

Consumer Attitude Toward Direct-To-Consumer Pharmaceutical

Advertising Impacts on Behavioral Intention and The Moderating Role of

Propensity To Trust. Istanbul – Turkey

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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 medications. We investigated how consumers' attitudes toward pharmaceutical direct-to-consumer advertising (DTCA) impacted their behavioral intentions and if the correlation between attitude toward DTCA and the behavioral 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 plays a moderating role in determining how they react to prescription and non-prescription medicine advertisements.

Keywords: Propensity To Trust, Behavioral Intention, Direct To Consumer Advertising, Consumer Attitude.

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Introduction

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 (Chatterjee and Chaud-huri 2005; Soh, Reid, and King 2009), advertisement attitude (Austin et al. 2002; Soh, Reid, and King 2009), as well as the corresponding behavioral 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. Trust in the practice of direct-to-consumer advertising (DTCA) of prescription medications has also decreased (Kaiser Family Foundation 2008). Whether or not this dwindling trust affects DTCA responses is the point at issue. Trust in advertising claims and behavioral response may not always be consistent, 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 medication advertisements is less important for 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 behavioral 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-toconsumer advertising (DTCA) can be delivered through TV, radio, newspapers, and the Internet. Direct-to-consumer prescription drug advertising (DTCA) of prescription

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medications has dominated pharmaceutical advertising research since the late 1990s, with the majority of studies focusing on this type of advertising (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 investigating the effects of over-the-counter (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 behaviors 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 purpose of this study is to investigate the impact of consumer attitude toward direct-to-consumer pharmaceutical (prescription and non-prescription medications) advertising on behavioral intention considering the moderating role of propensity to trust from consumers ViewPoint in Istanbul, Turkey.

Literature Review

The Correlation Between Attitude Toward DTCA and Behavioral Intention

Attitudes toward advertising are a significant predictor of behavioral outcomes such as intention to buy, affecting attitudes towards a certain advertisement or brand (MacKenzie & Lutz, 1989;). Individuals who have a more positive attitude toward advertising, in general, are more likely to regard particular advertisements as appropriate, instructive, and enjoyable (Lutz, 1985). Individuals who have a positive attitude toward advertising, in general, devote considerable time viewing advertisements (James & Kover, 1992), recall more advertisements, and are more influenced by them (Mehta, 2000; Mehta and Purvis, 1995). Although the extent and assessment of attitude toward DTCA have varied greatly across the literature (Mehta, 2000), it is simply described as a "learned predisposition to respond consistently favorable or unfavorable to advertising in general" (MacKenzie &Lutz, 1989, pp. 53–54). It should be separated from one's attitude 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 reactions 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 behavioral intention, assessing an individual's actual impact of DTCA.Examining the relationship between worldwide attitudes toward DTCA and

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behavioral intention merits additional scholarly research, given DTCA's particular public health significance. Prior to the dramatic increase of DTCA, health care choices, particularly those regarding therapeutic alternatives, were made by physicians and were dominated by a one-way flow of information from physician to the patient (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 DTCA has added an altogether new dimension to the role of information-enabled customers (Smith, 1998). Consumers have become more educated and active about health care than ever before (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 a favorable attitude toward DTCA, the "shared decision-making process" is more likely to occur. As a consequence, consumer attitudes toward DTCA are significant determinants of their behavioral intentions.Herzenstein and colleagues (2005) revealed that consumers' attitude toward DTCA was a significant predictor of their tendency to inquire about promoted medications with their physicians. Although the studies used slightly multiple measures of consumer attitudes toward DTCA, the findings generally indicate that consumers with more positive attitudes toward the promoted medicine were more likely to seek further information and consult with their physicians about it. 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 a positive attitude toward DTCA, in general, would view particular commercials as more agreeable and helpful, resulting in a greater impact on behavioral intention. The following hypotheses are provided about the major impact of attitude toward DTCA:

Hypothesis 1: Greater behavioral Intention of DTCA is associated with a more positive attitude towards DTCA of prescription medicine.

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

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More significantly, this research aims at a contingency circumstance in which the impact of attitude toward DTCA varies. The section that follows discusses the role of consumers' propensity to trust in the relationship between consumer's attitude toward DTCA and their behavioral intention.

Propensity To Trust In Literature

One facet of personality, demonstrating a trustworthy attitude in unexpected situations, can influence the course of action taken when confronted with risk (Gefen, 2000; McKnight, Cummings, & Chervany, 1998). 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 behavioral intent. Propensity to trust is a general, not a specific situation, desire to show trust in humanity and have a willingness to trust attitude toward others (McKnight et al., 1998). McKnight depicted propensity to trust through two sub-constructs: faith in humanity and a trusting attitude. Faith in humanity presupposes that humans are generally upright, well-intentioned, and dependable. Individuals who have high faith in humanity are less judgmental and critical of others and are therefore more accepting of their faults (McKnight et al., 1998). A trusting stance implies that, despite one's beliefs about people's basic character, one considers that dealing with people as if they are wellintentioned 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; McKnight & Chervany, 2001). As the research indicates consumers with a low propensity to trust are more likely to adopt cautious or even negative attitudes when faced with unclear situations (Falcone et al., 2001; Graziano & Tobin, 2002), even when they lack explicit reasons (Costa & MacCrae, 1992; Johnson, 2005). This propensity dampens their excitement and results in a reluctance to attempt new things. In comparison, consumers with a great propensity to trust, regardless of the risks, are more positive and receptive of things at first glance (Graziano & Tobin, 2002). Additionally, trust propensity reflects how much trust an individual has in another side when they lack knowledge (Gill et al. 2005). Despite the fact that consumers have a tendency to distrust advertisements (Obermiller and Spangenberg

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1998).In the context of DTCA, we can hypothesize that consumers' propensity to trust influences their behavioral 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 behavioral intention. As a result, The following hypotheses are proposed:

Hypothesis 3: Consumer trust propensity moderates the relationship between consumer attitudes toward DTCA of prescription medicine and behavioral intention..

Hypothesis 4: Consumer trust propensity moderates the relationship between consumer attitudes toward DTCA of Over-the-Counter (non-prescription) medicine and behavioral intention.

Conceptual Framework

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



1: Conceptual Framework

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METHODOLOGY

Selection Sample

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 217 participants being randomly selected respondents in Istanbul whose responses are critical to the success of our hypothesis testing. A survey was conducted among members of an online participant in Istanbul, Turkey. Respondents were invited to participate in the study via email, social media, and WhatsApp.

Key Measures

The complete set of items used per model variable is shown in Table 1 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 behavioral 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 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).

Data Analysis

Construct Validity and Reliability

Table 1 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),

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implying that construct validity was assumed by KMO and Bartlett Test. attitude toward DTCA of prescription medicine KMO rated 0.634, which is considered a middling degree of significance, attitude toward DTCA of non-prescription medicine rated 0.687, consumer behavioral intention rated 0.659, and propensity to trust KMO value was 0.894. A KMO value around 1 indicates that correlation patterns are generally compact and that factor analysis produces identifiable and reliable factors. However, a KMO index of 0.6 or over is considered acceptable, but an index of less than 0.6 indicates inadequate sampling and reveals pervasive correlations that prove problematic for factor analysis (Osborne, Costello, & Kellow; 2008). Cronbach's alpha reliability coefficient is determined using the average correlation of the measuring scale's items. Cronbach's alpha is a value between 0 and 1, with a value of 0.7 or above regarded as adequately reliable (Bonett & Wright, 2015). Six items were used to test the construct measuring consumer attitude toward DTCA of prescription medicine, which achieved 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 coefficient achieved was 0.768. The consumer behavioral intention and propensity to trust were tested using 4 and 7 items, respectively, and the corresponding Cronbach's alpha values were 0.766 and 0.868. The researcher also established acceptable datatype ratio, normality, and linearity of the variables, as shown by the Variance Inflation Factor (VIF < 5) and tolerance (tolerance > 0.22) for each variable (Hair et al. 1998), as shown in Table 1.

		U	
Attitude t	oward DTCA $(1 = \text{strongly disagree}; 7 = \text{strongly agree})$		Cronbach's Alpha = 0.757
of prescrip	tion medicine		KMO = 0.634
			$S_{1g} = < 0.001$
ATP1	Advertising prescription medicines directly to consumers	.806	
	benefits consumers.		
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	.544	
	prescription medicines are a bad idea.	105	
ATP5	I like to see advertisements about prescription medicines.	.427	
ATP6	Social media advertisements for prescription medicines are a	.572	
	bad idea.	<0 7	
ATP7	Prescription medicine ads provide useful information to consumers.	.687	

Loadings

Table 1: KMO and Bartlett's Test, Cronbach's alphas, tolerance, and Variance Inflation Factor. Scale items

Variables

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Attitude toward DTCA (1 = strongly disagree; 7 = strongly agree) of non-prescription medicine

ATNP1 be	enefits consumers.	.552	
ATNP2 Pr	rinted media like newspapers, magazines, and billboard dvertisements for non-prescription medicines are a bad idea.	.814	Cronbach's Alpha = 0.768
ATNP3 no	on-prescription medicines should not be advertised directly to onsumers.	.808	KMO = 0.687 Sig = < 0.001
ATNP4 I	think Broadcast media like TV, and radio commercials for on-prescription medicines are a bad idea.	.763	
ATNP5	like to see advertisements about non-prescription medicines.	.287	
ATNP6 a	ocial media advertisements for non-prescription medicines are bad idea.	.598	
ATNP7 N	Ion-prescription medicine ads provide useful information to onsumers.	.470	
Consumer intention	(1= extremely unlikely; 7 = extremely likely) behavioral		
H CBI1 at	low likely would you be to talk to your doctor in the future bout a health condition that was discussed in an advertisement or a particular medicine?	.790	Cronbach's Alpha = 0.766
H CBI2 at	Iow likely would you be to talk to your doctor in the future bout a particular medicine you saw or heard in an	.861	KMO = 0.659 Sig = < 0.001
ac H CBI3 ft	Iow likely would you be to go to other media sources in the uture to seek more information about a health condition or	.773	
CBI4 m ft	Indicine discussed in an advertisement? Iow likely would you be to talk with friends or relatives in the uture about a health condition or medicine discussed	.630	
Propensity to	trust $(1 = \text{strongly disagree}; 7 = \text{strongly agree})$		
DT1 It	t is easy for me to trust a person/thing	850	
	tend to trust a person/thing, even though I have little	.784	Crophach's Alpha - 0.869
^{F12} ki	nowledge of it.	C 00	KMO = 0.894
PT3 I	nowledge of it.	.680	Sig = < 0.001
PT4 M	Iost 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	
P17 I	usually trust the others	.853	

Correlation and Regression 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 included consumer behavioral intention and propensity to trust. Correlation coefficients vary between -1.00 to +1.00. Table 2 shows the Pearson correlation, Mean, standard deviations.

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Variables	Mean	SD	N	1	2	3	4
1 Consumer attitude toward DTCA of	4.3172	1.11042	13	1			
prescription medicine			4				
² Consumer behavioral intention	5.0019	1.07190	13	.541**	1		
			4				
3 Consumer attitude toward DICA of	4.4552	1.14875	13	.810**	.56/*	1	
non-prescription medicine			4		200*	724*	
⁴ Propensity to trust	4.0853	1.16337	15	.427**	.398*	.234*	1
			+		·	-	

Table 2: Descriptive Statistics, Correlations

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

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

Table 3: Hierarchical Regression Results

Model	R	R Square	Adjusted R Square	Std. Error of the
				Estimate
1	.587 ^a	.345	.330	.87748
D. 1			A transfer Descent and the transfer A	TD. C

a. 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: 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			

a. Dependent Variable: Consumer behavioral intention

b. 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

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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 5,). 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 5. Consumer attitude toward DTCA of prescription medicine has a positive impact on our dependent variable but our findings not indicate a 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 5)

Table 5: Coefficients^a

	Model	Unstandardized		Standardized	t		Colline	arity
		Coefficients		Coefficients			Statistics	
		В	Std.	Beta		Sig.	Tolerance	VIF
			Error					
1	(Constant)	2.347	.343		6.844	<.001		
	Consumer attitude toward	.446	.076	.462	5.874	<.001	.816	1.226
	DTCA of prescription medicine							
	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 behavioral intention

In support of hypothesis 2, and 4 consumer attitudes toward DTCA of non-prescription medicine were shown to be positively related withconsumer behavioral intention.Consumer attitude toward DTCA of non-prescription medicine and trust propensity significantly predict job performance (R = 0.679, $R^2 = 0.461$, *p.001). Table 6 shows R Square value 0.345 which is considered moderate that explained 46.1 % variance in consumer behavioral intention.

Table 6: Hierarchical Regression Results

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

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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.

	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			

Table 7: ANOVA^a

a. Dependent Variable: Consumer behavioral intention

b. Predictors: (Constant), ATNP x Propensity to trust, Consumer attitude toward DTCA of nonprescription medicine, Propensity to trust

The direct relationship findings of the structural model are shown in Table 8. Consumer attitude toward DTCA of prescription medicine has a positive impact on our dependent variable but our findings idicate a significant moderator impact at sig = .001. We consider the enteraction between consumer attitude toward DTCA of non-prescription medicine and propensity to trust as supported of hypotheses 4.

		Unstanda	dized	Standardized			Collinea	arity
	M. 1.1	Coefficients		Coefficients			Statist	ics
	Model	В	Std. Error	Beta	t	Sig.	Tolerance	VIF
	(Constant)	1.749	.334		5.240	<.001		
1	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

 Table 8: Coefficients^a

a. Dependent Variable: Consumer behavioral intention

Conclusion and Discussion

In general, the findings of this study indicated a positive relationship between consumer attitude toward direct-to-consumer pharmaceutical advertising and consumer behavioral intention; likewise, propensity to trust interacted with consumer attitude toward direct-toconsumer pharmaceutical advertising in predicting behavioral intention. Thus, a decreased

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consumer propensity to trust results in a stronger positive relationship between attitude toward DTCA and behavioral intention. Given DTCA's major importance as a source of health information, its implications for consumer engagement in health decision-making require careful consideration. While the DTCA-induced doctor-patient discussion continues to be controversial, it is important highlighting that genuine consumer empowerment may be reached by increasing participation by individuals who do not consider themselves to be informed about health and medicine. By considering DTCA as a type of public communication, we add a significant dimension to the research of attitudes toward DTCA in this paper. It discovered a contingent situation in which the impacts of attitude toward DTCA on consumer behavioral intention.

References

- Ball, J. G., Manika, D., & Stout, P. (2016). Causes and consequences of trust in direct-toconsumer prescription drug advertising. *International Journal of Advertising*, 35(2), pp. 216-247.
- 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.
- 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.
- Costa Jr, P. T., & McCrae, R. R. (2008). The Revised Neo Personality Inventory (neo-pi-r). Sage Publications, Inc
- 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 perceptive. 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.
- 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.
- 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.
- 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

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- Herzenstein, M., Misra, S., & Posavac, S. (2005). How consumers' attitudes toward direct-toconsumer 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.
- 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.
- 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.
- 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.
- Muehling, D. D. (1987). An investigation of factors underlying attitudes-toward-advertising- ingeneral. 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
- 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.

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- 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.
- 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.
- The Henry J. Kaiser Family Foundation, Impact of Direct-to-Consumer Advertising on Prescription Drug Spending(2003),
- 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.
- Williams, J. R. & Hensel, P. J. (1995). Direct-to-consumer advertising of prescription drugs. Journal of Health Care Marketing, 15(1), 35–41.

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