

T.C.
ISTANBUL AYDIN UNIVERSITY
INSTITUTE OF GRADUATE STUDIES



**CONSUMER ATTITUDE TOWARD DIRECT-TO-CONSUMER PHARMACEUTICAL
ADVERTISING IMPACTS ON BEHAVIORAL INTENTION AND THE MODERATING
ROLE OF PROPENSITY TO TRUST. ISTANBUL TURKEY**

MASTER'S THESIS

Ramez Mohammad Bahaa Salem

Department of Business
Business Administration Program

March, 2022

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Thesis Advisor: Dr. Hızır Konuk

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ONAY FORMU



DECLARATION

I hereby declare with respect that the study “Consumer Attitude Toward Direct-To-Consumer Pharmaceutical Advertising Impacts on Behavioral Intention and The Moderating Role of Propensity To Trust in Istanbul, Turkey”, which I submitted as a Master thesis, is written without any assistance in violation of scientific ethics and traditions in all the processes from the Project phase to the conclusion of the thesis and that the works I have benefited are from those shown in the Bibliography. (.../.../20...)

Ramez Mohammad Bahaa SALEM



This thesis is dedicated to both my parents. My father the one who taxed himself dearly over the years for my education and intellectual development, to my mother who has been a source of motivation and strength during moments of despair and discouragement. to my sisters and my fiancée for their love and support throughout my life, to my family who deserve my wholehearted thanks as well, to my friends for their support, your friendship makes my life a wonderful experience. I cannot list all the names here, but you are always on my mind.

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This thesis will not be completed without the support and assistance of many people. I would like to take this opportunity to thank all of you who have helped and encouraged me in undertaking my master's degree. I wish to express my sincere appreciation to my thesis advisor, Dr. Hızır KONUK, for his supervision, constructive guidance, inspiration, and encouragement throughout my program and ready to help me in any way towards making this study my best. I wish to express our deepest gratitude to our Director of Business Administration Dr. NURGÜN KOMŞUOĞLU and Faculty Dean of Social Sciences and Business for providing talented and young teachers to us and we are thankful our whole teachers for providing excellent knowledge to us. I would also like to thank my colleagues, who generously helped me and advised me on my survey and gave me courteous encouragement. A very special appreciation to my mom, my father, my sisters, my fiancée – one and all – who were always there to offer endless love, support, and understanding.

March 2022

Ramez Mohammad Bahaa SALEM

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ABBREVIATIONS

ATNP	: Attitude Toward DTCA Of Non-Prescription Medicine
ATP	: Attitude Toward DTCA Of Prescription Medicine
CBI	: Consumer Behavioral Intention
DTCA	: Direct-To-Consumer Advertising
OTC	: Over-The-Counter
PT	: Propensity To Trust



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ABSTRACT

The pharmaceutical industry is usually different from other markets for the reason that the "decision-makers" are usually the physicians who prescribe and choose medicines for their patients (consumers). In 1987, several marketers recognized the opportunity to generate enormous numbers of potential customers worldwide through direct-to-consumer advertising (DTCA). The Turkish government initially granted permission in 2011 to advertise non-prescription medicines directly to customers, while DTCA has long been restricted to prescription medications. We investigated how consumers' attitudes toward pharmaceutical direct-to-consumer advertising (DTCA) impacted their behavioural intentions and if the correlation between attitude toward DTCA and the behavioural intention was moderated by their propensity to trust. This research provides survey results that support the model. In terms of outcomes, there were findings regarding the correlation between the propensity to trust, attitudes, and behavioural intention. In general, the data shows that consumers' propensity to trust plays a moderating role in determining how they react to prescription and non-prescription medicine advertisements.

Keywords: *Propensity To Trust, Behavioural Intention, Direct To Consumer Advertising, Consumer Attitude*

**DOĞRUDAN TÜKETİCİYE YÖNELİK İLAÇ REKLAMCILIĞINA
YÖNELİK TÜKETİCİ TUTUMU, DAVRANIŞSAL NİYET ÜZERİNDEKİ
ETKİLER VE GÜVEN EĞİLİMİNİN DÜZENLEYİCİ ROLÜ. İSTANBUL,
TÜRKİYE**

ÖZET

İlaç endüstrisinde, "karar vericiler" genellikle hastaları (tüketiciler) için ilaç yazan ve seçen doktorlar olduğu için diğer pazarlardan farklıdır. 1987'de birkaç pazarlamacı, doğrudan tüketiciye reklamcılık (DTCA) yoluyla dünya çapında çok sayıda potansiyel müşteri yaratma fırsatını fark etmiştir. Türk hükümeti ilk olarak 2011'de reçetesiz ilaçların doğrudan müşterilere reklamını yapma izni verirken, DTCA uzun süredir reçeteli ilaçlarla sınırlıydı. Tüketicilerin doğrudan tüketiciye yönelik reklamcılığa (DTCA) yönelik tutumlarının davranışsal niyetlerini nasıl etkilediğini ve DTCA'ya yönelik tutum ile davranışsal niyet arasındaki korelasyonun onların güven eğilimleri tarafından düzenlenip düzenlenmediğini araştırdık. Bu araştırma, modeli destekleyen anket sonuçları sunmaktadır. Sonuçlar açısından, güven eğilimi, tutumlar ve davranışsal niyet arasında ilişki olduğuna dair bulgular bulunmaktadır. Genel olarak verilir, tüketicilerin güvenme eğiliminin, reçeteli ve reçetesiz ilaç reklamlarına nasıl tepki vereceklerini belirlemede düzenleyici bir rol oynadığını göstermektedir.

Anahtar Kelimeler: *Güven Eğilimi, Davranışsal Niyet, Doğrudan Tüketici Reklamına Yönelik, Tüketici Tutumu.*

1. INTRODUCTION TO THE STUDY

1.1 Background

The pharmaceutical industry is usually often different from other markets for the reason that the "decision-makers" are usually the physicians who prescribe and choose medicines for their patients (consumers). Considering that 1987, several marketers recognized the opportunity to generate enormous amounts of potential customers worldwide through Direct-to-Consumer Advertising (DTCA). The Turkish government initially adopted permission in 2011 to advertise non-prescription medicines directly to customers. While DTCA has long been restricted to prescription medications, two countries have allowed DTCA for prescription medications. Consumers in the United States and New Zealand were well-informed about the beneficial impacts of DTCA. As far as Turkey is concerned, DTCA is only permitted for over-the-counter (OTC) medications. while advertising prescription medications gives an interesting opportunity to examine trust in the context of customer response. Furthermore, since the world is now so available if you are being placed in the home, targeted and especially based on personal preferences and desires advertisements to attain you. Making this impossible but understanding of this marketing approach, particularly when using information freely, could allow you to fire your favourite internet search engine and research for one of the pharmaceutical companies among the humble, widely propagated, new firms and to slip into their landscape even though if you are not a physician, The health authorities, such as the Turkish authority, use the flow of the pharmaceutical advertising division Over the Counter (OTC) to manage a massive newly established enterprise.

The importance of trust in business relationships and techniques has long been recognized. Many trust-related effects are supported by the advertising literature (Chatterjee and Chaudhuri 2005), enhanced understanding, advertisement engagement, and awareness are some of the benefits (Soh, Reid, and King

2009), advertisement attitude (Austin et al. 2002), as well as the corresponding behavioural reactions (Li and Miniard 2006). Trust has become even more of a priority for advertisers as they attempt to combat growing competitive pressures by cultivating customer-brand relationships (Pawle and Cooper 2006). Pharmaceutical manufacturing is one of the industries that is struggling with difficulties of trust. Furthermore, trust in the prescription medication practice DTC advertising has deteriorated (Kaiser Family Foundation 2008). The question is whether or not DTCA is affected by the decline in trust. The consistency of trust in advertising statements and behavioural reactions is not always guaranteed., for example when one's health condition requires medicine. Because prescriptions require a doctor's approval, it may be possible to argue that trust in pharmaceutical advertising has a lesser role in decision-making when it comes to purchasing medicines. Customers increasingly request doctors to prescribe a certain brand of a drug after seeing it advertised (Singh and Smith, 2005), and this is taking its toll on how physicians write prescriptions (Mintzes 2012). A greater emphasis on the role of trust in the response to pharmaceutical advertisements is becoming increasingly important in today's highly educated patients. As a result, a better understanding of the DTCA can have substantial consequences for the formulation of more trustworthy medicine communications for pharmaceutical advertisers and regulators.

The extent to which a person is willing to put personal trust in others is known as a trust propensity (McKnight & Chervany, 2001). People's willingness to accept others' information is another factor (Gefen, Benbasat, & Pavlou, 2008). As a result, variations in trust propensity can lead to a variety of behavioural intentions and attitude outcomes.

The requirement for DTCA has increased with the development of new diseases, generic medicines, and more knowledgeable patients, as patients would like more information about the benefit-risk ratio of the medicines that they are consuming (Mutha, 2013).

In 1997, the United States Food and Drug Administration (FDA) approved DTCA on television. Niederdeppe et al. (2017) stated that due to the DTCA system, American patients have grown highly aware of their health. According

to Mackey et al. (2015), direct-to-consumer advertising (DTCA) can be delivered through TV, radio, newspapers, and the Internet.

Direct-to-consumer advertising (DTCA) of prescription medications has dominated pharmaceutical advertising research since the late 1990s, with the majority of studies focusing on this type of promotion (DeLorme, Huh, Reid, & An, 2010). While there has been a rise in self-medication and a steady increase in the rate of prescription-to-OTC switching, there has also been a rise in the importance of studying the impact of over-the-counter medicines (non-prescription) medication advertising, an area of pharmaceutical marketing that has received little attention (e.g., DeLorme et al., 2010). The most significant distinction between prescription and non-prescription medication purchase behaviours is that for OTC medicines, customers are the main decision-makers, whereas, for prescription medicines, consumers are not the actual decision makers because they must first obtain prescriptions from physicians (DeLorme et al. 2011).

In light of the background provided above, The goal of this research is to explore the effect of customer attitudes about direct-to-consumer pharmaceuticals (prescription and non-prescription medications) advertising on behavioural intention considering the moderating role of propensity to trust from consumers ViewPoint in Istanbul, Turkey.

1.2 Problem statement

The study's objective is to investigate typically the implications of propensity to trust in DTC pharmaceutical advertising that will present survey findings testing the model to provide mixed study for the relationship of propensity to trust with consumer attitudes and their behavioural Intention, as well as the role of trust in determining consumer behavior to pharmaceuticals advertising, from the perspective of consumers in Turkey.

The vast majority of research on this topic takes place in western nations. As a result, there is a dearth of data on the relationship between these variables in countries such as Turkey, and it will be interesting to conduct research on the

impact of customer attitude toward DTCA on behavioural intent, as well as the moderating effect of propensity to trust in this nation.

1.3 Significance of the study

Scientific importance: it could be a bottom for other scientific studies in the long term, besides the current research might well be considered a new study because there have been limited studies on this topic, in Turkey as the researcher's understanding. The outcomes may end up being appropriate abroad in order to enhance the primary importance of this specific study is to be able to provide sound recommendations to decision-makers, Authorities, physicians, and patients concerning the significance of DTCA.

1.4 Research Hypotheses

The hypotheses are prepared by the researcher which is enabling the researcher to meet the research objective.

H1: Greater behavioural Intention of DTC advertising is associated with a more positive attitude towards DTC advertising of prescription medicine.

H2: Greater behavioural Intention of DTC advertising is associated with a more positive attitude towards DTC advertising of Over-the-Counter (non-prescription) medicine.

H3: Propensity to trust will have a moderating effect so that the relationship between consumer attitude toward DTC advertising of prescription medicine and their behavioral intention about an advertised medicine will be stronger among those with a low propensity to trust.

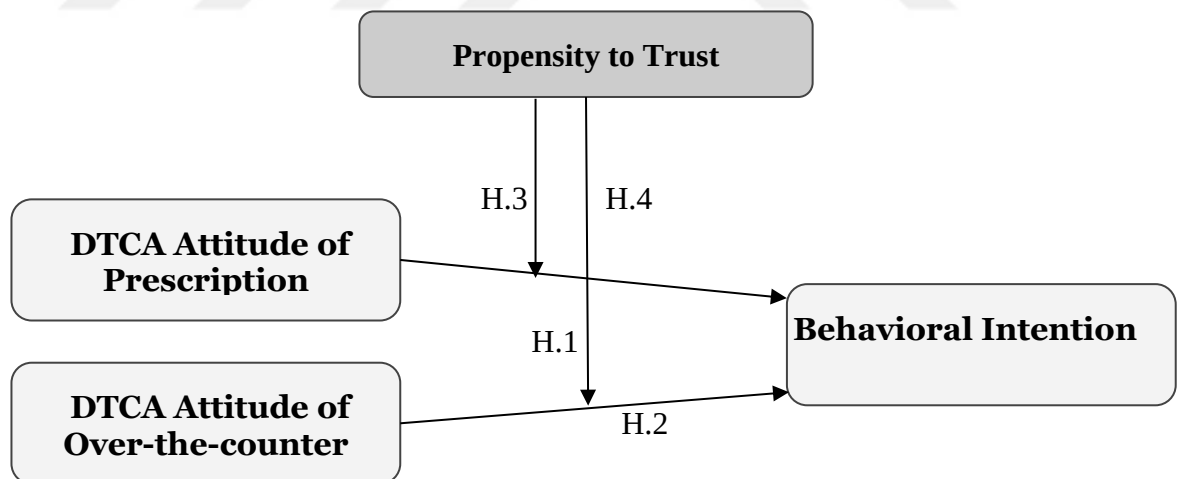
H4: Propensity to trust will have a moderating effect so that the relationship between consumer attitude toward DTC advertising of non-prescription medicine and their behavioral intention about an advertised medicine will be stronger among those with a low propensity to trust.

Table 1.1: Components of the Model

Hypotheses	Independent variables	Dependent variables	Moderating variables
1	Consumer attitude toward DTCA of prescription medicine	Behavioural intention	
2	Consumer attitude toward DTCA of non-prescription medicine	Behavioural intention	
3	Consumer attitude toward DTCA of prescription medicine	Behavioural intention	Propensity to trust
4	Consumer attitude toward DTCA of non-prescription medicine	Behavioural intention	Propensity to trust

1.5 Conceptual Framework

The following model was constructed based on the problem statement, current research objectives, and previous studies as sources to investigate the impact of DTC pharmaceutical advertising on behavioural intention and the moderating role of propensity to trust, as shown in model (1). Previous studies: **Causes and consequences of trust in direct-To consumer prescription drug advertising** (Ball et. al., 2016).

**Figure 1.1:** Conceptual Framework

1.6 Research Methodologies

When it comes to data collection and analysis, quantitative research is the most practical option for scholars. Most researchers prefer this approach for their research because it is more affordable. As a result, it saves valuable time for

researchers, which is always a concern when conducting research (Samson & Terziovski, 1999).

This research employs a similar testing methodology, with participants 217 being randomly selected respondents in Istanbul whose responses are critical to the success of our hypothesis testing. The questionnaire is distributed via email, social media, and WhatsApp. The questionnaire for the survey contains approximately thirty-one questions. The problems in this section will be defined in terms of the research's fulcrum and the necessity of testing the proposed hypotheses. It will be our highest priority to utilize all available resources when conducting research and engaging with respondents in order to ensure the integrity of this study as a whole. On the other hand, the need for improvement is unavoidable.

1.7 Study Limitations

Surveying research is not a simple undertaking. It is always confronted with difficulties and limitations. The same is valid for our research; it must contend with a variety of limitations. One potential major limitation of this research was the limited sample size. Due to the nature of this study's respondents, simple random sample size was used. When a sample eliminates some individuals from the population, sampling errors may occur (Fowler, 2013). To address this issue, the smallest possible sample size was determined. The participants occasionally refuse to comply, depending on their way of thinking. Furthermore, the study is geographically restricted to Istanbul. Moreover, because the researcher is unable to interact directly with each participant, the questionnaire could become constrained. Nevertheless, measures will be taken to ensure the survey's reliability.

1.8 Definitions of Terms

In this study, the following technical words are used:

Direct-to-consumer advertising (DTCA): a subset of direct-to-consumer marketing in which promotional materials are delivered to the potential user directly rather than the physician (Rollins & Perri, 2014).

Broadcast media is made up of commercials that are broadcast on the radio or television (Shimp, 2015).

According to academics, the most practical way of transmitting information to a large audience is by serving as the main source of news and other leisure material (e.g., movies, sitcoms, etc.).

Printed media is a published form of media used for promoting. (Shimp, 2015).

The researcher establishes that brochures are promoting materials. that are typically intended to promote a brand, organization, product, or service and to inform potential customers or members of the general public about its merits. According to the researcher, it is a piece of writing that contains a message with expressive imagery for research advertising or identifying products, organizations, niche markets, and so on. It includes magazines, newspapers, and brochures.

Social media is a term that refers to the use of advertising through computerized media, personal sales, and building relationships (Bruno & Dariusz, 2015).

Social media, according to an academic, is the use of technical communications (such as social networking web pages and blogs) to allow the construction of online communities for information exchange, beliefs, personal messages, as well as other content (such as videos).

Over-the-Counter (OTC) medicines are those that are freely available to consumers without a physician's prescription. (Millar & Abi, 2018).

1.9 Structure of The Thesis

Table 1.2: Structure of The Thesis.

Chapter One	INTRODUCTION This chapter contains a detailed outline of the study. A clear and precise summary of any critical feature of the thesis is included. This provides a brief overview of the study's significant subject.
Chapter Two	LITERATURE REVIEW This chapter discusses the theories in detail. Additionally, it provides a comprehensive view of the study's context, existing contours, and potential consequences. We will investigate each of the theories in this chapter in order to establish their veracity.
Chapter Three	RESEARCH METHODOLOGY This chapter discussed research methods. The random sample, responders, and field of study are all addressed in detail. It also sheds light on the structure of a questionnaire for the research.
Chapter Four	DATA ANALYSIS This chapter presented the results of the SPSS software analysis. Illustrating this part with graphs and diagrams would be useful. To ensure the effectiveness of this thesis, it is necessary to include all of the analyses used during the research process, including Factor Analysis and Reliability tests, Regression, Mean and Standard Deviation, etc.
Chapter Five	CONCLUSION AND RECOMMENDATION Finally, this latest chapter presents the entirety of a study project titled Conclusion. Additionally, this chapter includes recommendations for future research that are based on a thorough analysis of this thesis.

1.10 Conclusion

This chapter summarizes the thesis. It established the context for the inquiry in order to comprehend the phenomenon under investigation. The study problem was then examined in detail, drawing on previously identified issues and the researcher's personal observations. Additionally, the research's significance was assessed. The research topics were logically developed from the preceding parts, and the study's contributions were addressed. The technical terms have been defined, and finally, the structure of the thesis was provided.

2. LITERATURE REVIEW

2.1 DTCA Background

Direct to Consumer Advertising (DTCA) is defined by the Australian Medical Association as any declaration or visual design addressed to the general public that is needed to encourage the use or provision of medical products and services. DTCA includes a variety of advertising techniques targeted at consumers, such as television, radio, magazines, and the Internet, that advertise prescription and non-prescription medicines (Kaiser Family Foundation, 2003). There have been numerous sorts of DTCA, including help-seeking advertisements, reminder advertisements, and product claim advertisements (Ventola, 2011). The diversity of help-seeking advertisements has been classified according to the presence of disease-related information while ignoring drug-related information. The reminder advertisements include basic information on prescription medicines, such as the medication's brand, price, and potency. This assortment of adverts makes no suggestions nor claims about the efficacy or side effects of any medicine (Gellad & Lyles, 2007). In comparison to other types of promotion, product claim commercials involve a more comprehensive supply of prescription medicine information. This type of advertisement details the prescription drug's indications, effectiveness, and health impact (Connors, 2009). DTCA of pharmaceuticals is a vital source of public healthcare knowledge and has a considerable impact on consumer behaviour.

From 1938, when the Food, Drug, and Cosmetic Act was enacted, around until the middle of the 1980s, the business concentrated nearly solely on physicians. Considering physicians as their primary consumers, the pharmaceutical industry dispatched massive armies of sales personnel who marched into physicians' offices armed with advertising items (Kravitz, R. L., 2000). Prior to 1975, health care marketing was a highly contentious subject due to its novelty. Even more recent is the concept of direct-to-consumer advertising for prescription

medicines (Chandra and Cheek, 2001). In 1981, Reader's Digest published the first DTC advertisement for Rx medicine in the United States of America (Woloshin et al., 2001). Merck's first DTC print advertisement for Pneumovax (polyvalent pneumococcal vaccination) appeared in Reader's Digest in 1981. (C. L. Ventola, 2011). In 1983, the United Kingdom's Boots Pharmaceuticals broadcast the first televised direct-to-consumer advertising for prescription medicine. (Herzenstein et al 2004). Prescription medicine advertising on television has grown in popularity since the Food and Drug Administration (FDA) began enforcing less severe DTCA regulations in 1997 (Morgan, 2007). Although the pharmaceutical industry has attempted to control doctors' prescription practices via advertising and other techniques for years, since the US Food and Drug Administration (US FDA) permitted broadcast advertising for pharmaceuticals in 1997, DTC advertising has grown much more common and noticeable (Weismann, et al., 2004). In 1997, the US FDA announced new draft regulations relaxing and clarifying limits on direct-to-consumer advertising. In 1997, the FDA authorized pharmaceutical corporations' use of mass media outlets such as print advertisements, broadcasts, as well as the internet to promote their medicines. Since then, TV commercials for prescription medicines have been widespread (Herzenstein, Misra, and Posavac, 2004). Although providers may have felt intimidated as DTCA spending expanded rapidly in the late 1990s, they were gaining experience dealing with increasingly active patients who had behaviours that benefited from information from a variety of sources and perhaps developing a strategy for converting these discussions into effective interaction (Weismann et al., 2004). Consumers' interest in the DTCA of prescription medicines has piqued, prompting many to consult their physicians about the drugs those who view are allowed to advertise (Findlay, S., 1999). People are increasingly requesting newer, more expensive medicine from their physicians, even when less costly medicines might very well collaborate quite well in many instances. DTCA is a novel method for prescription medication promotion via common media that is presently only permitted in the United States and New Zealand (Rajani, C. H., 2012). West et al (2012), claim that patients who see a commercial and identify the signs of health conditions can reach their doctor to talk treatment choices,, actively participating in their own healthcare management.

2.2 Attitudes Towards DTCA

Much of the study on the influence of DTCA focuses on customer attitudes toward DTCA (Moms, Grossman, Barkdoll, Gordon, and Chun 1987). Positive consumer views regarding DTCA are critical because they boost the possibility of advertising content adoption and thus the possibility of external search (Stemthal and Craig 1982). According to Gould (1988), positive health attitudes are necessary for positive health behaviours. Consumer perceptions toward DTCA have been mostly favourable (Perri and Dickson 1987, Perri and Nelson 1987, Prevention Magazine 1999, Moms et al. 1986).

Moms, Bnnberg, Klimberg, Rivera, and Millstein (1986) discovered that customer perceptions of DTCA were generally favourable, despite the fact that a sizable minority of participants responded neutrally. The results indicated that a substantial number of replies were indifferent to the attitude questions, with the frequency of responses clustered in the middle of the scales. The studies concluded that customer attitudes are flexible and adaptable. This is unsurprising given that the data was obtained in 1984 when DTCA was in its infancy.

Perri and Nelson (1987) investigated consumer awareness of DTCA and the subsequent attitudes regarding DTCA. The study discovered that those who could recall a DTCA advertisement held a neutral attitude toward DTCA, while those who couldn't recall the advertisement held a positive attitude. According to the researchers, these results show that consumers who have previously cognitively evaluated DTCA information may assess these advertisements more critically, creating less favourable attitudes. Prior experience with DTCA enables consumers to develop more positive attitudes toward DTCA, implying that consumers who have not been exposed to DTCA are sensitive to the demanding impacts of the research methodology due to their weakly established attitudes toward DTCA. The research concludes as follows:

The project's primary limitation is that patients are not yet exposed to a range of direct prescription advertisements. Stable attitudes should arise from a thorough examination of a problem (Beales et al. 1981). Consumers in this research and

in our society lack the time and exposure required to develop such attitudinal structures. (1987, Perri and Nelson, p. 20)

In a 1999 Prevention Magazine health survey, respondents indicated that they had a more favourable reaction to DTCA when given additional information about the advertisement. Respondents observed a considerable increase in advertisement favorability when the advertisement contained fresh information about the medicine or treatment. Indeed, rates of doctor interaction as a result of a DTCA appear to be more than twice as likely to occur when a DTCA provides new information versus known information (39% versus 16%, respectively). These findings demonstrate the effect of positive perceptions toward DTCA on later consumer behaviour. Consumers are more critical of advertising messages than of advertising itself, the survey found. Thus, the quality of the information presented in the advertisement can affect how customers feel about DTCA in general. However, respondents' desire for additional information about the promoted medicine decreased when the advertisement included more risk information.

Moms and Millstein (1984) conducted an experimental study to see how different magazine and TV advertising formats changed people's attitudes. An advertising agency came up with a series of real TV and magazine ads for two fictionalized products, including one for arthritis and the other for high blood pressure. The advertisements were different in three ways: 1) how much risk information they put in (emphasized or integrated), 2) how many pieces of risk information they had (2 or 4), and 3) what kind of risk information they had (specific or general). The advertisements were also split up into two groups: one with no risk information and one with a lot of information. The gathering of 1509 participants, half of whom had either arthritis or high blood pressure, came from four cities in the United States. They were asked to come to a centralized location to watch a TV show or read a magazine, and then fill out an attitudinal survey. Subjects once saw an ad for each prescription medicine while they watched a 17-minute TV show or sat and read for 20 minutes. The prescription medication advertisements were put on the inside covers of the magazines to help people remember them (primacy and recency).

The researchers found that people had more positive feelings about magazine advertisements than television commercials. A lot of people wouldn't have liked the TV commercial if it didn't include a lot of information about what could go wrong, what kind of risk information it had, and how much of it there was. Participants preferred risk information that was more integrated into more important risk information. Also, general risk information was thought to be more essential than specific risk information, which was thought to be less important. The researchers found that giving people too many risks made them less likely to pay more attention to them. For magazines, the results revealed that more information led to lower knowledge scores, so the participants were confused by all the negative information about the product. This study shows how the risk information in DTCA impacts customers who purchase it. Balanced information is what people want, but too much risky information makes people uncomfortable, so they don't pay as much attention to the ad.

From a review of the previous literature, it can be seen that consumer DTCA attitudes are significant for DTCA-initiated behaviour. It looks like a lot of what makes a DTCA likable and what it does next comes from how much information it has.

2.3 DTCA-Induced Behaviours

Moorman and Matulich (1993) developed a model to assist people in making healthy choices by combining health motivation and health ability. One of the PHBs examined was health information acquisition, which entails the collection of health data from a variety of sources. This information may come from the media, your friends and family, or your physician.

According to the 1997 Scott-Levins Physician Drug and Diagnosis Audit, DTCA is increasing public awareness of available treatments, increasing visits to physicians' clinics, and driving patients to consult with their physicians about possible treatments. enticing them to request specific medications by name (Marcinko 1999).

Peyrot et al. (1998) developed a model to demonstrate how DTCA affects two factors: 1) consumer knowledge of prescription medicines and 2) how people

inquire about medicine brand names. A sample of 440 participants in Maryland was obtained using random-digit-dialing telephone interviews. They were then used to examine how individuals inquire about particular drug brands. Requesting behaviour was determined by the individual's willingness to request their physician for a medication that had been advertised. Only 5% of people requested medication from their physician based on what they saw in an advertisement. This study examined only those who requested items, not those who sought information.

Moms et al. (1987) conducted a telephone survey of 1000 adults aged 18 years and older nationally. They examined the information-seeking behaviours of younger and older patients who had recently received a prescription. Participants were questioned about their pharmacy and physician's clinic experiences, as well as about information they obtained independently from the media and other sources.

The FDA in 1995 surveyed 30,000 people who had been exposed to DTCA to ascertain their opinions. The research was conducted over two 12-week periods to ascertain how people became aware of product-specific advertisements and what they did in response to seeing them. Advertisements were displayed during both 12-week periods. The results indicate that 10% of those who purchased the items were informed of the advertisements. Additionally, results indicated that 6% of the 10% of people who remembered the advertisements sought medical attention. The study discovered that people value the type of information provided by DTCA, which influences their behaviour.

Prevention Magazine conducted a telephone survey of 1,205 adults in 1998. There was some debate over whether or not the subjects had visited a doctor for one or more of their medical conditions. 70% of those who saw the DTCA did so for a medical reason, 33% of those who saw it spoke to a doctor, and 13% spoke to their doctor about the DTCA's medical condition as a result of seeing it (Fine 1999). Additionally, 20% of the 33% of respondents who spoke with their doctor did so by setting up an appointment. The remaining respondents discussed the DTCA with their doctor during their visit. 18% of the 33% said it was the first time they had spoken to their doctor about the condition depicted

on television. 46% of people who contacted their physician after viewing a DTCA requested a prescription for the medicine they saw on television.

Consumers who had seen a DTCA for their condition but had not yet contacted their doctor were asked how likely they were to do so in the next three months. It was conducted on a scale ranging from 0 (no chance they will contact their physician) to 100 (100 percent) ("they will definitely contact their doctor"). 23 out of 100 people predicted this. Many people are opposed to this. 19% of individuals who did not discuss the DTCA with their physician stated that they were satisfied with the existing treatment, 15% stated that they were already taking the medication, and 12% stated that their condition was not severe enough to warrant treatment. Thus far, studies have relied on self-reported data that individuals may not be willing or able to provide, raising concerns about the measure's reliability.

Almost all of the research discussed in this section was conducted using non-representative samples of the national population. The sample groups were primarily composed of older adults who were more educated and healthier than the general older adult population (Moms and Millstein 1984, Perri and Dickson 1987).

2.4 Trust in the advertising literature

Many academics assert that building trust in advertising is a difficult undertaking to accomplish since the majority of consumers are prone to distrust advertising (Calfee and Ringold 1994). More than any other type of product information provided through various tools, this is a challenging task to achieve. The pharmaceutical industry uses a variety of media to establish trust, including audio-visual technology such as TV, radios, advertisements in medical journals and the Internet, moreover print ads (brochures and journals), despite the fact that the message content is identical (A. Wang, 2006). MacKenzie & Lutz (1989) claim that trust has an impact on consumer behaviour and communication. They did, however, consider advertising that emphasizes credibility to be more valuable than advertising that relies on trust. Findings of a limited but growing body of research on ads trust indicate that consumers' perception and assessment of, as well as reactions to, particular commercials,

are enhanced when they have trust in advertising (Soh, Reid, and King 2009). Advertisements which are perceived to be credible are more relevant and attractive to the audience (Austin et al. 2002). Additionally, research indicates that trust in mobile advertising can play a role in the development of favourable attitudes toward mobile ads. (Merisavo et al., 2007). While this line of research has the potential to yield valuable insights into the role of trust in DTC pharmaceutical advertising, several critical divergent points constrain the amount of extrapolation possible. The majority of scholarship on media trust takes a sociological approach to trust, situating it within the context of social behaviours (Ulsaner 2002). This distinguishes it from the trust as a psychological phenomenon associated with a more personal and behavioural outcome, as it is frequently handled in advertising academia and the study given here.

2.5 Theoretical framework and hypotheses

2.5.1 The correlation between attitude toward DTCA and behavioural intention

Attitudes toward advertising are a significant predictor of behavioural outcomes such as intention to buy, affecting attitudes towards a certain advertisement or brand (MacKenzie & Lutz, 1989;). Individuals who have more favourable attitudes toward advertising are more likely to regard particular advertisements as appropriate, instructive, and enjoyable (Lutz, 1985). Individuals who have favourable attitudes toward advertising, devote considerable time viewing advertisements (James & Kover, 1992), recall more advertisements and are more influenced by them (Mehta, 2000; Mehta and Purvis, 1995).

Despite the fact that the extent and assessment of attitudes toward direct pharmaceutical advertising to consumers have varied widely throughout the research (Mehta, 2000), it is simply described as a "learned predisposition to respond consistently favourable or unfavourable to advertising in general" (MacKenzie & Lutz, 1989, pp. 53–54). It should be separated from one's attitudes toward a particular advertisement or one's thoughts about advertising (MacKenzie & Lutz, 1989). Numerous views about advertising impact an individual's attitude toward advertising, as well as an individual's responses to a

particular advertisement are affected by consumer attitude toward advertising (Muehling, 1987).

This research investigates the effect of consumer attitude toward DTC pharmaceutical advertising on their behavioural intention, assessing an individual's actual impact of direct-to-consumer advertising.

Given the significance of DTCA in public health, additional academic research on the relation between worldwide attitudes toward DTCA and behavioural intention is required. Prior to the dramatic increase of DTCA, health care choices, particularly those regarding therapeutic alternatives, were made by doctors and were dominated by a one-way information flow from doctors to patients (Deshpande, Menon, Perri, & Zinkhan, 2004). Direct-to-consumer advertising (DTCA) has aided in the transition away from the conventional "paternalistic process" of health care decision-making to a more "shared decision-making process" (Deshpande et al., 2004, p. 501).

The increasing exposure of medicine advertisements has given knowledge customers a whole new dimension (Smith, 1998). Consumers have become more educated and engaged in health care than at any point in history. (Singh & Smith, 2005). Physicians have long been given patients with treatment alternatives. It is now possible for DTCA to interact directly with customers. If customers respect the information and also have positive attitudes toward DTC advertising, they are more likely to participate in a "shared decision-making process." As a consequence, consumer attitudes toward DTCA are significant determinants of their behavioural intentions.

Herzenstein et al (2005) revealed that consumers' attitudes toward DTC advertising were an important predictor of their tendency to inquire about promoted medications with their physicians. Although the studies used slightly multiple measures of consumer attitude toward DTC pharmaceutical advertising, the findings show that consumers who had more positive attitudes about the promoted medicine were much more inclined to seek more information and consult with their physicians. According to some research, there were no significant changes in attitudes toward DTCA between individuals who inquired about the promoted medications and those who did not. The investigations, however, were concluded before the FDA modified the

criteria for broadcast advertising in 1997. (Perri & Dickson, 1987; Williams & Hensel, 1995) Consumers' attitudes toward DTCA are thought to be different now as a result of increased exposure to DTCA. Moreover, Williams and Hensel's (1995) research included participants above the age of 59.

We may assume that consumers who have positive attitudes toward DTC advertising would view particular commercials as more agreeable and helpful, resulting in a greater impact on their behavioural intention. The next hypotheses are provided about the major impact of attitude toward direct-to-consumer advertising:

Hypothesis 1: Greater behavioural Intention of DTC advertising is associated with a more positive attitude towards DTC advertising of prescription medicine.

Hypothesis 2: Greater behavioural Intention of DTC advertising is associated with a more positive attitude towards DTC advertising of Over-the-Counter (non-prescription) medicine.

More significantly, this research aims at a contingency circumstance in which the impact of attitudes toward DTC advertising varies. The section that follows discusses the role of consumers' propensity to trust in the relationship between consumers' attitudes toward DTC advertising and their behavioural intent.

2.5.2 Moderating role of propensity to trust

The concept of trust has been analyzed in various ways, ranging from sociological approaches saying that it is a feature of society that is not individual, as it concerns the individual, therefore there is a great variation (Chervany, 2002). Different epistemological evaluations are used to trust. There is a psychological trust approach, cognitive and rational approaches, and a strict utilitarian account-based trust approach, in addition to a strict utilitarian account-based trust approach (Hardin, 1993), which indicates that everyone trusts at varying levels. As a result, it is possible to claim that there is a considerable measure of variety when it comes to determining the source of information for the concept of trust.

Aside from epistemological variations, there are other variants in the definition of trust. However, it is not fair to conclude that these many definitions of trust

have many features in common. (Zucker, 1985). Sitkin and Roth (1993) define trust between business parties as a belief in one's ability to perform a task under certain conditions, whereas Gambetta (1988) defines trust as a calculated decision to cooperate with other known actors based on information about the personal qualities and social limitations of others. According to Shapiro (1987), trust is defined as a principal-agent relationship. From a sociological standpoint, Zucker (1985) defines trust as a set of expectations shared by all parties involved in an exchange. According to Nooteboom et al. (1997), trust is related to a partner's ability to act on the objectives and expectations of a relationship (competence trust) or the intention not to behave imperfectly (deliberate trust). Dunn (1988) clearly distinguished between two types of trust: one based on logical decisions and the other on human emotions. According to Zaheer et al. (1998), trust with an economic and relationship-oriented perspective; trust is the expectation that an individual would meet his obligations, act predictably, behave perfectly when the chance for opportunity exists, and negotiate properly. Finally, McKnight and Chervany (2002) describe trust as beliefs in the other party's ability, benevolence, honesty, and dependability. However, some academics define trust as an irrational or emotional choice (Bigley, Pearce, 1998).

Along with the variation included in the writers' core definitions of trust, the many subcategories proposed by other researchers have added to the concept's richness. McAllister (1995), for instance, provides two sorts of trust bases: one is "cognitive-based trust," which is founded on cognitive judgements about the other's competency or trustworthiness, and the other is "impact-based trust," which is built on emotional relationships between persons. Trust, according to Nooteboom et al. (1997) It is studied in two contexts: competency-based trust and deliberate trust. Zaheer et al. (1998) investigated trust on two levels: attitudinal trust and relational trust.

The diversity associated with trust frequently appears as conflicts. (McKnight, Chervany, 2002). For example, Lewis and Weigert (1985) propose that trust should not be regarded as a characteristic of individual people but instead as a characteristic of social units consisting of various individuals. Additionally, these scholars describe trust as a sociological trait of the social structure that

allows communication between individuals. These arguments stand in contrast to psychology's concept of trust as an individual trait.

Mayer et al. (1995) also used this broad definition in their study, describing trust as the willingness to be exposed to the activities of the other person. This conception separates trust from its implications, which include different forms of threat in the relationship with the trustworthy person. When defined in this form, trust doesn't really contain risk; nevertheless, when it becomes a behavior, such that it is linked with the trusted person, the willingness to take risk gets involved. Among the effects of risk-taking include collaboration, the sharing of sensitive information, and the trusting person's deliberately ceding control over issues of significance to them (Mayer, Davis, 1999).

Additionally, this understanding of trust differentiates it from its originators: the perception of trustworthiness and the propensity to trust (McNally, 2005). Thus, Mayer and colleagues' definition of trust and model of trust, in accordance with Rotter's (1971) approach, state that the trusting side will be willing to be exposed to the trusted party, based on the overall propensity to trust other people and the sense that the other side is trustworthy.

One facet of personality, demonstrating a trustworthy attitude in unexpected situations, can influence the course of action taken when confronted with risk (Gefen, 2000). *Propensity to trust* or a disposition to trust is the extent to which an individual is inclined to rely on others (McKnight & Chervany, 2001). Additionally, it indicates how open people are to trust information offered by others (Gefen, Benbasat, & Pavlou, 2008). As a result, personal characteristics in trust propensity may result in personal differences in consumer attitude and behavioural intent. Propensity to trust is a generic trait, not a result of any particular situation, desire to show trust in humans, and a willingness to trust others (McKnight et al., 1998). McKnight depicted propensity to trust through two sub-constructs: a trusting attitude and faith in humanity. Faith in human nature presupposes that humans are generally honest, trustworthy. Individuals who have strong faith in humanity are low judgemental and analytical of others, and thus more accepting of their faults. (McKnight et al., 1998). A trusting stance implies understanding, despite one's beliefs about a person's basic character, one considers that dealing with people as if they are well-intentioned

and reliable results in better outcomes (McKnight & Chervany, 2001). It is the result of a calculative, economics-based trust research stream that one develops a trusting stance. As a result of the research, these two sub-constructs of trust propensity to trust (Gefen, 2000) have been identified as dealing with whether a person enters a transaction with a sense of trust or distrust, as well as their attitudes during that transaction (Falcone, Singh, & Tan, 2001).

As the research indicates consumers with a low propensity to trust are more likely to adopt wary or even unfavorable attitudes when confronted with unclear conditions (Graziano & Tobin, 2002), even when they lack explicit reasons (Johnson, 2005). This propensity reduces the excitement and results in a hesitation to attempt different things. In comparison, consumers who have a higher propensity to trust, despite the risks, are more optimistic and receptive to new experiences (Graziano & Tobin, 2002).

Additionally, propensity to trust reflects an individual's level of trust in that other side when those who are completely absent lack knowledge (Gill et al. 2005). Regardless of the fact that consumers have a natural aversion to advertising (Obermiller and Spangenberg 1998).

In the context of DTCA, we can hypothesize that consumers' propensity to trust influences their behavioural intentions, mostly with respect to their attitude toward direct-to-consumer advertising. More specifically, we postulate that consumers' trust propensity plays a moderating role in the relationship between consumer attitude about DTCA and their behavioural intention. As a result, The following hypotheses are proposed:

Hypothesis 3: Propensity to trust will have a moderating effect so that the relationship between consumer attitude toward DTC advertising of prescription medicine and their behavioral intention about an advertised medicine will be stronger among those with a low propensity to trust.

Hypothesis 4: Propensity to trust will have a moderating effect so that the relationship between consumer attitude toward DTC advertising of non-prescription medicine and their behavioral intention about an advertised medicine will be stronger among those with a low propensity to trust.

2.6 Conclusion

This chapter summarized the thesis. It established the context for the inquiry in order to comprehend the phenomena under investigation. The study issue was then discussed in detail, drawing on previously identified issues and the researcher's personal experience. Additionally, the research's importance was assessed. The research topics logically developed from the preceding parts, and the study's findings were addressed. The definition of important concepts was followed by the presentation of the thesis framework.



3. RESEARCH METHODOLOGY

3.1 Introduction

The aim of this research is to explore the effects of customer attitudes toward DTC advertising of pharmaceutical (prescription and non-prescription medications) on their behavioural intentions, considering the moderating role of propensity to trust. Singleton et al. (2010) describe the study, particularly social studies, as the technique of developing inquiries and then obtaining responses concerning an individual's social environment or surroundings. Understanding research methodology benefits both future researchers and consumers of research outcomes. Consumers are exposed to study findings regularly in their daily lives. However, one utilization of studies is in advertising, when findings of studies and different sorts of research are used to convince consumers to buy a particular item or service. It may very well be hard to determine which commercials are promoting incorrect information at times. As a result, the consumer must pay attention to and comprehend the methods employed in the research design process.

Generally, research is conducted in one of two approaches: qualitative or quantitative. Additionally, research designs might combine qualitative and quantitative approaches. Furthermore, either approach may employ a variety of methods or strategies (Singleton et al., 2010). This chapter discusses the methodology used in the research by detailing the research design and used approach, research variables, and measures,

3.2 Research Design and Approach

This paper is a case of quantitative research, which is defined by Marczyk et al. (2010) as studies that apply measurable investigation to get findings. Quantitative approaches can also be described as those that are focused exclusively on quantifiable data. In quantitative studies, large-scale sampling

techniques, as well as statistical measures, are frequently employed to determine the averages and variability of a sample (Willig, 2013).

The current study collected data from online participants among residents and Turkish members via a quantitative survey. Marczyk et al. (2010) asserted that researchers conduct surveys to generate responses from a wide number of individuals. These scale items can be utilized to obtain responses about opinions, attitudes, or particular behaviours. The results of the survey could be restricted to depicting reactions, but an endeavour might be had to determine the impact of consumer attitudes on DTCA on their behavioural intent, as well as to recognize the effect of trust propensity as a moderator variable.

3.3 Data Collection

Individuals serve as the unit of analysis in this study. To conduct statistical analysis, the researchers collect primary data using administered questionnaires. This research aims to discover empirical facts by generalizing a cross-sectional study of the current status through October, November, and December 2021.

3.4 Research Variables and Key Measures

The complete set of items used per model variable is shown in Table 3 including the objects that were reverse coded. Wherever possible, standard scales were applied. After pilot testing the survey and demonstrating high-scale reliability, the following measures were included in the actual data collection.

This research study contained the following: Variables are classified into three types:

The independent variables were consumer attitude toward direct-to-consumer pharmaceutical advertising, comprising two sub-variables: *attitude toward DTCA of prescription and non-prescription medicine*. as measured by a 14-item scale from Ball, Manika, and Stout (2016). Items were rated on a Likert-type 7-point scale from 1 (strongly disagree) to 7 (strongly agree). The dependent variable was consumer *behavioural intention*, as measured by a 4-item scale from Ball, Manika, and Stout (2016). Items were rated on a Likert-type 7-point scale from 1 (extremely unlikely) to 7 (extremely likely). The moderator

variable includes consumer *propensity to trust* as measured by a 7-item scale developed by Chen et al (2016), Huff, and Kelley (2003), Lee, and Turban (2001). Participants responded on a 7-point Likert-type scale from 1 (strongly disagree) to 7 (strongly agree). Socio-demographic characteristics (i.e., age, gender, occupation, marital status, and education).

3.5 Population and Sampling:

The selection of a sample is an important aspect of analysis (Collis and Hussey, 2003). There are several methods for selecting a sample, including random, hierarchical, and stratified sampling (Collis and Hussey, 2003). The current study aimed to determine the behavioural intent of customers in response to recent changes in advertising techniques in the pharma industry. Furthermore, it was intended to discover how consumers would interpret direct advertising of medications on various advertising platforms if it were legally permitted, as well as to comprehend the possible impact of those commercials on consumer medicine preferences. Random sampling is the technique employed in this study. A survey questionnaire was performed among members of an online participant's group in Istanbul, Turkey. The research gathered responses from respondents via email, social media, and WhatsApp.

3.6 Data Analysis Techniques

The provided results were analyzed using SPSS 22.0, and descriptive statistics will be utilized to provide mean and standard deviation values for all demographic questions. Charts and frequency counts will be used to present the data, and reliability statistics, regression analysis, ANOVA, and adjusted R-squared would be used to determine the level of significance of variables and test hypotheses, and eventually, co-efficient correlations will be utilized to decide relationships between the variables.

Table 3.1: Hypothesized Model Variables And Scale Items

Variables	Scale items
Attitude toward DTCA of prescription medicine	(1 = strongly disagree; 7 = strongly agree)
ATP1	Advertising prescription medicines directly to consumers benefits consumers.
ATP2	Printed media like newspapers, magazines, and billboard advertisements for prescription medicines are a bad idea.
ATP3	Prescription medicines should not be advertised directly to consumers.
ATP4	I think Broadcast media like TV, and radio commercials for prescription medicines are a bad idea.
ATP5	I like to see advertisements about prescription medicines.
ATP6	Social media advertisements for prescription medicines are a bad idea.
ATP7	Prescription medicine ads provide useful information to consumers.
Attitude toward DTCA of non-prescription medicine	(1 = strongly disagree; 7 = strongly agree)
ATNP1	Advertising non-prescription medicines directly to consumers benefits consumers.
ATNP2	Printed media like newspapers, magazines, and billboard advertisements for non-prescription medicines are a bad idea.
ATNP3	non-prescription medicines should not be advertised directly to consumers.
ATNP4	I think Broadcast media like TV, and radio commercials for non-prescription medicines are a bad idea.
ATNP5	I like to see advertisements about non-prescription medicines.
ATNP6	Social media advertisements for non-prescription medicines are a bad idea.
ATNP7	Non-prescription medicine ads provide useful information to consumers.
Consumer behavioural intention	(1= extremely unlikely; 7 = extremely likely)
CBI1	How likely would you be to talk to your doctor in the future about a health condition that was discussed in an advertisement for a particular medicine?
CBI2	How likely would you be to talk to your doctor in the future about a particular medicine you saw or heard in an advertisement?
CBI3	How likely would you be to go to other media sources in the future to seek more information about a health condition or medicine discussed in an advertisement?
CBI4	How likely would you be to talk with friends or relatives in the future about a health condition or medicine discussed
Propensity to trust	(1 = strongly disagree; 7 = strongly agree)
PT1	It is easy for me to trust a person/thing.
PT2	I tend to trust a person/thing, even though I have little knowledge of it.
PT3	I tend to trust a person/thing, even though I have little knowledge of it.
PT4	Most companies genuinely care about their customers.
PT5	I feel that people are generally trustworthy
PT6	I feel that people will not take advantage of me
PT7	I usually trust the others

4. DATA ANALYSIS

4.1 Chapter Outline

This chapter discusses the data analysis process used in the current study, which involves testing hypotheses based on the results of a research questionnaire issued to a selected sample. Section 4.2 discussed the sample demographics, including sample size and response rate. The testing method and verifying outputs were covered in the following sections, where section 4.3 detailed the normality test, section 4.4 highlighted a construct validity, and section 4.5 discussed assessing the reliability and face validity. The concluding parts discussed correlation analysis in Section 4.6, the regression analysis in Section 4.7, and the hypothesis testing in Section 4.8.

4.2 Sample Demographics

This section includes specific information on the demographic characteristics of customers (participants) in respect of the following factors: Gender, Marital Status, Age, educational level, and Ad exposure. This section analyzes respondents' answers in light of these demographics in order to give a thorough insight into the sample, which was a very diverse demographic.

4.2.1 Gender

Gender
217 responses

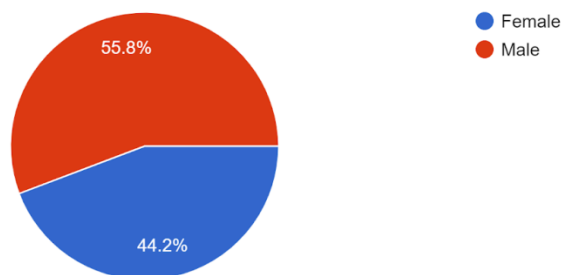


Figure 4.1: Gender

The current study included a total of 217 participants, with males contributing 55.8 % (n=121) and females contributing 44.2 % (n=96) as shown in table 4.1.

Table 4.1: Gender

	Frequency	Percent
Female	96	44.2
Male	121	55.8
Total	217	100

4.2.2 Marital status

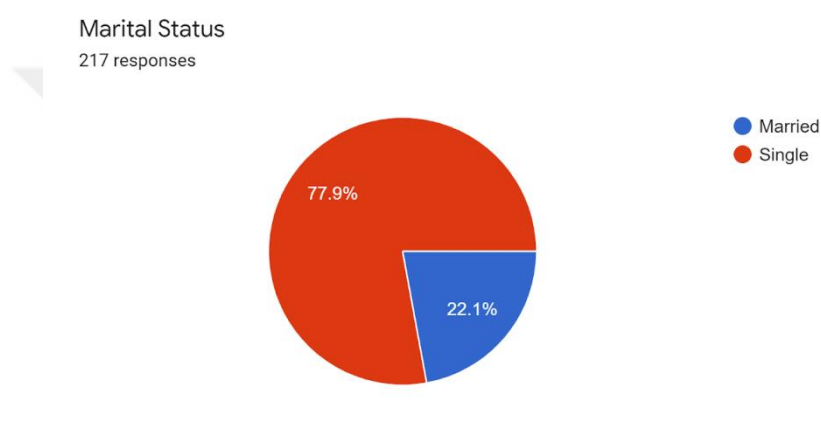


Figure 4.2: Marital Status.

According to marital status, approximately 77.9% (n=169) of the survey sample were single, while 22.1% (n=48) were married, as seen in table 4.2.

Table 4.2: Marital Status

	Frequency	Percent
Married	48	22.1
Single	169	77.9
Total	217	100

4.2.3 Age

Age

217 responses

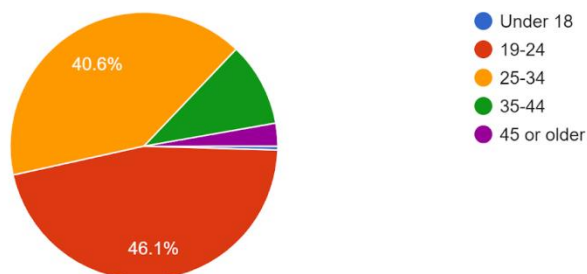


Figure 4.3: Age

One respondent was under 18 years old. With 46.1% (n=100), the 19-24 age group had a substantial majority, followed by the 25-34 age group with 40.6% (n=88), the 35-44 age group with 10.1% (n=22), and the 45 or older age group with 2.8%(n=6) (see table 4.3).

Table 4.3: Age

Age Group	Frequency	Percent
19-24	100	46.1
25-34	88	40.6
35-44	22	10.1
45 or older	6	2.8
Under 18	1	0.5
Total	217	100

4.2.4 Educational level

Highest level of formal education

217 responses

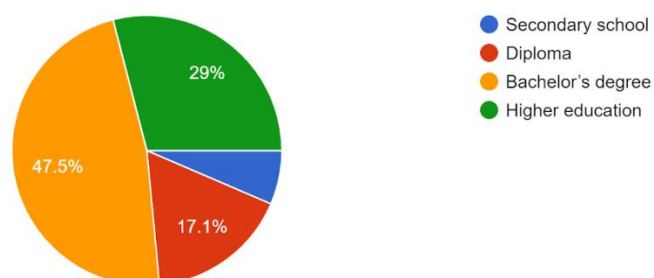


Figure 4.4: Educational Level.

Table 4.4 shows, approximately 29 % (n=63) of participants held a higher degree of education. The majority of respondents 47.5 % (n=103) were bachelor's degree holders, but nearly as many (17.1%, n=37) held a diploma degree. Secondary school graduates composed 6.5% of the sample (n=14).

Table 4.4: Educational Level

	Frequency	Percent
Secondary School	14	6.5
Diploma	37	17.1
Bachelor's Degree	103	47.5
Higher Education	63	29
Total	217	100

4.2.5 Ad exposure

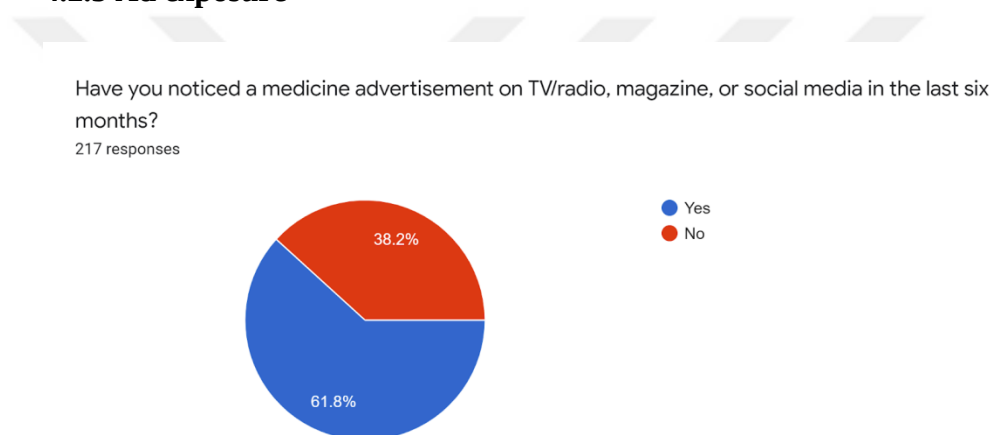


Figure 4.5: Ad Exposure.

The following question assessed exposure to pharmaceutical advertising: "Have you noticed a medicine advertisement on TV/radio, magazine, or social media in the last six months?" Yes or no, respondents responded to this question. When the participant responds "yes" the questionnaire continues to the next section. When a participant responds "no," the questionnaire is submitted immediately by the participant. Around 61.8% (n=102) answered Yes, while 38.2% (n=83) responded No, as shown in table 4.5.

Table 4.5: Ad Exposure

	Frequency	Percent
Yes	134	61.8
No	83	38.2
Total	217	100

4.3 Normality

Normality tests are statistical procedures used to determine if research variables are normally distributed. Before analyzing reliability, it is necessary to test the data; thus, a normality test was performed on the data to check that it is normally distributed. The skewness and kurtosis test value for each variable is listed in Table 4-6. Hair et al. (2017) asserted that skewness values beyond the range of +1 to -1 are significantly skewed.

The skewness and Kurtosis values in SPSS can be used to verify normality.



Table 4.6: Skewness and Kurtosis for Normality Test

Items	Skewness	Std. Error of Skewness	Kurtosis	Std. Error of Kurtosis
PT1	-.414	.209	-.809	.416
PT2	-.331	.209	-.905	.416
PT3	-.390	.209	-.672	.416
PT4	-.603	.209	-.209	.416
PT5	-.290	.209	-.805	.416
PT6	.445	.209	-.345	.416
PT7	-.551	.209	-.430	.416
ATP1	-.356	.209	-.814	.416
ATP2	-.293	.209	-.966	.416
ATP3	-.253	.209	-.560	.416
ATP4	-.115	.209	-.678	.416
ATP5	-.138	.209	-.938	.416
ATP6	.337	.209	-.890	.416
ATP7	-.531	.209	-.308	.416
ATNP1	-.485	.209	-.601	.416
ATNP2	-.040	.209	-1.189	.416
ATNP3	-.399	.209	-.600	.416
ATNP4	-.360	.209	-.802	.416
ATNP5	-.408	.209	-.628	.416
ATNP6	-.150	.209	-1.113	.416
ATNP7	-.559	.209	-.267	.416
CBI1	-.882	.209	.283	.416
CBI2	-.859	.209	.417	.416
CBI3	-.655	.209	-.009	.416
CBI4	-.484	.209	.498	.416

(*N Valid = 134, Missing = 83*)

As seen in Table 4.6, the results reveal that there is no normality problem because the kurtosis and skewness values are within the required range. As a result, it is reasonable to conclude that the data set of all variables is well-represented by a normal distribution.

4.4 Construct Validity

The initial stage of factor analysis is to examine if the data contains the necessary features. We employed The KMO and the Bartlett Test. Factor analysis is not suitable for data with little or no relationship between the variables. Kaiser-Meyer-Olkin (KMO) and Bartlett's tests of sphericity were

utilized to analyze the data's appropriateness for factor analysis. Table 4.7 summarizes the results.

KMO values range between 0 and 1, with a value around 0 suggesting that the sum of correlation coefficients is greater than the total of correlations. A KMO result close to 1 indicates that correlation structures are generally compact and that quantitative study produces identifiable and reliable components. Nevertheless, while a KMO measure of 0.6 or over is considered acceptable, a value compared with fewer than 0.6 suggests inadequate testing and reveals pervasive relationships that make factor analysis problematic (Osborne, Costello, & Kellow; 2008).

Table 4.7: Factor Analysis- KMO test result

Value	Status - Result
Between 0.00 to 0.49	Unacceptable
Between 0.50 to 0.59	Miserable
Between 0.60 to 0.69	Mediocre
Between 0.70 to 0.79	Middling
Between 0.80 to 0.89	Meritorious
Between 0.90 to 1.00	Marvellous

4.4.1 Factor Analysis (KMO) for variables

Table 4.8: KMO Test result for Consumer attitude toward DTCA of prescription medicine

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.634
Bartlett's Test of Sphericity	Approx. Chi-Square	358.198
	df	21
	Sig.	<.001

The KMO for consumer attitude toward DTCA of prescription medicine in this study is 0.634, as seen in the previous table. This suggests that our sample values are both mediocre and acceptable.

Table 4.9: KMO Test result for Consumer attitude toward DTCA of non-prescription medicine

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.687
Bartlett's Test of Sphericity	Approx. Chi-Square	370.994
	df	21
	Sig.	<.001

The KMO for Consumer attitude toward DTCA of non-prescription medicine in this research is 0.687, as indicated in the above table. This shows that our sample values are both mediocre and acceptable.

Table 4.10: KMO Test result for propensity to trust

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.894
Bartlett's Test of Sphericity	Approx. Chi-Square	413.841
	df	21
	Sig.	<.001

The KMO for propensity to trust as a moderator variable in this research is 0.894, as shown in the previous table. This shows that our sample values are middling which is acceptable.

Table 4.11: KMO Test result for consumer behavioral intention

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.659
Bartlett's Test of Sphericity	Approx. Chi-Square	172.542
	df	6
	Sig.	<.001

KMO for the dependent variables (Consumer behavioural intention) in this study is 0.659, as indicated in the previous table. This implies that our sample values are both mediocre and acceptable.

Table 4.12 below shows the factor loading of each scale item within variables rated equal or greater than 0.544. We discarded items that were less than 0.5 (ATP5, ATNP5, and ATNP7).

Table 4.12: Factor loading

Variables	Scale items	Loadings
Attitude toward DTCA of prescription medicine	(1 = strongly disagree; 7 = strongly agree)	
ATP1	Advertising prescription medicines directly to consumers benefits consumers.	.806
ATP2	Printed media like newspapers, magazines, and billboard advertisements for prescription medicines are a bad idea.	.757
ATP3	Prescription medicines should not be advertised directly to consumers.	.595
ATP4	I think Broadcast media like TV, and radio commercials for prescription medicines are a bad idea.	.544
ATP5	I like to see advertisements about prescription medicines.	.427
ATP6	Social media advertisements for prescription medicines are a bad idea.	.572
ATP7	Prescription medicine ads provide useful information to consumers.	.687
Attitude toward DTCA of non-prescription medicine	(1 = strongly disagree; 7 = strongly agree)	
ATNP1	Advertising non-prescription medicines directly to consumers benefits consumers.	.552
ATNP2	Printed media like newspapers, magazines, and billboard advertisements for non-prescription medicines are a bad idea.	.814
ATNP3	non-prescription medicines should not be advertised directly to consumers.	.808
ATNP4	I think Broadcast media like TV, and radio commercials for non-prescription medicines are a bad idea.	.763
ATNP5	I like to see advertisements about non-prescription medicines.	.287
ATNP6	Social media advertisements for non-prescription medicines are a bad idea.	.598
ATNP7	Non-prescription medicine ads provide useful information to consumers.	.470
Consumer behavioral intention	(1= extremely unlikely; 7 = extremely likely)	
CBI1	How likely would you be to talk to your doctor in the future about a health condition that was discussed in an advertisement for a particular medicine?	.790
CBI2	How likely would you be to talk to your doctor in the future about a particular medicine you saw or heard in an advertisement?	.861
CBI3	How likely would you be to go to other media sources in the future to seek more information about a health condition or medicine discussed in an advertisement?	.773
CBI4	How likely would you be to talk with friends or relatives in the future about a health condition or medicine discussed	.630
Propensity to trust	(1 = strongly disagree; 7 = strongly agree)	
PT1	It is easy for me to trust a person/thing.	.859
PT2	I tend to trust a person/thing, even though I have little knowledge of it.	.784
PT3	I tend to trust a person/thing, even though I have little knowledge of it.	.680
PT4	Most companies genuinely care about their customers.	.698
PT5	I feel that people are generally trustworthy	.811
PT6	I feel that people will not take advantage of me	.536
PT7	I usually trust the others	.853

4.5 Reliability

The instrument's reliability in the study was evaluated by examining the questionnaire's internal consistency, which was determined using Cronbach's alpha; values of more than 0.70 were considered appropriate, whereas values of less than 0.7 were considered questionable (Tavakol & Dennick, 2011). To

increase reliability, the questionnaire is designed using plain English, and any duplicate questions and elements identified during the pilot trial as reducing internal consistency are eliminated. Additionally, negative inquiries were avoided.

4.5.1 Reliability test

The questionnaire's reliability is shown in Table 4.13. The term "reliability" refers to the extent to which a survey or even other tool delivers accurate findings when performed (Bonett & Wright, 2015). Cronbach's alpha, a method invented by Cronbach in 1951, was used to determine the survey's internal consistency in this research.

The questionnaire's various items were classified into four separate constructs that each measured the same variable. The items in the questionnaire were classified into the following components based on the theoretical framework:

1. Consumer attitude toward DTCA of prescription medicine
2. Consumer attitude toward DTCA of non-prescription medicine
3. Consumer behavioural intention
4. Propensity to trust

Six items were used to test the construct measuring consumer attitude toward DTCA prescription medicine, which achieved a Cronbach's alpha value of 0.757. Another 5 items were used to test the research construct evaluating consumer attitude toward DTCA of non-prescription medicine, and Cronbach's alpha value was achieved of 0.768. Consumer behavioural intention and propensity to trust were tested using 4 and 7 items, respectively, with Cronbach's alpha values of 0.766 and 0.86 for each.

According to Taris (2002), a value of 0.90 is regarded as excellent, a value higher than 0.8 is deemed good, and a value larger than 0.7 is considered acceptable. Matkar (2012) considers values less than 0.7 to be questionable, and values less than 0.5 to be unacceptable.

Table 4.13: Reliability Statistics

Variable	Cronbach's Alpha	N of Items
Consumer Attitude Toward DTCA of Prescription Medicine	.757	6
Consumer Attitude Toward DTCA of non-prescription Medicine	.768	5
Consumer Behavioural Intention	.766	4
Propensity to trust	.86	7
Overall Items	.891	22

Cronbach's alpha was used to determine the reliability of items and it is 89.1%, which is outstanding. This shows that the items included in this study are valid and acceptable (see Table 4.13).

4.6 Correlation Analysis

Pearson correlation test is used to determine if these variables are related to one another and whether their combination is valid or not. The thesis's primary variables include consumer attitude toward DTCA of prescription and OTC medicine, while other variables include consumer behavioural intention and propensity to trust. Correlation coefficients vary between -1.00 to +1.00. Table 2 shows the Pearson correlation, Mean, standard deviations.

Table 4.14: Descriptive Statistics, Correlations

Variables	Mean	SD	N	1	2	3	4
1 Consumer attitude toward DTCA of prescription medicine	4.3172	1.11042	134	1			
2 Consumer behavioural intention	5.0019	1.07190	134	.541**	1		
3 Consumer attitude toward DTCA of non-prescription medicine	4.4552	1.14875	134	.810**	.567**	1	
4 Propensity to trust	4.0853	1.16337	134	.427**	.398**	.234**	1

** . Correlation is significant at the 0.01 level (2-tailed).

If we check the previous table, we see that all of our values are positive in relation to one another. This indicates that all of our variables positively correlated, forming a majority for developing a new hypothesis. Discovering a positive association between variables results in a novel and stronger concept that evolves into a hypothesis or, in other terms, becomes the subject of study.

Table 4.15: Correlation Interpretations

Value	Status
Between 0.01 to 0.25	Weak but positive correlation
Between 0.25 to 0.50	Moderate correlation
Between 0.50 to 0.75	Strong positive correlation
Equal to 1	Perfect positive correlation
Equal to 0	No correlation
Between -0.01 to -0.25	Weak negative correlation
Between -0.25 to -0.50	Moderate negative correlation
Between -0.50 to -0.75	Strong negative correlation
Between -0.75 to -1.00	Perfect negative correlation

The correlation values range from -1.00 to +1.00.

4.7 Regression Analysis

In support of hypotheses 1 and 3 consumer attitudes toward DTCA of prescription medicine was shown to be positively related to consumer behavioural intention. Consumer attitude toward DTCA of prescription medicine and trust propensity significantly predict consumer behavioural intention ($R = 0.587$, $R^2 = 0.345$, $*p.001$). Table 4.16 shows R Square value 0.345 which is considered moderate that explained 34.5 % variance in consumer behavioural intention.

Table 4.16: Hierarchical Regression Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.587 ^a	.345	.330	.87748
Predictors: (Constant), ATP x Propensity to trust, Propensity to trust, ATP: Consumer attitude toward DTCA of prescription medicine. DTCA: Direct to consumer advertising.				

The significant value in the table below (ANOVA) is 0.001, which is less than 0.05, indicating that the regression analysis likewise supported the hypotheses of this study.

Table 4.17: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	52.716	3	17.572	22.822	<.001 ^b
	Residual	100.096	130	.770		
	Total	152.812	133			

Dependent Variable: Consumer behavioural intention
Predictors: (Constant), ATP x Propensity to trust, Propensity to trust, Consumer attitude toward DTCA of prescription medicine

Prior to evaluating our model, it is critical to integrate the problem of multicollinearity with the measured variable. To determine multicollinearity, the variance inflation factor (VIF) and tolerance values for the variables were assessed. Hair et al. (2017) proposed an average variance extraction value of 5 or below and a tolerance level of 0.2 or higher to address the collinearity problem (see table 4.18). The last step in evaluating the structural model is to examine the research hypotheses using coefficient analysis. The lower the p-value, the more significant the relationship (Hair et al., 2017). The direct relationship findings of the structural model are shown in Table 4.18. Consumer attitude toward DTCA of prescription medicine has a positive impact on our dependent variable but our findings indicate almost significant moderator impact at sig = 0.057 but we consider the interaction between consumer attitude toward DTCA of prescription medicine and propensity to trust as weak support of hypotheses 3. (See table 4.18)

Table 4.18: Coefficients^a

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.	Collinearity Statistics Tolerance	VIF
1	(Constant)	2.347	.343		6.844	<.001		
	Consumer attitude toward DTCA of prescription medicine	.446	.076	.462	5.874	<.001	.816	1.226
	Propensity to trust	.192	.072	.208	2.652	.009	.817	1.223
	ATP x Propensity to trust	-.125	.065	-.137	-1.921	.057	.994	1.006

a. Dependent Variable: Consumer behavioural intention

In support of hypothesis 2, and 4 consumer attitudes toward DTCA of non-prescription medicine were shown to be positively related with consumer behavioural intention. Consumer attitude toward DTCA of non-prescription

medicine and trust propensity significantly predict consumer behavioural intention ($R = 0.679$, $R^2 = 0.461$, $*p.001$). Table 4.19 shows R Square value 0.345 which is considered moderate that explained the 46.1 % variance in consumer behavioural intention.

Table 4.19: Hierarchical Regression Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.679 ^a	.461	.449	.79586
Predictors: (Constant), ATNP x Propensity to trust, Consumer attitude toward DTCA of non-prescription medicine, Propensity to trust				

The significant value in the table below (ANOVA) is 0.001, which is less than 0.05, indicating that the regression analysis likewise supported the hypotheses of this study.

Table 4.20: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	70.471	3	23.490	37.086	<.001 ^b
	Residual	82.341	130	.633		
	Total	152.812	133			
Dependent Variable: Consumer behavioural intention						
Predictors: (Constant), ATNP x Propensity to trust, Consumer attitude toward DTCA of non-prescription medicine, Propensity to trust						

The direct relationship findings of the structural model are shown in Table 4.21. Consumer attitude toward DTCA of prescription medicine has a positive impact on our dependent variable but our findings indicate a significant moderator impact at $\text{sig} = .001$. We consider the interaction between consumer attitude toward DTCA of non-prescription medicine and propensity to trust as supported by hypothesis 4.

Table 4.21: Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients Beta	t	Sig.	Collinearity Statistics	
	B	Std. Error				Tolerance	VIF
1 (Constant)	1.749	.334		5.240	<.001		
Consumer attitude toward DTCA of non-prescription medicine	.478	.062	.512	7.728	<.001	.944	1.059
Propensity to trust	.289	.061	.313	4.697	<.001	.931	1.074
ATNP x Propensity to trust	-.240	.061	-.258	-3.971	<.001	.980	1.021
Dependent Variable: Consumer behavioural intention							

4.8 Hypotheses Testing

Hypothesis 1: Greater behavioural Intention of DTC advertising is associated with a more positive attitude towards DTC advertising of prescription medicine.

Based on table 4.14, the value of R is 0.541 and $\rho < 0.05$.

Based on table 4.16, $R^2 = 0.345$.

Based on table 4.17, $\rho < 0.05$.

Based on table 4.18, $\rho < 0.05$.

According to the above findings, that means there is a strong correlation between consumer attitude toward DTCA of prescription medicine and their behavioural intention which is considered a supported hypothesis.

Hypothesis 2: Greater behavioural Intention of DTC advertising is associated with a more positive attitude towards DTC advertising of Over-the-Counter (non-prescription) medicine.

Based on table 4.14, the value of R is 0.567 and $\rho < 0.05$.

Based on table 4.19, $R^2 = 0.461$.

Based on table 4.20, $\rho < 0.05$.

Based on table 4.21, $\rho < 0.05$.

According to the above findings, that means there is a strong correlation between consumer attitude toward DTCA of non-prescription medicine and their behavioural intention which is considered as a supported hypothesis.

Hypothesis 3: Propensity to trust will have a moderating effect so that the relationship between consumer attitude toward DTC advertising of prescription medicine and their behavioral intention about an advertised medicine will be stronger among those with a low propensity to trust.

Based on table 4.14, the value of R is 0.234 and $\rho < 0.05$.

Based on table 4.16, $R^2 = 0.345$.

Based on table 4.17, $\rho < 0.05$.

Based on table 4.18, $\text{sig} = 0.057$.

According to the above findings, that's means there is a moderating impact on the relationship between consumer attitude toward DTCA of prescription medicine and their behavioural intention but almost significant at 0.057 which is considered a weakly supported hypothesis.

Hypothesis 4: Propensity to trust will have a moderating effect so that the relationship between consumer attitude toward DTC advertising of non-prescription medicine and their behavioral intention about an advertised medicine will be stronger among those with a low propensity to trust.

Based on table 4.14, the value of R is 0.234 and $\rho < 0.05$.

Based on table 4.19, $R^2 = 0.461$.

Based on table 4.20, $\rho < 0.05$.

Based on table 4.21, $\rho < 0.05$.

According to the above findings, that means there is a moderating impact on the relationship between consumer attitude toward DTCA of prescription medicine and their behavioural intention which is considered as a supported hypothesis.

4.9 Hypothesis Test Summary

Table 4.22: Hypotheses Test Summary

H	Hypothesis	Result
H1	Greater behavioural Intention of DTC advertising is associated with a more positive attitude towards DTC advertising of prescription medicine.	Supported
H2	Greater behavioural Intention of DTC advertising is associated with a more positive attitude towards DTC advertising of Over-the-Counter (non-prescription) medicine.	Supported
H3	Propensity to trust will have a moderating effect so that the relationship between consumer attitude toward DTC advertising of prescription medicine and their behavioral intention about an advertised medicine will be stronger among those with a low propensity to trust.	Weakly Supported
H4	Propensity to trust will have a moderating effect so that the relationship between consumer attitude toward DTC advertising of non-prescription medicine and their behavioral intention about an advertised medicine will be stronger among those with a low propensity to trust.	Supported

5. CONCLUSION AND RECOMMENDATION

5.1 Introduction

This empirical study was conducted to determine the impact of consumer attitude toward DTC pharmaceutical advertising on their behavioural intention and the moderating role of propensity to trust in Istanbul, Turkey. This chapter of this research discusses the study's most significant results and conclusions, taking into account the statistical analysis of the research sample's responses and their significance to the offered to further the study's scientific approach.

5.2 Conclusion and Discussion

In general, the findings of this study indicated a positive relationship between consumer attitude toward DTC pharmaceutical advertising and consumer behavioural intention; likewise, the propensity to trust interacted with consumer attitude toward direct-to-consumer pharmaceutical advertising in predicting behavioural intention. Thus, a decreased consumer propensity to trust results in a stronger positive correlation between consumer attitudes toward DTC advertising and their behavioural intention. Given DTCA's critical role as a source of health-information, its implications for consumer engagement in healthcare decision-making require careful consideration. While the DTCA-induced doctor-patient discussion continues to be an argumentative issue, it is important highlighting that genuine empowerment of the consumer may be reached by increasing participation by individuals who do not consider themselves to be health- and medicine-aware. By considering DTC advertising as a type of public communication, in this paper, we add a significant aspect to the research on attitudes toward direct-to-consumer advertising. The research discovered a situational condition in which attitudes toward pharmaceutical advertising had an effect on customer behavioural intention.

Only when consumers' propensity to trust was decreased was a favourable attitude toward DTC advertising related to an increase in behavioural intention. Regarding those with a high propensity to trust, positive attitudes toward DTC pharmaceutical advertising had no noticeable impact on their behavioural intention to discuss medication with a physician or to seek further information sources about medication. If DTCA extends the participation gap between individuals with a high propensity to trust and those with a low propensity to trust, it is critical to identify ways to cover the gaps. More academic research is needed to determine how much and which sorts of content are received by various categories of consumers.

Pharmaceutical industries that see DTCA as a marketing technique must understand the important aspect of consumer attitudes towards DTCA in general. Given the fact that several non-advertising aspects may potentially influence a consumer's perception of DTC advertising, it will be critical to classify favourable attitudes of DTC advertising. Critically, since consumers' behavioural intentions are impacted by their attitude toward DTCA as well as their propensity to trust the advertised medicine, advertisers should put more emphasis on content building. Many broadcast advertisements are vague in nature, missing adequate information about the products' advantages and disadvantages.

5.3 Limitation And Future Study Suggestions

This research evaluates solely the chance of physicians being inquired about an advertised medicine. It is conceivable for individuals with a low propensity for trust to do so. More personal sources may act as a mediator between consumer attitudes toward DTCA and behavioural intention. The study's capacity to consider other ways to communicate is a limitation.

This research is cross-sectional in design. Although the researchers adjusted for important confounding variables as an example of curiosity in health-related information and demography, the substantial correlation between consumers' attitudes toward DTC advertising and behavioural intent establishes a statistical correlation. Future research would benefit from a longitudinal strategy using a

panel, in addition to a controlled laboratory trial. A better matched nationally representative sample will improve the findings' generalizability.

The role of propensity to trust may vary, this model was constructed to represent responses to DTCA as a whole, without reference to any particular health condition or advertising. The innovative components of an advertisement, the type of promoted health issue, as well as the individual's personal awareness of the health condition, all have the potential to influence which criteria are weighted more highly when establishing trust judgments regarding DTCA and how that trust is applied to healthcare decision-making.

Additional studies are needed to investigate the model's variety when applied to a specific advertisement instead of a classification, various health issues classified as lifestyle-related disorders against life-threatening, acute versus chronic, non-prescribed against prescribed medication, and even a general populace health crisis instead of a healthcare insurance item. The current study illustrates the need of examining the effect of division criteria including age (Ball et al. 2011), racial group origins (Huh et al. 2012), as well as psychological variables. Given the model that's been tested was developed and validated at a national scale, the qualitative approach will be beneficial in clarifying the structure of the variable correlations on an individualized basis. At a more fundamental level, further research is required to elucidate the mediating processes and regulating variables that underpin direct-to-consumer advertising exposure and reaction behaviours. There is still a need for frameworks with a theoretical basis that incorporate the causes and consequences of consumer reaction for various types of advertisement related to health, such as nutrition supplements and over-the-counter (OTC) advertising.

5.4 Practical Implications

Our findings suggest that consumers' propensity to trust may influence their reactions to advertisements. On the one side, trust has the help to strengthen attitudes and behavioural intentions. On the other side, consumers may demand additional information about the treatment as a result of or despite decreasing advertisement trust. This indicates, theoretically, that trust must actually be regarded as a complex element capable of performing independent of other

persuasive results. The results might be construed as showing that a lack of trust can also serve as a motivator for action. While there are other cases in which trust or a related measure contradicted other advertisement responses (Wood et al. 2008), the leading hypothesis does not effectively explain this apparent contradiction and the moderating aspects. We assume that the significance of the health condition or medicine may be significant in this situation, but our quantitative results require more investigation.



REFERENCES

- Ball, J. G., Manika, D., & Stout, P.** (2016). Causes and consequences of trust in direct-to-consumer prescription drug advertising. *International Journal of Advertising*, 35(2), pp. 216-247.
- Beales, Howard, Mazis, Michael B., Salop, Steven C., Staelin, Richard** (1981), "Consumer Search and Public Policy", *Journal of Consumer Research*, Vol. 8 (June), Pg 11-22.
- Bonett, D. G., & Wright, T. A.** (2015). Cronbach's alpha reliability: Interval estimation, hypothesis testing, and sample size planning. *Journal of organizational behavior*, 36(1), 3-15.
- Calfee JE, Ringold DJ.** The 70% Majority: Enduring Consumer Beliefs about Advertising. *Journal of Public Policy & Marketing*. (1994);13(2):228-238.
- Chandra and Cheek** (2001). The Emerging International Health Care Market: The Impact of Technology and Innovation. *Journal of Health Management*; 3 (1), 43 - 63.
- Chatterjee, S. C., & Chaudhuri, A.** (2005). Are trusted brands important? *Marketing Management Journal*, 15(1), 1-16.
- Chen, R., Sharma, S. K., & Rao, H. R.** (2016). Members' site use continuance on Facebook: Examining the role of relational capital. *Decision Support Systems*, 90(4), pp. 86–98.
- Collis, J., Hussey, R. & Hussey, J.** (2003) *Business research: a practical guide to undergraduate and postgraduate students*, 2nd edit., Basingstoke: Palgrave Macmillan.
- Connors, A.L.** (2009). "Big Bad Pharma: An ethical analysis of physician-directed and consumer-directed marketing tactics." *Albany Law Review*, 73(1), 243.
- Costa Jr, P. T., & McCrae, R. R.** (2008). *The Revised Neo Personality Inventory (neo-pi-r)*. Sage Publications, Inc..
- Czaja, R., & Blair, J.** (2005). Questionnaire design: Writing the questions. *Designing Surveys: A Guide to Discussions*, 51-70.
- David Gefen**, (2000), E-commerce: the role of familiarity and trust, *Omega*, 28 (6), 725-737.
- DeLorme, D. E., Huh, J., Reid, L. N., & An, S.** (2010). The state of public research on over-the-counter drug advertising. *International Journal of Pharmaceutical and Healthcare Marketing*.4(3), 208–231.
- DeLorme, D. E., Huh, J., Reid, L. N., & An, S.** (2011). Promoting Pharmaceuticals and Dietary Supplements to US Consumers. *The Routledge handbook of health communication*, 268.
- Deshpande, A. D., Menon, A. M., Perri, M., & Zinkhan, G. M.** (2004). Direct-to-consumer advertising and its utility in health care decision making: A consumer perspective. *Journal of Health Communication*, 9(6), 499–513.

- Falcone, R., Singh, M., & Tan, Y. H.** (Eds.). (2001). Trust in cyber-societies: integrating the human and artificial perspectives (Vol. 2246). Springer Science & Business Media.
- Findlay, S.** (1999). Prescription Drugs and Mass Media Advertising. N I H C M Foundation Research Brief, 1-8.
- Fine, Allan** (1999), "Increased Direct-to-Consumer Advertising Driving Pharmaceutical Costs, Trends", Executive Solutions for Healthcare Management, Vol. 2(1), Pg 2-3.
- Food and Drug Administration FDA** (1995), "Direct-to-Consumer Promotion", FDA Public Hearing, Vol. 2, Thursday, October 19, Silver Spring, Maryland.
- Fowler Jr, F. J.** (2013). Survey research methods. Sage publications.
- Gefen, D., Benbasat, I., & Pavlou, P.** (2008). A research agenda for trust in online environments. *Journal of Management Information Systems*, 24(4), pp. 275-286.
- Gellad, Z.F., & Lyles, K.W.** (2007). "Direct-to-Consumer Advertising for Pharmaceuticals." *The American Journal of Medicine*, 120(6), 475-480.
- Gill, H., K. Boies, J. E. Finegan, and J. McNally.** 2005. Antecedents of trust: Establishing a boundary condition for the relation between propensity to trust and intention to trust. *Journal of Business and Psychology* 19 (3): 287–302. DOI: 10.1007/s10869-004-2229-8.
- Graziano, W. G., & Tobin, R. M.** (2002). Agreeableness: Dimension of personality or social desirability artifact? *Journal of Personality*, 70(5), 695–728.
- Hair Jr., J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M.** (2017). PLS-SEM and CB-SEM: updated guidelines on which method to use. *International Journal of Multivariate Data Analysis*, 1(2), 107.
- Herzenstein, M., Misra, S., & Posavac, S.** (2005). How consumers' attitudes toward direct-to-consumer advertising of prescription drugs influence ad effectiveness, and consumer and physician behavior. *Marketing Letters*, 15(4), 201–212.
- Huff L., Kelley L.,** (2003), "Levels of Organizational Trust in Individualist versus Collectivist Societies: A Seven-Nation Study", *Organization Science*, 14(1), pp. 81-90
- James, W. L. & Kover, A.** (1992). Do overall attitudes toward advertising affect involvement with specific advertisements? *Journal of Advertising Research*, 32(5), 78–83.
- Johnson, J. A.** (2005). Ascertaining the validity of individual protocols from web-based personality inventories. *Journal of research in personality*, 39(1), pp. 103-129.
- Kannan, V. R., & Tan, K. C.** (2005). Just in time, total quality management, and supply chain management: understanding their linkages and impact on business performance. *Omega*, 33(2), 153-162.
- Kravitz, R. L.** (2000). Direct-to-consumer advertising of prescription drugs. *West J Med*, 173, 221-222.
- Li, F., & Miniard, P. W.** (2006). On the potential for advertising to facilitate trust in the advertised brand. *Journal of Advertising*, 35(4), 101-112.
- Lutz, R. J.** (1985). Affective and cognitive antecedents of attitude toward the ad: A conceptual framework. In L. Alwitt & A. Mitchell (Eds.),

- Psychological processes and advertising effects: Theory, research, and applications (pp. 45–63). Hillsdale, NJ: Lawrence Erlbaum Associates.
- MacKenzie, S. B. & Lutz, R. J.** (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing*, 53(2), 48–65.
- Mackey, T. K., Cuomo, R. E., & Liang, B. A.** (2015). The rise of digital direct-to-consumer advertising?: Comparison of direct-to-consumer advertising expenditure trends from publicly available data sources and global policy implications. *BMC health services research*, 15(1), 1-9.
- Mannetti, L., Pierro, A., Kruglanski, A., Taris, T., & Bezinovic, P.** (2002). A cross-cultural study of the Need for Cognitive Closure Scale: Comparing its structure in Croatia, Italy, USA, and The Netherlands. *British Journal of Social Psychology*, 41(1), 139-156.
- Marcinko, Tom** (1999), "What We've Learned From 11 Years of Strategic Studies: The DTC Revolution in Perspective", *Medical Marketing, and Media*, December 9.
- Marczyk, G. R., DeMatteo, D., & Festinger, D.** (2010). *Essentials of research design and methodology* (Vol. 2). John Wiley & Sons.
- Matkar, A.** (2012). Cronbach's alpha reliability coefficient for standard of customer services in Maharashtra state cooperative bank. *IUP Journal of Bank Management*, 11(3), 89.
- Matthew K. O. Lee & Efraim Turban** (2001) A Trust Model for Consumer Internet Shopping, *International Journal of Electronic Commerce*, 6(1), pp. 75-91.
- McKnight, D. H., & Chervany, N. L.** (2001). What trust means in e-commerce customer relationships: An interdisciplinary conceptual typology. *International journal of electronic commerce*, 6(2), pp. 35-59.
- McKnight, D. H., Cummings, L. L., & Chervany, N. L.** (1998). Initial trust formation in new organizational relationships. *The Academy of Management Review*, 23(3), 473–490.
- Mehta, A. & Purvis, S. C.** (1995). When attitudes toward advertising in general influence advertising success. Paper presented at the 1995 Annual Conference of the American Academy of Advertising, Waco, TX.
- Mehta, A.** (2000). Advertising attitudes and advertising effectiveness. *Journal of Advertising Research*, 40(3), 67–72.
- Merisavo, M., S. Kajalo, H. Karjalainen, V. Virtanen, S. Salmenkivi, M. Raulas, and M. Leppaniemi.** (2007). An empirical study of the drivers of consumer acceptance of mobile advertising *Journal of Interactive Advertising* 7(2), 41-50.
- Millar, Abi** (February 2018). "Defining OTC Drugs". *Pharma Technology Focus* (67). Retrieved 3 February 2018.
- Mintzes, B.** (2012). Advertising of prescription-only medicines to the public: does evidence of benefit counterbalance harm?. *Annual review of public health*, 33, 259-277.
- Moms, Louis A., Millstein, Lloyd G.** (1984), "Drug Advertising to Consumers: Effects of Formats for Magazine and Television Advertisements", *Food Drug Cosmetic Law Journal*, Vol. 39, Pg 497-503.

- Moorman, Christine, Matulich, Erika** (1993), "A Model of Consumers' Preventive Health Behaviors: The Role of Health Motivation and Health Ability", *Journal of Consumer Research*, Vol. 20(September), Pg 208-228.
- Morgan, S.G.** (2007). "Direct-to-consumer advertising and expenditure on prescription drugs: A comparison of experiences in the United States and Canada". *Open Medicine*, 1(1), 37-45.
- Morris, Louis A., Bnnberg, David, Klimberg, Ron, Rivera, Carole, Millstein, Lloyd G.** (1986), "The Attitudes of Consumer toward Direct Advertising of Prescription Drugs", *Public Health Reports*, Vol. 101(1), Pg 82-89.
- Morris, Louis A., Grossman, Ruth, Barkdoll, Gerald, Gordon, Evelyn, Chun, Misoon Y.**(1987), "Information Search Activities Among Elderly Prescription Drug User", *Journal of Health Care Marketing*, Vol. 7(4), Pg 5- 1 5.
- Muehling, D. D.** (1987). An investigation of factors underlying attitudes-toward-advertising- in-general. *Journal of Advertising*, 16(1), 32–40.
- Mutha, R. E., Shimpi, R. D., Gayakwad, P. S., & Gavit, A. J.** (2013). Herbal Drug Awareness and Relative Popularity in Jamner Area. *International Journal of Pharmacy and Biological Sciences*, 3(1), 387-391.
- Niederdeppe, J., Avery, R. J., Kellogg, M. D., & Mathios, A.** (2017). Mixed messages, mixed outcomes: exposure to direct-to-consumer advertising for statin drugs is associated with more frequent visits to fast-food restaurants and exercise. *Health communication*, 32(7), 845-856.
- Obermiller, C., and E. R. Spangenberg.** 1998. Development of a scale to measure consumer skepticism toward advertising. *Journal of Consumer Psychology* 7 (2):159–86.
- Okazaki, S., A. Katsukura, and M. Nishiyama.** (2007). How mobile advertising works: The role of trust in improving attitudes and recall. *Journal of Advertising Research*, 47 (2) 165-178.
- Pawle, J., & Cooper, P.** (2006). Measuring emotion—Lovemarks, the future beyond brands. *Journal of advertising research*, 46(1), 38-48.
- Perri, M. & Dickson, W. M.** (1987). Consumer and physician attitudes toward direct to consumer advertising. *Journal of Pharmaceutical Marketing and Management*, 2(1), 3–25.
- Peyrot, Mark, Alperstein, Nail M., Van Doren, Doris, Poli, Laurence G** (1998), "Direct-to-Consumer Ads Can Influence Behavior", *Marketing Health Services*, Vol.18(2), Pg 26-32.
- Prevention Magazine** (1999), "Assessing Consumer Reaction to Direct-to-Consumer Advertising", *Prevention Magazine*, August.
- Rajani, H. C** (2012). A Study to Explore Scope of Direct to Consumer Advertising (DTCA) of Prescription Drugs in India. *International Journal of Marketing and Human Resource Management*, 3 (1), 19-28.
- Rollins, B. L., & Perri, M.** (2014). *Pharmaceutical marketing*. Jones & Bartlett Publishers.

- Samson, D., & Terziovski, M.** (1999). The relationship between total quality management practices and operational performance. *Journal of operations management*, 17(4), 393-409.
- Schivinski, B., & Dabrowski, D.** (2016). The effect of social media communication on consumer perceptions of brands. *Journal of Marketing Communications*, 22(2), 189-214.
- Sekaran, U., & Bougie, R.** (2009). *Research Methods for Business: A Skill Building Approach* (5th Ed.).
- Shimp, T. A., & Terence A. Shimp.** (2003). Advertising, promotion & supplemental aspects of integrated marketing communications.
- Singh, T. & Smith, D.** (2005). Direct-to-consumer prescription drug advertising: A study of consumer attitudes and behavioral intentions. *Journal of Consumer Marketing*, 22(7), 369–378.
- Singleton, R. A., Jr., Singleton, R. & Straits, B. C.** (2010). *Approaches to social research* (5th ed.). New York, NY: Oxford University Press.
- Smith, D.** (1998 May). We hold the keys and we know it. *Pharmaceutical executive DTC times supplement* (pp. 8–9).
- Soh, H., Reid, L. N., & Whitehill King, K.** (2009). Measuring trust in advertising: Development and validation of the ADTRUST Scale. *Journal of Advertising*, 38(2), 83–103.
- Stemthal, Bnan, Craig, C. Samuel** (1982), "A Framework for Analyzing Consumer Behavior*", *Consumer Behavior: An Information Processing Perspective*, New Jersey: Prentice-Hall Inc., Pg 56-77.
- Tavakol, M., & Dennick, R.** (2011). Making sense of Cronbach's alpha. *International journal of medical education*, 2, 53.
- The Henry J. Kaiser Family Foundation, Impact of Direct-to-Consumer Advertising on Prescription Drug Spending** (2003), <https://www.kff.org/wp-content/uploads/2003/06/6084-impact-of-direct-to-consumer-advertising-on-prescription-drug-spending-summary-of-findings.pdf>
- Ulsaner, E.M.** 2002. *The moral foundations of trust*. Cambridge, UK: Cambridge University Press.
- Ventola, C.L.** (2011). "Direct-to-consumer pharmaceutical advertising: therapeutic or toxic?" *Pharmacy and Therapeutics*, 36(10), 669-684.
- Wang, A.** (2006). When synergy in marketing communication online enhances audience response: The effects of varying advertising and product publicity messages. *Journal of Advertising Research* 46 (2) 160-170.
- WeintraubAustin E, Miller AC-R, Silva J, et al.** The Effects of Increased Cognitive Involvement on College Students' Interpretations of Magazine Advertisements for Alcohol. *Communication Research* (2002). 29(2):155-179.
- Weismann, et.al.** (2004). Physicians Report On Patient Encounters Involving Direct-To-Consumer Advertising. *Health Affairs Web Exclusive*, W (4), 219-233.
- West, J.** (2012). National Marketing Gone Unintentionally Global: Direct-To-Consumer Advertising of Pharmaceutical Products and the Internet. *The Journal of International Business & Law*, 10 (18), 405-430.
- Williams, J. R. & Hensel, P. J.** (1995). Direct-to-consumer advertising of prescription drugs. *Journal of Health Care Marketing*, 15(1), 35–41.

- Willig, C.** (2013). Introducing qualitative research in psychology. McGraw-hill Education (UK).
- Woloshin, et al.** (2001). Direct-to-consumer advertisements for prescription drugs: what are Americans being sold? The Lancet, 358, 1141- 1146.



APPENDIXES

Appendix 1: Research Questionnaires

Appendix 2: Ethic Approval Form



Appendix 1: Research Questionnaires

Consumer Attitude Toward Direct-To-Consumer Pharmaceutical Advertising
Impacts on Behavioral Intention and The Moderating Role of Propensity to
trust.

Istanbul – Turkey

Dear participant,

The purpose of the research we present to you for your answer is to investigate the implications of propensity to trust in direct-to-consumer pharmaceutical advertising. Your answers to the questions in the questionnaire form below will only be used in the scientific research carried out. The answers you give in the survey will not be shared with anyone else in any way, and your name will not be mentioned in the results, so we kindly ask you to answer this scientific study sincerely without hesitation. Thank you in advance for your contribution to the research.

Section 1: Demographic Factors

Please tell us a little bit about yourself:

1. Gender

☐ Male

☐ Female

2. Marital Status

☐ Married

☐ Single

3. Age

☐ Under 18

☐ 19-24

☐ 25-34

☐ 35-44

☐ 45 or older

4. Highest level of formal education

☐ Secondary school

☐ Diploma

☐ Bachelor's degree

☐ Higher education

4. Occupation

Short answer text.

5. Have you noticed a medicine advertisement on TV/radio, magazine, or social media in the last six months?

☐ Yes

☐ No

Section 2: Propensity to trust

While answering the questions below, select the degree you accept. There are 7 levels between strongly disagree and strongly agree.

1 2 3 4 5 6 7

Strongly disagree

Strongly agree

1	It is easy for me to trust a person/thing.	1	2	3	4	5	6	7
2	I tend to trust a person/thing, even though I have little knowledge of it.	1	2	3	4	5	6	7
3	I tend to trust a person/thing, even though I have little knowledge of it.	1	2	3	4	5	6	7
4	Most companies genuinely care about their customers.	1	2	3	4	5	6	7
5	I feel that people are generally trustworthy	1	2	3	4	5	6	7
6	I feel that people will not take advantage of me	1	2	3	4	5	6	7
7	I usually trust the others	1	2	3	4	5	6	7

Section 3: Your attitude toward direct-to-consumer prescription medicine advertising

While answering the questions below, select the degree you accept. There are 7 levels between strongly disagree and strongly agree.

1 2 3 4 5 6 7

Strongly disagree

Strongly agree

1	Advertising prescription medicines directly to consumers benefits consumers.	1	2	3	4	5	6	7
2	Printed media like newspapers, magazines, and billboards advertisements for prescription medicines are a bad idea.	1	2	3	4	5	6	7
3	Prescription medicines should not be advertised directly to consumers.	1	2	3	4	5	6	7
4	I think Broadcast media like TV, and radio commercials for prescription medicines are a bad idea.	1	2	3	4	5	6	7
5	I like to see advertisements about prescription medicines.	1	2	3	4	5	6	7
6	Prescription medicine ads provide useful information to consumers.	1	2	3	4	5	6	7
7	Social media advertisements for prescription medicines are a bad idea.	1	2	3	4	5	6	7

Section 4: Your attitude toward direct-to-consumer over-the-counter (non-prescription) medicine advertising

While answering the questions below, select the degree you accept. There are 7 levels between strongly disagree and strongly agree.

1 2 3 4 5 6 7

Strongly disagree

Strongly agree

1	Advertising non-prescription medicines directly to consumers benefits consumers.	1	2	3	4	5	6	7
2	Printed media like newspapers, magazines, and billboards advertisements for non-prescription medicines are a bad idea.	1	2	3	4	5	6	7
3	non-prescription medicines should not be advertised directly to consumers.	1	2	3	4	5	6	7
4	I think Broadcast media like TV, and radio commercials for non-prescription medicines are a bad idea.	1	2	3	4	5	6	7
5	I like to see advertisements about non-prescription medicines.	1	2	3	4	5	6	7
6	Social media advertisements for non-prescription medicines are a bad idea.	1	2	3	4	5	6	7
7	Non-prescription medicine ads provide useful information to consumers.	1	2	3	4	5	6	7

Section 5: Your behavioral intention

While answering the questions below, select the degree you accept. There are 7 levels between extremely unlikely and extremely likely.

1 2 3 4 5 6 7

Extremely unlikely

Extremely likely

1	How likely would you be to talk to your doctor in the future about a health condition that was discussed in an advertisement for a particular medicine?	1	2	3	4	5	6	7
2	How likely would you be to talk to your doctor in the future about a particular medicine you saw or heard in an advertisement?	1	2	3	4	5	6	7
3	How likely would you be to go to other media sources in the future to seek more information about a health condition or medicine discussed in an advertisement?	1	2	3	4	5	6	7
4	How likely would you be to talk with friends or relatives in the future about a health condition or medicine discussed	1	2	3	4	5	6	7

Thank you very much for your participation.

Appendix 2: Ethic Approval Form

Evrak Tarih ve Sayısı: 02.03.2022-42924



T.C.
İSTANBUL AYDIN ÜNİVERSİTESİ REKTÖRLÜĞÜ
Lisansüstü Eğitim Enstitüsü Müdürlüğü

Sayı : E-88083623-020-42924
Konu : Etik Onayı Hk.

02.03.2022

Sayın RAMEZ SALEM

Tez çalışmanızda kullanmak üzere yapmayı talep ettiğiniz anketiniz İstanbul Aydın Üniversitesi Etik Komisyonu'nun 28.02.2022 tarihli ve 2022/03 sayılı kararıyla uygun bulunmuştur. Bilgilerinize rica ederim.

Dr. Öğr. Üyesi Alper FİDAN
Müdür Yardımcısı

Bu belge, güvenli elektronik imza ile imzalanmıştır.

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