IC	V

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Farxiga Everyday People	*Visual:* life is enjoyable whether it is alone with your dog or violin playing on a city street, with family and friends taking pictures and riding bikes, walking through a city or working on a farm or in a plant	*Wellness*	*Verbal:* type II diabetes can affect all walks of life and everyday people	Restored health	Start medicine	IC	V
Fasenra Targeted Treatment	*Visual:* during a day in the life of many different people health experts hold a special television interview that draws attention and prompts them to listen closely	*Wellness*	*Verbal:* taking this medicine is important for people with asthma	Restored health	Add medicine	IC	V
Harvoni I am Ready	*Visual:* alone but happy and fulfilled with hepC, eventually interactions with others is possible	*Wellness*	*Verbal:* prepare to find a cure hepC and stop worrying about it	Restored health	Start medicine	IC	V
Harvoni Let Go	*Visual:* family members are supportive and help celebrate rituals	*Wellness*	*Verbal:* being free from hepC causes happiness and relief	Restored health	Start medicine	IC	V

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Humira A Day at the Fair	*Visual:* it's hard to enjoy the fair when you are worried about what you can eat or where the bathroom is and if it is going have a line, but taking the medicine can relieve all of the worries and help you unite and enjoy the fair with friends.	*Restored health*	*Verbal:* there are a lot of worries associated with UC but the medicine takes all of those worries away	Restored health	Superior medicine	C	CD
Humira Chase What You Love	*Visual:* having a puppy brings joy, responsibility, connects you with old friends, and helps you make new friends	*Wellness*	*Verbal:* if something you desire is out of reach because of rheumatoid arthritis the medicine can help you acquire it	Restored health	Start medicine	IC	CD
Humira Go Further	*Visual:* having a niece is a momentous occasion that merits taking a mini-vacation, traveling, visiting, throwing a party, and relaxing	*Wellness*	*Verbal:* if you're talking to your doctor about treatment for your RA tell your doctor about humira because it relieves pain and protects joints	Restored health	Start medicine	IC	CD
Humira Your Wakeup Call	*Visual:* waking up with RA is painful and isolating but with medicine allows you to do things with family, friends, or self-care	*Restored health*	*Verbal:* it is urgent that you pay attention to taking care of moderate to severe RA	Restored health	Start medicine	C	V

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Januvia Seesaw	*Visual:* being on a seesaw is enjoyable and you can enjoy time with family at your home or on the beach	*Wellness*	*Verbal:* only someone with type 2 diabetes knows what it is like to deal with low and high blood sugar, it doesn't even have to be explained	Restored health	Start medicine	C	V
Jardiance Around the Clock	*Visual:* rituals can be challenging when you are trying to take care of your health – family, work, even finding something to eat, but you can be successful	*Restored health*	*Verbal:* music emphasizes that life has ups and down but don't give up, medicine to lower blood sugar can help	Restored health	Start medicine	C	V
Jardiance Good News	*Visual:* strangers approaching you on the street with a camera crew can help you understand more about type II diabetes, no matter who you are or who you are with you can learn something new and interesting	*Wellness*	*Verbal:* people on the street who have type II diabetes may not know much about the disease or how dangerous it can be, but the medicine can save your life	Restored health	Superior medicine	C	V

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Keytruda It's True Donna's Story	*Visual:* being a grandmother and raising your grandchildren is challenging and busy but it is possible to do all of this and still work	*Wellness*	*Verbal:* having advanced non-small cell lung cancer can be devastating but Keytruda can help you from giving up and help you live a healthy life	Restored health	Start medicine	IC	CD
Keytruda It's True Roger's Story	*Visual:* teaching your grandsons to take care of cars, and passing on your love for vintage cars and car shows, as well as spending the day with family is rewarding.	*Wellness*	*Verbal:* having advanced non-small cell lung cancer makes you think about your family and goals you have with them. With the medicine you can reach those goals	Restored health	Start medicine	IC	CD
Lantus Stay Together	*Visual:* certain things are a natural fit, long relationships and memories, dancing with a partner, playing baseball with a child, peas and carrots, black and white dogs, yin yang.	*Wellness*	*Verbal:* trustworthy and loyal people stay with this medicine	wellness	Stay with medicine	IC	V

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Latuda Maya's Story	*Visual:* having bipolar depression separates you from the people you love and prevents you from engaging in the things you love until you talk to your doctor and take the medication. Then you can engage with your family and children	*Restored health*	*Verbal:* being able to be present for the ones you love is difficult unless you take this medicine and can prevent you from missing the meaningful things to you	Restored health	Start medicine	C	CD
Linzess Yes	*Visual:* having ibs keeps you tethered to your toilet until you take a medicine that turns it all around. Then you can enjoy a day on the town.	*Restored health*	*Verbal:* if you suffer with stomach pain then you should say yes to taking this medicine	Restored health	Start medicine	C	V
Lyrica A Day at the Park	*Visual:* it's hard to function and be a part with pain but taking medicine helps me enjoy time with my family	*Restored health*	*Verbal:* people don't understand fibromyalgia pain because they can't see it, but it is painful. Taking the medicine helps to do things with family	Restored health	Start medicine	C	CD

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Lyrica Babysitter	*Visual:* a day that begins in pain and isolation can end with a date and night on the town with your spouse after taking medicine	*Restored health*	*Verbal:* people don't understand fibromyalgia pain because they can't see it, but it is painful. Taking the medicine helps to do things with family	*Restored health*	Start medicine	C	CD
Lyrica Carpenter	*Visual:* being tired and sitting keeps you away from what you enjoy but taking medicine helps you work and play with your children	*Wellness*	*Verbal:* fibromyalgia pain keeps you from doing things and having energy but the medicine can bring that all back	*Restored health*	Start medicine	C	V
Lyrica Coach	*Visual:* life is on hold with fibromyalgia but taking medicine restores life to previous functioning	*Restored health*	*Verbal:* fibromyalgia pain keeps you from doing things and having energy but the medicine can bring that all back	*Restored health*	Start medicine	C	V
Lyrica Keep the Beat Going	*Visual:* diabetic nerve pain stops you from doing things you did when you were younger, but taking medicine can help you enjoy time with your family and play your instrument even if you aren't standing on your feet	*Restored health*	*Verbal:* diabetic nerve pain prevents you from doing things you loved when you were young but taking this medicine helps you do those things again	*Restored health*	Start medicine	C	CD

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Opdivo Most Prescribed Immunotherapy	*Visual:* being sick leaves you dependent on others for help and looking for answers. Talking to your doctor and taking medicine restores time with your family and loves ones	*Restored health*	*Verbal:* you can live longer if you have advanced non-small cell lung cancer if you take this medicine	*Restored health*	Start medicine	C	V
Otezla Little Things Can Be a Big Deal	*Visual:* a woman who is going on a date feels confident, a teacher who is teaching young children with confidence and success, and a couple with their young daughter goes swimming on vacation.	*Wellness*	*Verbal:* that if you have plaque psoriasis or psoriatic arthritis they should not dismiss the little things like changing medicine because it can make a big difference.	*Restored health*	Superior medicine	IC	V
Pradaxa Fish	*Visual:* fish fluttering through the bloodstream can cause clot and travel to the brain if you don't take medicine to free up blood flow	*Restored health*	*Verbal:* having afib puts you at risk of a clot and potentially a stroke but taking medicine can stop clots	*Restored health*	Superior medicine direct compariso n	C	
Prevnar 13 Increased Risk	*Visual:* being sick with pneumonia will put you in bed while your loved ones are trying to enjoy social activities	*Restored health*	*Verbal:* being healthy may not stop you from getting pneumococca l pneumonia unless you get this vaccine	*Restored health*	Start medicine	C	V

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Prevnar 13 One Step	*Visual:* simple and little things can help you stay healthy and enjoy time with your loved one	*Wellness*	*Verbal:* being healthy by doing one simple thing is possible with the vaccine	*Restored health*	Start medicine	C	V
Rexulti Living Behind the Mask	*Visual:* hiding from depression cause you to miss important moments in life but when you take medicine you can stop hiding and start enjoying life with friends	*Restored health*	*Verbal:* antidepressants alone aren't enough to take care of all of depression symptoms but that doesn't prevent someone from hiding from it and the shame associated with not being better. Being honest with others and your doctor can lead you to a medicine that will help you from hiding	*Restored health*	Add medicine	C	CD
Stelara Chron's Disease	*Visual:* Chron's disease is haunting, leaves you isolated from others, and follows you everywhere you go until you take medicine that allows you to lead meetings and enjoy time with friends	*Restored health*	*Verbal:* taking medicine resolves the uncertainty of dealing with Chron's symptoms	*Restored health*	Superior medicine	C	V

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Taltz Touch is How We Communicate	*Visual:* life is enjoyable with family, playing in the water, intimately being touched by a romantic partner, and camping outside with your children.	*Wellness*	*Verbal:* psoriasis can get in the way of touching people we love but when you take medicine you can touch those people again	*Restored health*	Start medicine	IC	V
Taltz Touch Show How We Really Feel	*Visual:* life is enjoyable playing in the water with children, holding infant child, holding hands with a romantic partner, being close and intimate with a romantic partner, taking romantic trips, and laying on a car looking at the sky with a loved one.	*Wellness*	*Verbal:* touch is how we show people we care but psoriasis can prevent us from touching them until a medicine is taken and skin is clear	*Restored health*	Start medicine	IC	V
Tecfidera Relapsing MS	*Visual:* daily activities require smooth transitions from one activity to the next	*Wellness*	*Verbal:* taking medicine can help you look at relapsing MS differently	*Restored health*	Change medicine	IC	CD

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Toujeo Journal	*Visual:* life is surreal and disconnected even if you are managing type II diabetes	*Restored health*	*Verbal:* each day is a struggle that is hard to control with type II diabetes but that could be because you and your diabetes have changed, so choosing this longer acting medicine helps manage symptoms	*Restored health*	Change medicine	C	CD
Verzenio Relentless	*Visual:* being relentless is enjoyable and can help you spend time with your loved ones watching plays, cooking, playing the piano, camping, and blowing bubbles	*Wellness*	*Verbal:* metastatic breast cancer is aggressive but you can be equally aggressive by taking a medicine to fight it	*Restored health*	Superior medicine	C	V
Victoza Across the Country	*Visual:* It is possible to work, enjoy museums, spend time playing cars with grandchildren, visiting an aquarium with a friend, listening to music and getting food from a food truck with family when you have a reliable medicine	*Wellness*	*Verbal:* Victoza is nationally approved and helps take control of type II diabetes	*Restored health*	Change medicine	IC	V

Ad title	Visual story	Visual story type	Verbal story	Verbal story type	Ad goal	Congruency	Narrative type
Victoza Feat Dominique Wilkins	*Visual:* doing things that you are known for is possible in your personal life, shopping at a farmer's market, visiting a museum, and taking a walk in nature are all possible with a reliable medicine	*Wellness*	*Verbal:* Victoza is different from other type II diabetes medication and helps people reach their health goals	*Restored health*	Change medicine	IC	V
Xarelto Selective	*Visual:* being alone and having a health condition is scary, but getting treatment relaxes you to enjoy time with family and friends.	*Restored health*	*Verbal:* flying in plan or ride can result in a scary health condition, but the medicine takes away that fear	*Restored health*	Start medicine	C	V
Xeljanz Cactus	*Visual:* needles are ominous and scary, pills are easy and holdable, spending time in nature with your family is enjoyable	*Wellness*	*Verbal:* medicine that requires needles to treat RA is not always necessary. This medicine allows you to take a pill instead of being poked by a needle	*Restored health*	Change medicine	IC	CD

Appendix F

Visual Codes During the Verbal Information Portion of the Ad

Ad	Visual Codes	Information timespan	Remarks
Breo – The Many Pieces	Vivid text Novelty Enjoy Third person Contact info Isolated Workplace working Direct interaction with medicine Interactive doctor interaction Drug benefit Vivid image Friends Food home Family Home working Disease identified Drug intention Other relationship Walking	12.7 – 53.5	Verbal info begins during scene
Chantix – Ginny	Enjoy Vivid text Third person Other relationship Isolated Disease identified Drug intention Sitting Shopping Touch Home working Drug side effect Second person on screen Walking Car related	14.0 -52.8	Verbal info begins during scene
Chantix – Mark's Dogs	Third person Enjoy Family Vivid text Games Drug benefit Touch Isolated Second person on screen Drug side effect Vivid image Sadness Disease identified Sitting	13.2 – 52.1	Verbal info begins during scene

Ad	Visual Codes	Information timespan	Remarks
Cosentyx – Feat. Cyndi Lauper	Vivid image Enjoy Isolated Facing camera directly Second person on screen Drug benefit Vivid text Family Contact info Workplace working Other relationship Ouch Temperature Coworker	24.3 – 48.6	Verbal info begins during scene, but there isn't an exemplar in the scene. The word See is repeated by narrator "see if c. is..
Cosentyx – See Me	Third person Vivid image Other relationship Novelty Isolated Enjoy Vivid text Second person on screen Facing camera directly Disease identified Friends Drug benefit Touch Car related coworker	16.2 – 52.0	
Cosentyx – Watch Me	Enjoy Third person Vivid image Games Second person on screen Touch Family Disease identified Drug benefit Other relationship Watching	27.9 – 53.3	
Eliquis DVT and PE Blood Clot – Painting	Vivid text Third person Enjoy Isolated Drug benefit Drug intention Walking Facing camera directly Family Home working Touch Disease identified Drug side effect Other relationship Interactive doctor interaction	19.1 – 1:05.0	The exemplar begins giving information about the drug. His back is to the camera until the 31.6 into the ad and he turns after the drug is presented as superior and he even says "turned around my thinking" as he turns around to face the camera

Ad	Visual Codes	Information timespan	Remarks
Enbrel – Feat. Phil Mickelson	Vivid text Third person Enjoy Family Contact info Second person on screen Food home Charts Drug intention Novelty Vivid image Drug benefit Home working Surprise	14.9 – 47.6	The FC asks a question and the narrator answers it then begins giving info about the drug
Entresto – Tomorrow	Third person Enjoy Vivid image Touch Isolated Family Second person on screen Contact info Vivid text Drug benefit Home working Disease identified Watching Games Drug interaction warning Drug side effect Food home Car related Walking	18.6 – 46.5	The singing "tomorrow" by the exemplar begins in the same scene as the side effects wrap up
Entyvio – Time for a Change	Vivid image Third person Enjoy Touch First person Novelty Drug benefit Isolated Contact info Second person on screen Charts Passive doctor interaction Indirect interaction with medicine Drug intention Drug use instruction Sound Family Friend Walking	15.0 – 52.6	The side effects wrap up mid scene

Ad	Visual Codes	Information timespan	Remarks
Eucrisa – On Almost Everybody	Vivid image Enjoy Touch Third person Family Drug benefit Disease identified Walking Second person on screen Drug side effect Facing camera directly Contact information Games Isolated Vivid text Direct interaction with medicine	11.2 – 28.8	Side effects wrap up mid scene
Eucrisa – Steroid Free	Vivid image and vivid text Third person Drug benefit Isolated Disease identified Facing camera directly Sports Enjoy Touch Family Second person on screen Novelty Games Contact info Workplace working Drug side effect Direct interaction with medicine Sitting	11.8 – 28.6	Side effects wrap up mid scene
Farxiga – Everyday People	Enjoy Third person Vivid images Family Second person on screen Isolated Novelty Contact information Sound Drug side effect Touch Drug benefit Picture taking Friends Walking Other relationship Coworker	20.1 – 1:17.7	

Ad	Visual Codes	Information timespan	Remarks
Fasenra – Targeted Treatment for Ashtma	Third person Vivid text Novelty Enjoy Watching Second person on screen Isolated Family Contact info Other relationship Drug intention Food home Home working Disease identified Drug side effect Friends	5.4 – 57.9	This entire ad is a story about watching people watch an interview with health professionals about the medication
Harvoni – I am Ready	Vivid image Vivid text Third person Isolated Enjoyment Touch Sports Standing Sitting Disease identified Car related Drug interaction warning Second person on screen Drug intention Drug benefit Watching Contact info Family Drug side effect Other relationship Games	12.0 – 52.9	The information begins at the beginning of a scene and ends at the end of a scene
Harvoni – Let Go	Vivid image Enjoy Touch Family Third person Disease identified Vivid text Drug benefit Watching Isolated Drug interaction warning Contact information Novelty	13.5 – 53.7	The information begins at the beginning of a scene and ends at the end of a scene

Ad	Visual Codes	Information timespan	Remarks
Humira – A Day at the Fair	Vivid image Facing camera directly Friends Isolated Second person on screen Contact info Drug benefit Enjoy Touch Drug intention	19.7 – 53.6	Info split in first scene and last
Humira – Chase What You Love	Third person Enjoy Vivid text Touch Contact info Isolated Friends Games Second person on screen Home working Walking Drug use instructions Other relationship Charts Vivid images Drug benefit Drug interaction surprise	10.8 – 55.0	Info split in last scene Look for active activities in these. Look for other specific cues in this section. Find researchers who say that the story is more persuasive than argument or informative information.
Humira – Go Further	Third person Contact information Touch Family Vivid image Enjoyment Balance Isolated Second person on screen Drug benefit Drug use instructions Vivid text Novelty Charts First person Picture taking Food home	9.5 – 54.6	

Ad	Visual Codes	Information timespan	Remarks
Humira – Your Wakeup Call	Third person Vivid image Enjoyment Isolated Touch Other relationship Drug benefit Family Contact info Second person on screen Balance Novelty Charts Drug use instructions	18.6 – 52.8	Info split in last scene
Januvia – Seesaw	Enjoyment Third person Novelty Vivid image Family Contact information Balance Touch Home working Isolated Second person on screen Drug benefit Games Friends	9.5 – 1:21.6	Clean cuts
Jardiance – Around the Clock	Third person Vivid image Enjoyment Vivid text Second person on screen Novelty Isolated Family Charts Food public Games Sports Drug benefit Drug side effect Contact information Drug interaction warning Balance Home working	53.6 – 2:01:04	Singing in the background while the narrator delivers information

Ad	Visual Codes	Information timespan	Remarks
Jardiance – Good News	Third person Other relationship Enjoyment Vivid text Vivid image Surprise Second person on screen Disease identified Touch Drug interniton Drug benefit Walking First person Drug interaction warning Drug side effect	27.8 – 1:22.4	
Keytruda – It's True Donna's Story	Third person Enjoyment Touch Family Isolated Second person on screen Vivid image Vivid text Sadness Contact information Sadness Walking Disease identified Home working Workplace working Drug benefit Drug side effect Sitting Drug intention Car related Taste Food home Sight	19:3 – 1:16.1	
Keytruda – It's True Roger's Story	Third person Family Vivid images Vivid text Enjoyment Drug benefit Second person on screen Touch Car related Novelty Sight Picture taking Drug intention Disease identified	19.5 – 1:18.0	

Ad	Visual Codes	Information timespan	Remarks
Lantus – Stay Together	Vivid images Second person on screen Family Enjoyment Third person Touch' Drug benefit Drug side effect First person Vivid text Contact information Drug interaction warning Disease identified novelty	15.1 – 57.0	
Latuda – Maya's Story	Third person Vivid image Enjoyment Second person on screen Family Disease identified Drug intention Friends Vivid text Workplace working Coworker	22.2 – 1:16.2	Info begins during scene
Linzess – Yes	Isolated Third person Vivid text Enjoyment Walking Home working Disease identified Novelty Drug intention Second person on screen	11.1 – 52.3	Info begins with "yes…" close mid scene
Lyrica – A Day at the Park	Enjoyment Third person Family Vivid text Drug benefit Games Touch Vivid image Facing camera directly Disease identified Contact information Walking Food public Drug intention Novelty Isolated Drug side effect	15.3 – 54.5	Begins mid scene, ends mid scene

Ad	Visual Codes	Information timespan	Remarks
Lyrica – Babysitter	Vivid images Enjoyment Third person Family Vivid text Touch Drug benefit Disease identified Games Food public Watching Isolated Drug side effect Novelty Facing camera directly Charts	15.8 – 54.3	There isn't a pattern in the product mfg and scene breaks
Lyrica – Carpenter	Vivid text Third person Enjoyment Facing camera directly Isolated Family Games Other relationship Workplace working Food public Contact information Disease identified Walking Novelty Charts Vivid images	16.0 – 56.6	Begins mid scene, ends mid scene
Lyrica – Coach	Vivid images Enjoyment Third person Family Disease identified Other relationship Touch Second person written on screen Novelty	19.0 – 56.0	Begins mid scene
Lyrica – Keep the Beat Going	Vivid images Enjoyment Third person Famly Touch Food home Drug benefit Drug intention	20.3 – 53.5	Begins mid scene.

Ad	Visual Codes	Information timespan	Remarks
Opdivo – Most Prescribed Immunotherapy	Touch Family Enjoyment Third person Novelty Walking Watching Vivid text Sound Drug side effect Disease identified Vivid image Balance Drug benefit Sadness Surprise Drug intention Games Passive doctor interaction Charts First person Second person on screen Contact information		When drug side effects are shown on screen are there several other things happening?
Otezla – Little Things Can be a Big Deal	Vivid text Enjoyment Touch Family Walking Contact information Other relationship Workplace working Drug benefit Disease identified Shopping Indirect interaction with medicine Car related activity Drug intention	8.3 – 57.1	Begins mid scene, ends mid scene
Pradaxa – Fish	Vivid images Novelty Vivid text Disease identified Second person on screen Drug interaction warning Drug side effect Drug intention Drug benefit Contact information	26.4 – 1:28	

Ad	Visual Codes	Information timespan	Remarks
PrevNar13 – Increased Risk	Third person Novelty Touch Enjoyment Family Walking Contact information Vivid text Direct interaction with medicine Drug use instructions	24.5 – 54.3	Ends mid scene
PrevNar13 – One Step	Vivid images Third person Isolated Enjoyment Second person on screen Contact information Shopping Taste Food home Balance Games Direct interaction with medicine Touch Disease or illness identified Drug interaction warning	18.7 – 53.0	Begins and ends mid scene
Rexulti – Living Behind the Mask	Third person Vivid text Enjoyment Contact information Friends Touch Walking Food public Picture taking Drug side effects Vivid images	33.4 – 1:19.8	
Stelara – Chron's Disease	Vivid text Third person Isolated Walking Enjoyment Second person on screen Contact information Sadness Disease identified Drug benefit Friends Food public Vivid images Workplace working	13.7 – 51.5	Begins and ends mid scene

Ad	Visual Codes	Information timespan	Remarks
Taltz – Touch is How We Communicate	Third person Family Enjoyment Touch Vivid images Vivid text Games Drug benefit Second person on screen Contact information Disease identified Drug intention Walking Drug side effect Picture taking	13.5 – 51.3	
Taltz – Touch Shows How We Really Feel	Family Touch Third person Enjoyment Vivid image Vivid text Drug benefit Disease identified Games Second person on screen Contact information Novelty Drug intention	7.9 – 41.2	Ends mid scene
Tecfidera – Relapsing MS	Third person POV Vivid image Novelty Enjoyment Touch Isolated or alone Drug intention Family Indirect interaction with the medicine Condition identified Drug benefit Second person on screen Drug side effect Interactive doctor interaction Watching Taste	11.3 – 55.8	

Ad	Visual Codes	Information timespan	Remarks
Toujeo – Journal	Third person Enjoyment Novelty Vivid images Drug side effect Drug benefit Isolated or alone Family Friends Disease identified Contact information Vivid text Touch Second person on screen Food public Smell Charts Drug use instructions	*5.5* – 1:54.3	Begins mid scene
Verzenio – Relentless	Vivid image Enjoyment Third person Family Touch Games/ play Second person on screen Direct contact with camera Vivid text Isolated Food public Drug benefit Disease identified Food home Watching Taste Sitting	14.0 – 1:20.8	Begins mid scene. These stories are about being well
Victoza – Across the Country	Enjoyment Third person Vivid image Contact information Disease identified Isolated Family Second person on screen Vivid text Drug use instructions Novelty Direct contact with camera Friend Drug benefit Workplace working Walking Sound Touch Direct interaction with medicine	14.8 – 1:51.0	This exemplar states that he asked his doctor about Victoza. Active doctor interactions assume the exemplar knows about the medicine beforehand

Ad	Visual Codes	Information timespan	Remarks
Victoza Feat. Dominique Wilkins	Contact information Enjoyment Novelty Disease identified Facing camera Friends Vivid text Vivid image Third person Isolated Drug use instruction Touch Family Second person on screen Drug use instruction Direct interaction with medicine	9.3 – 1:51.9	Begins mid scene. All of the transcribed stories center around the condition, its symptoms, and treatment for it
Xarelto – Selective	Vivid text Drug intention Third person Walking Isolated Drug benefit Enjoyment Isolated Novelty Charts Vivid image Second person on screen Family Touch Friends Drug side effect	21.3 – 1:09.0	
Xeljanz XR - Cactus	Vivid text Third person Direct interaction with medicine Enjoyment Walking Isolated Contact information Family Second person on screen Touch Shopping	9.4 – 50.7	Begins mid scene