



Research Article

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Factors Affecting the Purchase Intention of Chocolate by Consumers

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Abstract

This research was conducted to investigate the motivations and attitudes of consumers to choose chocolate and their effects on purchase intention. For this purpose, the effects of health variables, mood, weight control, chocoholism, sensory, packing, price, and brand trust on the purchase intention of chocolate have been investigated using the structural equation model. The results of this research indicate that only the variable of mood has a positive and significant effect on chocoholism. Additionally, the variables of brand trust, packaging, and price have a positive, direct, and significant impact on the intention to purchase chocolate. Mood and packaging stood out with a notable difference, indicating that these two factors are especially important from the consumer's perspective. Furthermore, attractive packaging has the ability to attract the attention of consumers and convey important information about the product, including taste, ingredients, and nutritional value. Also, most consumers buy chocolate products from their trusted brands, so in this case, famous and reliable brands usually have an advantage, price sensitivity is different in consumer groups. These factors are often interrelated and their importance may vary depending on individual preferences, demographics, and market trends.

Keywords: Attitude, Chocolate, Choice motivation, Purchase intention



Introduction

The chocolate sector is an important part of the confectionery industry and its global market value exceeded EUR 105 billion in 2021 and is expected to grow at an annual rate of 3.7 % from 2022 to 2030. The global chocolate market is segmented by product type (dark, milk, or white chocolate and with other ingredients), distribution channel (online e-commerce and physical shops), and geographically. In the world, some regions have a higher share of the financial market, including Western Europe with 33%, followed by Eastern Europe, the Middle East and Africa with 24%, and North America with 22%, which is 14% in Asia and the Pacific and America South will decrease by 7% (Statista, 2023). Also, the rapid growth of the chocolate market is characterized by changing consumer preferences for new and innovative products. Such conditions force manufacturers to regularly update the list of factors influencing the consumption of chocolate products, and they seek to identify purchase intention drivers in the chocolate market by considering groups of factors. The individual preferences of consumers, along with the sensory and non-sensory characteristics of the product (Fortune Business Insights., 2020). In Iran, the increase in competition, the entry of various foreign companies, diverse products, and the advancement of technology has made it difficult to maintain customer satisfaction and loyalty (Asgar Nejad *et al.*, 2012). Confectionery and chocolate industry are among the luxury industries. Also, due to the large investments of the private sector in the last two decades, it has become a modern and up-to-date industry, and it has been the leader in the export of the food industry group for many years (Ministry of Industry, Mine and Trade, 2022). Today, many companies are competing in the confectionery and chocolate industry in the country, to the extent that in some areas, the market is completely occupied by domestic competitors. What is certain is that customer orientation is the key to the success of companies active in this field (Jafar Nejad *et al.*, 2010). With 900 candy and

chocolate production units, Tabriz has become one of the most important hubs in the Middle East and also a supplier of about 50% of Iran's chocolate. Also, with large factories such as Shirin Asal, Anata, Shoneys, Aydin, etc., it has various and high-quality chocolates. Some of them are planning to supply their products daily to domestic, European, Central Asia, Caucasus, as well as Iraq, Afghanistan, Pakistan, Ivory Coast, Azerbaijan, UAE, and Qatar markets (Asgar Nejad *et al.*, 2012). The history of the confectionery and chocolate industry in Iran has made the added value of this industry from raw materials and production and packaging machines to distribution, sales, and human resources facilities in Iran to an acceptable level (Sadat *et al.*, 2014). In addition, company managers need to understand buyers' motivations and respect their motivations, values, lifestyles, insights, attitudes, and needs. The broad field of customer behavior includes three separate activities, which are: buying, selling, and consumption, which have made significant progress in determining the dimensions of buying behavior and the number of buying behavior theories (Henzai & Bahrami Jah, 2015). Therefore, a systematic study on the relationship between chocolate choice motives, attitudes, and purchase intention is needed to explain consumer behavior in the chocolate industry. Analyzing consumer choice behavior is very important according to the types of production, because chocolate choice behavior is different for chocolates sold in hypermarkets and supermarkets and chocolates available in handmade chocolate shops (Lybeck *et al.*, 2006). In the field of human behavior, there are factors that not only force us to act but also lead us to a specific goal. Psychologists call these factors motivation. Motivation is the driving factor that motivates people to buy (Goldsmith *et al.*, 2011). Therefore, these motives have a specific role in customer behavior. Similarly, regarding attitude, since most consumers have low expertise in food selection, they tend to make attitudes or food choices depending on their sensory response (Stanovich & West,

2000). For example, the dynamic sensory experience that occurs when consuming chocolate is very important for the consumer (Giller, 2017). Consumers' attitudes can predict consumer buying behaviors, as they choose specific products from different types (Costell *et al.*, 2010). Because visual perceptions of packing designs can increase the consumer's understanding of the taste, quality and performance of the product and increase the consumer's purchase intention (Metcalf *et al.*, 2012).

Each of the conducted studies has focused on some motivations and attitudes effective on the purchase intention by consumers, which can be summarized and categorized in a different way:

Demographics of consumers, including age, size of household, and household income. Each of these factors has had different effects in different studies. The study by Kontinen *et al.* (2012) they investigated whether the absolute or relative importance of different food choice motivations contributes to low socioeconomic status (SES) disparities in the consumption of energy-dense food, vegetables, and fruits. Cross-sectional data from the study were analyzed using the structural equation model. The obtained results showed that the motivation for choosing food based on income and education level, high-income consumers valued health more, and low-income consumers were more concerned about price. Sondhi & Chawla (2017) this study was a mixed approach by conducting three focus group discussions (FGD) on 301 chocolate consumers in different age and gender groups, and three suitable clusters were considered. Then k-means cluster analysis was performed on the data. The results showed that the sensory characteristics of chocolate, such as the aroma of cocoa, its texture, and softness, which are understood by the cognitive function of the brain, cause more craving for chocolate among women.

Consumer motivation has been investigated in various studies. The study by Lee & Yun (2015) investigated how consumers perceive the characteristics of organic food. 725

questionnaires were collected for this research. The data analysis was also done with the structural equation model and the findings showed that the sensory appeal factor of food selection motivation plays an important role in the hedonistic attitude towards organic food and the purchase intention variable. Mohammadian & Dehdashti (2016) in investigating the effect of emotional attachment on consumers' purchase intention, 390 questionnaires were collected and analyzed using the structural equation model. The results showed that emotional attachment has a positive and direct effect on purchase intention and investing in emotional relationships with customers leads to loyalty. Also, store image, perceived transaction value, and consumers' trust in the store play an important role in creating emotional attachment. Bryła (2016) investigated the selective aspects of organic food consumption in Poland. A survey of 1000 consumers was conducted using the CAWI (Computer Assisted Web Interview) method. The findings showed that the main motivations for choosing organic food in Poland are: Healthiness, product environmental features, food safety considerations, superior taste, and quality assurance.

The attitude of consumers toward the intention to purchase chocolate has been explored in several studies. Maleki *et al.* (2020) also suggest that managers should focus on enhancing consumers' positive attitudes toward the brand by improving packaging and graphic design, thereby increasing their willingness to purchase from the company. Kita *et al.* (2020) in a study determined the effect of long-term storage time and type of packaging on the quality of chocolate in Poland. Statistical analysis was performed using the principal component method (PCA) and its findings show showed that storage and type of packaging simultaneously affect the quality of chocolate. Baptista *et al.* (2021) investigated how packaging colors affect the expectations of sweetness, bitterness, fruitiness and liking of chocolates in Brazilian and French subjects.

Data analysis was done with variance (ANOVA), Tukey-Kramer test and multi-factor analysis (MFA). The findings showed that there are several significant effects of packaging color on the expectations of Brazilian and French consumers. Also, the effect of packaging color did not differ significantly between cultures, but depending on the type of chocolate (sweet, bitter, fruity, etc.), packaging color may have a negative effect on attractiveness and enjoyment. [Brown et al. \(2020\)](#) conducted a study to understand American premium chocolate consumers among members of the Pennsylvania State University campus community. The results showed that consumers pay attention to the characteristics of chocolate type classification, price, availability, packaging, organic, Fairtrade label, brand trust, and nostalgia to determine the quality and choice of chocolate.

The purchase intention of consumers has been investigated in various studies. For example, in the study of [Henzai & Bahrami Jah \(2015\)](#), purchase motivation is one of the main concepts in the field of customer purchasing behavior. In this study, the attitude of 400 students of Qazvin Islamic Azad University was analyzed using the structural equation model. The obtained results help business owners and brand managers to segment their customers based on purchase motives and attitudes and to better understand what reasons motivate customers to buy. [Thaichon et al. \(2018\)](#) in a semi-structured in-depth interview study on repeat purchases of Australian consumers, the results showed that factors such as taste, quality, texture, price, and variety significantly influence consumers' repeat purchases of a particular brand. Also, attractive packaging and variety of flavors also play a more important role in attracting customers. [Kim & Jeon \(2020\)](#) investigated the effect of motivations for choosing chocolate on attitude and willingness to buy, which were analyzed in a sample of 487 people using the structural equation model. The results showed that mood and health have a positive effect on chocoholism and the desire to buy again, and the effect of these factors

depends on the type of consumer. [Semenova et al. \(2023\)](#) measured the effects of packaging on purchase intention for chocolate. Electroencephalography (EEG) method, which is relatively cheap and efficient, was used to investigate this research. The results showed that attractive packaging for famous brands has a positive effect on the willingness to pay for chocolate.

In the present study, the factors influencing consumers' purchase intention of chocolate are analyzed using the structural equation model (SEM). SEM is a powerful tool in multivariate data analysis, allowing for the examination of relationships between multiple variables within a single model. Its strength in theory development has led to its widespread use in various scientific fields such as psychology, social sciences, management research, and business (Azar et al., 2012). Given the active role of the chocolate industry in driving exports and supporting the national economy, it is crucial to identify the motivations and attitudes of different consumer groups, as well as effective strategies for meeting their needs, in order to develop products and sales strategies for chocolate companies. To help in the decision to buy chocolate and predict the future behavior of consumers, because there has been no study in this field in Iran, and this study is innovative in this regard.

According to the review of the conducted studies, the hypotheses can be expressed as follows:

H1. The motivation to choose chocolate has a positive and significant effect on attitude.

H1-1. Health variable has a positive and significant effect on chocoholism.

H1-2. Weight control variables have a positive and significant effect on chocoholism.

H1-3. Mood variable has a positive and significant effect on chocoholism.

H1-4. Sensory variable has a positive and significant effect on chocoholism.

H2. The attitude towards chocolate has a positive, direct, and significant effect on purchase intention of chocolate.

H2.1. Chocoholism Variable has a positive, direct, and significant effect on purchase

intention of chocolate.

H2.2. Packaging variable has a positive, direct, and significant effect on purchase intention of chocolate.

H2.3. Brand trust variable has a positive, direct, and significant effect on purchase intention of chocolate.

H2.4. price variable has a positive, direct, and significant effect on purchase intention of chocolate.

Materials and Methods

In structural equation modeling, there are six stages that include data collection, model specification, diagnosis, fitting, evaluation, and model modification (Kline, 2013). The first stage of this research is data collection using a questionnaire.

The next steps are the diagnosis and fitting of the structural model. In this research, in order to check the validity of the questionnaire, confirmatory factor analysis test is used. In conducting factor analysis, the common criterion for establishing convergent validity is the average variance extracted average variance extracted (AVE) which was suggested by (Fornell & Larcker, 1981). This criterion is defined as the sum of the second power of times divided by the number of reagents. The method used in this research to check the fit of the measurement model includes three criteria: construct validity, diagnostic or convergent validity, and reliability based on Cronbach's alpha coefficient. Construct validity is a composite concept that requires the investigation of several stages and is measured by concurrent validity, predictive validity, discriminant validity, and convergent validity. Construct validity is the degree of accuracy of the scale in measuring the theoretical construct or desired characteristic (Mohammad Beigi *et al.*, 2015). Decomposition of the detection function is also used to check diagnostic validity. In this method, there is an initial grouping of subjects, and the purpose of this analysis is to confirm the initial grouping based on other data (Mesrabadi *et al.*, 2016).

Finally, Cronbach's alpha coefficient shows the internal consistency of the questions. The last step is to modify the model, which is to ensure the fit of the model with the data. If the proposed model does not fit the data, it needs to be modified (Akinyode, 2016). In this research, Smart PLS 3 software was used to analyze the structural model.

The statistical population under study is the community members of Ferdowsi University of Mashhad, which is one of the largest integrated campuses in the country and includes all faculties, research institutes, buildings, and a large part of cultural, welfare, sports complexes, cooperatives, and dormitories. As a result, many people from different cities are working and studying there. Likewise, the data used has been calculated using Cochran's formula equal to 300 numbers. The tool for collecting information in this research is a questionnaire that includes 44 questions, the demographic part of which includes questions about the general characteristics of the respondents such as gender, age, level of education, and income of the respondents. The next section is specific questions based on the variables selected in the above section. The scale used is a five-point Likert scale. This scale uses the basis of strongly disagree, disagree, neutral, agree, and strongly agree. Also, the data was collected by available sampling method in 1402. In the following, the conceptual model of the research is presented in Fig. 1:

Table 1 shows the number of items for each variable and the source of variables extraction, which includes variables: health (3), mood (4), weight control (3), sensory (3), chocoholism (3), packaging (4), price (3), brand trust (3) and purchase intention chocolate (5).

Results and Discussion

The analysis of the demographic characteristics of the respondents is shown in Table 2. Most of the respondents are women and people aged 20-29 with a bachelor's degree and single.

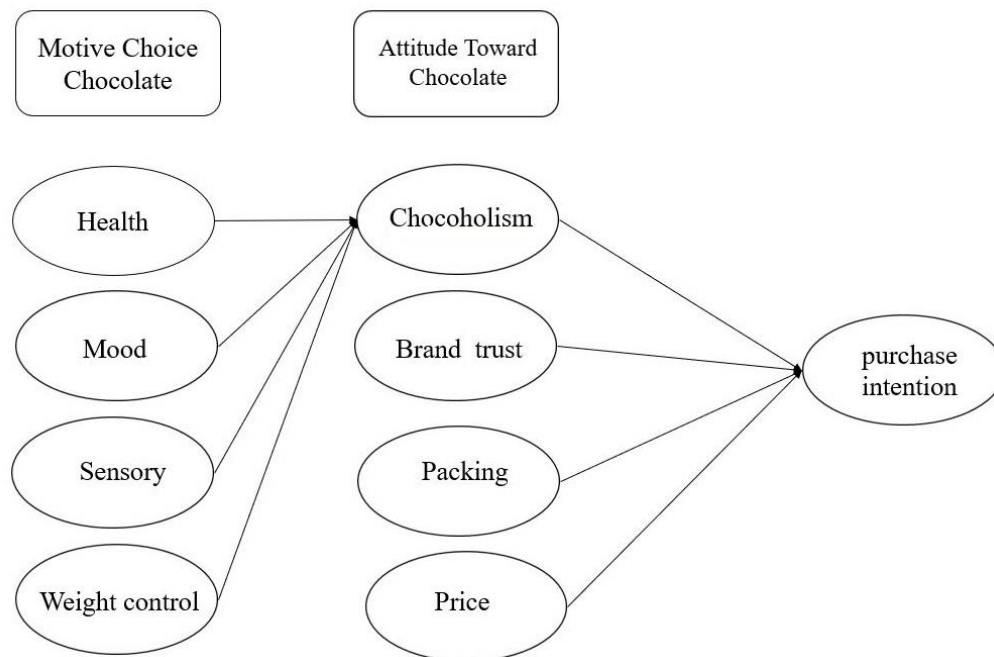


Figure 1- Conceptual model of research

The results of construct validity, diagnostic validity, and convergent validity as well as reliability including Cronbach's alpha coefficient for all questions of the questionnaire are presented in Table 3. The results show that all 9 indicators are accurate because the reliability of each question is more than 0.5, and the reliability by Cronbach's alpha method is more than 0.6 and the composite reliability is more than 0.7. CR¹ values for the factors of this research are CR > AVE, and therefore, because the AVE index is higher than 0.5, this questionnaire has good reliability.

There are three necessary conditions for the realization of convergent validity: 1. The composite reliability value should be greater than 0.7; 2. The average value of the extracted variance should be greater than 0.5; and 3. The composite reliability value is greater than the average variance extracted (Davari & Rezazadeh, 2016). Finally, convergent validity is a relatively strong correlation between the question and the main variable shown in Table 4, which is smaller than the range of 0.812 to 0.900 and indicates the appropriate internal

stability for measurement models. Therefore, all latent variables had convergent validity.

Fig. 2 shows the results of the hypothesis test and it shows the relationships between the impact of choice motivation and attitude factors in the form of reflective measurement models along with path coefficients between variables, coefficient of determination, and Student's t-statistics, these results are shown in Table 5.

Based on Table 5, hypothesis (H1-1): It shows that the path coefficient of the exogenous latent variable of health on chocoholism is (0.039) and its t-statistic is (0.572), which has a positive but not significant effect. Therefore, the null hypothesis that there is no relevant coefficient is rejected, which is confirmed by the studies (Kim & Jeon, 2020). In relation to taking care of their health, people consume chocolates with healthy and nutritious ingredients.

1- Composite Reliability (CR)

Table 1- Research variables, number of items, and source

Symbol	Variable	Source	Components
Health		(Kim & Jeon, 2020)	Motive
XHE1	Iranian chocolates keep me healthy.		
XHE2	Iranian chocolates contain fiber, vitamins, and minerals		
XHE3	Iranian chocolates are nutritious.		
Mood		(Kim & Jeon, 2020)	Motive
XMO1	Eating chocolate reduces my stress		
XMO2	Eating chocolate changes my mood.		
XMO3	Eating chocolate gives me energy.		
XMO4	Eating chocolate makes me happy.		
Sensory		(Kim & Jeon, 2020)	Motive
XSE1	Iranian chocolates smell good.		
XSE2	Iranian chocolates have a good taste.		
XSE3	Iranian chocolates have a pleasant texture.		
Weight control		(Kim & Jeon, 2020)	Motive
XWE1	Iranian chocolates help me control my weight.		
XWE2	Iranian chocolates are low in fat.		
XWE3	Iranian chocolates are low in calories.		
Chocoholism		(Kim & Jeon, 2020)	Attitude
XCH1	I indulge in eating chocolate.		
XCH2	I have an addiction to eating chocolate.		
XCH3	When shopping at the store, looking at the shelves of chocolates is attractive to me.		
Packing		(Brown <i>et al.</i> , 2020)	Attitude
XPA1	Packing of Iranian chocolates is modern and up-to-date.		
XPA2	Iranian chocolates have beautiful packaging.		
XPA3	The packaging of Iranian chocolates is suitable for gift-giving.		
XPA4	In terms of packaging, Iranian chocolates can compete with foreign chocolates.		
Price		(Brown <i>et al.</i> , 2020)	Attitude
XPR1	In my opinion, chocolates with thick or metal packaging are more expensive and of better quality.		
XPR2	In my opinion, quality chocolates have luxury packaging and expensive prices.		
XPR3	The price of Iranian chocolates is reasonable compared to foreign chocolates		
Brand trust		(Brown <i>et al.</i> , 2020)	Attitude
XBR1	I have been consuming chocolate from Iranian brands for years.		
XBR2	It is important for me when buying a chocolate brand.		
XBR3	The brand I buy focuses on quality.		
purchase intention		(Kim & Jeon, 2020)	
YRE1	I plan to purchase intention Iranian chocolate in the future		
YRE2	If Iranian chocolates keep me healthier than foreign ones, I will buy them.		
YRE3	If the taste of Iranian chocolates is better than foreign ones, I will buy Iranian chocolates.		
YRE4	If Iranian chocolates have more nutrients than foreign ones, I will buy them.		

Source: Research findings

Table 2- Description of demographic variables (N = 300)

Variable		Abundance	%
Gender	Female	241	80
	Male	59	20
Age	Below 20 Years	20	7
	20-29 years	192	64
	30-39 years	52	17
	40-49 years	19	6
	Above 50 years	17	6
Marital status	Single	223	74
	Married	77	26
Educational level	Lower than diploma	4	1
	Diploma	40	13
	BSc	152	51
	MSc	86	29
	PhD	18	6
Occupation	Self-employed	41	14
	Employee	33	11
	Student	203	68
	Retired	4	1
	Housewife	19	6
Income	Below 7 Milion	131	44
	7 – 15 Milion	66	22
	15 – 25 Milion	54	18
	25 – 35 Milion	21	7
	Above 35 Milion	28	9
Monthly consumption of chocolate	Below 500 gr	148	49
	500-750 gr	98	33
	750-1000 gr	42	14
	1000-1500 gr	9	3
	Above 1500 gr	3	1

Source: Research findings

Table 3- The results of the validity and reliability test

Variable	Cronbach's α	AVE	CR	Rho-R
Brand trust	0.826	0.559	0.887	0.666
Chocoholism	0.842	0.559	0.895	0.682
Health	0.859	0.672	0.914	0.780
Mood	0.922	0.752	0.945	0.812
purchase intention	0.894	0.743	0.934	0.824
Sensory	0.886	0.723	0.929	0.814
Weight control	0.869	0.689	0.920	0.793
Packing	0.895	0.741	0.934	0.826
Price	0.703	0.579	0.867	0.766

Source: Research findings, Abbreviations: CR, Composite reliability; AVE, Average Variance Extracted.

Table 4- Fornell and Locker

Variable	Brand Trust	Packing	Sensory	Mood	Health	Chocoholism	Purchase intention	Price	Weight control
Brand trust	0.892								
Packing	0.317	0.813							
Sensory	0.197	0.736	0.888						
Mood	0.470	0.212	0.225	0.900					
Health	0.148	0.484	0.431	0.215	0.869				
Chocoholism	0.394	0.097	0.091	0.615	0.141	0.838			
Purchase intention	0.381	0.568	0.517	0.377	0.300	0.206	0.731		
Price	0.223	0.148	0.111	0.215	0.230	0.157	0.271	0.812	
Weight control	0.096	0.392	0.353	0.174	0.724	0.108	0.193	0.124	0.843

Source: Research findings

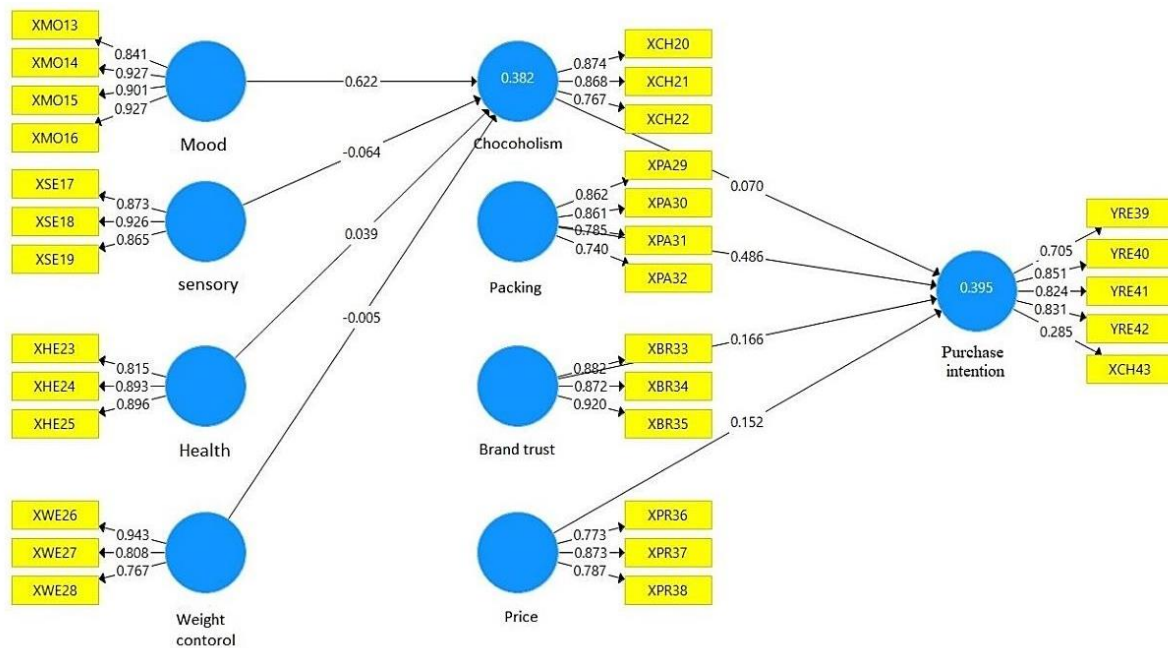


Figure 2- Structural model of attitude and purchase intention towards chocolate: the effects of choice motivation

Table 5- The results of the hypothesis test

Relationship	Hypotheses	β	t-value	p-value	Decision
H2-3	Brand trust -> Purchase intention	0.166	2.876	0.004	Accept
H2-2	Packing -> Purchase intention	0.486	9.689	0.000	Accept
H1-4	Sensory -> Chocoholism	-0.064	1.052	0.293	reject
H1-3	Mood -> Chocoholism	0.622	15.666	0.000	Accept
H1-1	Health -> Chocoholism	0.039	0.572	0.568	reject
H2-1	Chocoholism -> Purchase intention	0.070	0.734	0.463	reject
H2-4	Price -> Purchase intention	0.152	2.797	0.005	Accept
H1-2	Weight control -> Chocoholism	-0.005	0.070	0.945	reject

Source: Research findings

Hypothesis (H1-2): It shows that the path coefficient of the exogenous latent variable of weight control on chocoholism is (-0.005) and its t-statistic is (0.070) which has a negative and significant effect and the null hypothesis is

rejected. Studies by Kim & Jeon (2020) confirm this, and Kroese *et al.* (2009) believe that consuming high-calorie chocolates leads to an anticipated feeling of guilt towards gaining weight, which can be a negative

feeling after consumption.

Hypothesis (H1-3): It shows that the path coefficient of the exogenous latent variable of mood on chocoholism is (0.622) and its t-statistic is (15.666) which has a positive and significant effect and the hypothesis zero is accepted. The results of studies by [Urala & Lähteenmäki \(2004\)](#) confirm that consumers experience a greater amount of chocolate orientation when they need to reduce stress, happiness, and energy in their daily lives. Their study by [Luomala et al. \(2009\)](#) showed that from a practical point of view, mood is the most important influencing factor on the tendency to chocolate and chocolate consumption in increasing positive emotions and decreasing negative emotions.

Hypothesis (H1-4): It shows that the path coefficient of the exogenous latent variable of sensory on chocoholism is (-0.064) and its t-statistic is (1.052), which does not have a positive and significant effect. Therefore, the null hypothesis is rejected. The studies by [Kim & Jeon \(2020\)](#) confirm this. However, contrary to the findings of [Thaichon et al. \(2018\)](#), the bitter aroma of chocolate and its texture causes addiction and turns consumers into chocolate lovers, which in turn causes continued consumption. [Thomson et al. \(2010\)](#) that the intensity of chocolate softness has a significant effect on the quality and these sensory factors play an important role in the intention to buy chocolate.

Hypothesis (H2-1): It shows that the path coefficient of the exogenous latent variable of chocoholism on purchase intention of chocolate is (0.070) and its t-statistic is (0.734), which does not have a positive, direct, and significant effect. Therefore, the null hypothesis is rejected. The study by [Kim & Jeon \(2020\)](#) confirms this. [Mooney et al. \(2009\)](#) In fact, the feeling of guilt caused by the consumption of chocolate can cause internal conflict about the consumption of chocolate Hypothesis (H2-2): It shows that the path coefficient of the exogenous latent variable of packaging on purchase intention of chocolate is (0.486) and its t-statistic is (9.689), which has a positive, direct, and

significant effect. Therefore, the null hypothesis is accepted. Studies by [Semenova et al., 2023](#)), [\(Brown et al., 2020\)](#), [\(Maleki et al., 2020\)](#), and [\(Ranjbaran et al., 2010\)](#) confirm this. In the food industry, packaging plays a significant role in attracting customers and creating attractiveness and psychological expectations for consumers and it can affect the customer's perspective and purchase intention.

Hypothesis (H2-3): It shows that the path coefficient of the exogenous latent variable of brand trust on purchase intention of chocolate is (0.166) and its t-statistic is (2.876), which has a positive, direct, and significant effect. Therefore, the null hypothesis is accepted. The studies [\(Semenova et al., 2023\)](#), [\(Brown et al., 2020\)](#), [\(Thaichon et al., 2018\)](#), and [\(Thomson et al., 2010\)](#) state that taste and brand are effective in stimulating positive emotional reactions. Also, it will lead to frequent purchases by consumers.

Hypothesis (H2-4): It shows that the path coefficient of the exogenous latent variable of price on purchase intention of chocolate is (0.152) and its t-statistic is (2.797), which has a positive, direct, and significant effect. Therefore, the null hypothesis is accepted. The study by [Brown et al. \(2020\)](#) confirms this. The most influential factors for purchase intention chocolate among all chocolate consumers investigated by NCA were mood, brand, and price ([NCA, 2019](#)).

Conclusion and Suggestions

In the comments section of the questionnaire, many respondents expressed a preference for purchasing domestic chocolates to support the local industry. While they acknowledged that foreign chocolates are superior in quality, taste, aroma, and flavor, they found them unaffordable. Additionally, due to concerns about the expiration dates and storage conditions of imported chocolates, they tend to prefer domestic options, indicating significant potential for growth in the local market. Given the popularity of chocolate production and consumption in Iran, this theoretical framework can serve as a

foundation for future studies on consumer behavior in the chocolate industry. It is recommended that chocolate manufacturing companies pay more attention to quality, taste, aroma, and smell. Also, in the chocolate industry, they should focus on product development, increasing brand trust, improving packaging, appropriate pricing, attractive marketing and advertising,

continuous market research, active customer support, and paying attention to the demographic diversity of consumers. Based on the results of the research, by planning and using appropriate marketing strategies, they can successfully market their products, manage the market effectively, achieve good sales, and find a good position in the domestic and foreign markets.

References

1. Akinyode, B.F. (2016). The use of structural equation modeling (SEM) in built environment disciplines. *International Institute for Science, Technology and Education (IISTE)*, 6(6).
2. Asgar Nejad Noori, B., Zarei, G., Bashirkhodaparasti, R., Saeib Nia, S., & Nazer Asl, A. (2012). Designing a model of marketing impact on business performance using the Metameta- analytical approach. Ph.D. Dissertation. Isfahan University. (In Persian)
3. Azar, A., Gholamzadeh, R., & Ghanavati, M. (2012). Path-structural modeling in management: The application of Smart PLS software. *Negahe Danesh Publication*, Tehran. (In Persian)
4. Baptista, I., Valentin, D., Saldana, E., & Behrens, J. (2021). Effects of packaging color on expected flavor, texture, and liking of chocolate in Brazil and France. *International Journal of Gastronomy and Food Science*, 24(1), 100340. <https://doi.org/10.1016/j.ijgfs.2021.100340>
5. Brown, A.L., Bakke, A.J., & Hopfer, H. (2020). Understanding American premium chocolate consumer perception of craft chocolate and desirable product attributes using focus groups and projective mapping. *PLOS ONE*, 15(11 November). <https://doi.org/10.1371/journal.pone.0240177>
6. Bryła, P. (2016). Organic food consumption in Poland: Motives and barriers. *Appetite*, 105. <https://doi.org/10.1016/j.appet.2016.07.012>
7. Costell, E., Tárrega, A., & Bayarri, S. (2010). Food acceptance: The role of consumer perception and attitudes. In *Chemosensory Perception* (Vol. 3, Issue 1). <https://doi.org/10.1007/s12078-009-9057-1>
8. Davari, A., & Rezazadeh, A. (2016). Structural equation modeling using PLS software. *Jihad Daneshgahi Publications Organization*, Second Edition. (In Persian)
9. Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1). <https://doi.org/10.1177/002224378101800104>
10. Fortune Business Insights. (2020). *Cocoa and Chocolate Market Size, Trends | Growth Report, 2029*. Fortune Business Insights. <https://www.fortunebusinessinsights.com/industry-reports/cocoa-and-chocolate-market-100075>
11. Giller, M. (2017). Bean-to-bar chocolate: America's craft chocolate revolution: the origins, the makers, and the mind-blowing flavors. Book, 1–240.
12. Goldsmith, R.E., Flynn, L.R., & Clark, R.A. (2011). Materialism and brand engagement as shopping motivations. *Journal of Retailing and Consumer Services*, 18(4), 278–284. <https://doi.org/10.1016/j.jretconser.2011.02.001>
13. Henzai, K., & Bahrami Jah, A. (2015). Investigating the motivations of Iranian consumers' purchases. *Journal of Development and Transformation Management*, 22(13), 45-54. (In Persian)
14. Jafar Nejad, A., Momeni, M., & Abdollahi, M-H. (2010). *Industrial Management*, 5(11), 35-52. (In Persian)

15. Kim, S.H., & Jeon, H.M. (2020). Chocolate choice motives and attitudes in foodservice market: Fine store product vs. manufactured product consumers. *Journal of Foodservice Business Research*, 23(2). <https://doi.org/10.1080/15378020.2019.1706701>
16. Kita, A., Lachowicz, S., & Filutowska, P. (2020). Effects of package type on the quality of fruits and nuts panned in chocolate during long-time storage. *LWT - Food Science and Technology*, 125(1), 109212. <https://doi.org/10.1016/j.lwt.2020.109212>
17. Kline, R.B. (2013). Assessing statistical aspects of test fairness with structural equation modelling. *Educational Research and Evaluation*, 19(2–3). <https://doi.org/10.1080/13803611.2013.767624>
18. Kongor, J.E., Hinneh, M., de Walle, D. Van, Afoakwa, E.O., Boeckx, P., & Dewettinck, K. (2016). Factors influencing quality variation in cocoa (*Theobroma cacao*) bean flavour profile - A review. In *Food Research International*, 82, 44–52. <https://doi.org/10.1016/j.foodres.2016.01.012>
19. Kontinen, H., Sarlio-Lähteenkorva, S., Silventoinen, K., Männistö, S., & Haukkala, A. (2013). Socio-economic disparities in the consumption of vegetables, fruit and energy-dense foods: The role of motive priorities. *Public Health Nutrition*, 16(5). <https://doi.org/10.1017/S1368980012003540>
20. Luomala, H.T., Sirieix, L., & Tahir, R. (2009). Exploring emotional-eating patterns in different cultures: Toward a conceptual framework model. *Journal of International Consumer Marketing*, 21(3). <https://doi.org/10.1080/08961530802202818>
21. Lybeck, A., Holmlund-Rytkönen, M., & Sääksjärvi, M. (2006). Store brands vs. Manufacturer brands: Consumer perceptions and buying of chocolate bars in Finland. *International Review of Retail, Distribution and Consumer Research*, 16(4). <https://doi.org/10.1080/09593960600844343>
22. Maleki, S., Amiri Aghdaie, S.F., Shahin, A., & Ansari, A. (2020). Investigating the relationship among the Kansei-based design of chocolate packaging, consumer perception, and willingness to buy. *Journal of Marketing Communications*, 26(8). <https://doi.org/10.1080/13527266.2019.1590855>
23. Metcalf, L., Hess, J.S., Danes, J.E., & Singh, J. (2012). A mixed-methods approach for designing market-driven packaging. *Qualitative Market Research*, 15(3). <https://doi.org/10.1108/13522751211231987>
24. Mesrabadi, J., Ostovar, N., & Jafariyan, S (2016). Structural validity and discriminant of meaning in life questionnaire in students. *International Journal of Behavioral Sciences*, 7(1), 83-90. (In Persian)
25. Ministry of Industry, Mine and Trade. (2022). <https://www.mimt.gov.ir>
26. Mohammadian, M., & Khajeh Dehdashti, M. (2016). The effect of consumer retailing emotional attachment on purchase intention. *Business Management Explorations Journal*, 8(15), 39-58. (In Persian). <https://doi.org/20.1001.1.2645386.1395.8.15.3.0>
27. Mohammad Beigi, A., Mohammad Salehi, N., & Aligol, M. (2015). Validity and reliability of the instruments and types of measurement in health applied researches. *Journal Rafsanjan University Med Science*, 13(10), 1153-70. (In Persian)
28. Mooney, E., Farley, H., & Strugnell, C. (2009). A qualitative investigation into the opinions of adolescent females regarding their body image concerns and dieting practices in the Republic of Ireland (ROI). *Appetite*, 52(2), 485–491. <https://doi.org/10.1016/j.appet.2008.12.012>
29. National Confectioners Association, Fine Chocolate Industry Association. Getting to Know the Chocolate Consumer: Exploring consumer demographics, consumption preferences, and shopping habits.2019 [cited 4 Sep 2019]. Available: <https://www.candyusa.com/my-nca/>

30. Ranjbarian, B., Mahmoudi, S., & Shahin, A. (2010). Packaging elements and consumer buying decisions. *International Journal of Business Innovation and Research*, 4(4), 376–390. <https://doi.org/10.1504/IJBIR.2010.033353>
31. Sadat, M., Shafiei, A., Aghajani, Z., Masoumzadeh Zavareh, A., Pirouz, E., & Yazdan shenas, L. (2014). Examining the success factors of top pastry and chocolate companies in branding and entry into export markets. *Publications of the Institute for Business Studies and Research*. First Edition. (In Persian)
32. Semenova, D., Kulikova, S., Zaripova Shamgunova, Y., & Molodchik, M. (2023). Measuring effects of packaging on willingness-to-pay for chocolate: Evidence from an EEG experiment. *Food Quality and Preference*, 107. <https://doi.org/10.1016/j.foodqual.2023.104840>
33. Sondhi, N., & Chawla, D. (2017). Segmenting and profiling the chocolate consumer: An emerging market perspective. *Journal of Food Products Marketing*, 23(2). <https://doi.org/10.1080/10454446.2017.1244784>
34. Stanovich, K.E., & West, R.F. (2000). Individual differences in reasoning: Implications for the rationality debate? In *Behavioral and Brain Sciences*, 23, 5. <https://doi.org/10.1017/S0140525X00003435>
35. Statista. (2023). *Chocolate confectionery global market share, by region 2023* | Statista. Website. <https://www.statista.com/statistics/981833/chocolate-confectionery-market-share-region-worldwide/>
36. Thaichon, P., Jebarajakirthy, C., Tatu, P., & Gajbhiyeb, R.G. (2018). Are You a Chocolate Lover? An Investigation of the Repurchase Behavior of Chocolate Consumers. *Journal of Food Products Marketing*, 24(2). <https://doi.org/10.1080/10454446.2017.1266551>
37. Thomson, D.M.H., Crocker, C., & Marketo, C.G. (2010). Linking sensory characteristics to emotions: An example using dark chocolate. *Food Quality and Preference*, 21(8). <https://doi.org/10.1016/j.foodqual.2010.04.011>
38. Urala, N., & Lähteenmäki, L. (2004). Attitudes behind consumers' willingness to use functional foods. *Food Quality and Preference*, 15(7-8 SPEC.ISS.). <https://doi.org/10.1016/j.foodqual.2004.02.008>



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عوامل مؤثر بر قصد خرید شکلات توسط مصرف کنندگان

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چکیده

این پژوهش با هدف بررسی انگیزه‌ها و نگرش‌های مصرف‌کنندگان به انتخاب شکلات و تأثیر آن بر قصد خرید انجام شد. برای این منظور با استفاده از مدل معادلات ساختاری تأثیر متغیرهای سلامت، خلق و خو، کنترل وزن، شکلات‌گرایی، حسی، بسته‌بندی، قیمت و اعتماد به برند بر قصد خرید شکلات بررسی شده است. نتایج این تحقیق حاکی از آن است که تنها متغیر خلق تأثیر مثبت و معناداری بر اعتیاد به شکلات دارد. همچنین متغیرهای اعتماد برند، بسته‌بندی و قیمت بر قصد خرید شکلات تأثیر مثبت، مستقیم و معناداری دارند. متغیرهای خلق و خو و بسته‌بندی با تفاوت زیادی تأیید شده‌اند که نشان می‌دهد این دو عامل از نظر مصرف‌کننده بسیار مهم هستند. بنابراین روحیه مصرف‌کنندگان می‌تواند تأثیر بسزایی در مصرف شکلات داشته باشد. علاوه بر این، بسته‌بندی جذاب این قابلیت را دارد که توجه مصرف‌کنندگان را به خود جلب کند و اطلاعات مهمی را در مورد محصول از جمله طعم، مواد تشکیل دهنده و ارزش غذایی منتقل کند. همچنین اکثر مصرف‌کنندگان محصولات شکلات را از برندهای مورد اعتماد خود خریداری می‌کنند، بنابراین در این مورد معمولاً برندهای معروف و معتبر دارای مزیت هستند، حساسیت قیمت در گروه‌های مصرف‌کننده متفاوت است. این عوامل اغلب به هم مرتبط هستند و اهمیت آنها ممکن است بسته به ترجیحات فردی، جمعیت‌شناسی و روند بازار متفاوت باشد.

واژه‌های کلیدی: انگیزه انتخاب، شکلات، قصد خرید، نگرش

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