## ԱՐԴԻ ՀՈԳԵԲԱՆՈՒԹՅՈՒՆ ԳԻՏԱԿԱՆ ՀԱՆԴԵՍ

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# **АКТУАЛЬНАЯ ПСИХОЛОГИЯ** НАУЧНЫЙ ВЕСТНИК

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## FEATURES OF FINANCIAL BEHAVIOR IN CASH, CARDS AND APPLICATIONS

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Nowadays market develops new means of payment to force consumers increase their spending readiness. New means of paying (different applications and cards) decrease "pain of paying" and increase readiness of spending. But different means of paying are differently perceived and accepted by the consumers. This research is aimed to reveal some features of spending and financial behavior of consumers depending their preference of cash, cards and applications. Our earlier research proves that using of cash depends on the age. The older persons prefer cash. In certain payments the youngest group prefers doing payments by applications. Unemployed people are more tended to choose cash spending. Those, who generally preferred paying in cash or card, noted that utility bills are paid by app. So, if well-working and trusted system exists people choose application. Reason can be either consumers tend to focus less on the negative feeling associated with the amount paid or with absence of queues and general easiness. Now we tried to discover online consuming features and some psychological characteristics depending of preferences of different means of payment.

**Key words:** economic psychology, behavioral economics, financial behavior, consumer habits, money preferences.

#### ОСОБЕННОСТИ ФИНАНСОВОГО ПОВЕДЕНИЯ В НАЛИЧНЫХ, КАРТАХ И ПРИЛОЖЕНИЯХ

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В настоящее время рынок развивает новые платежные средства, чтобы заставить потребителей повысить готовность к тратам. Новые способы оплаты (различные приложения карты) «болезненность оплаты» и повышают готовность к тратам. Но разные способы оплаты по-разному воспринимаются и принимаются потребите-Данное исследование направлено на выявление некоторых особенностей трат и финансового поведения потребителей в зависимости от их предпочтений в отношении наличных денег, карт и приложений. Наши ранние исследования доказывают, что использование наличных денег зависит от возраста. Пожилые люди предпочитают наличные деньги. В некоторых платежах молодежь предпочитает совершать платежи по заявкам. Безработные более склонны выбирать наличные расходы. Те, кто вообще предпочитал платить наличными или картой, отметили, что коммунальные платежи оплачиваются через приложение. Итак, если существует хорошо работающая и проверенная система, люди выбирают приложение. Причина может заключаться либо в том, что потребители склонны меньше сосредотачиваться на негативных ощущениях, связанных с уплаченной суммой, либо в отсутствии очередей и общей легкости. Теперь мы попытались выявить особенности онлайн-потребления и некоторые психологические характеристики, зависящие от предпочтений тех или иных платежных средств.

**Ключевые слова:** экономическая психология, поведенческая экономика, финансовое поведение, потребительские привычки, денежные предпочтения.

#### ՖԻՆԱՆՍԱԿԱՆ ՎԱՐՔԻ ԱՌԱՆՁՆԱՀԱՏԿՈՒԹՅՈՒՆՆԵՐԸ ԿԱՆԽԻԿՈՎ, ՔԱՐՏԵՐՈՎ ԵՎ ՀԱՎԵԼՎԱԾՆԵՐՈՎ

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Ներկայումս շուկան մշակում է վճարման նոր միջոցներ՝ սպառողներին ստիպելու մեծացնել ծախսելու պատրաստակամությունը։ Վճարման նոր մեթոդները (տարբեր հավելվածներ և քարտեր) նվազեցնում են

«վճարման ցավոտությունը» և մեծացնում ծախսելու պատրաստակամությունը։ Բայզ վճարման տարբեր միջոցները սպառողների կողմից տարբեր կերպ են ընկալվում և ընդունվում։ Այս ուսումնասիրությունը նպատակ ունի բացահայտելու սպառողների ծախսերի և ֆինանսական մոդելներ՝ հիմնվելով վարքագծի nnn2 կանխիկի, քաոտերի հավելվածների նկատմամբ նրանց նախասիրությունների վրա։ Մեր ավելի վաղ հետազոտություններն ապացուցում են, որ կանխիկ գումարի օգտագործումը տարբերվում Ł տարիքից կախված։ Տարեցները նախրնտրում են կանխիկ գումար։ Որոշ վճարումների դեպքում երիտասարդները նախընտրում են վճարումներ կատարել հավելվածներով։ Գործազուրկներն ավելի հավանական է, որ ընտրեն կանխիկ վճարումը։ Նրանք, ովքեր հիմնականում նախընտրում էին վճարել կանխիկ կամ քարտով, նշել են, որ կոմունալ վճարումները վճարվում են հավելվածի միջոցով։ Այսպիսով, եթե կա լավ գործող և ապացուցված համակարգ, մարդիկ ընտրում են հավելվածը։ Պատճառը կարող է լինել կամ այն, որ սպառողները հակված են ավելի քիչ կենտրոնանալ վճարվող գումարի հետ կապված բացասական զգացմունքների վրա, կամ հերթերի բացակալությունը և ընդհանուր դյուրինությունը։ Այժմ մենք փորձել ենք բացահայտել առցանց սպառման առանձնահատկությունները և որոշ հոգեբանական բնութագրեր, որոնք կախված են որոշակի վճարային միջոցների նախասիրություններից։

Theoretical analysis.

Prelec and Loewenstein in 1998 invented the concept of "pain of paying" [7]. The idea of "pain of paying" suggests that with occasional use, consumers experience immediate pain when they pay by cash. When the payment is less transparent (the payer is less exposed to the outflow of money), the payment is less painful. Soman (2003) defines the transparency of a payment method as the salience of parting with money. At the high level, the form consumed by the payment and the time separation between consumption and payment can vary, and hence people reduce pain when they don't add as physical money goes and/or when they consider that the payment is only spent, both features were later covered by credit cards, making it from one transparent payment transaction.[9].

In addition, the relationship of payment and the physical format of payment that affects the behavior of the buyer has also been tested and validated by other payment methods, established as gift certificates, prepaid cards and checks [9, 10, 12, 13].

The other research results show that people are willing to pay more for identical products with debit cards than with cash. The explanation is that this is because of the representation of money, leading to salience of the physical form and the salience of the amount paid with the card [11].

This latest stream of research has shown that the payment instrument itself shows that it costs [4, 5, 8, 9, 12, 13]. A comparison of credit cards and cash showed that people tend to spend more with credit cards [6, 8].

The fact that credit cards and the best benefits have a fundamental aspect (relationship between cost and payment and format), it is reasonable to conclude that such an impact can be accounted for by:

- (1) the temporal separation between consumption and payment [7];
- (2) the representation of money itself [4, 9];
- (3) a combination of both.

This result suggests that the format of money affects the willingness to pay. Cash payments, which are more transparent than debit card amounts, make it easier to control spending, and this effect is not only due to cash-on-hand restrictions. This may explain why some people prefer cash to control their spending [11].

Previous research did not include mobile payments, the question arises "Does mobile payment usage underlie the same psychological mechanisms as the cash and credit card payments?". There are two confronting assumptions available. On the one hand, mobile payment can be an even more abstract payment than credit cards. Indeed, as the credit card is not directly showing the money movement on the account, for instance, Google Pay and Apple Pay both rely on a credit or a debit card which, in turn, is attached to the account where the money movement happens. The indirect nature of this relationship may result in a lower feeling of control similar to or even lower than in the event of a credit card. On the other hand, smartphones are very personalized devices in contrast to plastic credit cards. Smartphones contain personal information, personal contacts list, and use fingerprint or facial recognition as protection mechanisms. This may reduce the psychological distance and increase the feeling of control with regard to the smartphone and the attached mobile payment feature. Moreover, in contrast to a credit or a debit card, where the information about amounts subtracted from the current account arrives with a time delay, mobile payment apps show the new account balance

almost immediately. This effect may increase the "pain of paying" to a degree similar to cash payment. A research was conducted to check the control for all three payment methods.

The results showed that mobile payment with regard to the perceived control is closer to cash than to credit card payment. Moreover, there is no significant results with regard to difference in the degree of control for cash and mobile payment. At the same time, the D-score difference between credit card and mobile payment is higher than between credit card and cash payment. This finding may explain the rapid rise of mobile payment usage during the COVID-19 pandemic: while requiring the feeling of control, individuals might prefer mobile payment or cash payment over credit cards, whereby mobile payment may provide an even more pronounced feeling of control [3].

The goal of another study was to understand the psychological distance related to different means of payment. The concept of psychological distance describes the way we perceive different objects or situations. Scientists differentiate between four dimensions of psychological distance: spatial, temporal, social, and hypothetical [1, 2, 14]. Indeed, the same event (e.g., a crisis) is perceived differently depending on the conditions. Spatial: is the event far away (a crisis in another country) or nearby (a crisis in my country)? Temporal: is it a past or future event (crisis of 2008) or the current event (COVID-19-driven crisis)? Social: is it an event which has a direct impact on my direct environment (crisis impacting my firm or my family) or is it a socially distant event (crisis impacts someone else)? Hypothetical: will the event happen for sure (a crisis will have spill-over effects on my work) or can it happen only with a certain degree of probability (the crisis may have an impact on my work under certain conditions).

In all these situations, scientists argue that a person changes the way of information processing. The lower the psychological distance, the more individuals tend to concrete information processing; the higher the psychological distance, the more likely individuals will process information on an abstract level. The assumption that there should be a stereotype, which relates cash to a low psychological distance (i.e., cash has to be related to detailed thinking; paying right here and right now), whereas credit card payment should be associated with a high psychological distance (i.e., abstract thinking; paying at some point in the future) was proved [3].

#### Experimental Design

The study was conducted online in Armenia among 285 people. The age of the respondents ranged from 18 to 58 years. Respondents were both currently employed and unemployed. For this study, a questionnaire consisting

of 16 questions was developed to study consumers preferences of means of payment and online spending behavior and self-assessment of some psychological features.

#### Research results

Chi-Square Tests (p=.000) results has shown that those who have chosen application and PayPal as the most preferred payment method in the month during online shopping equally use card and application. Table is shown below. For the other preferred method of payment Card payment is more usable.

**Table 1.** Most preferred method of payment and preferences of online shopping

			Online shopping	
			Card	Application
		Application	55.7%	44.3%
Most method month	preferred during	NFC phone	81.5%	18.5%
		NFC card	83.3%	16.7%
		Card	85.7%	14.3%
		Google pay	66.7%	33.3%
		Paypal	50.0%	50.0%
		Apple pay	82.9%	17.1%

Now, let's take a look on each preferred method separately. Those people, who preferred cash, actually, 47% of them use application during the month. Those people, who preferred card, in fact also use application during the month. But percentage is smaller- 31%. And only those people, who preferred application really use it during month, only 11 percent use card, 23 % - Apple pay and 23% phone NFC, which is also considered as card. Who have chosen as preferred method cash, never receive payments by application and mostly receive by cash, who preferred app mostly receives by card.

As one more prove to the theoretical base, those people who preferred paying by cash consider themselves as more thrifty. The figure is shown below.

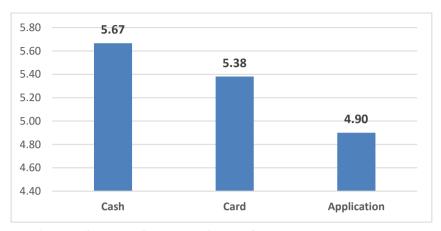


Figure 1. Spending behavior and paying preferences.

Another interesting fact was shown in the results.

Chi-Square Tests (p=.000) results has shown that we have statistically significant differences between paying and receiving money by different means.

Those people who prefer paying by cash wants to receive money by cash (59.2\$) either by cards (40.8%). Those who prefer pay by cards give re preference receive money by cards (85%). But those people who prefer pay by application, when this concern to receive it give their preference to cards (77.1%). And only 17.1% prefer to receive money by applications.

**Table 2.** Paying and receiving money by different means.

		Receiving money		
		Cash	Card	Application
Paying	Cash	59.2%	40.8%	
	Card	12.2%	85.0%	2.7%
	Application	5.7%	77.1%	17.1%

#### Conclusions

During their economical behavior agents prefer to use wide methods of payments such as cash, different cards and applications, but during online shopping the main preferred method is card payment. Only the people who use Paypal prefer to pay during online shopping by applications as often as by card.

People who prefer to use applications as paying method, prefer to receive money by cards. We can conclude that applications aren't yet as much trusted as cards.

People who prefer cash as paying method consider themselves more thrifty.

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