Influencing attitudes and behaviors with advertisements: bridging theories and practice

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Abstract

Advertising campaigns influence consumer behavior using key concepts that the behavioral sciences have mapped using controlled and randomized lab experiments. The aim of this bibliographic research article is, therefore, to present, articulate and discuss the main theories of social psychology regarding both attitude and behavior change. More specifically, this study seeks to reduce the distance between the theoretical-conceptual framework of psychology and the professional practice of advertising production, proposing an interface between these two universes and offering suggestions on how psychological insights could be applied to improve advertising effectiveness. **Keywords**: Social influence. Attitude change. Behavior change. Consumer behavior. Advertising.

Introduction

Persuading consumers is the primary goal of most advertising. However, few campaigns have a theory (or start from empirical data) to substantiate messages that seek to change attitudes, behaviors or habits, in many cases depending solely on intuitive beliefs and artistic creativity. From this perspective, the theoretical-conceptual framework of the behavioral sciences offers principles tested in controlled and randomized experiments that can be applied to ads, increasing their effectiveness (BATOR; CIALDINI, 2000). This study, therefore, starts with the following problem: how and to what extent can social-psychological theories about social influence contribute to the development of more persuasive advertisements?

Through a bibliographic study, this work aims to analyze and articulate the scientific literature on strategies related to changing attitudes and social influence when applied to

advertising. More specifically, the present study seeks to understand how the theoretical framework of social psychology can be used for the development of advertisements informed by empirical evidence. With this, the study also equips consumers with knowledge that they can use for their own benefit. Understanding the dynamics of persuasive processes is of vital importance for this audience, as they are the primary target of these attempts. Using these insights, consumers can defend themselves by taking a more critical stance in the face of persuasive advertising appeals.

The article describes the main contemporary theories of attitude change, highlighting the dual processing models (PETTY; CACIOPPO, 1986, CHAIKEN; LIBERMAN; EAGLY, 1989) and how they relate to the principles of social influence identified by Cialdini (2008, 2016), as well as the persuasive tactics index compiled by Pratkanis (2008). The paper also reviews what the empirical evidence seems to suggest about the way these messages generate sales. Finally, this study outlines possibilities for the practical use of these theories in the creative advertising environment, especially in the context of visual and textual content aimed at changing specific consumer behaviors.

Attitude change

The history of social influence studies could easily be tracked back in time to the rhetorical system developed by the Greeks and Romans, two thousand years ago. This article, however, offers a more restricted look, with an emphasis on experimental research on the theme carried out since the 1890s, e.g. Triplett (1898). Social influence refers, more broadly, to how and why people change each other's thoughts, feelings and behaviors (PRATKANIS, 2008).

In its most basic form, persuading involves changing the mental states of individuals, as a precursor to behavioral change. For Seiter and Gass (2004), the act of persuading is a special case of social influence. After a critical bibliographic research carried out in order to give more conceptual transparency to the term, the authors concluded that many academics and researchers seem to agree that a more traditional perspective of the construct involves at least two criteria: the first is the intentionality of the sender and the second is the presence of effects, that is, a context in which the recipient is, in any way, altered or affected. The gain of acquiescence, when intentional, is a subset of the act of persuading, which happens more specifically in face-to-face contexts.

The most common target for studying this process has been to change a person's attitudes. In order to better contemplate the complexities of this phenomenon, multiple processing models have been proposed, according to which there are two different mental processes. These processes mirror the two great contrasting approaches that characterized socio-cognitive research: one elemental and the other holistic. These two paths were combined in the dual mode approach, a paradigm that establishes the existence of relatively automatic processes and conscious processes. Kahneman (2012) refers to them, didactically,

as "systems of the mind". System 1 is responsible for standard operational procedures, and acts automatically, quickly, and without voluntary control, requiring little or no effort. System 2, on the other hand, is conscious, reasoning, managing laborious mental activities, such as the deliberate search for memory, complex calculations, planning and choice. Roughly speaking, System 2 refers to logic and reason.

The dual processing model described by Kahneman (2012) is present in several other theories of psychology and related areas. Automatic processes start in pure automaticity - devoid of intentionality and control - but are be efficient, autonomous, and out of consciousness. Dual processes also provide the basis for the elaboration likelihood model, the ELM (PETTY; CACIOPPO, 1986) and the heuristic-systematic model, HSM (CHAIKEN; LIBERMAN; EAGLY, 1989), which inspired most of the contemporary studies on attitudinal change. Of these, the ELM is the one that generated more research on persuasive processes in a communicational perspective.

The ELM is a model developed in an attempt to integrate the literature on persuasive processes by proposing that there is a limited set of central processes through which variables could affect attitudes. Thus, variables influence the amount of thought that occurs, the valence (favorable or unfavorable) of those thoughts, the structural properties of the thoughts generated (meta-cognitive processes), and serve as persuasive arguments for the merits of a proposal, or as simple clues to desirability.

According to this model, attitudes formed or changed through deliberative thought processes tend to be more persistent, resistant to change and predictive of behavior than attitudes changed through more automatic thought processes. The ELM further postulates that any variables (such as source, message, recipient or context) influence attitudes by affecting any of these processes.

Although they may differ significantly in some aspects, the ELM and the HSM share fundamental characteristics: both describe that persuasive processes occur through two qualitatively different "routes" (KRUGLANSKI; THOMPSON, 1999). In the ELM, these routes are called "central" and "peripheral"; in the HSM, they are called "systematic" and "heuristic" route. Both models emphasize that a careful analysis of the message's arguments will result in attitude change through one of the routes (in the ELM, by the central route; in the HSM, by the systematic route). At the same time, arguments analysed with less effort, using accessory indicators, modify the attitude through the peripheral (in the ELM) and heuristic (in the HSM) routes.

The occurrence of the peripheral route/heuristic model, more specifically, is associated with the use of cognitive heuristics - mental shortcuts that reduce complex problems and simplify them in terms of simpler judgments (KAHNEMAN, 2012). In their daily lives, people use a large number of heuristics, some more general and others more idiosyncratic, due to a variety of factors, such as limited time, complexity and volume of relevant arguments, as well as doubts about the quality of the available evidence. Contrary, however, to what is commonly imagined, heuristics typically produce correct answers.

There is also a growing literature on the neural correlates of persuasive processes. Although essentially descriptive, studies using functional magnetic resonance imaging have correlated regional activity in the medial prefrontal cortex and in the lateral prefrontal cortex to persuasive appeals that influenced attitudes (CACIOPPO; CACIOPPO; PETTY, 2017). Other studies have used regional brain activity (usually in the medial prefrontal cortex) in response to a persuasive call to effectively predict behavioral changes.

Social influence and behavior change

In "Influence", a book originally published in 1984, Cialdini (2008) summarized the available scientific literature on social influence in terms of six principles or "weapons of automatic influence": reciprocity, commitment and consistency, social proof, authority, liking, and rarity. "Influence" is considered by many scholars in the field as one of the most important books in social psychology (PRATKANIS, 2008). Later, Cialdini (2016) added another principle to the list: unity - related to the feeling of identity and to act synchronously, in a collaborative way.

To identify these principles, Cialdini articulated an ecologically valid model of basic research that he called "full-cycle of social psychology" (MORTENSEN; CIALDINI, 2010), based on conducting research moving cyclically between what is observed in the natural environment, the theory, and laboratory experiments. In an ethnographic study that lasted three years, Cialdini (2008) acted as a participant observer among professionals whose financial support depended on the success of their persuasive appeals. His hypothesis was that a natural selection process occurs with persuasive tactics: according to him, the strongest and most adaptable procedures to generate behavioral change emerge, persist, and accumulate. Specifically, Cialdini (2008) sought for comprehensive principles of influence, which occurred in multiple ways, appeared in the entire spectrum studied, were employed by the greatest number of professionals and had been used successfully historically. The principles of Cialdini (2008) are based on theories and important findings of social psychology. The principles also organize tactics of behavioral influence that have been studied experimentally by researchers since the 1890s.

One of the first principles identified by Cialdini (2008) is the norm of reciprocity, according to which people seem more likely to consent to a request made by someone who has previously provided them with a favor. The "door-in-the-face technique" (FEELEY; ANKER; ALOE, 2012), for example, is one of several persuasive tactics that explore the automatic tendency to reciprocate. In this procedure, a relatively large initial request is made for the individual, who refuses it. A minor request is made immediately afterwards, in the hope that refusing the first will make the person more susceptible to accepting the second (which was the real goal from the start). Studies on reciprocity have also found that significant, unexpected and personalized gifts obtain an even higher success rate (STROHMETZ et al, 2002).

The second principle, consistency, establishes that, after committing to a certain position, one is more likely to consent to requests for behavior consistent with it. This principle emerges mainly from empirical findings based on one of the most popular theories of social psychology, cognitive dissonance (FESTINGER, 1957). According to this theory, when an individual maintains two or more mental processes inconsistent with one another, this creates a state of discomfort - the so-called "dissonance". People try to reduce this unpleasant state, usually by protecting the most resistant belief to change. To decrease dissonance, individuals use several strategies: add consonant beliefs, suppress dissonant beliefs, increase the importance of consonant beliefs or reduce that of dissonant ones (HARMON-JONES; HARMON-JONES, 2007). Therefore, behavioral change is one of the possible by-products of this process and strategies based on similar cognitive mechanisms could be used to influence individuals.

According to the principle of social proof, one is more likely to consent to a request if it is consistent with what others seem to be thinking. In a classic experiment, Asch (1956) demonstrated that people would agree that one line corresponded to the length of another even when they were visibly different - if others around them said the same. His studies on compliance have been replicated extensively, and in several countries, finding, for example, that more collectivist cultures seem even more susceptible to social proof (CIALDINI et al, 1999). Social norms - rules that provide expectations about appropriate behavior in a given context - represent an implicit social consensus and therefore act through the same mechanism. There is a vast literature on the use of norms to direct behavior in a variety of contexts (MILLER; PRENTICE, 2016).

The principle of authority dictates that people tend to follow the advice of a legitimate authority. In a series of pioneering studies on obedience to authority figures, Milgram (1974) demonstrated that, under the orders of a researcher, 62.5% of the participants in an experiment were willing to administer potentially fatal electric shocks to another participant. These studies were replicated by researchers in several different contexts (BLASS, 1999). More recently, Burger (2009), and also Doliński et al (2017), partially reproduced the original experiment, within the limits of scientific ethics, with results very similar to those found by Milgram (1974). In the same way, researchers have shown that titles (HOFLING et al, 1966) and costumes (BICKMAN, 1974) act through similar processes.

Under the liking principle, individuals tend to consent more to requests from friends or other liked individuals. Several factors seem to increase positive feelings related to the source of the persuasive appeal, with physical attractiveness being one of the most important stable traits. In addition, an individual seems more attractive as he/she has certain psychological characteristics - such as warmth/trustworthiness, vitality, and status/ resources. Other relevant factors studied are familiarity with the target, the use of praise, the level of self-disclosure and even, in the case of women, the fertile period of the menstrual cycle (FINKEL; BAUMEISTER, 2010).

According to the principle of scarcity, one should try to ensure opportunities that seem scarce or that appear to be diminishing. Evidence of this principle can be found, for example, in studies of cognitive behavioral economics on judgment and decision making that show that the psychological impact of losses is much greater than that of gains, even when the value of both is exactly the same (NEUMANN; BÖCKENHOLT, 2014).

The last of the proposed principles is unity, described by Cialdini (2016) as the experience of being recognized as a member of a group and refers to the sharing of identity. The principle of unity involves the categories that individuals use to define themselves (race, ethnicity, nationality, family, political positioning, religious beliefs) and the feeling of merging with others.

According to Cialdini (1987, 2008), the principles of social influence function as heuristics, which places them in the domain of automatic processing, in line with what has been proposed by Guadagno (2017), for whom the principles increase the likelihood of acquiescence because they are processed without thinking. Chaiken (1987) also argues that the principles are equivalent to simple decision rules, provided by the HSM. Cialdini and Griskevicius (2010) highlight that, from an evolutionary perspective, the principles work because they promote adaptive behaviors. For them, returning favors and agreeing with those they like is fundamental to the development of social relationships. Likewise, deciding in the most appropriate possible way advances goals in an effective way. For example, when the possible paths seem ambiguous, it is adaptive to follow the advice of one authority or the behavior of similar others. Individuals also have a strong need to behave in a manner consistent with their attitudes, commitments, and beliefs.

Research in social psychology on the systematic use of principles of influence demonstrates that they have been widely used in the most diverse contexts. Researchers have documented persuasive appeals based on these principles among sellers (DAMASCENO; IGLESIAS, 2017, IGLESIAS; DAMASCENO, 2013), in messages of public utility about the environment or whose goal is to instill pro-health behaviors (TAYLOR, 2010), and even in military efforts (CIALDINI, 2011, KING, 2011). Approaches based on social influence have also been used in marketing strategies (KIRMANI; FERRARO, 2017) and, more specifically, in advertising campaigns (IGLESIAS; CALDAS; LEMOS, 2013), even if in an essentially intuitive way.

Reciprocity, for example, appears in the form of the free sample (CIALDINI, 2008). Another technique based on this principle is the procedure of offering a product at a high price and, soon after, presenting a more advantageous offer, adding another product or reducing the price (BURGER, 1986); commitment and consistency emerge in advertisements that label consumers with stereotypes that encourage them to act similarly (for example, mentioning that elegant people smoke); advertisements using the principle of social proof highlight the popularity of the product or service (JEONG; KWON, 2012), showing several people consuming it, informing that it is the most sold or reporting, with witnesses, the behavior of other customers; the principle of liking is used when the advertisement uses the

image of attractive people, or when the text tries to invoke similarity of ideas, personality traits, experiences or lifestyles with the potential consumer. This is even the principle behind the strategy of associating the brand with celebrities. The liking rule also stipulates that arguing against your own interests - which includes mentioning a disadvantage in your proposals or products - signals honesty and trust. The use of this principle is responsible for the success of two striking campaigns in the advertising industry, that of the Beetle and that of the car rental company Avis (GOLDSTEIN; MARTIN; CIALDINI, 2008).

An advertisement using the authority rule invokes the general use of credentials and titles to support their arguments, or features people wearing specific clothes (cassocks, white coats, police uniforms, suits) that attribute respectability; an ad using rarity points out that there are few units of the product, that it is rare or may be running out, this being a call often used by advertisements (MUKHERJEE; LEE, 2016). The announcement based on the principle of unity, finally, highlights the feeling of belonging to a certain group and can, for example, highlight certain aspects of an identity.

When it comes to advertising, more specifically, other authors have proposed more influential principles to the list. Armstrong (2010), for example, mentions the strength of rational arguments and the strategy of attributing favorable behaviors and traits to the target market. Fennis and Stroebe (2016) highlight the persuasive strategies that aim to confuse consumers during the purchase.

Advertising and social influence

The purpose of many advertising messages is to seek to predispose a target audience to consume a certain product or service. Although many agree on the purpose, there is much debate about the means by which this result is achieved. Since the beginning of this industry, efforts have been made by advertisers, agencies and researchers to transform advertising into a more controlled, rigorous, and systematized method, with established theoretical principles (RIBEIRO et al, 1995). Despite this, many advertising professionals still operate based on creativity, simple heuristics, and assumptions rooted in the field¹. Although the emphasis on creativity as an essential technique for the development of more surprising and persuasive advertisements reached its peak in the 1970s, gradually giving way to a more holistic approach, which emphasizes strategic thinking (CARRASCOZA, 2011), natural talent and creativity still remain important values in this industry. This is one of the possible reasons why many professionals in the field still seem reluctant to adopt more systematic procedures. Indeed, many studies have shown, through diverse methods, that creativity is a fundamental variable in the development of effective advertising, directly impacting sales (FIELD, 2011, 2016). At the same time, however, a large body of evidence also indicates

¹ Feldwick (2015) reviews the different perspectives adopted by practitioners in the field to think about advertising over the years.

that incorporating knowledge from research on human behavior contributes significantly to increasing the effectiveness of campaigns (ARMSTRONG, 2010).

Although considerable correlational and experimental evidence indicates that advertising investment and increased sales seem directly related, specific mechanisms through which these messages influence consumers still provoke a great debate among researchers (FELDWICK, 2015). A perspective of the functioning of advertising that has gained space among academics and practitioners is the proposal by the model NBD-Dirichlet of incidence of purchase and choice of brand (GOODHARDT; EHRENBERG; CHATFIELD, 1984), a statistical-mathematical model that connects several empirical regularities identified in consumer panel data obtained in different product categories, countries, and time periods. The empirical regularities of the NBD-Dirichlet suggest that growth in market share comes mainly from brands acquiring new consumers, which happens, primarily, through the increase of the brand's physical and mental availabilities (SHARP, 2010). According to Kerin and Sethuraman (1999)², these empirical (or generalized conditionals) regularities are the most basic forms of a scientific law. Such uniformities need, however, to incorporate other important criteria (such as empirical content and nomological universality) in order to reach the highest level of principle. Another issue is to be systematically integrated with a cohesive body of scientific knowledge - that is, they need to be explained or connected to theories (BARWISE, 1995). According to Sharp (2010), advertising is, therefore, an important part of the growth of a brand, one of the essential ingredients of "mental availability". For the author, advertising works mostly by refreshing, or occasionally building, structures of memory.

In view of a growing interest in identifying which elements make an ad more persuasive, progress in this area is dependent on methodological advances, especially in the area of ad testing. To this day, measuring the effectiveness of ads remains one of the biggest challenges for advertising agencies and advertisers³. Probably due to the practical difficulty of using more sophisticated behavioral measures, most advertising testing techniques use purely attitudinal measures, with little evidence of validity and limited predictive power (KENNEDY et al, 2010). With recent advances, researchers have started to propose measures based on neurophysiological methods (PLASSMANN et al, 2015), but even these measures offer limited results (VARAN et al, 2015). One of the best alternatives to measure the effectiveness of advertisements seems to be use data from a single source, which collect data from individuals (or households) both when exposed to advertising and when buying the brand (MCDONALD, 2000).

In addition, the lack of conceptual transparency and a consensus among academicians about what "persuasion" means leads to a very broad (or very narrow) use of the construct. For example, when describing and studying this phenomenon, important works in the field of marketing, such as Ehrenberg et al (2002), as well as the meta-analyzes of the databases

² Later discussed by Hunt (2010).

³ Research in the context of digital media, for example, shows how difficult it is to distinguish the effects of advertising from random noise (LEWIS; RAO, 2015).

of the IPA Effectiveness Awards (BINET; FIELD, 2007, 2013), use different concepts from each other, and also from those traditionally employed in the most widespread theoretical models in social psychology, the discipline with more studies on the subject. The dual-processing theories that this paper reviewed show that, without theoretical organizing thinking, researchers may come to interpret conflicting results as evidence that certain types of ads appear more or less effective - when, in fact, many other variables modulate this process.

Possibilities of use in the advertising environment

Methods, techniques, and the theoretical framework from psychology have been consistently applied to the practice of advertising, since the beginning of this industry (FELDWICK, 2015). With the advent of the Internet, for example, agencies began to define the target audiences of campaigns based on psychological theories about personality traits, delivering highly personalized ads through the many digital media (MATZ et al, 2017). This is also the case for art directors, who have used eye-tracking equipment to determine the hierarchy of the many visual elements in an ad, thus aiming to ensure the legibility and prominence of the message against different backgrounds (WEDEL; PIETERS, 2008). In the same way, advertising copywriters can come to apply the principles and tactics of social influence presented here (CIALDINI, 2008, 2016) to the textual content of the ads. Likewise, these same psychological principles can be used as a pre-testing strategy for ads - especially when combined with attitudinal, behavioral and neurophysiological measures of effectiveness.

Assuming that advertising can come to be used as an effective means of persuading individuals to adopt certain behaviors - a purpose that is underused, contrary to what is commonly imagined - Armstrong (2010) proposed a checklist to facilitate the usage of persuasive principles and tactics. In order to overcome many of the obstacles that professionals face when using experimental evidence in the development of more persuasive ads, he organized the results of scientific research on attitude and behavior change of scientific disciplines such as behavioral economics, cognitive and social psychology, organizational behavior, politics and advertising, among others, in an understandable and easily accessible format. In a 16-year effort, Armstrong and a team of more than 80 researchers summarized the evidence accumulated in about 640 scientific articles and 50 books - laboratory, field, and quasi-experimental research, covering a period of approximately a century - about advertising effectiveness. He divided his 195 principles into strategies, general tactics, and tactics specific to certain media. In subsequent studies, Armstrong et al (2016) found evidences of validity for the instrument, in addition to testing its predictive validity and demonstrating the potential of its use for advertising testing. Although the instrument has shown promise, more rigorous tests, using data from a single source, still need to be conducted (SHARP; HARTNETT, 2016).

Armstrong's (2010) proposal encompasses the work of many of the researchers mentioned here, such as the theoretical models of attitudinal change and the principles of social influence. The tool provided by Armstrong (2010) is especially useful because its primary focus is the advertising use of these principles. Unlike the work of Cialdini (2008, 2016), which includes many tactics for interpersonal use, Armstrong (2010) provides guidelines that can help advertisers and agencies to design more persuasive campaigns.

As Carrascoza (2004) points out, the word "persuasion" contains the Latin root "svad", the same as the word "sweet, pleasant", implying that influencing behaviors is only possible when the cognitive processes that lead different audiences to act in the way they act with the strategy of the persuader. The theoretical framework proposed here, if applied to the creative process of ads, could have a positive impact on the advertising industry. Armstrong's (2010) work is valuable for grouping in a very clear and coherent way the principles and tactics that social psychology has identified over the past decades, also offering a more directly focused on advertising use. Armstrong's (2010) principles can be used to stimulate creativity, offering a list of things to check during the development of the ads, as well as evaluating and improving ads.

Likewise, testing ads, in general, is a procedure that should be an integral part of the creative routine. In the absence of specific behavioral measures (more reliable and accurate, but much more expensive), several other measures must be used, both attitudinal and neurophysiological, always looking for convergent results. For example, the literature suggests that campaigns that generate emotional engagement tend to be more memorable, causing lasting impact on business metrics (BINET; FIELD, 2007, BINET; FIELD, 2013). Probably because they create positive emotional feelings, corroborating the results of a large study conducted by the Advertising Research Foundation, which found that a positive attitude regarding the content of the ad is the best predictor of sales success (HALEY; BALDINGER, 1991).

Final comments

This article sought to analyze and articulate the main psychological theories related to attitude and behavior change - highlighting the possibility of their practical use in advertising campaigns. Acknowledging this situation also contributes to consumer empowerment, by allowing the recognition of effective persuasive appeals, as a first step towards resistance.

Academics often complain that advertising professionals ignore scientific literature when designing strategies or thinking about ads. In fact, part of this is probably due to the fact that the current paradigm of the advertising industry reinforces the behavior of developing more creative and artistic ads, rather than more effective messages (which can be a result, among others, of the difficulty, both from agencies and research in the area, in finding and developing more predictive methods of testing ads), with a strong belief shared by the industry that more creative ads are the most effective. Creativity plays a central role

in advertising, to the point that the main advertising festival has changed its name from "International Advertising Festival" to "Cannes Lions International Festival of Creativity".

On the other hand, another factor that contributes to this lack of empirical evidence in advertising is probably the difficulty for managers and advertisers to have easy access to it. Sommer (2006), for example, suggests a way to tackle this problem by arguing that the results of studies should be disseminated within and outside the scientific community by researchers. However, few researchers have the time or patience to do so. Reviewing the scientific literature for answers is a complex process that requires a lot of training, patience and time - which ends up hampering its practical use.

The principles of Armstrong (2010) present themselves, in this way, as a way to solve this problem and allow the research available to the creative process of advertising, in a way that integrates the framework previously proposed by authors such as Cialdini (2008) or Pratkanis (2008). Much of Armstrong's work (2010) refers, precisely, to organizing, in an understandable way, research supported by robust results.

However, there is certainly room for improvement. From this, the following are suggested: a) Armstrong's (2010) checklist needs to be updated to include missing tactics, such as the newly proposed principle of unity; b) knowledge of social psychology theories (such as the ELM and the HSM, for example) can help researchers and professionals and get more out of the list; c) as well as a greater understanding of how advertising influences sales .; In addition, d) more research on the media use of the principles needs to be conducted, instead of the traditional studies with an interpersonal focus. Armstrong's (2010) work is still very recent, so that a further analysis of the consequences of its use is necessary. However, it is noteworthy that the advertising industry has much to gain from the various empirical studies that have emerged on the subject - this being a great opportunity to improve the effectiveness of what has been produced, using as a basis the methods and techniques of science.

Finally, the literature on influence is multipurpose, being useful to a wide range of actors. Although Cialdini (1999, 2016) argues that the unethical use of persuasive principles would ultimately be harmful to companies, it is important that consumers themselves develop independent strategies, based on serious scientific knowledge, to identify and resist different approaches and sales calls, as advocated by the "transformative consumer research" movement (MICK et al, 2011).

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