

Predicting the consumer guilt-based purchasing behavior (A Case Study of Shopping Centers in Almaty)

Nurakhova Botagoz^{1*}, Serikkyzy Mira², Baizhaxynova Gulshat³, Duisebayeva Aizhan⁴, Manap Almagul⁵

¹Department of Management and marketing, Narxoz University, Almaty, Republic of Kazakhstan,

²Department of Food safety and quality, Almaty technological university, Republic of Kazakhstan, mira.serikkyzy@mail.ru

³Department of Management and marketing, Narxoz University, Almaty, Republic of Kazakhstan, gulshat_bai@mail.ru

⁴Department of Management and marketing, Narxoz University, Almaty, Republic of Kazakhstan, d-aizhan@mail.ru

⁵Almaty Management University, Republic of Kazakhstan, almamanap1@gmail.com

ARTICLE INFO

Article history:

Received 27 Dec 2019

Received in revised form 13 Jan 2020

Accepted 17 Feb 2020

Keywords:

Guilt,

Purchasing Behavior,

Consumer,

Violating Norms,

Self-Control,

Coping Response

ABSTRACT

Sometimes, consumer feels unpleasant and unusual after consuming and even after not consuming and explores himself about his behavior when purchasing or non-purchasing, and compares the behavior with ethical principles and social norms. Eventually he feels regret, this sense of regret provides the basis for the emergence of coping responses to modify purchasing behavior. In this study, consumer guilt was selected that is the result of violating social norms, internal failure, unjustified excessive consuming, lack of self-control, as well as consuming for fun and enjoyment, it was implemented among the consumers' community referring to Almaty Metropolitan Shopping Centers using the structural equation method (SEM). Data were collected using standard questionnaires and analyzed using SPSS and Amos software. There was a positive and significant relationship between guilt and purchasing, non-purchasing, violating norms, self-blame and hedonism. There was also a positive and significant relationship between guilt and coping responses and predicting future purchasing behaviors. Also, in the final model of research, purchase for hedonism and fun had the most impact on the consumer guilt.

1. Introduction

The most important strategy in marketing is to retain current customers and attract new customers (Yi, 2014). Although extending products and marketing play an important role in corporate development, encouraging the consumer to consume a particular product permanently during this period that the profits is low and competition is intense is important for companies. Thus perceiving consumer behavior has a key role to determine how to retain customers. Customers are constantly exposed to a variety of brand-related stimuli. Different stimuli create a different range of positive and negative emotions to the product for customers, some negative emotions such as guilt, doubt, dissatisfaction, regret, etc. causes different behavioral approaches from customers (Feizabadi, 2015). Gyeonggold defines consumer guilt and defines it as "negative emotions" that are the result of a consumer's decision and violate the values or norms of a person, that consumer experiences self-esteem reduction as a result of his decision. In the context of this definition, consumer guilt is specifically related to consumption decision; it means that guilt can be considered as a major factor in the initial impact as well as the repetition of purchasing decisions, as marketers use this concept to convince consumers to purchase their products.

2. Statement of the problem

Guilt is a negative self-conscious feeling that most users or marketing specialists, especially distributors and informers, use to influence customer behavior (Cottee & Ritch, 2005). Guilt is created based on the possibility that a person may have done a wrong action, in other words, guilt is an internal negative state in which personal experiences occur in response to positive events but unworthy or negative events but worthy. In spite of its negative capacity, guilt has been considered as one of the applied emotions because it informs the violation of personal and social standards and it is a motivation for compensation (Tangney and et al, 2003). In this regard, guilt is considered the pervasive aspect of everyday life, as researchers acknowledge that humans spend 13 percent of their time of life with a sense of guilt. Consumer guilt is a feeling caused by diagnosis of person in failing to access or violation of

*Corresponding author: bota_nzh@mail.ru

DOI: <https://doi.org/10.24200/jmas.vol8iss02pp49-59>

individual or social ethical standards in the field of consumption (Ayla ozhan, 2012). Consumer guilt can occur during the purchasing process, such as emotional purchases that may conflict with community norm, such as purchasing products that are harmful to health or under normal circumstances, such as when disposing a recycled product. (Iyla Ozan, 2012). In the religious literature, the concept of guilt is: regret and self-blame after committing a wrong act contrary to divine law, law and ethics (Heidari Naraghi, 2008). The consumer analyzes the benefits and disadvantages of the product in the decision-making process for purchasing a product that he has previously purchased and experienced with a mental return to before about that product (Feyzabadi & Shojae, 2015). Then he decides to purchase product when the consumer feels guilty, he does not enjoy the feeling but the guilt is a painful emotional experience that is accompanied by feelings of regret, remorse, self-blame and self-punishment, and the person is always trying to avoid them. This consumer effort may lead to the non-purchase or consumption of certain products that its consequences damage the target company. Therefore, companies should look for a way to prevent falling of their sales through consumer guilt and regulating consumer guilt-based marketing programs, because if a person is convinced in the process of marketing programs of a company, he can easily overcome his negative emotions and try to reduce the factors inducing guilt (Feyzabadi & Shojae, 2015). In this study, consumer guilt was selected that is the result of violating social norms, internal failure, unjustified excessive consuming, lack of self-control, as well as consuming for fun and enjoyment. Finally, this study will answer the question: Can the consumer's guilt change his purchasing behavior in the future?

2.1. Importance and necessity of research

Success and profitability of companies are factors such as proper understanding of the customer, providing optimal services and meeting their needs in a target market, so marketing can be a main factor in the success of business companies. Content understanding and conceptual explanation of consumer guilt which is a new approach and creating a huge evolution in marketing science and consumer values can lead to greater profitability for organizations.

2.2. The concept of consumer guilt

The guilt is disobedience and committing an act contrary to the law or the disobedience of the law (Hamilton, 2002). In other words, guilt is violating divine, social, individual and intra-individual laws.

2.3. Cognitive heterogeneity after purchase

If the consumer is dissatisfied with the quality of the product and feels a great difference between the actual and expected performance, he/she will experience a cognitive heterogeneity that will lead to his or her dissatisfaction. According to Fostinger's (1957) theory, cognitive homogeneity is a type of distress and anxiety in person that is as a result of the conflict between cognitive elements in the individual. This state occurs when one has contradictory beliefs or his attitude and behavior are opposed to each other (Badar, 2002). In the case of purchasing behavior, this state occurs when there is a significant difference between expected performance and actual product performance and it causes the individual to adjust his or her future behaviors in a way that less cognitive heterogeneity is created in him, as a result, if consumer after purchasing a product observes heterogeneity in his attitudes, he goes towards other products to avoid repetition of this heterogeneity.

2.4. Consumer mental conflicts

Consumer mental conflicts are one of the factors affecting cognitive heterogeneities. Consumer mental conflict is the extent of importance of product or a person's interest to the selection, consumption, and abandonment of goods or services. The amount of energy, money, and time spent in making a purchase may be due to the consumer mental conflict about the subject (Bitti & Vecal, 1988). One important aspect of consumer mental conflict is the formulation of a purchase decision that is a cognitive response to control uncertainty or hesitation caused by purchase (Mital, 1989). In other words, purchases with less mental conflicts have higher cognitive heterogeneities than those with higher mental conflicts (Ji badamci, 2009).

People who have uncertainty or doubt about their purchase decision and are constantly comparing selected and unselected options will suffer from cognitive heterogeneity after purchase, in contrast, consumers who trust their purchase performance experience less cognitive heterogeneity. Lindsay in his studies states that consumer will have cognitive heterogeneity after facing an unexpected price, he suggests three strategies to reduce this heterogeneity: first, he changes his belief or knowledge for consistency with heterogeneity. Second, he seeks information to confirm his previous beliefs. Third, it tries to reduce the heterogeneity by showing the transaction, the amount of money spent or the goods purchased less important.

2.5. Fastinger's theory of cognitive heterogeneity and guilt justification

Fastinger argues that the conflict between two cognitive elements within the individual is the basis for a change in the attitudes, the two cognitive elements become heterogeneous when the confirmation of one causes the negation of another, and this state occurs when one has opposite beliefs or even attitudes and behavior. OK. According to Fastinger, anyone who knows two cognitive elements are heterogeneous feels unpleasant. The more the cognitions are more and their deviation from one another is more, the heterogeneity will be greater (Badar et al., 2002). In this case, in addition to try to reduce heterogeneity, one actively avoids situations and information that are likely to increase the heterogeneity. (Tankart, 2002). Most scholars who have studied cognitive heterogeneity have referred to post-decision heterogeneity (Karimi, 1994). Therefore, it can be said that this theory is a theoretical justification for accepting consumers' guilt because the consumer is faced with a sense of internal heterogeneity and guilt after making the wrong decision when shopping. Emphasizing this decision will negate the internal standards, so one will face a sense of tension and guilt within self about this wrong decision and he will try not to place self in similar positions to such purchases.

2.6. Regret from purchasing

The regret caused by purchasing is the feeling that occurs after the purchase. This feeling can be caused by wishing to not mistake, like "I wish I would never mistake" or a guilty feeling of non-considering balance or suspect to be cheated by a seller (Bell, 1967).

After-purchase regret encompasses consequences caused by decisions that obtained from feelings of sadness perceived from misfortunes or mistakes, so it is obvious that the motivations and decision-making process related to purchase change and leads to cognitive heterogeneity and affects levels of regret after purchase. According to Landman, regret is defined as a painful judgment and a state of regret for misfortune, limitations, loss, mistakes or errors (Boee et al, 2012). The regret feeling is shown by announcing regret about difference between the results obtained from the decisions made with what is the individual demand, or it is defined as something that seems undesirable compared to the actual or hypothetical results of the non-selected options (Salivan et al, 2013).

2.7. Regret caused by non-purchasing

Regret caused by non-purchasing is the feeling that occurs after canceling and non-purchasing, this feeling is caused by a state with regret and wish to purchase that motivates one's desire to purchase later (Bell, 1967).

Sometimes consumers feel guilt and regret for not buying the product when the buyer misses the position of the previous purchase or the item that seems desirable is sold and he is unable to purchase it. People usually feel guilt or regret for purchases they did not make on trips or for purchases lost at auction (due to the low price of goods) (Ayla ozan, 2012).

Ruiz et al. (2011) have concluded that regret for purchasing and non-purchasing are different in terms of motivational consequences, regret for purchasing tends to be avoided and associated with prevention of failure. For example, consumers cannot resist against an inappropriate product or situation while regret for non-purchasing tends to approach and relate to the promotion of failure. For example, they cannot approach the desired product or situation. Regret for non-purchasing usually happens about the products associated with the benefit, while regret for purchasing happens about the enjoyable products that make you feel guilty with non-self-controlling. Regret for purchasing because of a mistake in decision-making not only leads to lost opportunities, but in this case, the person has not even been able to meet his needs (Dedogloo, 2010).

2.8. Violating from social norms

If a person takes step against the desirable and positive practices and rules of society and rejects them, he is called transgressive. Violating from social norms about determining the principles, criteria, and methods for explaining good and bad, right and wrong, should and should not be, and the like are said about purchase (Jafari, 2014).

Violation has many effects on guilt. Adaptive norms can eliminate the guilt; principle evaluations describe judgments of consumers, decision-making in certain situations of purchase (Heydari et al., 2014). Norms can be determined by consumers or others and depend on the product or conditions of purchase. Committing an offense or guilt, as well as violating internal norms or ethical standards such as buying products with high conflict or disregarding the recommendations of reference groups or surrendering to temptation, without the purchase program cause the increase of guilt despite evaluating negative norms. (Toristi, 2007). Guilt and violation are escape from the limits set by foreign sources, such as reference groups and society. For example in the center of France, the phrase "smoking banned" on a billboard shows a little girl smoking that taken the cigarette upside down. This image illustrates the sense of responsibility of smokers to the health of their relatives (Kedotal et al, 2017).

A French group working on making healthy food for children uses an interesting ad to persuade mothers to breastfeed their young children for up to 12 months. The company illustrates a picture of a bottle (milk) full of potatoes fried to show mothers that stopping breastfeeding until 12 months is not appropriate (Kedotal et al, 2017).

2.9. Lack of self-control (self-blame)

Self-regulation is a process that a person monitors his or her behavior in accordance with the standards, goals, and criteria that judge his or her behavior and regulate his or her behavior according to the outcome of the judgment, self-regulation is also important in improving and controlling health (Vindora, 2015). Vindura states that people are constantly guided by their behavior, so monitoring and regulating behavior can be effective in achieving health and its shortage can lead to health problems. Humans guide their behavior by controlling and regulating their own challenging goals and then mobilizing resources and effort to perform them. (Alivardi Nia and Salehnejad, 2011) showed that low self-control is one of the most important factors in predicting deviant behaviors. It should be noted that self-regulation and self-control are not intrinsic but they are acquired skills that can be learned (Valsh et al. al.2012).

Self-control refers to a capacity used to modify an individual and its reactions, and represents a capacity to resist the temptations that later lead to regrets (Bazomister, 2002). Conflict among goals of consumer and standards can weaken self-control and increase guilt. Emotional fluctuations, needs, extremes, and instant and unintentional purchases play a major role in contrast among goals and standards (Kay Nun et al., 2008). Reducing self-control and creating guilt creates through those domestic and foreign resources that is formed due to reduce the ability of consumer self-control and individual inability to modify it (Serony et al, 2006), however, regrets caused from reducing self-control can help consumers to rebalance their consumption, for example after over-shopping or consumption, consumer subsequently and subconsciously avoids guilt and violation and applies the strategy of utilitarianism against hedonism (Clarke et al, 2013). Therefore, it can be said that customer knowledge is increasingly recognized along with marketing as a valuable resource that can guide us to support R&D management (Musa Khani, 2012).

2.10. Purchasing and consuming with motivation of fun, hedonism and fashion victim

Fashion refers to the sudden and frequent change of taste that leads to a tendency for a particular behavior or consumption of a particular product, and fashion victim refers to a strong desire and interest in fashionable goods (park et al, 2010). Purchasing is with motivation of personal and subjective

pleasure and reflects an emotional and psychological value of purchasing that is represented by values such as happiness arising from the excitement of purchasing and avoiding daily activities. At the same time, in this way, people are looking for pleasure and justify their subsequent purchases. People sometimes buy to complete a stressful job to relieve stress and have a good feeling, and sometimes they tend to buy daily and buy products exposed to view and enjoy their shopping. Such purchases have subjective and intangible characteristics and create a pleasant reaction for consumer. Most people buy products for the necessities of life and receive services that bring happiness to themselves and others. They enjoy shopping and regret some of their decisions. (Hulberg, 1982).

Hedonism consumption has been provided to prepare people for the experience of pleasure and satisfaction that are both psychological and physiological needs that are also considered necessities in consumption. In addition to enjoyment, consumers can simultaneously understand the negative aspects and guilt. Following the desires and trying to achieve them, leads to instant purchases, obsessions, or any purchase that seeks to minimize threats and guilt (Ozan et al, 2012). Findings from several studies also show that consumers desire to enjoyable products when they want to justify their decisions. They can deliberately seek to satisfy their desires to avoid the fear of having a life of non-pleasure and wish and to regain the lost feeling of enjoyment in the long run. Guilt can be different due to indulgence in every condition (Dedeoglu et al, 2012).

2.11. Coping responses

According to the explanations, purchasers sometimes regret from their decisions. Such outcomes lead to the identification of needs related to purchase new products that more and more consumption is taken place based on need. Failure to pay attention to the outcomes of purchase behavior will increase post-purchase regret. It is assumed that consumers are often escaping from regret and try to control their behavior to prevent and regulate their regrets, assuming that guilt is a motivational state; consumers tend to regulate and eliminate their guilt through coping strategies. Avoidance is a set of consumer cognitive and behavioral responses aroused against emotions and stressful events to achieve emotional state and reduce stress level. Adaptive coping involves dealing with known negative emotions and trying to overcome the threat by solving problematic aspects and performing coping behaviors. In an avoidance problem, consumer tries to manage the negative source of emotional state in order to change the nature of a stressor factor directly (Dedeoglu et al, 2012).

2.12. Future behavior and perspectives of consumer

Intention to repurchase is a kind of cognitive and emotion-based behavior (Bagozzi, 2013) and it is a customer behavior and loyalty index and is basically depended on the times of purchases (Bakar, 2015) and it is a factor that influences the customer's future relationship with the organization, profitability of their company and their success. One of the common responses of consumer after deciding purchase is satisfaction or dissatisfaction, concern or doubt and sometimes regret and non-use of goods or abandonment of the goods. Behavioral tendencies indicate that customers are staying with the company or they are criticizing it. Behavioral tendencies can be categorized into two dimensions of desirable (satisfaction) and undesirable (dissatisfaction). Desirable behavioral tendencies include behaviors such as positive verbal advertising, overpayment, spending more money for the company and loyalty to the company, and undesirable behavioral tendencies include behaviors such as leaving the company, spending less money for the company, negative verbal advertising and legal activities against company (Ladhari, 2015).

When purchaser chooses a special option, his/her impression is that the chosen option is generally better than other options in the buying process and that the consumer expects a certain level of performance. Consumer will have a perception to the level of product performance during and after use of a consumer product or service. Satisfaction is a function of person's initial satisfaction with performance, his/her perception to actual performance, and the relationship of this performance with his/ her expectation. The level of customer satisfaction improves whether or not the product meets their previous expectations. High levels of satisfaction occur when performance is higher than the expected level (Muge et al, 2010). Satisfaction in person reduces the level of individual decision making in next times. This means that satisfactory shopping can encourage the person to repeat future shopping behavior. Satisfied consumers are much more likely to do positive word-of-mouth advertising about the brand (Poodney, 1994), but dissatisfaction occurs when performance is below the level of consumer expectation and if the gap between performance and expectation level is too high, consumer may restart the decision-making process and move towards another product (Danaher, 2012), in this case he/she will remember the brand as an inappropriate brand and may do negative word-of-mouth advertising amongst their surroundings.

Table 1. prospective of empirical foundations of research

Findings	Author	Title
At 95% confidence level, there is a positive and significant relationship between guilt and consumption.	Heidari et al 2014	Designing a structural model for consumer guilt (Study of Kermanshah City)
Self-gift purchase to enjoy had the greatest feeling of regret after shopping.	Sepid Shahr Jardi 2016	Self-gift motivation and its effect on post-purchase regret
Nine different mindsets from uncertain customers were obtained, which were the reason for the uncertainty between decision options.	Soltani & Mohammadian 2016	Discourse mining of uncertain customer patterns and application of the Q method
Consumer guilt's experiences in advertising programs obtain conflicting effects.	Camille Kodottal et al. 2017	Using guilty experiences in marketing communication
Guilty as a collaborative strategy against traffickers increases the market share of legal products.	Linden Meyer et al. 2017	Predicting consumer guilt and its consequences for fair consumption and trade

Guilt occurs more when disposing of recyclable products, and guilt is a major cause of repeated purchases.	Melissa S. et al. 2016	The concept of guilt in the consumer decision making process
The feeling of shame and guilt is very much related to the consumer's financial situation.	Sang Wan 2011	Religion and guilty
Regret caused by non-purchasing has the most effect on consumer guilt.	Iyla Ozan 2012	Consequences and contexts of consumer guilt
The feeling of shame and guilt is very much related to the consumer's financial situation.	Sang Wan 2011	Coping with guilt in unplanned purchases
Regret is the most common feeling experienced in most purchases or after consumption.	Di Diego 2010	Guilt and regret in shopping
Person can control his/her choices in the future by considering guilty.	Kan Yoo 2009	Guilt and justification of choice

2.13. Research model

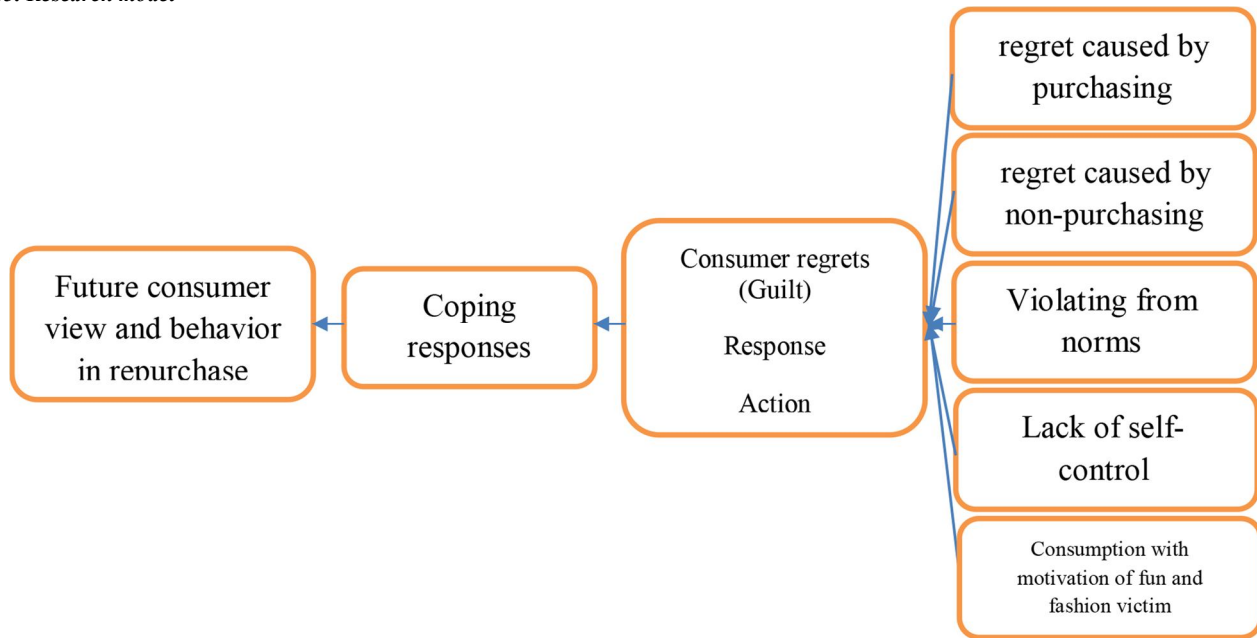


Figure 1. Structural Model of Ayla Ozan et al. (2012)

2.14. Research hypotheses

1. Regret caused by purchasing increases the level of guilt in the consumer.
2. Regret caused by non-purchasing increases the level of guilt in the consumer.
3. Violating accepted social norms increases the level of guilt in the consumer.
4. Lack of self-control increases the level of guilt in the consumer.
5. Purchasing and consuming for fun and fashion victim increases the level of guilt in the consumer.
6. Consumer guilt affects his/her coping responses.
7. Coping responses affect the view and decisions of the future purchaser of the consumer.

3. Research method

The present study is applied objectively, in terms of data collection is a survey research, and in terms of method is a non-experimental study, and the research design is correlational based on factor analysis and structural equations SEM.

3.1. Population, sample, sampling method

The statistical population of this research is: all purchasers (consumers) referring to commercial complexes and shopping centers in Almaty. According to statistical theories, when the population size (N) is uncertain, at least 384 people should participate in the study based on Cochran's formula with error

level (0.05). Also, the sampling method is convenience quota sampling to reach the number of 384. In the convenience sampling method, the data are collected from consumers who wish to complete the questionnaire at different times and days, as well as the reason for choosing the quota model is the difference in physical space, and the number of customers referring to complexes and shopping centers.

3.2. Method of gathering information

The information was collected from domestic and foreign printed or electronic sources (libraries, magazines, internet, articles) and note taking tool. In addition, a standardized questionnaire by Ayla Ozan et al. (2012) was used to measure consumer guilt and its consequences in purchase behavior, the number of questions of this questionnaire is 36 questions in 11 items. The answer to this questionnaire is as a five-point Likert scale.

3.3. Reliability and Validity

To investigate the reliability of the questionnaire, 30 questionnaires were distributed among the statistical population. Spss software was used for calculating Cronbach's alpha. The calculated alpha for all dimensions of the questionnaire was above 70%, so it can be said that the questionnaire has reliability and it is reliable. The validity of the questionnaire used in this study was confirmed by the professors' comments.

3.4. Data analysis method

Descriptive statistics methods such as frequency tables, bar chart, percentages, mean, variance and standard deviation were used to describe the findings. To analyze research hypotheses and the influence of variables, SEM structural equation test and factor analysis as well as Pearson correlation coefficient tests were used and also to investigate multivariate relationships (consumer variables, guilt, future purchasing behaviors and coping responses), multivariate regression model was used and to test the normality of the data distribution, Kolmogorov - Smirnov test was used. It is worth mentioning that all statistical analyzes were performed using SPSS, EXCELL and AMOS software.

4. Findings

56.8% of the statistical sample was single people.

51.8% of the statistical sample was women.

52.3% of the statistical sample has bachelor's degree and associate degree.

31.8% of the statistical sample was 29-35 years old.

38.8% of the statistical sample was the employees of private and public sectors.

51.8% of the statistical sample has average economic status.

-Guilt has an average of 16.48 with a standard deviation of 1.36.

-Regret caused by purchase has an average of 16.48 with a standard deviation of 1.36.

-Regret caused by non-purchase has an average of 15.67 with a standard deviation of 1.01.

-Violating social norms has an average of 16.35 with a standard deviation of 1.26.

-Lack of self-control has an average of 34.15 with a standard deviation of 4.67.

-Purchase with motivation of fun, fashion victim and hedonism has an average 8.48 with a standard deviation of 1.071.

-Coping responses have an average of 32.20 with a standard deviation of 2.40.

-Future decisions of consumer have an average of 8.59 with a standard deviation of 1.35.

Table 2. Statistical investigating of variables

Future decisions of consumer	Coping responses	Purchase with motivation of fun	Lack of self-control	Violating social norms	Regret caused by non-purchase	Regret caused by purchase	Guilt	Variables
8.59	32.20	8.46	34.15	16.35	16.29	15.67	16.48	average
9.00	32.00	9.00	35.00	17.00	16.00	16.00	17.00	Medium
10.00	32.00	9.00	39.00	17.00	16.00	16.00	17.00	Mode
1.3561	2.4008	1.0711	4.6740	1.2686	1.3361	1.0116	1.3614	SD
1.839	5.764	1.147	21.847	1.609	1.785	1.023	1.854	Variance
4.00	22.00	4.00	19.00	12.00	9.00	10.00	10.00	Minimum
10.00	37.00	10.00	40.00	20.00	19.00	20.00	20.00	Maximum

Table 3. Results of the one-sample Kamogrov-Smirnov test to assume the normality of data distribution

		Guilt	Regret caused by purchase	Regret caused by non-purchase	Violating social norms	Lack of self-control	Consuming with motivation of fun	Coping responses	Future decisions of consumer
Samples		384	384	384	384	384	384	384	384
Normal Parameters	average	16.48	15.67	16.29	16.35	34.15	8.46	32.20	8.59
	SD	1.36	1.01	1.33	1.26	4.67	1.07	2.40	1.35
Most Extareme Differences	The most certainty	0.130	0.109	0.098	0.170	0.098	0.203	0.111	0.603
	Positive	0.114	0.109	0.077	0.97	0.0136	0.208	0.107	0.041
	Negative	0.103-	0.102-	0.098-	0.036-	0.689-	0.116-	0.103-	0.413-
Kolmogorov-Smirnov test		1.167	0.975	0.874	0.975	0.874	1.01	0.840	0.741
Significant level		0.131	0.297	0.429	0.094	0.308	0.269	0.073	0.088

As it can be seen in Table 3, the Kolmogorov-Smirnov Z statistic is higher than 0.05 for all variables in the study and is not significant at the level ($p > 0.05$), it means that the distribution of the variables among the sample is normal with its distribution in population and the possibility of using parametric tests are existed.

Table 4. Testing hypotheses based on Pearson's correlation coefficient

Significant level	Correlation coefficient	Research hypotheses
0.00	**0.706	1- The regret caused by purchase →increasing the level of consumer guilt
0.00	**0.202	1- The regret caused by non-purchase →increasing the level of consumer guilt
0.027	**0.113	3- Violating social norms→increasing the level of consumer guilt
0.00	**0.546	4- The lack of self-control →increasing the level of consumer guilt
0.001	**0.166	5- Purchase for fun and hedonism →increasing the level of consumer guilt
0.001	**0.441	Consumer guilt→coping responses
0.002	**0.161	Coping responses→future consumer view and decisions

In all the hypotheses, the H0 hypothesis indicates no correlation or zero correlation, and the H1 hypothesis indicates the existence of correlation between variables.

According to the results in Table 4, it can be said:

The regret caused by purchase has an effect on increasing the level of consumer guilt and the relationship between two variables is significant.

The regret caused by non-purchase has an effect on increasing the level of consumer guilt and the relationship between the two variables is significant.

Violating social norms in purchasing has an effect on increasing the level of consumer guilt and the relationship between two variables is significant.

Lack of self-control has an effect on increasing the level of consumer guilt and the relationship between two variables is significant.

Purchasing and consuming for fun, hedonism and fashion victim have an effect on increasing consumer guilt and the relationship between the two variables is significant.

The level of consumer guilt affects his/ her coping responses, and there is a significant relationship between the level of consumer guilt and his/her coping responses.

4.1. Investigating the fitting of conceptual model

Model fitting was performed using chi-square of root mean square error of approximation (RMSEA), comparative fit index (CFI), Tucker-Lewis index (TLI), goodness of fit index (GFI), and adjusted goodness of fit index (AGFI) using SPSS and AMOS software. As it can be seen in Table 5, the chi-square value (CMIN) was 798.45 ($p = 0.00$). Also the root mean square error of approximation (RMSEA) was obtained 0.29 which is a small number and close to 0.05, also Tucker-Lewis index (TLI) was 0.31, adjusted goodness of fit index (AGFI) was 0.56 and relative chi-square index (CMIN/DF) 33.34 indicates sufficient values of model fit indices and it can be said that the model is in optimal adaptation with the data.

Table 5. Model fit indices

Parsimonious fit index		Comparative fit indices			Model fit indices			
CMIN/DF	RMSEA	TLI	GFI	AGFI	GFI	CMIN		
						df	p	
34.33	0.029	0.31	0.54	0.56	0.72	22	0.00	798.45

4.2. Investigating multivariate relationship

Multivariate regression model was used to investigate the multivariate relationship, consumer variables, and guilt, future purchasing behaviors, and coping responses (Figure 2).

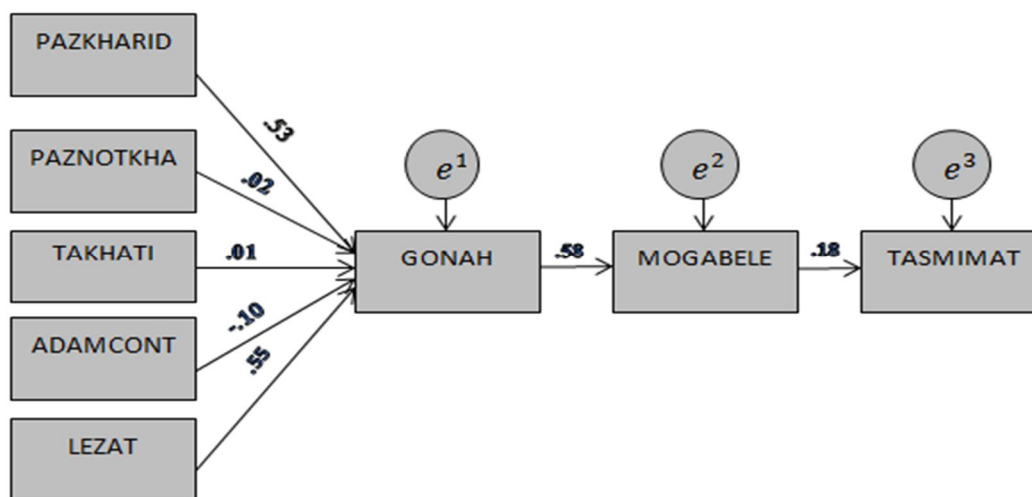


Figure 2. Multivariate regression model of the relationship between variables of consumer and guilt

Table 6. Investigating model assumptions based on multivariate regression model

Confirm/ rejecting hypothesis	sig	Impact	Hypotheses
Confirmation, positive and significant with 99% confidence	0.01<	0.53	1- The regret caused by purchase → increasing the level of consumer guilt
Confirmation, positive and significant with 99% confidence	0.01<	0.02	2- The regret caused by non-purchase → increasing the level of consumer guilt
Confirmation, positive and significant with 99% confidence	0.01<	0.01	3- Violating social norms → increasing the level of consumer guilt
Confirmation, negative and significant with 99% confidence	0.01<	0.10-	4- The lack of self-control → increasing the level of consumer guilt
Confirmation, positive and significant with 99% confidence	0.01<	0.55	5- Purchase for fun and hedonism → increasing the level of consumer guilt
Confirmation, positive and significant with 99% confidence	0.01<	0.58	Consumer guilt → coping responses
Confirmation, positive and significant with 99% confidence	0.01<	0.18	Coping responses → future consumer decisions

Based on the multivariate regression model and the findings in Table 6:

The regret caused by purchase affects the increase of the level of consumer guilt and it is confirmed in terms of influencing.

The regret caused by purchase affects the increase of the level of consumer guilt and it is confirmed in terms of influencing.

Violating social norms affects the increasing of the level of consumer guilt and is confirmed in terms of influencing.

Lack of self-control affects the increasing of the level of consumer guilt and is confirmed in terms of influencing.

Purchasing for fun and fashion victim affects the increasing of the level of consumer guilt and is confirmed in terms of influencing.

The level of consumer guilt affects his/her coping responses and is confirmed in terms of influencing.

Coping responses affect future consumer views and decisions and are confirmed in terms of influencing.

Also, the greatest effect between the component of purchasing for hedonism and fun is on the variable of consumer guilt. All coefficients are significant at the level ($p < 0.01$).

Table 7. Standard and non-standard regression coefficients of coping response with guilt

Coping responses		Variables
b	B	
0.58	**0.78	Guilt

Non-standard coefficients B

Standard coefficients b $p < 0.01$ **

Table 7 shows the standard and non-standard regression coefficients of coping responses with guilt. According to this table, the regression weight of all components is positive and all coefficients are significant at the level ($p < 0.01$). Based on the positive coefficients, it is found that by increasing guilt, the variable rate of coping responses increases.

Table 8. Standard and non-standard regression coefficients of future consumer view and decisions with coping responses

future consumer view and decisions		Variables
b	B	
0.18	**0.09	Coping responses

Table 8 shows the standard and non-standard regression coefficients of future consumer view and decisions with coping responses. According to this table, the regression weight of components is positive and all coefficients are significant at the level ($p < 0.01$). Based on the positive coefficients, it is found that the more the coping responses are increased, it affects more on future consumer view and decisions.

Table 9. path analysis

Variables	Indirect effect on coping response	Indirect effect on future purchase behavior
Regret caused by purchase	0.30	0.054
Regret caused by non-purchase	0.011	0.002
Violating social norms	0.0058	0.001
Lack of self-control	0.058-	0.01-

5. Discussion and conclusion

The model and table of the path analysis (Table 9) show that the strongest relationship is related with the purchasing component for hedonism and enjoyment with coping responses, and the weakest relation is related with the violating norms. The most effect on the future consumer view and decisions is the variable of purchase for hedonism, regret from purchasing, regret from non-purchasing, and against accepted social norms.

5.1. Test result of the first hypothesis

The regret caused by purchasing has an impact on increasing the consumer guilt. According to the correlation coefficient between the two variables ($r = 0.706$), there was a positive and significant relationship between regret caused by purchase and guilt, which is statistically significant, it means that the more regret caused by purchase is increased, consumer guilt increases. Regret caused by purchase not only leads to loss better opportunities, but also leaves unmet needs in individual. The results of this hypothesis are consistent with findings of Heidari et al. (2014), Camille Kodotal et al. (2017), Iyla Ozan (2012) and Di Digo et al. (2010).

5.2. Test result of the second hypothesis

The regret caused by non-purchasing has an impact on increasing the consumer guilt. According to the correlation coefficient between the two variables ($r = 0.202$), there was a positive and significant relationship between regret caused by non-purchase and guilt, which is statistically significant, it means that the more regret caused by non-purchase is increased, consumer guilt increases. The results of this hypothesis are consistent with findings of Heidari et al. (2014), Abubakr et al. (2017), Iyla Ozan (2012).

5.3. Test result of the third hypothesis

The violating from social norms in purchase increases the consumer guilt. According to the correlation coefficient between the two variables ($r = 0.113$), there was a positive and significant relationship between violating from social norms and guilt, which is statistically significant, it means that the more violating from social norms is increased, consumer guilt increases. The results of this hypothesis are consistent with findings of Linden Meyer et al. (2017), Iyla Ozan (2012), Ban Shiv et al. (2006) and Heydari et al. (2014).

5.4. Test result of the fourth hypothesis

The lack of self-control increases the consumer guilt. According to the correlation coefficient between the two variables ($r = 0.546$), there was a positive and significant relationship between lack of self-control and guilt, which is statistically significant, it means that the more the lack of self-control is increased, consumer guilt increases. Fear of making decision for wrong purchases, unplanned purchase or instant purchases, purchasing without prior consultation, irrational use of money can increase the buyer's guilt. The results of the above test are consistent with the findings of Iyla Ozan (2012), Butch Bell (2008), Bamster (2002) and Heydari et al. (2014).

5.5. Test result of the fifth hypothesis

Purchase and consumption for fun, hedonism and fashion victim increases the consumer guilt. According to the correlation coefficient between the two variables ($r = 0.166$), there was a positive and significant relationship between purchase and consumption for fun, hedonism and fashion victim and guilt, which is statistically significant, it means that the more purchase and consumption for fun, hedonism and fashion victim is increased, consumer guilt increases.

Consumer experience a greater sense of guilt when he/she purchase only to satisfy his/her need for luxury-oriented, especially if one is financially incapable and purchases for competing with friends and relatives, the perceived guilt increases. It can be said that the perceived guilt severity is also strongly correlated with the individuals' financial capacity; it means that the more the person's financial capacity is higher, he/she experiences less guilt. The results of this hypothesis test are consistent with the findings of Ayla Ozan (2012), Butch Bell (2008), Bamster (2002) and Heidari et al. (2014).

Test result of the sixth hypothesis

Consumer guilt affects his/her coping responses. According to the correlation coefficient between the two variables ($r = 0.441$), there was a positive and significant relationship between consumer guilt and coping responses, which is statistically significant, it means that the more consumer guilt is increased, coping responses increase. Superficiality, the use of expensive goods, and the purchase of goods that constantly causes the consumer regret, increase the buyer's guilt. This result is consistent with the findings of Linden Meyer et al. (2017), Melissa S., Brent Dale & Lonsford (2016), Heidari et al. (2014) and Ayla Ozan (2012).

5.6. Test result of the seventh hypothesis

Coping responses affects future consumer view and decisions. According to the correlation coefficient between the two variables ($r = 0.161$), there was a positive and significant relationship between coping responses and future decisions, it means that the more coping responses is increased, the decoction for future purchases changes more. Prospecting, purchasing cheap goods, justifying purchasing behavior, and using past experiences will influence the decision for future purchases. This result is consistent with the findings of Camille Kodottal et al. (2017), Linden Meyer et al. (2017), Melissa S., Brent Dale & Lonsford (2016) and Heidari et al. (2014).

5.7. Recommendations

Creating a happy and relaxed atmosphere to reduce stress, increasing self-esteem and creating a better feeling when purchasing.

Appropriate propaganda about encouraging people to purchase as doing something (for example, buying sportswear for fitness).

Specific training for sales staff to not disrupt the comfort of purchasers by inappropriate guides to avoid creating a negative feeling in consumers and avoid selling under forced compliance.

Consumers while traveling should note that similar purchase situations and opportunities may not be repeated again and not lose inexpensive purchase opportunities such as end of season auctions.

Advertising companies are proposed to pay particular attention to the social values and norms of the sector that they are targeting, for example to invest in film making as a sponsor and present on provincial networks without paying attention to their values.

Making decisions about advertising, media, theme (theme, context) messages, to be designed appropriate to fashion and taste of people and increase the amount of purchases by providing fashionable people's favorite products and variety in providing products.

Marketers for high-value (high-price) products provide enough and comprehensive information to consumers, along with main goods (expensive) embed alternative goods with good price for consumers to consumers not to be regretted from purchase when making decision.

Consumers tend to trust more on information that they obtain from personal sources (Lee & Young, 2009). Therefore, it is proposed to strengthen the recommendation advertising and having systematic plans in this area.

Designing a structured model of guilt in macro marketing strategies to predict supply and demand processes in the macro economy.

This study is examined in religious cities such as Qom, Mashhad, and Yazd in order to clarify whether the level of religiosity and religious tendencies of individuals is related to their perceived guilt.

REFERENCES

- Abedi, B., Asgari, N., Safari, H., Asadzadeh, A., & Rahnama, A. 2015. The Role of Individual, Environmental and Modernity Factors in Facilitating Instant Purchase.
- Ayla Özhan Dedeoğlu, İ.K. 2012. Consumer Guilt: A Model of Its Antecedents and Consequences. *Cilt: 12 Sayı: 1 Ocak*, 9-22.
- Bagozzi, R.P., Baumgartner, H., Pieters, R., & Zeelenberg M. 2000. The role of Emotions in Goal-Directed Behavior. S. Ratneshwar, D. G Mick, C. Huffman The Why of Consumption: Contemporary Perspectives on Consumers Motives, Goals and Desires, London, Routledge .
- Bakar, A., Lee, R., & Noor Hazarina, H. 2013. Parsing Religiosity, Guilt and Materialism on Consumer Ethics, *Journal of Islamic Marketing*, 4(3), 232 – 244.

- Baumeister, R.F. 2002. Yielding to Temptation: Self-Control Failure, Impulsive Purchasing and Consumer Behavior. *Journal of Consumer Research*, 28(4): 670-676.
- Bei, L.T., Lin, Y.T., & Yu, C.M. 2007. The Relationship between Consumer Guilt and Shopping Behavior. in G. Fitzsimons, V. Morwitz (Eds). *Advances in Consumer Research*, 34, Duluth, MN: Association for Consumer Research, 405-408.
- Burnett, M.S., & Lunsford, D.A. 1994. Conceptualizing Guilt in the Consumer Decision-making Process. *Journal of Economic Psychology*, 15(4): 307–315.
- Chédotal, C., Berthe, B., de Peyrelongue, B., & Le Gall-Ely, M. (2017). Using guilt appeals in communication. *Recherche et Applications en Marketing (English Edition)*, 32(4), 91-110.
- Chun, H., Patrick, V.M., & MacInnis, D.J. 2007. Making Prudent Vs. Impulsive Choices: The Role of Anticipated Shame and Guilt on Consumer Self-Control. G. Fitzsimons, V. Morwitz (eds.) *Advances in Consumer Research*, Duluth, MN, Association for Consumer Research.
- Clarke, P. D., & Mortimer, G. (2013). Self-gifting guilt: an examination of self-gifting motivations and post-purchase regret. *Journal of Consumer Marketing*, 30/6: 472–483.
- Cooke, A.D.J., Meyvis, T., & Schwartz, A. 2001. Avoiding Future Regret in Purchase-Timing Decisions“ Contexts. *Marketing Letters*, 14(3): 159–171.
- Cotte, J., & Ritchie, R. 2005. Advertisers’ Theories of Consumers: Why Use Negative Emotions to Sell? G. Menon, A.R. Rao (eds.) *Advances in Consumer Research*, Duluth, MN, Association for Consumer Research.
- Dahi, W.D., Honea, H., & Manchanda, R.V. 2005. Three Rs of Interpersonal Consumer Guilt: Relationship, Reciprocity, Reparation. *Journal of Economic Psychology*, 15(4): 307–315.
- Darlington, R.B., & Macker, C.E. 1966. Displacement of Guilt-produced Altruistic Behavior, *Journal of Personality and Social Psychology*, 4(4): 442-443.
- Dedeoglu, A., & Kazancoglu, I. 2012. Consumer Guilt: A Model of Its ntecedents and Consequences, *Ege Akademik Bakış / Ege Academic Eview*, V12, S1.
- Dedeoglu, A.O., & Kazançoglu I. 2010. The Feelings of Consumer Guilt: A Phenomenological Exploration. *Journal of Business, Economics and Management*, 11(3): 462–482.
- Elison, J. 2005. Shame and Guilt: A Hundred Years of Apples and Oranges. *New Ideas in Psychology*, 23(1): 5-32.
- Etzebarria, I. 2000. Guilt: An Emotion under Suspicion. *Psicothema*, 12: 101-108.
- Ghingold, M. 1980. Guilt Arousing Marketing Communications: An Unexplored Variable. in Monroe, K.B. (Ed.), *Advances in Consumer Research*, Association for Consumer Research, Ann Arbor, MI: 442-448.
- Lindenmeier, J., Lwin, M., Andersch, H., Phau, I., & Seemann, A. K. (2017). Anticipated consumer guilt: an investigation into its antecedents and consequences for fair-trade consumption. *Journal of Macromarketing*, 37(4), 444-459.
- Mahdiah, O. & Chobtarash, N. 2014. Consumer Mental Conflict and Purchasing Decision Making.
- Melissa, S. Burnett Dale, A. Lunsford . 2016. Conceptualizing Guilt in the Consumer Decision-making Process. *Journal of Consumer Marketing*.
- Nikbakht, M.J., Meshbaki, A., & Khodadad Hosseini, S.H. 2015. Investigation of the Influence of Factors of Buyer and In-Store instant-oriented on Instant Purchasing in Chain Stores.
- Sadeghi Mal Amiri, M. 2013. Designing a Consumer Behavior Analysis Model Based on the Teachings of Islam.
- Shahr Jerdi, S. 2016. Investigating Self- Gift Motivations and Post-Purchase regret.
- Tabatabaei Nasab, M., & Arjmand, K. 2014. Clustering of Customers based on Purchasing Style and Investigating its Relationship with Intrinsic Innovation and Neo-Personality Dimensions.