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# PAIN OF PAYMENT IN DIFFERENT CULTURES AND PERSONALITY TYPES [1]

**Tuğçe METIN**

University of Bonn, Visiting Researcher & Kahramanmaraş Sütçü İmam University

tmet1@uni-bonn.de & tugcekaracevirgen@ksu.edu.tr

**Ibrahim ARSLAN**

Gaziantep University, Prof. Dr.

aslan@gantep.edu.tr

## ABSTRACT

Pain of payment is one of the concepts that fall under cognitive biases in behavioral economics literature, as an extension of mental accounting theory. This concept focuses on the emotional effects created by the mental accounting processes during an individual's purchasing experience. With the diversification of payment methods and the advancement of technology over time, the concept of pain of payment has maintained its relevance. Research on the emotional impacts of various payment methods and shopping scenarios has revealed how pain of payment takes shape in different situations. The aim of this study is to explore the concept of pain of payment in the context of culture and personality type. It is observed that the concept of pain of payment is generally considered as a basic emotion in the literature, but the cultural and psychological factors underlying this emotion have not been sufficiently explored. The study examines how pain of payment is shaped by personality types and cultural identity in different cultures, such as in Germany and Turkey. The research, conducted through a website simulating a real shopping experience, analyzes the effects of personality types and payment methods on pain of payment using SPSS 30.0 and the Process v4.2 software by Andrew F. Hayes. The results show that personality types have a significant mediating effect in the relationship between culture and pain of payment. On the other hand, no significant results were found in the analysis of the mediating effect of payment methods.

**Keywords**: Pain of payment, personality types, grocery shopping

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# FARKLI KÜLTÜRLERDE VE KİŞİLİK TİPLERİNDE ÖDEME SANCISI

**ÖZET**

Ödeme acısı, zihinsel muhasebe teorisinin bir uzantısı olarak davranışsal ekonomi literatüründe bilişsel önyargılar altında yer alan kavramlardan biridir. Bu kavram, bireyin satın alma deneyimi sırasında zihinsel muhasebe süreçlerinin yarattığı duygusal etkilere odaklanmaktadır. Zaman içinde ödeme yöntemlerinin çeşitlenmesi ve teknolojinin ilerlemesiyle birlikte ödeme acısı kavramı güncelliğini korumuştur. Çeşitli ödeme yöntemlerinin ve alışveriş senaryolarının duygusal etkileri üzerine yapılan araştırmalar, ödeme acısının farklı durumlarda nasıl şekillendiğini ortaya koymuştur. Bu çalışmanın amacı, ödeme acısı kavramını kültür ve kişilik tipi bağlamında incelemektir. Ödeme acısı kavramının literatürde genellikle temel bir duygu olarak ele alındığı, ancak bu duygunun altında yatan kültürel ve psikolojik faktörlerin yeterince araştırılmadığı görülmektedir. Çalışma, ödeme acısının Almanya ve Türkiye gibi farklı kültürlerde kişilik tipleri ve kültürel kimlik tarafından nasıl şekillendirildiğini incelemektedir. Gerçek bir alışveriş deneyimini simüle eden bir web sitesi üzerinden yürütülen araştırma, SPSS 30.0 ve Andrew F. Hayes'in Process v4.2 yazılımını kullanarak kişilik tiplerinin ve ödeme yöntemlerinin ödeme acısı üzerindeki etkilerini analiz etmektedir. Sonuçlar, kişilik tiplerinin kültür ve ödeme acısı arasındaki ilişkide anlamlı bir aracılık etkisine sahip olduğunu göstermektedir. Öte yandan, ödeme yöntemlerinin aracılık etkisinin analizinde anlamlı bir sonuç bulunamamıştır.

**Anahtar Kelime**: Ödeme sancısı, kişilik tipi, market alışverişi

## INTRODUCTION

The concept of pain of payment was introduced into the literature in 1996 by Zellermayer and has become a significant topic in behavioral economics as an extension of Thaler's (1985) mental accounting theory. This concept focuses on the emotional effects created by the mental accounting processes that occur in an individual's mind during the purchasing process. Particularly important in understanding consumer behavior and purchase decisions, pain of payment has maintained its relevance with the development of payment methods and technologies over time. Research on the emotional effects of various payment methods and shopping scenarios has revealed how pain of payment manifests in different situations (Prelec & Loewenstein, 1998; Bagchi & Block, 2011; Thomas et al., 2011; Yeung, 2014; Shah et al., 2016; Banker et al., 2021; Liu & Dewitte, 2021).

The main aim of this study is to update the concept of pain of payment within the context of culture and personality types. While the literature has generally treated pain of payment as a general emotion, the cultural and psychological factors behind this emotion have not been sufficiently researched. In addition to understanding consumers' purchasing behaviors, it is important to examine how feelings of responsibility towards sustainability, such as in the case of food products, are formed. Understanding how cross-cultural differences and individual personality types impact pain of payment will contribute significantly to research in this area.

The study is conducted in two different cultures, Germany and Turkey, with the aim of better illustrating the effects of cultural differences and psychological personality types on pain of payment. Additionally, the research aims to develop an in-depth understanding of how personality types, payment methods, and cultural affiliation shape pain of payment. In this context, Goldberg's (1992) Five-Factor Personality Inventory was used, and the impact of cultural affiliation on consumer decisions was examined. The significance of this research lies in considering not only economic outcomes but also the psychological, cultural, and sociological factors that shape individuals' behaviors. To ensure the sustainability of resources, it is essential to understand the emotional effects on consumers' purchasing

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decisions. In this regard, examining pain of payment as not just an economic concept but also a social and cultural phenomenon will contribute significantly to interdisciplinary studies in this area.

The research investigates the impact of personality types and cultural affiliation on pain of payment among individuals engaged in grocery shopping in Germany and Turkey. To ensure equal conditions in both countries, a website simulating a real shopping experience was designed for participants. The website was presented in Turkish, German, and English, and the most consumed grocery items in both countries were selected to create the simulation (Statista, 2024a; 2024b). The products were organized based on price and weight variations to provide participants with a shopping experience. Payment methods were designed to reflect real-world conditions, enabling the measurement of emotional differences between cash, debit card, and credit card payments. After the shopping experience, participants were asked about their pain of payment emotions, and these emotions were measured using an 11-point Likert scale. In this study, the cultural element was measured through questions about the participants' country of residence and the culture they feel affiliated with. Finally, participants completed a personality inventory test (Goldberg, 1992; Tatar, 2017), and the effects of personality types on pain of payment were analyzed using SPSS 30.0 software with the Process v4.2 by Andrew F. Hayes tool.

## LITERATURE

Mental accounting is a concept that emerged from behavioral economics, particularly through the work of Kahneman and Tversky (1983). This refers to the cognitive process through which individuals organize, evaluate, and track their financial decisions, sometimes consciously or unconsciously. This concept suggests that people divide their money into different mental accounts (e.g., savings, daily expenses, entertainment) rather than viewing all of their money as fungible. Thaler (1985) expanded on this idea, proposing that individuals mentally “code” gains and losses and that their financial decisions are influenced by the psychological impact of these mental accounts. He defined mental accounting as the set of cognitive operations that individuals use to organize and evaluate their financial activities (Thaler, 1999). 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.

The evolution of mental accounting can be divided into three distinct phases. In the early phase, from the 1970s to the 1980s, Richard Thaler introduced the concept and bridged the gap between economics and psychology, offering a behavioral perspective on decision-making. The 1990s marked the widespread acceptance of mental accounting, with research focusing on how it affects financial decisions such as saving, spending, and emotions. In particular, Zellermayer (1996) contributed to this development by introducing the concept of “pain of payment” as a psychological consequence of financial decisions, which emerged from mental accounting theory. By the 2000s, mental accounting had become a central concept in behavioral economics, with researchers like Loewenstein (2000) and Levav and McGraw (2009) expanding the theory to include emotional components of financial decisions.

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In the modern era, mental accounting has been applied to a wide range of economic behaviors, including investment decisions, tax policy, and financial planning. Thaler and Sunstein (2008) emphasized that mental accounting is not just about financial decisions but extends to other areas of life, such as health and happiness. Research into mental accounting has also looked at its role in shaping consumer behavior and how biases in mental accounting lead to irrational decision-making. The development of this concept has been instrumental in understanding how psychological factors influence economic choices, providing valuable insights into consumer behavior.

Pain of payment is a concept that stems directly from the idea of mental accounting, first formally introduced by Zellermayer (1996). It refers to the psychological discomfort or negative emotions that arise when individuals make a payment, particularly the feeling of loss that occurs when money is exchanged. The pain of payment is not just a mental phenomenon but can also be measured physically, with research showing that individuals may experience neural responses related to this discomfort (Mazar et al., 2016). The experience of pain during payment can vary depending on the method of payment, with different emotions elicited by paying with cash, credit cards, or online methods. For example, cash payments involve physically handling money, which may intensify the feeling of loss, while online payments may reduce the perceived pain due to their ease and speed (Yeung, 2014). It was considered a critical element in understanding how individuals make financial decisions, as it can significantly influence consumer spending, saving, and emotional responses to transactions. Prelec and Loewenstein (1998) made significant contributions by highlighting the role of time in the pain of payment, arguing that the pain is more closely related to the moment of payment rather than the timing of receiving a product or service. As payment methods diversified, research in the 2000s began to explore how different payment methods affect the intensity of the pain experienced during transactions.

In the early 2000s, research continued to expand on the emotional and cognitive dimensions of the pain of payment, with studies exploring its role in consumer attachment to products and services (Shah, 2015). These studies showed that the pain of payment could either increase or decrease consumer attachment depending on how payment is experienced. Additionally, Mazar et al. (2016) used brain imaging techniques to demonstrate that the pain of payment is not just a cognitive experience but has tangible physical effects, positioning the concept at the intersection of behavioral economics and neuroeconomics.

In the period following 2020, the pain of payment concept gained renewed importance due to changes in consumer behavior, particularly with the rise of online payments during and after the pandemic. Researchers like Reshadi (2020) explored how the pain of payment varies when individuals pay off different types of debt, such as credit card or loan debt, showing how the emotional experience of paying differs depending on the context. Additionally, Banker et al. (2021) examined how the shift away from cash payments has impacted the pain of payment experience, using brain imaging to study the psychological effects of modern payment practices. This research suggests that the pain of payment is a dynamic concept, evolving with changes in economic conditions, payment methods, and consumer behaviors.

Pain of payment, as a derivative of mental accounting, has evolved into a significant area of research in behavioral economics. It provides valuable insights into how the psychological experience of paying influences consumer behavior, financial decisions, and even emotional responses. The theory continues to evolve, especially with the changes brought by digital payments, making it an essential concept for understanding modern consumer finance.

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## RESEARCH METHODOLOGY AND HYPOTHESES

In the study, data were collected from Turkey and Germany via the website https://pain-of-payment.web.app/ in JSON format. A total of 200 participants were included in the study, with 100 participants from Germany and 100 from Turkey. The data obtained were analyzed using IBM SPSS 30.0 software. In the analysis, Hayes' (2018) Hayes Process Model 4 was run with a 95% confidence interval, and covariates (correlated variables) were added. Covariates are external variables used to ensure accuracy and reliability in the analysis, and they include demographic characteristics, social factors, personality traits, and other related elements. Adding these covariates to the model enhances internal validity, reduces biases, controls for confounding effects, and provides stronger statistical results. The study consists of three hypotheses in Figure 1.

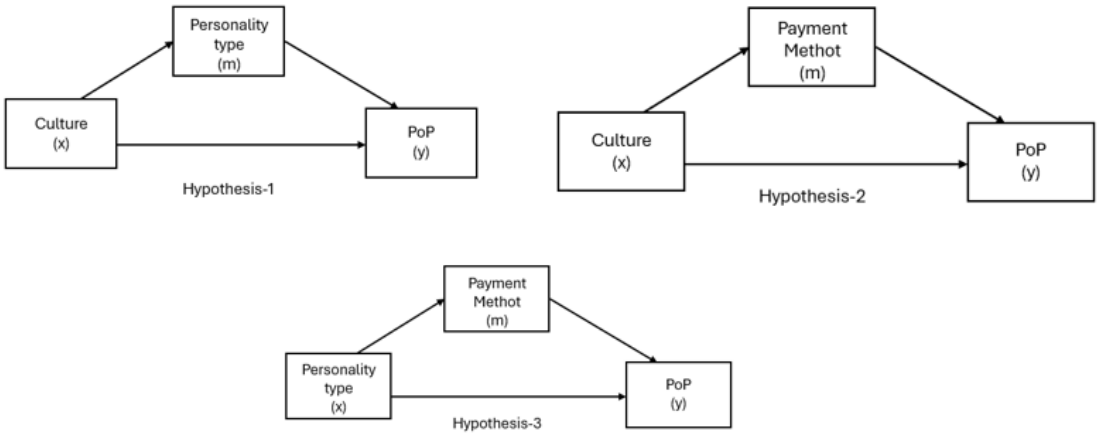


Figure 1. Hypothesis models

Hypothesis 1: There is an indirect effect of personality type as a mediating variable in the relationship between culture and pain of payment.

In modeling this hypothesis, the independent variable is culture (x), the dependent variable is pain of payment (PoP) (y), and the mediating variable is personality type (m). The model includes covariates such as age, gender, education, country of residence, income group, estimated total payment amount (the amount participants remembered), actual payment amount, and payment method.

Hypothesis 2: There is a mediating effect of payment method in the relationship between culture and pain of payment.

In the modeling of the hypothesis, the independent variable is Culture (x), the dependent variable is pain of payment (PoP) (y), and the mediating variable is payment method (m). The model includes covariate variables such as age, gender, education, country of residence, income group, estimated total payment amount (the amount participants recall paying), actual payment amount, and personality type.

Hypothesis 3: There is a mediating effect of the payment method in the relationship between personality type and the pain of payment.

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In the modeling of this hypothesis, the independent variable is personality (x), the dependent variable is pain of payment (PoP) (y), and the mediating variable is payment method (m). The model includes covariate variables such as age, gender, education, country of residence, income group, estimated total payment amount (the amount participants recall paying), actual payment amount, and perceived cultural affiliation.

## ANALYSIS AND FINDINGS

First, the correlations of all variables, including the demographic variables included in the study, were examined. The mean, standard deviation, and correlation values of the data are presented in Table 1.

Table 1. Mean, Standard Deviation and Correlations of Data

| | | Mean | Std. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Culture | 2,35 | 1,141 | 1 | | | | | | | | | |
| 2 | Pers. Type | 2,795 | 1,401 | -0,062 | 1 | | | | | | | | |
| 3 | Paym. Mth. | 1,86 | 0,832 | -0,091 | 0,07 | 1 | | | | | | | |
| 4 | PoP | 4,785 | 3,330 | 0,001 | ,175* | 0,092 | 1 | | | | | | |
| 5 | Est.Spend. | 4,63 | 1,918 | 0,046 | 0,015 | 0,096 | -,196** | 1 | | | | | |
| 6 | Gender | 1,615 | 0,487 | 0,081 | -0,101 | 0,003 | -,262** | 0,132 | 1 | | | | |
| 7 | Age | 3,165 | 1,163 | -0,127 | 0,052 | -0,126 | 0,013 | -0,112 | -0,082 | 1 | | | |
| 8 | Edu. | 3,325 | 0,901 | -,262** | -0,122 | ,148* | 0,02 | 0,012 | 0,035 | ,380** | 1 | | |
| 9 | Country | 1,5 | 0,501 | ,658** | 0,054 | -,168* | -,155* | -0,037 | ,175* | -,194** | -,306** | 1 | |
| 10 | Income | 2,53 | 0,826 | 0,085 | 0,125 | 0,123 | -0,041 | -0,034 | -0,052 | 0,107 | 0,071 | 0,097 | 1 |
| 11 | Amn.Spend | 4,545 | 2,728 | 0,09 | -0,102 | -0,028 | -,265** | ,750** | 0,023 | -0,065 | 0,042 | -0,006 | 0,052 |

*** p<0,01 ve *p<0,05 (Pers.Type: Personality Type, Paym.Mth:Payment Method, PoP: Pain of Paymenti Est.Spend.:Estimate Spending, Amn.Spend:Amount Spending)*

The correlation analysis between variables is shown in Table 1. A positive correlation was found between culture and the country of residence (r: 0.658, $p < 0.01$), and a negative correlation between education and culture (r: -0.262, $p < 0.01$). A positive correlation (r: 0.175, $p < 0.05$) was found between personality type and payment pain. The payment method showed a positive correlation with education (r: 0.148, $p < 0.05$), while participants' country of residence was negatively correlated (r: -0.155, $p < 0.05$). A negative correlation was found between payment pain and participants' expenditure predictions (r: -0.196, $p < 0.01$), gender (r: -0.262, $p < 0.01$), country (r: -0.155, $p < 0.05$), and amount spent (r: -0.265, $p < 0.05$). A positive significant relationship was found between expenditure prediction and amount spent (r: 0.750, $p < 0.01$), gender and country (r: 0.175, $p < 0.05$), and age and education (r: 0.380, $p < 0.05$). A negative correlation was found between age and country (r: -0.194, $p < 0.01$), and education and country (r: -0.306, $p < 0.01$). When examining the average results of participants from

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Germany and Turkey collectively, the payment pain experience resulted in an average score of 4.785. In the scoring system, which utilized an 11-point Likert scale (-5 to +5), this average indicates that participants approximately assigned a pain score between (-1) and (-2).

In order to test the hypotheses through models, direct regression analyses were performed. For Hypothesis 1, the independent variable is culture (x), the dependent variable is payment pain (PoP) (y), and the mediating variable is personality type (m). Age, gender, education, country of residence, income group, total payment amount estimate (the amount remembered by participants), actual payment amount, and payment method were included as covariate variables. The results of the regression analysis are shown in Table 2.

Table 2. Hypothesis 1 Regression Analysis Results

| | Model 1 | | | Model 2 | | | Model 3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Variables | B | se | p | B | se | p | B | se | P |
| Constant | 2,5247 | 0,7394 | 0,0008 | 8,6877 | 1,7162 | 0,0000 | 9,7148 | 1,6885 | 0,0000 |
| Culture | -0,2370 | 0,1130 | 0,0374 | 0,7322 | 0,2576 | 0,0050 | 0,6358 | 0,2581 | 0,0147 |
| Est.Spend. | 0,1866 | 0,0788 | 0,0189 | -0,0089 | 0,1801 | 0,9607 | 0,067 | 0,1799 | 0,7099 |
| Gender | -0,3518 | 0,2049 | 0,0876 | -1,5081 | 0,4651 | 0,0014 | -1,6512 | 0,4678 | 0,0005 |
| Age | 0,1513 | 0,0930 | 0,1056 | -0,1907 | 0,2110 | 0,3674 | -0,1291 | 0,2124 | 0,544 |
| Edu. | -0,2687 | 0,1225 | 0,0295 | 0,2422 | 0,2795 | 0,3874 | 0,1329 | 0,2798 | 0,6355 |
| Income | 0,2182 | 0,1205 | 0,0718 | -0,2297 | 0,2738 | 0,4025 | -0,141 | 0,2751 | 0,609 |
| Amn.Spend | -0,1343 | 0,0550 | 0,0155 | -0,3247 | 0,1258 | 0,0106 | -0,3794 | 0,1255 | 0,0029 |
| Paym. Mth | 0,1297 | 0,1239 | 0,2963 | 0,1584 | 0,2799 | 0,5720 | 0,2112 | 0,2829 | 0,4562 |
| Country | 0,5091 | 0,2691 | 0,0600 | -1,8154 | 0,6119 | 0,0034 | -1,6083 | 0,6145 | 0,0096 |
| Pers. Type | | | | 0,4068 | 0,1634 | 0,0137 | | | |
| F | | 2,7056 | | | 4,9723 | | | 4,7076 | |
| P | | 0,0055 | | | <0.001 | | | <0.001 | |
| R-sq | | 0,1136 | | | 0,2083 | | | 0,1823 | |

The regression analysis for Hypothesis 1 was conducted with three sub-models. According to the results in Table 2 in Model 1, it can be seen that culture has a significant negative effect on personality (B: -0.2370, p: 0.0374). When other variables are examined, it is observed that the recalled payment amount has a significant positive effect on personality (B: 0.1866, p: 0.0189), gender has a

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limited significant negative effect (B: -0.3518, p: 0.0876), education has a significant negative effect (B: -0.2687, p: 0.0295), and the total amount paid has a significant negative effect (B: -0.1343, p: 0.0155). The R-sq value, which shows the explanatory power of the independent variables on the dependent variable (personality), is 0.1136. Therefore, this model explains 11.36% of the personality variable.

The results of Model 2 show that the direct effect of culture on payment pain is significant and positive (B: 0.7322, p: 0.005). Personality also has a significant positive effect (B: 0.4068, p: 0.0137), while gender (B: -1.5081, p: 0.0014), total spending amount (B: -0.3247, p: 0.0106), and the country of residence (B: -1.8154, p: 0.0034) have significant but negative effects in the model. The explanatory power of culture (independent variable) on payment pain (dependent variable) is R-sq: 0.2083, or 20.83%.

Model 3 represents the total effect analysis, where the impact of culture on payment pain, along with personality type, is significant and positive (B: 0.6358, p: 0.0147). Gender (B: -1.6512, p: 0.005), total amount spent (B: -1.6512, p: 0.005), and country (B: -1.6083, p: 0.0096) all have significant negative effects. The explanatory power of this model is R-sq: 0.1823, or 18.23%.

Based on the significance values of the three models analyzed, it has been determined that mediation effect analysis can be conducted. The results of the mediation effect are presented in Table 3.

Table 3. Results of Hypothesis 1 Mediation Effect Analysis

| | | | Unstand. | se | LLCI | ULCI |
|---|---|---|---|---|---|---|
| Total Effect of Culture on Payment Pain | | | 0,6358 | 0,2581 | 0,1267 | 1,1449 |
| Direct Effect of Culture on Payment Pain | | | 0,7322 | 0,2576 | 0,2241 | 1,2403 |
| Mediating Effect of Personality Type on the Effect of Culture on Payment Pain | | | | | | |
| Independent Variable | Mediator Variable | Dependent Variable | Unstand. | se | LLCI | ULCI |
| Culture | Personality Type | Pain of Payment | -0,0964 | 0,064 | -0,2483 | -0,0002 |

According to the results in Table 3 the mediating effect of personality type was found to be significant (γ: -0.0964, se: 0.064, 95% CI -0.2483, -0.0002). It appears that personality type plays a mediating role in reducing the effect of culture on payment pain. Based on the analysis of the data, Hypothesis 1 has been accepted.

For Hypothesis 2, the independent variable is culture (x), the dependent variable is payment pain (PoP) (y), and the mediating variable is payment method (m). Age, gender, education, country of residence, income group, total payment amount estimate (the amount remembered by participants), actual payment amount, and personality were included as covariate variables. The results of the regression analysis are shown in Table 4.

Table 4. Hypothesis 2 Regression Analysis Results

| Variables | Model 1 | Model 2 | Model 3 |
|---|---|---|---|

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| | B | se | P | B | se | p | B | Se | p |
|---|---|---|---|---|---|---|---|---|---|
| Constant | 1,5353 | 0,4307 | 0,0005 | 8,6877 | 1,7162 | 0 | 8,9309 | 1,6585 | 0 |
| Culture | 0,0541 | 0,0667 | 0,4179 | 0,7322 | 0,2576 | 0,005 | 0,7408 | 0,2567 | 0,0044 |
| Est.Spend. | 0,105 | 0,046 | 0,0237 | -0,0089 | 0,1801 | 0,9607 | 0,0078 | 0,1773 | 0,9651 |
| Gender | -0,0052 | 0,1206 | 0,9656 | -1,5081 | 0,4651 | 0,0014 | -1,5089 | 0,4643 | 0,0014 |
| Age | -0,1748 | 0,0532 | 0,0012 | -0,1907 | 0,211 | 0,3674 | -0,2184 | 0,2049 | 0,2879 |
| Edu. | 0,184 | 0,0712 | 0,0105 | 0,2422 | 0,2795 | 0,3874 | 0,2713 | 0,2743 | 0,3238 |
| Country | -0,3579 | 0,1565 | 0,0233 | -1,8154 | 0,6119 | 0,0034 | -1,8721 | 0,6026 | 0,0022 |
| Income | 0,1623 | 0,07 | 0,0214 | -0,2297 | 0,2738 | 0,4025 | -0,204 | 0,2695 | 0,45 |
| Amn.Spend | -0,074 | 0,0322 | 0,0225 | -0,3247 | 0,1258 | 0,0106 | -0,3364 | 0,1238 | 0,0072 |
| Pers. Type | 0,0442 | 0,0422 | 0,2963 | 0,4068 | 0,1634 | 0,0137 | 0,4138 | 0,1627 | 0,0118 |
| Paym. Mth | | | | 0,1584 | 0,2799 | 0,572 | | | |
| F | | 3,5799 | | | 4,9723 | | | 5,5089 | |
| P | | 0,0004 | | | <0.001 | | | <0.001 | |
| R-sq | | 0,1450 | | | 0,2083 | | | 0,2069 | |

The results of the three sub-models created for Hypothesis 2, which examines the mediating role of payment method in the effect of culture on payment pain, are shown in Table 4. For mediation effect analysis to be conducted, there must be a significant relationship between the variables included in the model. According to Model 1, the effect of culture on the payment method (p: 0.4479) did not yield a significant result. Similarly, in Model 2, the relationship between payment method and payment pain also did not reach a significant result (p: 0.5720). Therefore, mediation effect analysis could not be performed, and Hypothesis 2 was rejected based on the pilot data.

For Hypothesis 3, the independent variable is personality type (x), the dependent variable is payment pain (PoP) (y), and the mediating variable is payment method (m). Age, gender, education, country of residence, income group, total payment amount estimate (the amount remembered by participants), actual payment amount, and culture were included as covariate variables. The results of the regression analysis are shown in Table 5.

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Table 5. Hypothesis 3 Regression Analysis Results

| | Model 1 | | | Model 2 | | | Model 3 | | |
|---|---|---|---|---|---|---|---|---|---|
| Variables | B | se | p | B | se | p | B | se | p |
| Constant | 1,5353 | 0,4307 | 0,0005 | 8,6877 | 1,7162 | 0,0000 | 8,9309 | 1,6585 | 0,0000 |
| Pers. Type | 0,0442 | 0,0422 | 0,2963 | 0,4068 | 0,1634 | 0,0137 | 0,4138 | 0,1627 | 0,0118 |
| Est.Spend. | 0,105 | 0,046 | 0,0237 | -0,0089 | 0,1801 | 0,9607 | 0,0078 | 0,1773 | 0,9651 |
| Gender | -0,0052 | 0,1206 | 0,9656 | -1,5081 | 0,4651 | 0,0014 | -1,5089 | 0,4643 | 0,0014 |
| Age | -0,1748 | 0,0532 | 0,0012 | -0,1907 | 0,211 | 0,3674 | -0,2184 | 0,2049 | 0,2879 |
| Edu. | 0,184 | 0,0712 | 0,0105 | 0,2422 | 0,2795 | 0,3874 | 0,2713 | 0,2743 | 0,3238 |
| Country | -0,3579 | 0,1565 | 0,0233 | -1,8154 | 0,6119 | 0,0034 | -1,8721 | 0,6026 | 0,0022 |
| Income | 0,1623 | 0,07 | 0,0214 | -0,2297 | 0,2738 | 0,4025 | -0,204 | 0,2695 | 0,45 |
| Amn.Spend | -0,074 | 0,0322 | 0,0225 | -0,3247 | 0,1258 | 0,0106 | -0,3364 | 0,1238 | 0,0072 |
| Culture | 0,0541 | 0,0667 | 0,4179 | 0,7322 | 0,2576 | 0,005 | 0,7408 | 0,2567 | 0,0044 |
| Paym. Mth | | | | 0,1584 | 0,2799 | 0,572 | | | |
| F | | 3,5799 | | | 4,9723 | | | 5,5089 | |
| P | | 0,1450 | | | <0.001 | | | <0.001 | |
| R-sq | | 0,0004 | | | 0,2083 | | | 0,2068 | |

The results of the three sub-models created for Hypothesis 3, which examines the mediating role of payment method in the effect of personality type on payment pain, are shown in Table 5. Again, for mediation effect analysis to be conducted, there must be a significant relationship between the variables included in the model. According to Model 1, the effect of personality type on the payment method (p: 0.2963) did not yield a significant result. Similarly, in Model 2, the relationship between payment method and payment pain also did not reach a significant result (p: 0.572). Therefore, mediation effect analysis could not be performed, and Hypothesis 3 was rejected based on the pilot data.

## CONCLUSION

This study aimed to explore the concept of the "pain of payment" and how this concept is influenced by cultural and personality type factors. According to the results of Hypothesis 1, culture has a significant negative effect on personality (B: -0.2370, p: 0.0374), culture has a significant and positive effect on payment pain (B: 0.7322, p: 0.005), and culture, along with personality type, has a significant and positive effect on payment pain (B: 0.6358, p: 0.0147). Based on the analysis and findings, it was concluded that culture influences personality types, which in turn affects the experience of payment pain.

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The cultural variable was assessed based on participants' sense of belonging to a particular culture. Participants were presented with options such as Turkish culture, Middle Eastern culture, German culture, and European culture. Individuals' perceptions of payment pain varied according to the cultural group to which they felt they belonged. Personality types were found to play a mediating role in the effect of culture on payment pain.

However, the effect of culture on payment methods was not found to be significant. Specifically, the study revealed that the payment method itself did not have a significant effect on the experience of payment pain, suggesting that the payment method is not a crucial determinant of how painful a payment is perceived.

Additionally, while the combination of personality type and payment method did not have a direct effect on payment pain levels, it was found that personality traits shape how individuals interpret and respond to the emotional aspects of the payment process. This highlights the importance of considering personality types when designing consumer experiences aimed at minimizing discomfort related to financial transactions.

Based on these findings, similar shopping experiences in different cultural and personality contexts were examined to understand how participants' mental accounting processes influence their experience of payment pain. Further research is needed to improve strategies for reducing payment distress by examining these dynamics in different cultural contexts and across various personality types.

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