

# The effect of eating alone on behavioral intention: A case of Rize

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## ABSTRACT

### Keywords:

Eating alone,  
Solo dining,  
Behavioral intention,  
Rize.

In the modernizing and developing world conditions, eating and drinking habits and behaviors of individuals also change. With the effect of this change, consumers' collective eating habits have started to be replaced by individual eating. It is possible to state many reasons for this. The concept of eating alone, which has come to the fore in recent years, is very important for food and beverage businesses. It is because determining the needs of this changing customer profile and knowing the behaviors of this customer profile means determining the steps to be taken for these businesses. Therefore, in this study, the effect of eating alone on behavioral intention was investigated. There is no study examining the relationship between these variables. In addition, bungalow accommodation facilities, which have been under construction in Rize in recent years, are also businesses that will attract the attention of tourists with a eating alone profile. Therefore, it is also important to investigate these variables in Rize. A questionnaire form was created to measure this effect, and a total of 406 usable data were obtained. These data were subjected to various analyses using SPSS 24 and AMOS programs. As a result of these analyses, it was found that eating alone had no significant effect on behavioral intention. This result could not be compared since there is no finding in the literature addressing these variables. Therefore, testing the relationship between eating alone and behavioral intention as a whole through the model created for this research fills the gap in the literature. As a result of this result, suggestions for future studies and tourism policy makers are presented.

### Article History:

Submitted: 02.04.2024

Revised: 20.07.2024

Accepted: 12.10.2024

Published Online: 15.10.2024

## 1. Introduction


While the reasons for eating alone are changing in many countries today, there is a general increase in the number of individuals who eat alone (Kim & Choi, 2019). The concept of eating alone may differ internationally. For example, in western countries, eating alone is accepted by many segments of society, whereas in some Asian countries, such as Korea, it is not very accepted (Her & Seo, 2018). In Turkey, this situation differs according to the cities. While eating alone is accepted in large cities with a large population, eating alone is not accepted in relatively smaller cities due to the influence of human relations and culture. In fact, it can be said that individuals come together at dinner and make the critique of that day while eating. As can be understood from here, the reasons for the concept of eating alone may vary. For example, in China and Japan, individuals tend to eat their meals alone due to long working hours. At the same time, in western countries, it can be said that the rate of eating alone increases in later ages due to the nuclear family orientation of individuals. After the Covid-19 pandemic that occurred in 2019, it is known that the rate of eating alone has increased worldwide. During the pandemic period, there were major restrictions in many businesses, including food and

beverage businesses, due to full closure at first and then partial closure (Onat, Karakuş, Pimentel & Doğan, 2021). For this reason, it is known that the behaviors acquired in individuals during these periods continue to be reflected after the pandemic (Koay et al., 2024).

Eating alone is also frequently preferred among employees because the eating times of individuals who spend lunch with their colleagues at lunchtime are prolonged and the entire lunch break will be consumed by eating. In this case, it is seen that employees who do not want to consume their lunch breaks with food consume their meals in the office in a shorter time. These employees spend the remaining time resting (Danesi, 2012; Brown, Buhalis & Beer, 2020). Some employees prefer to eat alone because they are afraid of eating together. A study conducted in the United States of America revealed that 46% of the meals consumed by adults are meals consumed without another person (Group, 2017). As it is understood from this, the concept of eating alone is increasing in a way that food and beverage businesses cannot ignore.

Customers of hotel, food and beverage or accommodation businesses have information about these businesses after visiting these businesses once and then decide to visit these

Research Paper

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businesses again based on these experiences. In this case, although it is an important goal of an enterprise to attract new customers, the priority will be to send off the customers who come to their businesses by satisfying them. It is because a satisfied customer conveys this satisfaction to 3 people. However, a dissatisfied customer shares this dissatisfaction with 10 people (Çati & Koçoğlu, 2008). Therefore, as an operator, the primary goal is to provide services that will create positive behavioral intentions for their customers. The aim of this research is to reveal the effect of the concept of eating alone, which has become a trend in recent years and is increasing day by day, on behavioral intention. In this way, solutions will be suggested for food and beverage businesses. As a result of the literature review in this field, it has been determined that these two concepts have not been handled in a holistic manner and the relationship between these two variables has not been revealed. Thanks to this study, this relationship will be revealed by using SPSS 24 and AMOS package programs.

## 2. Conceptual Framework

Eating alone can be expressed as a practice in which individuals eat alone in various environments such as restaurants or home. The concept of eating alone, which has recently attracted attention, has become increasingly important after the COVID-19 pandemic. Researchers have examined the concept of solo dining from different perspectives, including socio-cultural evolution, experiential consumption, and its impact on individuals' emotions and satisfaction (Jang et al., 2021; Soo-Yeon & Seo, 2021; Zhang et al., 2021). Although solo dining is a concept that has emerged in recent years, it can be stated that this concept is not a temporary trend. It is because, as mentioned above, solo dining has become an increasingly widespread lifestyle in terms of changes in travel culture after the COVID-19 pandemic (Kwon et al., 2023).

The concept of dining alone is expressed as a new understanding that offers a multifaceted experience to consumers from a psychological, socio-cultural and commercial perspective. Some studies have shown that eating alone (especially in the evening) can be an uncomfortable experience for some consumers (Lorraine Brown et al., 2020). However, the same study also suggested that eating alone could be redefined as a form of communal eating (Koponen & Mustonen, 2020). There are many motivations behind eating alone. Research in this field shows that while intrinsic loneliness in individuals can lead to a positive and healthy experience, eating experiences that are not motivated by intrinsic loneliness can lead to physical and mental health problems (Jang et al., 2021). According to another study, the desire to recognize and discover new restaurants is stated as an important factor in increasing the dining experience alone (Soo-Yeon & Seo, 2021). In addition to the physical facilities offered by restaurants for customers, psychological comfort positively affects the perceived

service quality. The increase in perceived service quality increases the satisfaction of solo diners and their intention to visit again (Planinc & Kukanja, 2022).

As seen above, the concept of eating alone is indirectly related to the concept of behavioral intention. In other words, the concept of solo dining is a complex phenomenon that is influenced by various factors, including psychological, socio-cultural and commercial aspects of behavioral intention (Soo-Yeon & Seo, 2021; Planinc & Kukanja, 2022). It is important for the food and beverage industry to understand the motivations and experiences of solo diners, to increase the number of establishments offering solo dining experiences, and to meet the various needs of this growing customer profile. In this context, it is necessary to examine the concept of behavioral intention, which is related to the concept of eating alone, and the relationship between these two concepts in more depth.

Behavioral intention refers to the subjective probability and willingness of individuals to engage in a particular behavior in the future (Chu, 2018). In theoretical models such as Theory of Planned Behavior and Technology Acceptance Model, the concept of behavioral intention plays a key role (Venkatesh & Davis, 2000; Ramadiansyah et al., 2022). These models suggest that behavioral intention is an important determinant of actual behavior (Ramadiansyah et al., 2022). Behavioral intention is influenced by factors such as attitude towards behavior, subjective norms and perceived behavioral control (Karahana, 2018; Conner & Norman, 2022). Strong intentions are known to better predict behavior and thus reduce the intention-behavior gap (Hall, 2016). Moreover, intention strength is closely related to motivation and high levels of intention strength indicate a strong motivation to perform a behavior (Luszczynska et al., 2007).

Research has shown that the formation of behavioral intentions is crucial for action (Geers et al., 2009). Moreover, developing behavioral intentions increases the likelihood of taking goal-related actions. Therefore, high priority goals are more likely to lead to the formation of intentions (Marpaung et al., 2021). Behavioral intention is important for technology adoption (Conner et al., 2016), health behavior adoption (Purusottama, 2019), and entrepreneurial activities. Behavioral intentions serve as a predictor of actual behavior. They help to bridge the gap between intentions and actions in the formation of final behavior (Ramadiansyah et al., 2022). More precisely, behavioral intention is an important variable in understanding and predicting human behavior (Onat & Güneren, 2024). It is influenced by various factors and is the main determinant of whether individuals will take certain actions in the future (Yücenur et al., 2011). By studying behavioral intentions, researchers can learn about the factors that drive human behavior and develop strategies to encourage desired behaviors.

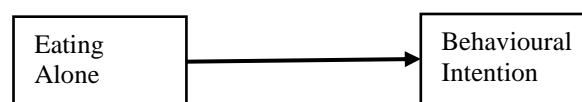
In studies on solo eating, it can be stated that individuals who eat alone have different intentions and behaviors than individuals who eat with a group (Wang et al., 2016; Kwon et al., 2023). For example, among older people in Korea, the frequency of eating alone has been found to affect their health and dietary behavior (Kwon et al., 2023). It also examined the association between eating alone and depressive symptoms in older adults and highlighted a potential link between eating alone and mental health outcomes (Tani et al., 2015; Sharkawi et al., 2021). Furthermore, the Theory of Planned Behavior was applied to understand healthy eating intentions and behaviors and showed that perceived behavioral control, attitudes, and subjective norms predict behavioral intentions, which in turn influence actual behaviors (Conner et al., 2002; Brouwer & Mosack, 2015; Close et al., 2018). However, there is no study that directly explains the relationship between the concept of eating alone and behavioral intention. Therefore, the relationship between these two variables was established based on TPB. Namely, within the framework of TPB, the concept of eating alone can be explained by considering the basic components of the theory. According to TPB, behavioral intentions are influenced by three main factors: attitude towards the behavior, subjective norm, and perceived behavioral control (Ajzen, 1985). In the context of eating alone, an individual's attitude towards this behavior can be shaped by factors such as personal preferences, convenience or cultural norms. For example, a person who enjoys the values such as solitude or independence may have a positive attitude towards eating alone. In other words, according to TPB, eating alone is expected to have a positive and significant effect on behavioral intention. In this context, it can be said that individual norms, perceived control, individuals' attitudes, emotional and psychological behaviors affect whether individuals eat together or alone. In other words, it is possible to talk about a relationship between the concept of eating alone and the concept of behavioral intention. Clearly demonstrating this relationship may enable effective measures to be taken for populations that tend to eat alone.

### 3. Method

#### 3.1. Instrument and Data Collection

Quantitative research method was adopted in the study. Data for the research were collected through a questionnaire form. The questionnaire form was applied to tourists visiting Rize. Rize has become a frequent destination for domestic and foreign tourists in recent years in terms of cultural tourism. In 2023, according to the statistics of Rize Provincial Directorate of Culture and Tourism, Rize was visited by a total of 1.196.054 domestic tourists and 145.942 foreign tourists (Rize Provincial Directorate of Culture and Tourism, 2022b). These figures show that the highest number of tourists visited Rize destination in 2023 according to past data. Rize is a destination that includes a total of 15 tourism types such as

nature tourism, plateau tourism, thermal tourism, heli-skiing, bird watching for tourists and provides services in these areas for incoming tourists. For this reason, Rize was chosen as the destination where the application would be made. Tourists visiting Rize were selected from tourists who benefited from the goods and services produced by food and beverage businesses operating in the Rize destination. Convenience sampling method was preferred as the sampling method. The independent variable of the research, the concept of eating alone, was preferred from the 6-dimensional and 18-expression scale used in the study of Yen et al. (2022). In this scale, 5-point Likert-type weighting was used. In the scale of the behavioral intention concept, which is the dependent variable of the research, the one-dimensional scale with 3 statements used in the study of Ryu et al. (2008) was preferred. In this scale, 5-point Likert scale was also preferred by the authors. In this context, the research model in Figure 1 was created to reveal the relationship between these two variables and the hypothesis was expressed as in H1.



**Figure 1. Research Model**

Source: By authors (2024).

H1= Eating alone has a positive and significant effect on behavioral intention.

#### 3.2. Sampling and Data Analysis

In this research, convenience sampling method, which is one of the non-random sampling methods, was used. For this reason, the questionnaire was applied regardless of domestic and foreign tourists who benefit from the goods and services produced by the food and beverage businesses in the Rize destination. The result of the study cannot be generalized to the universe because the convenience sampling method is used. It is because when the same study is applied in a different period, the result may differ (Gürbüz & Şahin, 2014).

In the study, tourists visiting Rize destination constitute the universe. According to 2023 Rize Provincial Directorate of Culture and Tourism data, a total of 1.341.996 tourists visited Rize (Rize Provincial Directorate of Culture and Tourism, 2022b). According to Ural & Kılıç (2005), it is recommended to reach 384 people as a sample group in populations of 100 000 people or more. The questionnaire form created in the current study was applied to tourists visiting Rize between 21.03.2024 and 30.03.2024. Ethics committee permission numbered 2024/098 was obtained from Recep Tayyip Erdoğan University Social and Human Sciences Ethics Committee on 20.03.2024 for the survey. In this study, a total of 406 people were reached as a result of the online survey application. While creating the online questionnaire, since it was obligatory to answer every

**Table 1. Kurtosis and Skewness Values**

Statements	Skewness	Kurtosis
Eating alone is enjoyable (EA11)	-.697	.478
I have good moments when eating alone (EA12)	-.748	.544
Eating alone allows for choosing the food one likes (EA13)	-.899	1.268
One does not have to cooperate with others when eating alone (EA14)	-.802	.995
One can avoid the foods one dislikes by eating alone (EA15)	-.936	1.832
Eating alone is convenient (EA16)	-.851	1.695
Eating alone saves time (EA17)	-.942	1.549
One can save money by eating alone (EA18)	-.672	.183
I would like to come back to Rize in the future (BI1)	-.721	-.160
I would recommend Rize to my friends or others (BI2)	-.924	.621
I would more frequently visit Rize (BI3)	-.363	-.835

EA: Eating Alone, BI: Behavioural Intention

Source: By authors (2024)

statement, no statement was left blank. Therefore, all collected questionnaires were included in the analysis.

The data collected through the questionnaire for this study were analyzed using SPSS and AMOS 24 package programs. In the study, it was determined whether the normality assumption was met by looking at the skewness and kurtosis test results. Since the data fulfilled the normality assumption, the study continued with parametric tests. Then, Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were conducted, respectively. After EFA, the statements from 1 to 10 of the variable of eating alone were removed from the analyses in order due to overlapping between the factors and factor loadings below the minimum value of 0.60 (Hair et al., 2013). After the statements were removed, the analysis was repeated and it was determined that the scale validity of the eating alone variable was achieved. Afterwards, the behavioral intention scale was also subjected to EFA and it was determined that scale validity was achieved. The KMO values of the scales were examined for scale reliability. Structural equation modeling was used to analyze the data. In this study, structural equation modeling was used because it gives more meaningful results than regression analysis, includes the error variations of the statements in the scale in the analysis, and allows the model to give better results by creating covariances between the statements.

## 4. Findings

### 4.1. Normality Distributions of Scales Used in the Study

Multivariate normal distribution analyses were used to determine whether the scales used in this study provided normality distribution. The critical values of skewness and kurtosis were taken as (-+2.58) at 0.01 significance level and (-+1.96) at 0.05 significance level (Çokluk et al., 2016; Tabachnick & Fidell, 2014).

Table 1 presents the skewness and kurtosis values of the scales used in the study. Based on the table, it can be said that the highest skewness value is -0.363 and the lowest skewness value is -0.942. When kurtosis values were analyzed, the lowest kurtosis value was found to be -0.835 and the highest kurtosis value was found to be 1.832. Since these values are between the desired critical threshold

values, it can be said that the scales used in the study meet the normality assumption. In the rest of the study, parametric analyzes were used.

### 4.2. Descriptive Statistics

In this research, tourists visiting Rize destination constituted the population of this study. Descriptive statistics of the sample group representing this population are shown in Table 2.

**Table 2. Descriptive Statistics of Respondents**

	N	Frekans	Percentage (%)
Gender	406		
Male		229	56.4
Female		177	43.6
Age	406		
20 and Below		14	3.4
21-30		102	25.1
31-40		171	42.1
41-50		81	20
51 and Above		38	9.4
Educational Status	406		
Primary Education		9	2.2
Secondary Education		13	3.2
High School		55	13.5
Associate's Degree		74	18.2
Bachelor's Degree		170	41.9
Master's and Doctoral Degree		85	20.9
Monthly Income (₺)	406		
0-11300		38	9.4
11301-20000		19	4.7
20001-30000		60	14.8
30001-40000		103	25.4
40001-50000		131	32.3
50001 and Above		55	13.5

When Table 2 is examined, in summary, the majority of the tourists participating in the study are male (229, 56.4%). When the age range of the tourists is analyzed, it is seen that there are 171 (42.1%) people between the ages of 31-40. When the educational status and income of the respondents are examined, it can be stated that the majority have a bachelor's degree (170, 41.9%) and an income between 40001-50000 (131, 32.3%).

### 4.3. Measurement Model

In this study, first EFA and then CFA were applied to test the scale validity. As a result of the findings obtained,

**Table 4. Validity Results of Eating Alone Scale (EFA Results)**

Items	Factor Loading	Common Variance	Cronbach's Alpha	Eigenvalues	Total Variance
EA11	.724	.524	0.916	5.121	64.007
EA12	.731	.534			
EA13	.837	.700			
EA14	.832	.692			
EA15	.859	.739			
EA16	.840	.706			
EA17	.829	.687			
EA18	.733	.537			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy					
Bartlett's Test of Sphericity					Approx. Chi-Square
					df
					Sig.
					2021.872
					28
					.000

Source: By authors (2024).

Structural Equation Modeling was used to test the model created for this research. The goodness of fit values used for CFA and SEM are given in Table 3.

**Table 3. SEM and CFA Goodness of Fit Values**

Fitness Criteria	Good Fit	Acceptable Fit	References
<b>Overall Fitness of the Model</b>			
$\chi^2/df$	$0 \leq \chi^2/df \leq 2$	$2 < \chi^2/df \leq 5$	(Byrne, 2010)
p value	$.05 < p \leq 1.00$	$.01 \leq p \leq .05$	(Gürbüz & Şahin, 2014)
<b>Comparative Fit Indices</b>			
RMSEA	$0 \leq RMSEA \leq .05$	$.05 < RMSEA \leq .08$	(Schermelleh-Engel et al., 2003)
IFI	$.95 \leq IFI \leq 1.00$	$.90 \leq IFI < .95$	(HERBERT W. Marsh & Hau, 1996)
NFI	$.95 \leq NFI \leq 1.00$	$.90 \leq NFI < .95$	(Byrne, 2010)
NNFI	$.95 \leq NNFI \leq 1.00$	$.90 \leq NNFI < .95$	(Mulaik et al., 1989)
CFI	$.95 \leq CFI \leq 1.00$	$.90 \leq CFI < .95$	(Bentler, 1992; Hu & Bentler, 1999)
<b>Absolute Fit Indices</b>			
GFI	$.90 \leq GFI \leq 1.00$	$.80 \leq GFI \leq .89$	(Marsh, Balla, & McDonald, 1988)
AGFI	$.90 \leq AGFI \leq 1.00$	$.80 \leq AGFI \leq .89$	(Doll et al., 1994)
SRMR	$0 \leq SRMR \leq .05$	$.05 < SRMR \leq .08$	(Gürbüz & Şahin, 2014)

Source: Onat et al., (2021).

Reliability refers to whether a variable or variables used in a study are consistent (Hair et al., 2013). Cronbach Alpha reliability coefficient was used to determine the internal consistency of the scales used in this study. Hair et al. (2017) state that the Cronbach Alpha reliability coefficient should be at least 0.70. In this study, the reliability coefficient was based on 0.70.

The EFA results of the eating alone scale are given in Table 4. When the table is examined, the KMO sampling level is observed as 0.929. Since this value is above 0.90, it is characterized as very good by Çokluk et al. (2016). When the eigenvalue is examined, it indicates a unidimensional structure. The total variance explained was found to be 64%. Since this is 60% and above, which is a desired value, it can be stated that the total explained variance is sufficient. The statements from 1 to 10, which constitute the eating alone scale of the study, were removed from the analyses sequentially because they were below the desired value of 0.60 (Hair et al., 2013). After these statements were removed from the analyses, the analyses were renewed again and continued since the scale validity was ensured.

EFA results of the behavioral intention scale are given in Table 5. The KMO sampling level of this variable was found to be 0.70. Çokluk et al. (2016: 207) state that values between 0.70 and 0.80 are acceptable values. It is observed that there is only one factor related to the scale, and the total explained variance is 67%. It can be stated that the reliability of the behavioral intention scale used in the study is 0.754. Since this value is above the desired threshold value, it can be said that scale reliability is ensured. Since the factor loadings of the scale statements were above the desired value (0.60), no statement in the scale was removed.

After the EFA analysis, the eating alone and behavioral intention scales were subjected to a first level CFA analysis. With the data collected, it was determined

**Table 5. Validity Results of the Behavioral Intention Scale (EFA Results)**

Items	Factor Loading	Common Variance	Cronbach's Alpha	Eigenvalues	Total Variance
BI1	.809	.655	0.754	2.022	67.386
BI2	.820	.673			
BI3	.833	.694			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy					.700
Bartlett's Test of Sphericity					Approx. Chi-Square
					df
					Sig.
					293.820
					3
					.000

Source: By authors (2024).

**Table 6. First Level Multifactor CFA Results**

Model	Dimension	Item	Std. Path Coefficients	t Value	CR	AVE
1. Level	Eating Alone (EA)	EA.11	0.635	11.857	0.918	0.585
		EA.12	0.642	11.989		
		EA.13	0.811	14.829		
		EA.14	0.809	14.796		
		EA.15	0.861	15.601		
		EA.16	0.842	15.307		
		EA.17	0.799	14.634		
		EA.18	0.680	Fixed *		
	Behavioural Intention (BI)	BI.1	0.685	Fixed *	0.758	0.511
		BI.2	0.711	10.376		
		BI.3	0.748	10.344		

Fit indices:  $\chi^2/df= 1.575$ ; CFI= 0.989; GFI= 0.973; AGFI= 0.957; RMSEA= 0.038; TLI= 0.986; SRMR= 0.025  
 Source: By authors (2024).

whether the scales, whose theoretical background was known, were validated or not.

Table 6 presents the CFA results for the eating alone and behavioral intention scales. First of all, two values that should be noted here are composite reliability (CR) and average variance extracted (AVE) values. These values are required by Fornell & Larcker, (1981); Dedeoğlu & Demirer, (2015); Boğan & Dedeoğlu, (2019) with a minimum CR of 0.70 and above and AVE of 0.50 and above. It is observed that the scales in this study are above the desired values (CR=0.91, 0.75; AVE=0.58, 0.511). Therefore, based on these values, it can be stated that composite construct reliability and convergent validity are achieved in the scales used in this study. While the factor loadings in Table 6 are above the desired values, it can be stated that the goodness of fit of the model given in Table 3 has excellent goodness of fit. Therefore, it is possible to say that construct validity and reliability were achieved for the scales used in this study (See Tables 4,5,6).

**Table 7. Structural Model Results**

Hypotheses	Relationship	Std. Factor Loading ( $\beta$ )	t value	P value	Result
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H<sub>1</sub> EA → BI 0.057<sup>NS</sup> 0.965 0.335 Not Supported

Fit indices:  $X^2/df= 1.575$ ; CFI= 0.989; GFI= 0.973; AGFI= 0.957; RMSEA= 0.038

R<sup>2</sup>: BI = .057

<sup>NS</sup>= Not Significant

EA= Eating Alone; BI= Behavioural Intention

Source: By authors (2024).

Table 7 shows that eating alone has a positive but insignificant effect on behavioral intention ( $\beta= 0.057$ ;  $t= 0.965$ ;  $p=.335$ ). Therefore, based on Table 7, it can be stated that hypothesis H1 (H1= Eating alone has a positive and significant effect on behavioral intention) is rejected. However, the model goodness of fit values obtained as a result of SEM analysis are above the values specified in Table 3 ( $X^2/df= 1.575$ ; CFI= 0.989; GFI= 0.973; AGFI= 0.957; RMSEA= 0.038). Therefore, it can be stated that the model created for this study shows a good fit with the collected data.

#### 4.4. Structural Model

The independent variable of this study consists of the concepts of eating alone, and the dependent variable consists of behavioral intention. SEM was preferred to test the relationship between these variables. SEM analysis increases the explanatory rate of the model by including error variances that are not included in the analysis in classical analysis methods. In addition, the variables in the model created in classical analyses are included in the model separately. In SEM, on the other hand, the model is created holistically and it is determined whether the analyses will be verified with the collected data. These analyses also reveal alternative relationships with the model goodness-of-fit values it offers to the researcher. The models created as a result of these relationships are better understood. For these reasons, SEM was preferred in this study. The relationship between eating alone and behavioral intention is presented in Table 7 with SEM analysis.

#### 5. Discussions And Conclusions

In this study, the effect of eating alone, which has been increasing in recent years, on behavioral intention was investigated. The results of the research show that eating alone does not have a significant effect on behavioral intention. In other words, consumers can eat out alone for many reasons. Especially after the pandemic, consumers met their food and beverage needs without caring what the individuals outside said and socializing. After the pandemic, this habit continued in consumers and the habit of eating alone continues today. For this reason, it can be stated that positive behavioral intentions, i.e. behaviors such as revisiting and making a positive announcement of the business, did not occur in the consumers participating

in the research. It is not possible to compare this finding with a direct finding in the literature. However, within the framework of the Theory of Planned Behavior (TPB), the concept of eating alone can be explained by considering the basic components of the theory. According to TPB, behavioral intentions are influenced by three main factors: attitude towards the behavior, subjective norm, and perceived behavioral control (Ajzen, 1991). In the context of eating alone, an individual's attitude towards this behavior can be shaped by factors such as personal preferences, convenience or cultural norms. For example, a person who enjoys solitude or independence may have a positive attitude towards eating alone. In other words, according to TPB, eating alone is expected to have a positive and significant effect on behavioral intention. However, in this study, no significant effect was found. This insignificant effect can be explained in many ways.

Rize destination usually hosts more tourists in the spring and summer months. This is because during the winter months the attractions of the region are not accessible due to the season. For this reason, Rize usually starts to host tourists in the spring months and becomes a popular destination for tourists in the summer months, especially until September. Food and beverage establishments in the region are limited, especially in terms of high-end service facilities and establishments to serve. Due to the density during these months, it is difficult to find a place to eat in most establishments in the region. Therefore, this situation has increased especially after the pandemic. The holiday concept of individuals has changed from sea, sand and sun holidays to nature tourism types such as culture, mountain and plateau tourism (Ongun et al., 2015). In addition, when the averages of the behavioral intention statements were examined, it was observed that the statement "I would like to visit Rize more often" was lower than the other statements. This situation can be explained by the short length of stay of tourists visiting the Black Sea region. Tourists visiting the region visit the tourist attractions of the region in maximum 2 days. It is known that the average number of overnight stays in the region is 1.4 (Rize Provincial Directorate of Culture and Tourism, 2022a). In other words, tourists visiting the region do not stay in the region for a long time. Therefore, participation in other types of tourism besides the cultural attractions of the region remains limited. Consequently, the intention to visit the region again is low, and as a result, behavioral intention is low. Another reason for the insignificant relationship is that eating alone may mean that consumers may order a smaller portion of food or eat in a cheaper restaurant. However, this region is generally located on the route where cultural tours are intensively organized. For this reason, consumers who come with the tour cannot leave the tour and consume the food they want in the restaurant they want. It is because they have to go to the predetermined food and beverage establishments on the route written in the tour program. Since the tours are crowded, the products to be eaten and drunk in the restaurant to be visited are

determined in advance by the tour leader and the guide. For these reasons, the participants who make up the sample of this study may be tour-oriented. Tour-oriented consumers may not have developed positive behavioral intentions because they do not eat alone and cannot choose the products they want.

As a result of these results, the best suggestion that can be made for food and beverage restaurants in the region is that the intention to eat alone is on the rise in Turkey as in the rest of the world. Therefore, the number and quality of food and beverage establishments can be increased to cater to this market. In this way, consumers of this profile will easily find the appropriate environment to eat and may prefer these restaurants again in the future.

It is known that bungalow accommodation facilities in Rize are businesses that provide individual service. These businesses generally consist of places intertwined with nature away from the collective living areas. Therefore, the profile of these businesses is compatible with the customer profile of consumers who eating alone. From this point of view, it is thought that by increasing the investment in bungalow accommodation in the region, the service provided to individual tourists will increase. In this way, consumers with the profile of eating alone will be attracted to this region.

Tourism decision-makers in the region can encourage an increase in the number of good quality food and beverage establishments in the region. Only in this way a sufficient number of tourism facilities can be put into operation to serve the 4-month tourism activity in the region.

In this study, the relationship between the concept of eating alone and behavioral intention was tried to be revealed in Rize destination. In future studies, the same concepts can be revealed through data collected in different regions and regional differences can be compared.

The implementation of this study was carried out in the first quarter of 2024. These dates are the dates when Rize tourism has not fully started tourist density. This constitutes the limitation of this study. In future studies, the implementation period of the study can be kept longer and more data can be collected from a more diverse tourist profile.

## References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Bentler, P. M. (1992). On the fit of models to covariances and methodology to the Bulletin. *Psychological Bulletin*, 112(3), 400–404.
- Boğan, E., & Dedeoğlu, B. B. (2019). The influence of corporate social responsibility in hospitality establishments on students' level of commitment and intention to recommend. *Journal of Hospitality, Leisure, Sport and*

- Tourism Education, 25, 100205. <https://doi.org/10.1016/j.jhlste.2019.100205>
- Brouwer, A. M., & Mosack, K. E. (2015). Expanding the Theory of Planned Behavior to Predict Healthy Eating Behaviors. *Nutrition & Food Science*. <https://doi.org/10.1108/nfs-06-2014-0055>
- Brown, L., Buhalis, D., & Beer, S. (2020). Dining alone: improving the experience of solo restaurant goers. *International Journal of Contemporary Hospitality Management*, 32(3), 1347–1365.
- Brown, Lorraine, Buhalis, D., & Beer, S. (2020). Dining Alone: Improving the Experience of Solo Restaurant Goers. *International Journal of Contemporary Hospitality Management*.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd editio). Taylor & Francis Group.
- Çati, K., & Koçoğlu, C. M. (2008). Müşteri Sadakati İle Müşteri Tatmini Arasındaki İlişkiyi Belirlemeye Yönelik Bir Araştırma. *Selcuk University Social Sciences Institute Journal*, 19.
- Chu, K. M. (2018). Mediating Influences of Attitude on Internal and External Factors Influencing Consumers' Intention to Purchase Organic Foods in China. *Sustainability*. <https://doi.org/10.3390/su10124690>
- Close, M., Lytle, L. A., Chen, D.-G., & Viera, A. J. (2018). Using the Theory of Planned Behavior to Explain Intention to Eat a Healthful Diet Among Southeastern United States Office Workers. *Nutrition & Food Science*. <https://doi.org/10.1108/nfs-06-2017-0123>
- Çokluk, Ö., Şekercioğlu, G., & Büyükoztürk, Ş. (2016). Sosyal Bilimler İçin Çok Değişkenli İstatistik SPSS ve LISREL Uygulamaları (Vol. 5). PEGEM AKADEMİ. <https://doi.org/10.14527/9786055885670>
- Conner, M., Abraham, C., Prestwich, A., Hutter, R., Hallam, J., Sykes-Muskett, B., Morris, B., & Hurling, R. (2016). Impact of Goal Priority and Goal Conflict on the Intention–health–Behavior Relationship: Tests on Physical Activity and Other Health Behaviors. *Health Psychology*. <https://doi.org/10.1037/hea0000340>
- Conner, M., & Norman, P. (2022). Understanding the Intention–Behavior Gap: The Role of Intention Strength. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2022.923464>
- Conner, M., Norman, P., & Bell, R. A. (2002). The Theory of Planned Behavior and Healthy Eating. *Health Psychology*. <https://doi.org/10.1037/0278-6133.21.2.194>
- Danesi, G. (2012). Pleasures and stress of eating alone and eating together among French and German young adults. *The Journal of Eating and Hospitality Research*, 1, 77–91.
- Dedeoğlu, B. B., & Demirer, H. (2015). Differences in service quality perceptions of stakeholders in the hotel industry. *International Journal of Contemporary Hospitality Management*, 27(1), 130–146. <https://doi.org/10.1108/IJCHM-08-2013-0350>
- Doll, W. J., Xia, W., & Torkzadeh, G. (1994). A confirmatory factor analysis of the end-user computing satisfaction instrument. *MIS Quarterly*, 453–461.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Geers, A. L., Wellman, J. A., & Lassiter, G. D. (2009). Dispositional Optimism and Engagement: The Moderating Influence of Goal Prioritization. *Journal of Personality and Social Psychology*. <https://doi.org/10.1037/a0014830>
- Group, T. H. (2017). *Hartman eating occasions compass: Food & beverage analytics*. <https://store.hartmangroup.com/content/food-and-beverage-occasionscompass.pdf>
- Gürbüz, S., & Şahin, F. (2014). *Sosyal Bilimlerde Araştırma Yöntemleri* (Vol. 2). Sözkese Matbaacılık Tic. Ltd. Şt.
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2013). *Multivariate Data Analysis* (Pearson Ne). Pearson Higher Ed. <https://pearson.com.au/products/H-J-Hair-Anderson/H-J-Hair-Joseph-F-et-al/Multivariate-Data-Analysis-Pearson-New-International-Edition/9781292021904?R=9781292021904>
- Hair, Joseph F, Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (Second ed.). Sage Publication.
- Hall, P. A. (2016). *Intention*. [https://doi.org/10.1007/978-1-4614-6439-6\\_1697-2](https://doi.org/10.1007/978-1-4614-6439-6_1697-2)
- Her, E. S., & Seo, S. (2018). Why not eat alone? The effect of other consumers on solo dining intentions and the mechanism. *International Journal of Hospitality Management*, 70, 16–24.
- Hu, L.-T., & Bentler, P. M. (1999). Structural Equation Modeling: A Multidisciplinary Journal Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Multidisciplinary Journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Jang, S. J., Lee, H., & Choi, S.-H. (2021). Associations Among Solo Dining, Self-Determined Solitude, and Depression in South Korean University Students: A Cross-Sectional Study. *International Journal of Environmental Research and Public Health*. <https://doi.org/10.3390/ijerph18147392>
- Karahan, M. O. (2018). *Dijital Korsanlıkta Planlı Davranış Teorisi ve Etik Kavramının Etkisi*. Dumlupınar Üniversitesi Sosyal Bilimler Enstitüsü.
- Kim, H., & Choi, J. (2019). Measuring emotions toward dining alone by frequency of single dining events. *British Food Journal*, 121(2), 642–654.
- Koay, K. Y., Ong, D. L. T., Idris, I., Kamarulzaman, N. S. B., & Cheah, C. W. (2024). The rise of solo dining: prediction and consumer profiling. *Journal of Foodservice Business Research*, 1–20. <https://doi.org/DOI:10.1080/15378020.2024.2307682>



- Koponen, S., & Mustonen, P. (2020). Eating Alone, or Commensality Redefined? Solo Dining and the Aestheticization of Eating (Out). *Journal of Consumer Culture*. <https://doi.org/10.1177/1469540520955219>
- Kwon, Y.-S., Hong, K. H., Park, Y. K., & Kim, S. (2023). How Does the Frequency of Eating-Alone Among Older People in Korea Affect Their Health and Dietary Behavior? *Nutrients*. <https://doi.org/10.3390/nu15092085>
- Luszczynska, A., Sobczyk, A. S., & Abraham, C. (2007). Planning to Lose Weight: Randomized Controlled Trial of an Implementation Intention Prompt to Enhance Weight Reduction Among Overweight and Obese Women. *Health Psychology*. <https://doi.org/10.1037/0278-6133.26.4.507>
- Marpaung, F. K., Dewi, R. S., Grace, E., Sudirman, A., & Sugiat, M. A. (2021). Behavioral Stimulus for Using Bank Mestika Mobile Banking Services: UTAUT2 Model Perspective. *Golden Ratio of Marketing and Applied Psychology of Business*. <https://doi.org/10.52970/grmapb.v1i2.68>
- Marsh, H. W., Balla, J. R., & McDonald, R. P. (1988). Goodness-of-fit Indices In Confirmatory Factor Analysis: The Effect of Sample Size. *Psychological Bulletin*, 103(3), 391.
- Marsh, HERBERT W., & Hau, K.-T. (1996). Assessing Goodness of Fit: Is Parsimony Always Desirable? *The Journal of Experimental Education*, 64(4), 364–390.
- Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of Goodness-of-Fit Indices for Structural Equation Models. *Psychological Bulletin*, 105(3), 430–445.
- Onat, G., Karakuş, Y., Pimentel, T. D., & Doğan, Y. (2021). Antecedents of the Concept of Travel Intention During the Pandemic: A Case Study from Turkey. *ROSA DOS VENTOS-Turismo e Hospitalidade*, 13(4).
- Onat, Gökhan, & Güneren, E. (2024). The mediator role of customer satisfaction in the effect of gastronomic image on behavioral intention. *Tourism & Management Studies*, 20(2).
- Ongun, U., Gövdere, B., & Kaygısız, A. D. (2015). Burdur İlinin Kırsal Turizm Potansiyelinin Değerlendirilmesi: Sorunları ve Çözüm Önerileri. *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 7(12), 99–116.
- Planinc, S., & Kukanja, M. (2022). Restaurant Customers' Quality Expectations. *Tourism*. <https://doi.org/10.37741/t.70.2.2>
- Purusottama, A. (2019). Revisiting Students' Entrepreneurial Intention in Indonesia: A Theory of Planned Behavior Approach. *Jurnal Manajemen Dan Kewirausahaan*. <https://doi.org/10.9744/jmk.21.1.64-73>
- Ramadiansyah, S. A., Safitri, R., & Prasetyo, B. D. (2022). The Effect of Self-Efficacy and Social Influence on Behavioral Intention to Use Zoom Cloud Meeting in Implementing Virtual Learning for Students of Brawijaya University. *Technium Social Sciences Journal*.
- Rize Provincial Directorate of Culture and Tourism. (2022a). Coğrafi İşaretli Ürünler. <https://rize.ktb.gov.tr/TR-256610/cografi-isaretli-urunler.html>
- Rize Provincial Directorate of Culture and Tourism. (2022b). Turizm Türleri. T. C. Kültür ve Turizm Bakanlığı. <https://rize.ktb.gov.tr/TR-112787/turizm-turleri.html>
- Ryu, K., Han, H., & Kim, T. H. (2008). The relationships among overall quick-casual restaurant image, perceived value, customer satisfaction, and behavioral intentions. *International Journal of Hospitality Management*, 27(3), 459–469. <https://doi.org/10.1016/j.ijhm.2007.11.001>
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the Fit of Structural Equation Models: Tests of Significance and Descriptive Goodness-of-Fit Measures. *Methods of Psychological Research Online*, 8(2), 23–74.
- Sharkawi, I., Latip, M., & Mohamed, Z. A. (2021). Applying the Theory of Planned Behavior to Healthy Eating Intention Among Malaysian Adults. *International Journal of Academic Research in Business and Social Sciences*. <https://doi.org/10.6007/ijarbs/v11-i17/11387>
- Soo-Yeon, I., & Seo, S. (2021). A Focus on the Restaurant Social Servicescape on the Solo Dining Satisfaction: Moderating Role of Restaurant Familiarity. *Tour Sci Soc Kor*. <https://doi.org/10.17086/jts.2021.45.3.167.191>
- Tabachnick, B. G., & Fidell, L. S. (2014). *Using Multivariate Statistics: Pearson new international edition (Sixth Edit)*. Pearson Education Limited.
- Tani, Y., Sasaki, Y., Haseda, M., Kondo, K., & Kondo, N. (2015). Eating Alone and Depression in Older Men and Women by Cohabitation Status: The JAGES Longitudinal Survey. *Age and Ageing*. <https://doi.org/10.1093/ageing/afv145>
- Ural, A., & Kılıç, İ. (2005). *Bilimsel Araştırma Süreci ve SPSS ile Veri Analizi*. Detay Yayıncılık.
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science*.
- Wang, X., Shen, W., Wang, C., Zhang, X., Xiao, Y., He, F., Zhai, Y., Li, F., Shang, X., & Lin, J. (2016). Association Between Eating Alone and Depressive Symptom in Elders: A Cross-Sectional Study. *BMC Geriatrics*.
- Yen, C.-H., Tsai, F. C., Tzeng, J.-C., & Tai, C.-Y. (2022). Why do people eat alone? An international comparison. *British Food Journal*, 124(10), 3152–3168.
- Yücenur, G. N., Demirel, N. Ç., Ceylan, C., & Demirel, T. (2011). Hizmet Değerinin Müşterilerin Davranışsal Niyetleri Üzerindeki Etkisinin Yapısal Eşitlik Modeli ile Ölçülmesi. *Doğuş Üniversitesi Dergisi*, 12(1), 156–168.
- Zhang, X., Chen, S., Shi, L., Gong, D., Zhang, S., Zhao, Q., Zhan, D., Vasseur, L., Wang, Y., Yu, J., Liao, Z., Xu, X., Qi, R., Wang, W., Ma, Y., Wang, P., Ye, N., Ma, D., Shi, Y., ... You, M. (2021). Haplotype-Resolved Genome Assembly Provides Insights Into Evolutionary History of the Tea Plant *Camellia Sinensis*. *Nature Genetics*. <https://doi.org/10.1038/s41588-021-00895-y>

## INFO PAGE

The effect of eating alone on behavioral intention: A case of Rize

### Abstract

In the modernizing and developing world conditions, eating and drinking habits and behaviors of individuals also change. With the effect of this change, consumers' collective eating habits have started to be replaced by individual eating. It is possible to state many reasons for this. The concept of eating alone, which has come to the fore in recent years, is very important for food and beverage businesses. It is because determining the needs of this changing customer profile and knowing the behaviors of this customer profile means determining the steps to be taken for these businesses. Therefore, in this study, the effect of eating alone on behavioral intention was investigated. There is no study examining the relationship between these variables. In addition, bungalow accommodation facilities, which have been under construction in Rize in recent years, are also businesses that will attract the attention of tourists with a eating alone profile. Therefore, it is also important to investigate these variables in Rize. A questionnaire form was created to measure this effect, and a total of 406 usable data were obtained. These data were subjected to various analyses using SPSS 24 and AMOS programs. As a result of these analyses, it was found that eating alone had no significant effect on behavioral intention. This result could not be compared since there is no finding in the literature addressing these variables. Therefore, testing the relationship between eating alone and behavioral intention as a whole through the model created for this research fills the gap in the literature. As a result of this result, suggestions for future studies and tourism policy makers are presented.

**Keywords:** Strategic management, Bibliometrics, Science mapping, Tourism.

### Authors

Full Name	Author contribution roles	Contribution rate
<b>Gökhan Onat:</b>	Conceptualism, Methodology, Software, Validation, Formal Analysis, Investigation, Resources, Data Curation, Writing - Original Draft, Writing - Review & Editing, Visualization, Supervision, Funding acquisition	100%

**Author statement:** Author(s) declare(s) that All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. **Declaration of Conflicting Interests:** The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article

**Ethics Committee Satatement:** Ethics committee report is available for this research and it has been documented to the journal

Ethics committee: Recep Tayyip Erdogan University social and humanities ethics committee

Date of ethics committee decision: 20.03.2024

Ethics committee decision number: 2024/098