Exploring Payment Pain in Food Purchases During Travel

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Abstract

This study examines the relationship between the pain of payment during food purchases by travellers and moderating variables such as income, trip planning duration, payment amount, and payment method. Two experimental studies were conducted, one in the United States and one in Turkiye. Results from Turkiye indicate that payment method and trip planning duration play a significant and positive moderating role in the relationship between the highest food purchase amount and the pain of payment. In the United States, however, the payment method was found to have a significant but negative moderating effect. Additionally, when income and trip planning duration were considered as independent variables, both the highest food purchase amount and total food expenditure during the trip had a significant and positive moderating effect on the pain of payment. This study discusses the "pain of payment" phenomenon, a cognitive bias in behavioral economics, in the context of tourism expenditures.

Keywords: pain of payment; behavioral economics; food purchasing on traveling, tourist behavior

JEL Code: D91, Z30, C93

1. Introduction

Travel is often considered one of the most enjoyable leisure activities. Whether for work, family visits, holidays, exploring different cultures, reliving past experiences, or even culinary reasons, people travel for many motivations. However, how frustrating is it when food and drink expenses exceed the planned budget during a trip? While it's expected that a rational individual sticks to their

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budget, do food-related expenses on a trip bring more pleasure than pain, especially when they surpass the planned amount? Or is the "pain of payment" felt during travel the same as when making similar purchases outside of travel? Does our mental accounting work the same way during travel, or is there a shift in emotions in our memorial?

Food and drink expenses typically account for about one-third, or up to one-fourth in some regions, of total travel costs (Littrel et al., 1994; Telfer and Wall, 2000; Türker and Süzer, 2022; Apak and Gürbüz, 2023; Phan et al., 2023). Thus, these expenses are a significant part of travel. Research on tourist consumption behaviors (March and Woodside, 2005; Divisekera and Deegan, 2008; Lee et al., 2015; Ekizler et al., 2022) reveals links between income, prices, and emotional factors in consumption. Additionally, studies on traveller psychology (Pearce and Stringer, 1991; Pearce and Packer, 2013; Tung et al., 2016) and tourists' purchasing behaviors (Yu and Littrell, 2005; Cheng et al., 2022; Farokhi et al., 2024) have been discussed.

The concept of mental accounting emerged in the 1980s (Thaler, 1985; Thaler, 1999), and the pain of payment has been explored since 1996 (Zellermayer, 1996). Both have been studied empirically (Prelec and Loewenstein, 1998; Yeung, 2014; Liu, 2020; Reshadi, 2020; Tufan et al., 2024) and in neuroeconomics (Mazar et al., 2006; Banker et al., 2021). Although few studies examine mental accounting in tourism (Brida and Tokarchuk, 2015; Tufan et al., 2024), no research addresses the pain of payment in this context. The emotional impact of food and drink spending, a key aspect of travel, remains underexplored.

Leisure activities like travel and dining out, which are often associated with spontaneous decisions, can influence how individuals perceive their spending. While such activities can heighten the enjoyment of food purchases, they might also lead to increased payment pain, particularly when the expenses surpass initial expectations. For instance, the emotional responses to spending during planned vacations could differ from those during more impulsive leisure activities, like an unplanned restaurant visit. These behaviors may also interact with factors such as income and planning duration, further influencing the pain of payment experienced by travellers. Thus, leisure activities, with their varying levels of planning and spontaneity, provide a unique lens to examine how the pain of payment manifests in travel contexts. How much of these emotions are remembered after the experience is another research question for the researchers.

This study's literature review covers behavioral economics in tourism, planned and unplanned expenditures and pain of payment. Two experimental studies are presented: the first, an online survey with 102 participants from Turkiye, who had travelled in the last 12 weeks and could recall their highest food purchase and total food expenditure. The second study involved 86 U.S. participants recruited via Amazon's Mechanical Turk, with similar criteria. Both studies tested moderating effects on payment pain using IBM SPSS 30.0 and the Hayes Process Model-1 (Hayes, 2018). The findings were discussed and the study concluded.

2. Literature review

Behavioral economics integrates psychological insights into traditional economic models, challenging the assumption of rational decision-making (Ruben and Dumludağ, 2018). It highlights how cognitive biases influence economic decisions, suggesting that individuals process information imperfectly and are emotionally driven, contrary to rational expectations (Kitapcı, 2017). Concepts like bounded rationality, prospect theory, hindsight bias, cognitive dissonance, framing effects, illusion of control, anchoring, and mental accounting have been validated through extensive theoretical and empirical studies (Simon, 1955; Festinger, 1957; Tversky and Kahneman, 1974; Fischhoff, 1975; Langer, 1975; Kahneman and Tversky, 1979; Tversky and Kahneman, 1981; Thaler, 1985).

Within cognitive biases, research has explored various aspects of the pain of payment, but no studies specifically address this phenomenon in relation to food purchases by travellers. In order to overcome this gap, this paper reviews the behavioral economics literature on tourism, reviews research on planned and unplanned travel expenditures and discusses existing studies on the pain of payment.

Behavioral Economics in Tourism

Behavioral economics examines market behavior within the context of human limitations and complexities, treating individuals as economic agents (Mullainathan and Thaler, 2000). It contrasts with some assumptions of the marginalist revolution (Hattwick, 1989) but does not aim to replace traditional economics (Ho et al., 2006). Instead, it explores the influence of cognitive, social, and emotional biases on economic decisions (Kurtoğlu, 2016; Tepeler and Dastan, 2021). This perspective acknowledges that economic decisions are inherently influenced by emotions, suggesting that psychological traits should be considered in benefit maximization, while not rejecting neoclassical views (Kahneman, 1994; Kitapcı, 2017). In tourism economics, marketing, and management, behavioral economics offers both theoretical and practical insights, particularly through the lens of bounded rationality (Li et al., 2022).

Psychology's study of human behaviour makes psychology-based approaches in tourism economics logical (Pearce and Packer, 2013). Challenges in generalizing tourist behavior support the idea that such behaviors are intuitive or made without full information (Chang, 2018; Park et al., 2018; Tan et al., 2018). Research in tourism and behavioral economics explores various topics, such as the role of colours in shaping consumer behavior (Bagchi and Cheema, 2013; Siamionava et al., 2018), tourists' sensitivity to prices (Mccarville and White, 1996; Dellaert and Lindberg, 2003), tourists' perception of time and related behaviors (Yaoqi, et al., 2023), behavioral intention (Cavusoglu and Avcıkurt, 2021) and the anchoring trap effect experienced by tourists (Jin and Phua, 2016; Book et al., 2015). These studies, among others, provide researchers with an opportunity to

interpret the complex behaviors of tourists through the lens of behavioral economics (Li et al, 2022; Mayer, et al. 2022).

Taking advantage of all of previous literature this study focus is placed on the traveller experience, specifically food purchases during travel, considering factors such as planning time, expenditure amount, and the resulting feeling of payment pain.

Planned and Unplanned Purchasing in Tourism

In microeconomic theory, the ideal consumer is assumed to have perfect market knowledge, ordered preferences, and make fully rational choices (Henderson and Quandt, 1980). However, in practice, consumers operate in a dynamic environment with limited or unknowable information (Wood, 1998). Decision-making often diverges from ideal rationality, influenced by cognitive biases and intuitive methods (Tversky and Kahneman, 1981; Slovic, 1995), leading to unplanned spending alongside planned expenditures, deviating from the ideal consumer model (Piron, 1991). Unplanned purchases are typically defined as unexpected acquisitions (Kollat and Willett, 1967), and impulsive buying, a specific form, has historically been viewed negatively, influenced by marketing strategies (Ainslie, 1975). However, Rook and Fisher (1995) argued that impulsive buying behavior is shaped by normative evaluations, with consumers viewing it as "smart consumption" when justified (Rook, 1987; Rook and Fisher, 1995; Cheng et al., 2022). Additionally, not all unplanned spending is impulsive; some consumers budget for such purchases (Zeithaml, 1985; Stilley et al., 2010).

Tourists, like other consumers, exhibit both planned and unplanned spending behaviors, with impulsive buying being particularly prevalent in tourism contexts (Muruganantham and Bhakat, 2013; Brida and Tokarchuk, 2017; Sarı Gök et al., 2021). Factors such as store location, product uniqueness, salespeople's approach, and perceived value influence these behaviors (Kim and Littrell, 1999; Turner and Reisinger, 2001; Josiam et al., 2005; Kemperman et al., 2009). Tourists may experience mixed emotions, such as "guilt balanced with happiness," after unplanned purchases (Mukhopadhyay and Johar, 2007), and may feel "pride" when resisting further purchases. Baek and Park (2022) found that female and younger tourists are more likely to make planned purchases. Expenditures that exceed the planned budget are of greater importance mainly for local economic actors (Baruah and Sarma, 2012). Since unplanned purchases constitute a significant portion of retail sales (Mogelonsky, 1998; Cheng et al., 2022), the "pain of payment" following such purchases remains underexplored in tourism contexts.

The duration of trip planning varies based on travel type and motivations (Fodness, 1994; Petrick, 2004), with personal, economic, and psychological factors also influencing planning duration (Gnoth, 1997; Bonn et al., 1998; Yoon and Uysal, 2005; Agyeiwaah and Zhao, 2024). However, the literature lacks direct studies on when tourists begin planning their vacations. This study aims to address this gap by exploring the planning duration of tourists' trips.

Pain of the Payment Theory

Kahneman and Tversky (1983) suggest that people construct the outcomes of their decisions in their minds, and this explains consumer behaviors that deviate from rationality. Thaler (1985) stated that individuals mentally code combinations of gains and losses and that purchasing behavior is measured by "transaction utility," which he defined as "mental accounting." Money is assessed by individuals under different categories in their minds, and mental accounting explains how an individual's economic decisions are influenced by this evaluation (Thaler, 1999). Using this information, Zellermayer (1996) introduced the concept of "pain of payment" into the literature. According to Zellermayer (1996), the pain of payment refers to the pleasure or pain that an individual experiences because of the mental accounting process that occurs in the mind during the purchasing process. The concept has gained validity with the diversification and widespread use of payment methods.

Among the studies examining the pain of payment, some have pointed out that this phenomenon is influenced by the type of payment method and the degree of transparency of the payment (Prelec and Loewenstein, 1998; Raghubir and Srivastava, 2008; Horst and Matthijsen, 2014, Banker et al., 2021; Liu and Dewitte, 2021). Other studies have emphasized the influence of what product or service is being consumed (Bagchi and Block, 2011; Sheehan and Van Ittersum, 2018; Thomas et al., 2011; Gu and Chan, 2023), as well as those that focus on the post-purchase outcomes (Kamleitner and Erki, 2013; Shah et al., 2016).

Limited literature on pain of payment has primarily focused on how the pain is affected by the use of different payment forms and whether this pain is physical or emotional. However, it is also crucial to consider the effects of individual characteristics, personality types, types of products purchased, advertising, and cultural structures on the pain of payment (Reshadi and Fitzgerald, 2023).

It is well-known that consumer behavior in tourism encompasses fundamental behavioral sciences and economics, alongside applied research areas (Woodside, 2017). While there are a few studies that evaluate mental accounting from a tourism perspective (Brida and Tokarchuk, 2015; Tufan et al., 2024), no study has yet discussed the concept of pain of payment within this context. Considering that there are also studies examining the relationship between travel behavior and happiness (Shi, et al., 2024), it is thought that examining the pain of payment, which may be the painful side of a trip, will contribute to the literature.

3. Study Model and Hypotheses

The study is developed based on two main models, each generating eight hypotheses. The first model, which includes four hypotheses, is presented in Figure 1.
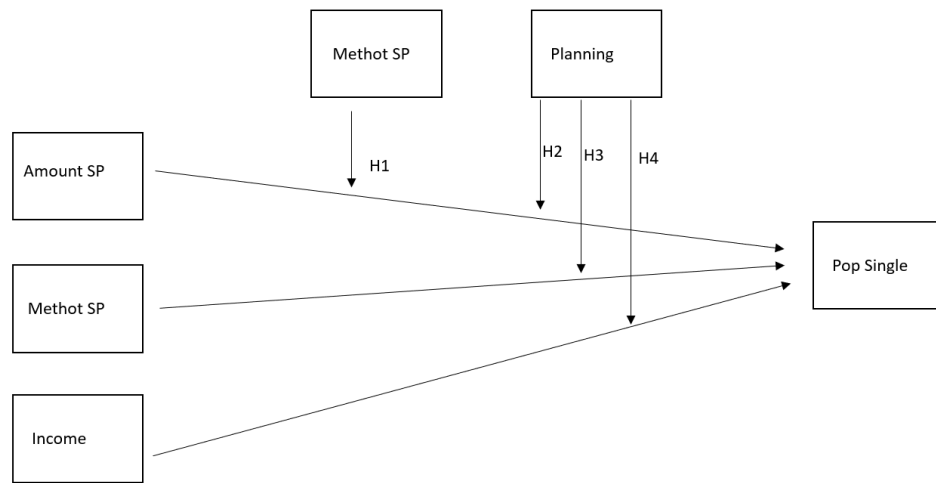
Figure 1. Research Model-1

In this model, four main hypotheses are included. The independent variables of the model are defined as 'Highest single food purchase amount during the trip' (AmountSP), 'Payment method of the highest single food purchase during the trip' (MethodSP), and 'Income' (Income). The dependent variable in this model is selected as 'Pain of payment felt from the highest single food purchase during the trip' (Pop Single). The moderating effects of 'payment method' (MethodSP) and 'trip planning duration' (Planning) will be examined in the relationship between the independent and dependent variables.

The hypotheses formulated for this purpose are as follows:

H1. The payment method plays a moderating role in the relationship between the highest single food purchase amount during the trip and the pain of payment felt from this purchase.

H2. The duration of trip planning plays a moderating role in the relationship between the highest single food purchase amount during the trip and the pain of payment felt from this purchase.

H3. The duration of trip planning plays a moderating role in the relationship between the payment method of the highest single food purchase during the trip and the pain of payment felt from this purchase.

H4. The income of the participant plays a moderating role in the relationship between the highest single food purchase amount during the trip and the pain of payment felt from this purchase, with respect to the duration of trip planning.
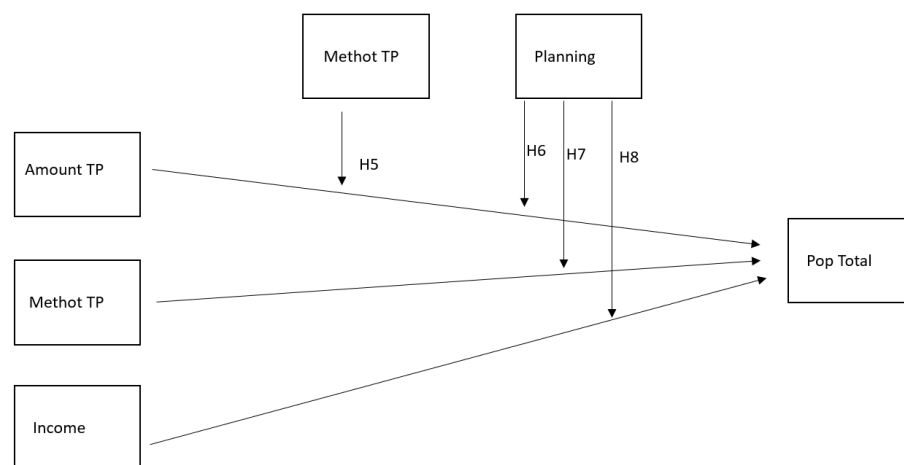
Figure 2. Research Model-2

In Figure 2, the second model of the study is presented. This model also includes four main hypotheses. The independent variables of the model are defined as 'Total food expenditure during the trip' (AmountTP), 'Payment method of food purchases throughout the trip' (MethodTP), and 'Income' (Income). The dependent variable in this model is selected as 'Pain of payment felt from all food purchases during the trip' (PoP Total). The moderating effects of 'payment method' (MethodTP) and 'trip planning duration' (Planning) will again be examined in the relationship between the independent and dependent variables.

The hypotheses formulated for this purpose are as follows:

H5. The payment method plays a moderating role in the relationship between the total food expenditure during the trip and the pain of payment felt from this expenditure.

H6. The duration of trip planning plays a moderating role in the relationship between the total food expenditure during the trip and the pain of payment felt from this expenditure.

H7. The duration of trip planning plays a moderating role in the relationship between the payment method of all food purchases during the trip and the pain of payment felt from this expenditure.

H8. The income of the participant plays a moderating role in the relationship between the total food expenditure during the trip and the pain of payment felt from this expenditure, with respect to the duration of trip planning.

The study model was analysed using IBM SPSS 30.0 and Hayes' (2018) Process Model 1 for moderation analysis. The model estimates, tests, and probes interactions in ordinary least squares regression, where the effect of the focal predictor X on the outcome Y is moderated by a single moderator W (Hayes, 2018). Hayes' Process Model 1 offers several advantages, especially in testing moderation

and mediation effects. It allows for the simultaneous testing of multiple moderators or mediators, enhancing the understanding of variable relationships. The bootstrapping method in Hayes' model also ensures accurate confidence interval estimation, addressing data non-normality. Furthermore, it enables the analysis of both direct and indirect effects within one model, making it a comprehensive tool for complex behavioral and social science research.

In the model formula, y represents the dependent variable, x represents the independent variable, w represents the moderator, and xw represents the interaction between the independent variable and the moderator.

$$y: i + b_1 x + b_2 x + b_3 xw$$

Each hypothesis in the study model has been tested separately according to Hayes Process Model 1. The hypotheses are the same in both Study 1 and Study 2, which have different data collection fields. Thus, the results of the same hypotheses in different datasets will be observed.

Study 1

Study 1 data were collected from 157 participants in Turkiye via social media (Instagram ads). Participants were required to have travelled in the last 12 weeks and recall their spending. Data from 55 participants who did not meet these criteria were excluded, leaving 102 valid responses. The highest spending was on a single food purchase, with the payment pain measurement for this (PopSingle) showing a Skewness of 0.468 (Std.Error: 0.239) and Kurtosis of -1.080 (Std.Error: 0.474). For total food spending, the payment pain measurement (PopTotal) had a Skewness of 0.306 (Std.Error: 0.239) and Kurtosis of -0.952 (Std.Error: 0.474), all within the accepted range (-1.5 to +1.5) (Büyüköztürk et al., 2008; Tabachnick and Fidell, 2013). The scale's Cronbach's Alpha was 0.827, indicating high reliability (Kalaycı, 2014; Büyüköztürk, 2019).

In the scale conducted in Turkiye, the currency used for shopping during the trip was the Turkish Lira. The scale was administered in Turkish. 70.6% of the participants were in the 26-40 age range, and the average amount spent on the most expensive food purchase during their travels ranged from 351 TRY to 750 TRY. The total amount spent on food purchases during their travels averaged between 1501 TRY and 2000 TRY. For both the highest amount spent on a single food purchase and for food purchases in general, the most preferred payment method was a credit card. 49% of the participants identified themselves as belonging to the lower-middle-income group, while the closest result was the upper-middle-income group at 35.3%.

Additionally, considering Turkiye's current inflation trend (the annual inflation rate in 2024 was 44.38% according to TurkStat, 2025), the participants' adherence to their travel budgets is noteworthy. 33.3% of the participants stated that they did not set a budget for food shopping during their travels, while 31.4% said they set a budget and adhered to it. One potential outcome affecting the sense of payment pain is that 22.5% of the participants reported feeling unhappy because

they were unable to stick to their budget. Regarding how far in advance the travel plans were made, 28.4% of the participants indicated they planned 1-2 weeks before the trip, while 20.6% said they planned 1 month before.

Analysis Results of Study 1

When examining the relationships between the payment method as a moderating variable and the payment pain felt because of the highest single food purchase during the trip, it was initially determined that there was no multicollinearity problem between the independent variable and the moderating variable (Pearson Correlation: -0.036). The interaction term value (p: 0.036) was found to be smaller than the significance level (p<0.05), indicating that the contribution of the moderating variable to the model is significant. The moderating variable (coeff: 0.635) has a positive effect on the model relationship. The contribution of the model was found to be (r²-chng: 0.044).
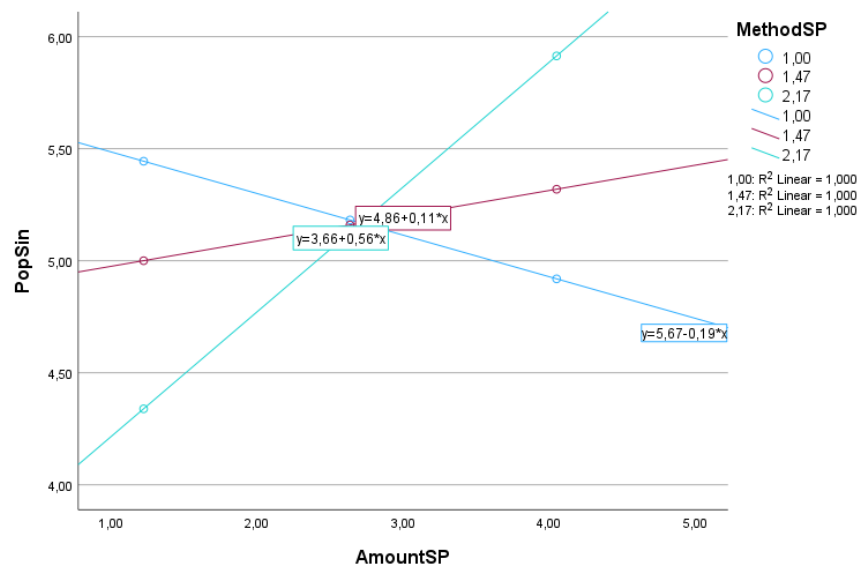

Figure 3. Results of hypothesis H1 in study 1

The graph in Figure 3 presents the results of the hypothesis testing. It shows that when the moderating variable is evaluated one standard deviation above or below, it does not contribute to the model. However, considering the moderating variable's p-value of 0.036, Hypothesis H1 is supported by the data from Study 1. In other words, the payment method has a moderating role in the payment pain felt by tourists because of their highest single food purchase during their travels.

To examine the moderating role of how far in advance the trip was planned on the payment pain felt from the highest food purchase during the trip, the potential multicollinearity problem between independent and moderating variables was investigated. No multicollinearity problem was found (Pearson Correlation: 0.269).

The interaction term value (p: 0.002) was found to be smaller than the significance level (p<0.05), indicating that the contribution of the moderating variable to the model is significant. The moderating variable (coeff: 0.518) positively contributes to the model relationship. The contribution of the model was found to be (r^2-chng: 0.096).
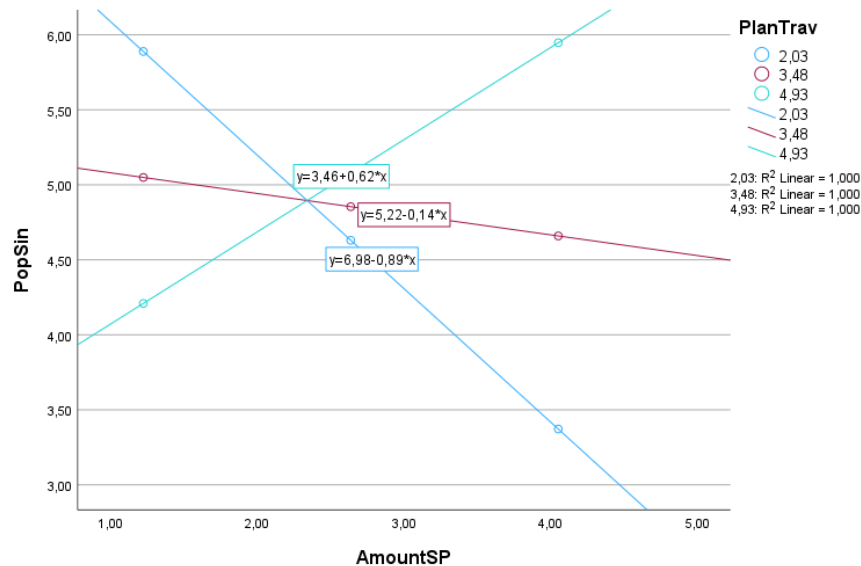

Figure 4. Results of hypothesis H2 in study 1

Figure 4 presents the results regarding the moderating role of the variable in Hypothesis H2, showing how the outcomes change when the moderating variable is one standard deviation below or above the mean. When the mean of the moderating variable (3.480) is considered, the model's contribution (p: 0.574) is not significant (p<0.05). However, when the moderating variable is one standard deviation below the mean (2.027), the model's contribution (p: 0.025) becomes significant. Similarly, when the moderating variable is one standard deviation above the mean (4.934), the model's contribution (p: 0.027) is also significant (p<0.05). This indicates that when the planning time of the trip is at the average (mean: 3.48), it does not have a significant effect on the model, but when the planning time deviates from the mean, either below or above, it makes a significant contribution.

The analysis found that spending on the highest-value food purchase increases payment pain, while planning time reduces it, supporting Hypothesis H2. Multicollinearity was not an issue for the moderating role of planning time (Pearson: -0.078), but the interaction term (p: 0.851) was non-significant, rejecting Hypothesis H3.

For planning time's moderating role with income and payment pain, no multicollinearity was found (p: 0.024), but the interaction term (p: 0.983) was non-significant, rejecting Hypothesis H4. In Hypothesis H5, no multicollinearity was detected (Pearson: -0.083), but the interaction term (p: 0.484) was non-significant, rejecting H5.

The moderating effect of planning time on total expenditure and payment pain was not significant (p: 0.098), rejecting Hypothesis H6. For the effect of payment method on payment pain, the interaction term (p: 0.771) was also non-significant, rejecting Hypothesis H7. Lastly, no multicollinearity was found between planning time and income (p: 0.24), but the interaction term (p: 0.479) was non-significant, rejecting Hypothesis H8.

Study 2

Study 2 data were collected from 100 participants via Amazon's Mechanical Turk. Participants were required to have travelled in the last 12 weeks and recall their spending. Data from 14 participants who did not meet these criteria were excluded, leaving 86 valid responses. The highest spending was on a single food purchase, with the payment pain measurement (PopSingle) showing a Skewness of -0.382 (Std.Error: 0.260) and Kurtosis of -0.881 (Std.Error: 0.514). For total food spending, the payment pain measurement (PopTotal) had a Skewness of -0.468 (Std.Error: 0.260) and Kurtosis of -0.507 (Std.Error: 0.514), all within the accepted range (-1.5 to +1.5) (Büyüköztürk et al., 2008; Tabachnick and Fidell, 2013). The scale's Cronbach's Alpha was 0.879, indicating high reliability (Kalaycı, 2014; Büyüköztürk, 2019).

The study data were collected from individuals residing in the United States. The currency used in the scale was specified as dollars. The scale was administered in English. The average age of the participants was in the 26-40 age range. 33.7% of the participants reported feeling they belonged to the lower-middle-income group, while 53.5% indicated that they felt they belonged to the upper-middle-income group. In terms of payment methods, credit cards and debit cards were the most frequently used options. The highest amount paid for a single food item during the trip ranged from 26 to 40 dollars on average. The total food expenditure during the trip was between 46 and 60 dollars on average. Only 3.5% of the participants stated that they did not plan a food budget for their trip, while 45.3% mentioned that they did plan a budget and adhered to it. Finally, in response to the question regarding how long before the trip the planning was done, 40.7% of the participants indicated that they planned 1-2 weeks in advance.

Analysis Results of Study 2

When examining the relationships between the payment method as a moderating variable and the payment pain felt because of the highest single food purchase during the trip, it was initially determined that there was no multicollinearity problem between the independent variable and the moderating variable (Pearson Correlation: -0.027). The interaction term value (p: 0.005) was found to be smaller than the significance level (p<0.05), indicating that the contribution of the moderating variable to the model is significant. The moderating variable (coeff: -1.528) has a negative effect on the model relationship. The contribution of the model was found to be (r²-chng: 0.091).
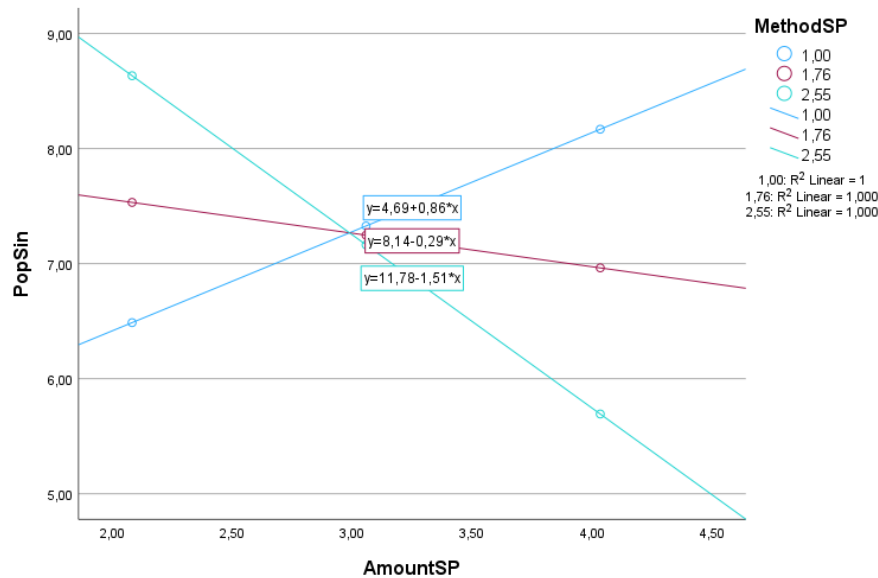
Figure 5. Results of H1 hypothesis in study 2

Figure 5 shows the results for the moderator variable in Hypothesis H1 of Study 2, with results based on whether the moderator variable is one standard deviation above or below the mean. When the average of the moderator variable was 1.756, the contribution to the model (p: 0.400) was not significant (p<0.05). When the moderator variable was one standard deviation below the mean (1.000), the contribution to the model (p: 0.051) was still not significant. However, when the moderator variable was one standard deviation above the mean (2.552), the contribution to the model (p: 0.019) became significant (p<0.05). This indicates that when the total amount spent on a single product during the trip exceeds the average, the ability to regulate payment discomfort increases, but considering the negative contribution of the moderator variable (coeff: -1.58), it increases the feeling of payment discomfort. Therefore, Hypothesis H1 for Study 2 is accepted.

The moderator role of the time before the trip was planned in the relationship between the participant's income and the payment discomfort felt because of the highest single food purchase during the trip was also examined, and no multicollinearity problem was found (p: 0.025). However, the interaction term value (p: 0.025) was found to be significant (p<0.05), indicating that the moderator variable contributed significantly to the model. The moderator variable (coeff: 0.798) had a positive effect on the model relationship, and the model's contribution was found to be (r²-chng: 0.056).
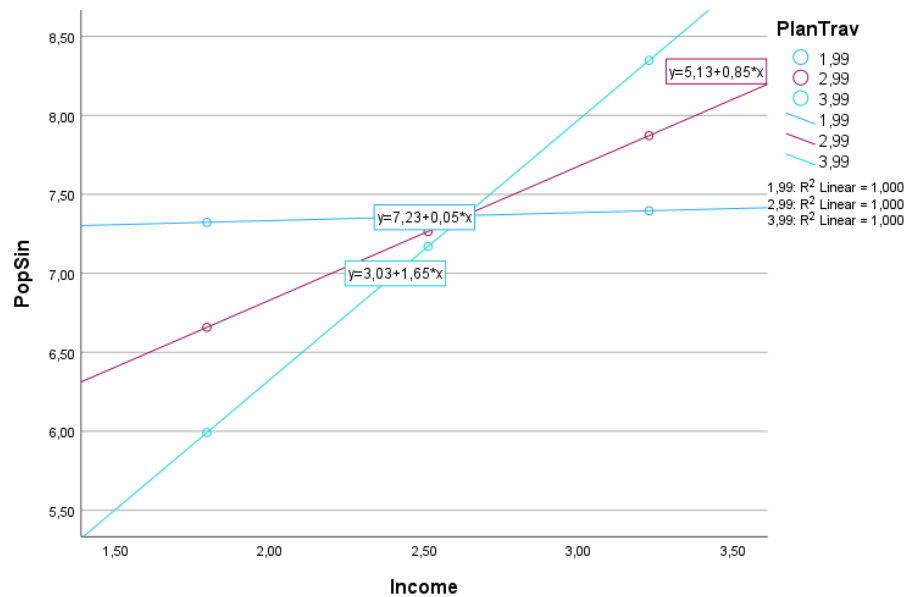
Figure 6. Results of hypothesis H4 in study 2

Figure 6 presents the results for the moderator variable in Hypothesis H4 of Study 2, with results based on whether the moderator variable is one standard deviation above or below the mean. When the average of the moderator variable was 2.988, the contribution to the model (p: 0.065) was not significant (p<0.05). When the average of the moderator variable was one standard deviation below (1.988), the contribution to the model (p: 0.937) remained insignificant. However, when the moderator variable was one standard deviation above (3.988), the contribution to the model (p: 0.001) became significant (p<0.05). This indicates that when the planning time of the trip exceeds the average, it has a reducing effect on the payment discomfort experienced for that trip. Therefore, Hypothesis H4 is accepted for Study 2.

For the role of the time before the trip was planned as a moderator variable in the relationship between the participant's income and the payment discomfort felt from food purchases, there was no multicollinearity problem (Pearson correlation value: 0.25). The interaction term was found to be significant (p: 0.028) (p<0.05), indicating that the moderator variable had a significant contribution to the model. The moderator variable (coeff: 0.732) had a positive effect on the model relationship, and the contribution of the model was found to be (r^2-chng: 0.057).
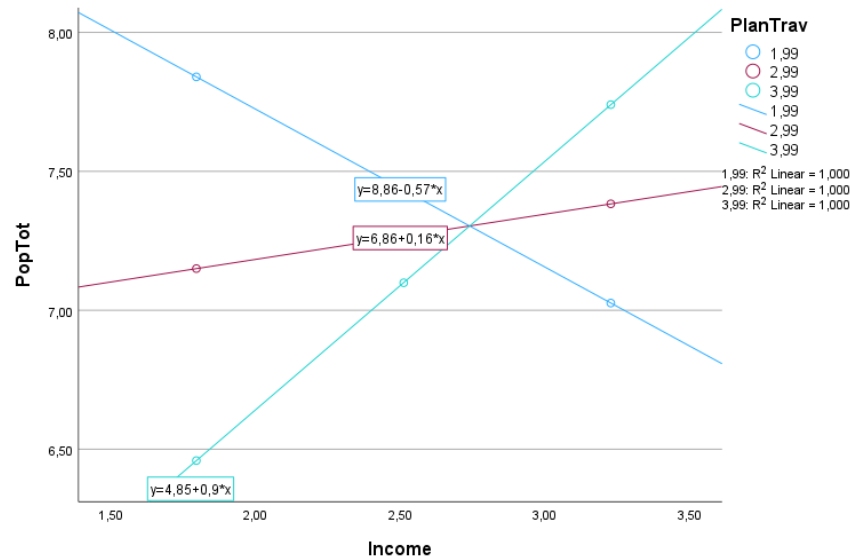
Figure 7. Results of hypothesis H8 in study 2

Figure 7 presents the results for the moderator variable in Hypothesis H8 of Study 2, with results based on whether the moderator variable is one standard deviation above or below the mean. Hypothesis H8 is accepted for Study 2.

To examine the moderating role of planning time between the highest single food purchase and payment discomfort, multicollinearity was checked (Pearson: 0.665), with no issues found. However, the interaction term (p: 0.406) was non-significant, leading to the rejection of Hypothesis H2. Similarly, for the moderating effect of planning time on the relationship between payment method and payment discomfort, multicollinearity was not an issue (Pearson: 0.011), but the interaction term (p: 0.477) was non-significant, rejecting Hypothesis H3. Hypothesis H5 tested the payment method as a moderator between total food spending and payment discomfort. The Pearson correlation was 0.198, with no multicollinearity, but the interaction term (p: 0.869) was non-significant, rejecting H5. For Hypothesis H6, the time before the trip as a moderator showed a Pearson correlation of 0.478, but the interaction term (p: 0.275) was non-significant, rejecting H6. For Hypothesis H7, the payment method's role between trip planning time and payment discomfort showed a Pearson correlation of -0.164, but the interaction term (p: 0.856) was non-significant, leading to the rejection of H7.

4. Discussion and Conclusion

This research, conducted with data from both Turkiye and the U.S. using the same scale and methodology, contributes to the literature on both countries and their comparison. The results include first the hypotheses and then the interpretations of the results of these hypotheses.

The results show that Hypothesis H1 was accepted in both countries. In Turkiye, 63.7% of participants preferred using a credit card for their most expensive food purchase, while in the U.S., the rate was 45.3%. In Turkiye, the amount spent on the highest-value food purchase ranged from 351 TL to 750 TL, with credit card

use significantly reducing payment pain. In contrast, in the U.S., while credit card use also moderated payment pain, it had an increasing effect, unlike in Turkiye. This aligns with Liu (2020), which found a similar result between China and Canada. The preference for credit card payments is consistent with previous studies (Saldanlı and Uzun, 2023; İlhan, 2024; Akinwande, et al., 2024). However, literature on payment pain indicates that credit cards reduce pain (Soman 2001; Lo and Harvey, 2011), which aligns with the Turkish data, while the U.S. results align with studies suggesting no reduction in payment pain (Banker et al., 2017).

In Study 1 (Turkiye), Hypothesis H2 was accepted, with the duration of trip planning moderating payment pain. Shorter or longer trip durations led to less payment pain for expensive food purchases. This is a new contribution to the literature. In Study 2 (U.S.), besides H1, Hypotheses H4 and H8 were accepted. Hypothesis H4 found that 53.5% of U.S. participants felt they belonged to the upper-middle-income group, with income moderating the effect of trip planning duration on payment pain. Hypothesis H8 showed that trip planning moderates payment pain when income is considered. These findings align with previous studies on income's effect on payment pain (Robin, et al., 2014).

In Study 1 (Turkiye), Hypotheses H3, H4, H5, H6, H7, and H8 were rejected, indicating no moderating effect of trip planning on payment pain regarding payment method and income. Similarly, in Study 2 (U.S.), Hypotheses H2, H3, H5, H6, and H7 were rejected, showing no moderating effect of trip planning on payment pain in relation to food expenditure and payment method. These rejected hypotheses are noteworthy for the payment pain literature. There is research that payment method affects the amount of expenditure or the propensity to save (Thaler, 1994; Raghubir and Srivastava, 2008; Somville and Lore, 2018; Liu and Dewitte, 2021; Brune, et.al., 2021). However, there is no evidence that payment method has a regulatory role on payment pain.

An interesting result was that 33.3% of Turkish participants did not plan their food budget, while only 3.5% of U.S. participants had the same response. This aligns with existing literature on cultural and economic influences on travel planning (Gnoth, 1997; Yoon and Uysal, 2005). The distinction between planned and unplanned spending reflects behavioral economics' insight into how spontaneous leisure activities, like eating out or last-minute travel decisions, may influence the pain of payment (Ariely, 2008). As noted by Gnoth (1997), cultural differences in leisure activity planning directly impact expenditure behaviors, which could explain the observed discrepancy in budgeting behaviors between participants from Turkiye and the U.S.

Zajchowski, et al. (2016), which brings a remarkable perspective to the literature on action and emotional recall of leisure activities, contains results that overlap with some of the hypotheses of this study. While the mind tends to suffer

less according to the planning time of the trip, there is a change in the pain remembered by the mind when the income variable is added.

The primary limitation of this study is the data field. Data collected from countries with different travel trends is expected to contribute to the literature regarding the relationship between payment pain and travel. Additionally, all the participants from America were recruited from Amazon's Mechanical Turk, which presents a limitation. Future research could extend our findings by conducting a field study (such as working with participants from a tour company) to test payment pain for tourists. Thus, it may be possible to compare the pain or pleasure remembered when the experience is still fresh with that remembered after some time has passed. The type of trip (business, family visit, honeymoon, cultural tour) was excluded from this study, but changes in the type of trip could potentially affect payment pain.

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