Article

The Relationship between Decision and Payment Habits and Its Relation with Wasting—Evidence from Hungary

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Abstract: The aim of the study is to explore the relationship between overspending and the method of payment, to highlight its causes. The non-representative survey was conducted between 2020 and 2021 in Hungary (n = 499) using the snowball sampling of data collection. They examined the relationship between age, education, place of residence, and payment methods, and analyzed the impact of internal and external factors on cash consumption and sustainability. The results showed that the use of cash as a method of payment is characteristic with advancing age, and higher education has a higher willingness to pay electronically according to the examined sample, and the existence of electronic access is not related to the size of the settlement. It can be stated that the majority of respondents have no choice when choosing a payment method. The answers reflect confidence in electronic payment solutions (a value of 2.21 on a six-point scale). Each group believes that they can consciously plan their budget (alternative budget). With proper communication and awareness of these influencing factors, financial awareness can be strengthened.

Keywords: cash; payment habit; purchase decision; consumer confidence; waste

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1. Introduction

A steady rise in consumption standards can be observed. The day of global overconsumption is occurring earlier and earlier [1], but as has already been detected earlier, against the increasing number of vehicles, microwave ovens, and color TVs, per capita, people are less and less declaring themselves happy [2]. We speak about overconsumption when “- the quantity or nature of consumption undermines the species’ own life support system . . . because the species then overload the ability of the given ecosystem of some natural resources to renew and dispose of its waste (assimilation). . .” [3] (p. 16).

According to family life cycles, the age of individuals living in households influences household consumption, and based on this, future consumption can be determined [4]. The life cycle theory provides the motivation behind the level of savings and consumption. Younger people prefer to let go of their savings and prefer to spend their income on loan repayment [5], while as they become older their savings for retirement years become more important [6]. According to Keith Chen, our savings attitude also depends on the structure of language. In his view, in languages where they strongly distinguish the present and the future, people have a harder time saving, because the grammar structure reminds them to meet needs at a later date postponed [7]. There is also a point of view that overconsumption can be traced back to individual and environmental factors (unnecessary accumulation, commodity abundance, media impact) [8].

Sustainability as a value also seems to appear in consumer behavior. Western societies (USA, EU) show a constant change in value [9], although various factors—economic, social, lifestyle, and psychological, limit following it [10]. Nevertheless, 10% of the 14–20 age

group still carries the characteristics of overconsumption [11]. At the same time, world leaders committed themselves in 2015 to 17 sustainable development goals, of which Goal 12 calls for responsible sustainable consumption and production habits [12]. There is also a finding that income determines the lifestyle of households, and thus their consumption and environmental consideration [13]. In contrast, it has been shown [14] that 3.5 times higher income is not spent for consumption but is used for savings.

The spreading of sustainability still has obstacles partly because the economic policy system encourages consumption from above, on the one hand. After all, a consumer spends if it is possible (car, travel) [15], and thirdly, people want to live on their former standard of living [16].

Sustainability is therefore hampered by the already mentioned over-consumption, which has an impact on waste generation in the long run, and the continuous technological innovation also contributes to it greatly (emergence of new products, replacement of existing products due to obsolescence) [17]. The linear economy avoids wasting (we do not produce new products, declining production volume), while the circular economy has created waste management (recycling solutions) [18].

It should be used as a means of payment to process consumption; however, these tools have formally undergone a significant change. Initially, the direct product exchange, the visual directness also expressed the value of the transaction, e.g., when the Moorish caravans exchanged gold for salt, the proportion of which was agreed amended [19]. Later, production and consumption moved away from the exchange trade, which has played a key role in the implementation of this process, which had to be simplified, so money appeared as a medium of exchange [20]. Today, this simplification is already so drastic that the movement of money is no longer traceable.

The benefits of cash are that it is anonymous, more convenient, and cheaper than other means of payment, while the downsides are that it is dirty, heavy, and expensive [21]. Based on the report of the EY (2019), China and India are at the forefront of global FinTech adaptation, and in both cases, the rate of adaptation among consumers is 87% [22].

The acceptance of the cashless payment methods based on a Malaysian investigation highlights the importance of preparation and expected waiting as the most important [23]. Just as innovation affects processes in consumption, so do people, who used some technological innovation and are more open to the use of electronic money [24], but each country and local context has its challenges [25]. When the Jordan Mobile Payment system was introduced, the usage intent depended on performance, social influence, value, security, and privacy, but not on culture [26].

According to the European Central Bank, in 2019 in the eurozone the number of vending machines decreased by 3.5% to 0.31 million, while point-of-sale (POS) terminals increased by 8.1% to 11.7 million [27]. For example, in the United Kingdom in 2007 and 2017, based on the payment volume of cash and debit cards for the years between 2018 and 2027, the trend lines for cash and debit card payments are completely reversed [28].

Financial digitization has proven to be important primarily for the poorer strata. The winners of this process are the social groups that used to be pushed out of the banking system and could not enjoy the benefits of financial services. According to the study of Molnár and Kerényi (2017), the main causes of exclusion are the wealth situation (poverty of the affected strata), underdeveloped infrastructure, and from the aspect of customer ratings, the high-risk rating [29].

Currently, nearly 2 billion people in the world do not have access to the traditional banking system services, especially in developing countries [30] however, within the population excluded from financial services, there are about 480 million of 1 billion people with a smartphone and internet connection. This huge group can form the basis of financial integration. Lack of internet access can be compensated in an offline payment system development, which is already in progress. Successful implementation of this could bring breakthrough change for these strata [31].

In the second quarter of 2020, the proportion of card payments in Hungary rose to 23 percent from the previous year's 17 percent, and the rate of cash payment decreased to 77% compared to the previous year's 82%, due to the effects of the coronavirus [32]. As an effect of the virus, examination of contamination of banknotes and coins was also on the agenda [33].

A study by the Magyar Nemzeti Bank listed influencing the use of cash and card factors including the cost of borrowing and holding cash, POS terminal coverage, what and how much the population spends, and the size of the gray and black economy. The amount of cash is influenced by those on lower incomes, the number of people with lower education, as well as those over 60, as in this category debtors receive their salary in cash to a greater extent [34].

According to research [35], the 16–29 age group uses mostly cash (60%), and those with basic education (76%), the unemployed (67%), the students (66%), ones who have labor market status and where the household income is classified below HUF 100,000 (78%). There is research, e.g., on mobile payment platforms, where gender [36] is important, but the mentioned research did not find a correlation with gender in Hungary.

The obstacles to reducing cash in Hungary is based on the number of high transaction fees paid per transfer [37,38]. In addition, an obstacle is, e.g., the counterfeiting of cash substitute [39] but the mobile store payment risks could also be mentioned [40]. More than half of online shoppers pay on delivery of their internet orders [41].

In Hungary, the bank card holders' proportion among the adult population was 83% in 2019 [42].

Neuroeconomics (psychology and behavioral science behind financial decisions + economics) is becoming more popular [43], and more and more books are drawing attention to why we spend more than we should [44]. Some researchers say it is called an insula area which is responsible for the feeling of pain after overspending. In people who tend to save more, this area of the brain shows greater activity, thus shopping is also experienced as a more unpleasant experience in a neurological sense. Scientists concluded that those whose insula works more actively are more likely to make savings [45].

A person evaluating a financial decision has different brain activity patterns in their brain and outlines the changes that are taking place [46]. Decision-makers, who are familiar with the decision-making area, can experience positive emotions (confidence, comfort), while those who do not, can experience negative emotions, including anxiety [47]. One in a South African survey, the effect of anxiety was not significant during mobile payments [48]. It is of the utmost importance for market participants to keep the uncertainties to a minimum, and also the risks of their decisions [49]. It has been established [50] that the process that takes place induces something else in terms of price increases and waiting for a better price.

A survey in Russia [51] showed that various financial innovations promote consumer activity. Consumers are typically more willing to spend by card than in cash because they do not feel the pain of paying [52]. When examining the spending habits of low-income consumers [53], this statement does not prove true, but price sensitivity when paying by a card did.

Financial decisions based on the literature can therefore be influenced by age, place of residence, education, and the existence of external (e.g., unavailable banking services) and internal (sense of security, pain of payment) limiting factors. Examining these can be important in understanding how conscious financial decisions are made. If gaps in the process can be identified, market participants can increase their financial awareness and minimize the risks associated with their decisions. This can help reduce overconsumption in the long run. Based on the above, the following hypotheses were made:

Hypothesis 1 (H1). *Factors influencing the choice of payment methods are age, education, and place of residence.*

Hypothesis 1 (H1a). *With increasing age, the use of cash is the typical method of payment;*

Hypothesis 1 (H1b). *Higher education is associated with a higher willingness to pay electronically;*
and

Hypothesis 1 (H1c). *As the size of the settlement increases, the use of the electronic payment method increases too.*

Hypothesis 2 (H2). *The use of cash depends on internal (security, payment pain) and external factors (there are no options for cashless payment).*

2. Materials and Methods

2.1. Sampling Method

Hypotheses were set up on the basis of the literature and a questionnaire survey that was conducted to test them. Consumer research was conducted in Hungary between November 2020 and May 2021 ($n = 499$). In the online survey covering the whole of Hungary, snowball sampling of data collection was used [54]—first acquaintances and then their acquaintances were targeted through social media—the respondents were not randomly selected. The territorial scope was not limited. The survey asked respondents by using a Likert scale (0 = totally disagree; 6 = totally agree; mean value could not be indicated), using multiple-choice and open-ended questions, about attitudes, payment habits, and personal data of respondents (background information: age, education, place of residence, labor market status). The questions were asked by the literature in such a way as to ensure the confirmation or refutation of the established hypotheses. The responses were recorded electronically automatically by sending the filled survey and then were converted to a binary number system for processing.

The distribution of the sociodemographic data of the respondents is shown in Table 1.

Table 1. Distribution of the sample.

Description	n	%
Total respondents	499	100
Age		
16–29	147	29
30–39	183	37
40–49	110	22
50–59	45	9
>60	14	3
Education background		
Primary school	2	1
Secondary school (without graduation)	27	5
Secondary school (with graduation)	149	30
College, university	321	64
Residence		
Village	120	24
City	114	23
County seat	123	25
Capital city	142	28

2.2. Statistical Analysis

Data were evaluated by using the STATA 15 software. Purification of the sample was performed during subsequent analysis: due to the low number of items, the population age 60 and over ($n = 14$) and respondents without a secondary education ($n = 2$) were excluded due to low sample element reasons. They will no longer be included in later tables. The following statements of the questionnaire were used to test the hypotheses. Behind the statements are their notations in parentheses, which were later used:

- x1: If I had the opportunity to decide, I would only process my payments cashless/electronically;
- x2: I need cash because in many places today, making daily payments are the only possibilities despite the risk of the epidemic;
- x3: I feel safer keeping my money (e.g., my salary) in cash than in electronic form; and
- x4: If I pay in cash, I can budget my money more easily.

Comparison of different groups can be performed by one-way ANOVA, but in the absence of normality the differences can be examined by a non-parametric test (Kruskal–Wallis). The normality of the data was examined by Shapiro–Wilk and Shapiro–French tests (Table 2). The null hypothesis of the Kruskal–Wallis test is that the medians of the groups are the same, formally:

$$H = (N - 1) * \frac{\sum_{i=1}^g n_i (\bar{r}_i - \bar{r})^2}{\sum_{i=1}^g \sum_{j=1}^{n_i} (r_{ij} - \bar{r})^2},$$

where

N is the total number of observations across all groups;

g is the number of groups;

n_i is the number of observations in group i ;

r_{ij} is the rank (among all observations) of observation j from group i ;

$\bar{r}_i = \frac{\sum_{j=1}^{n_i} r_{ij}}{n_i}$ is the average rank of all observations in group i ;

$\bar{r} = \frac{1}{2}(N + 1)$ the average of all the r_{ij} .

Table 2. Normality test of selected variables.

Variable	Shapiro-Wilk (<i>p</i> -Value)	Shapiro-Francia (<i>p</i> -Value)
x1	0.000	0.000
x2	0.027	0.038
x3	0.000	0.000
x4	0.000	0.000

The limitation of the Kruskal–Wallis test is that it is unknown exactly which groups differ from each other. In the case of the ANOVA test, the solution to this is the so-called post hoc test, in the case of non-parametric tests it can be examined in more detail for our groups with the help of the Dunn’s Test. To ensure the robustness of the results, the Dunn test was performed in three ways: without adjustment, Bonferroni, and Sidak adjustment.

3. Results

To test the first hypothesis, statement x1 was used (Table 3), which is used to assess how, if possible, respondents would do payments there. (“If I had the opportunity to make a decision, I would only process my payments cashless/electronically.”)

Descriptive statistics show that the demand for electronic payments decreases with age. Based on the Kruskal–Wallis test, the median of the groups does not match, so there is a statistically significant difference based on age (chi-squared: 9326, DF: 3, probability: 0.0253). To explore for differences between groups, a Dunn test was performed, the results of it are illustrated in Table 4.

According to the Dunn test, there is a difference between the groups, the “breaking point,” which is observed at the age of over 40, and the over-40s are less likely to use electronic payment solutions.

In the study based on educational attainment, those with primary education ($n = 2$) were excluded from the sample due to the low number of items. The Kruskal–Wallis test

(chi-squared: 10.408, DF: 2, probability: 0.005) shows differences between certain groups here (Table 5).

Table 3. Results for variable X1.

<i>“If I had the Opportunity to Decide, I would Only Process My Payments Cashless/Electronically”</i>					
	n	Mean	Median	SD	CV
<i>Age</i>					
16–29	147	4.60	5	1.75	0.38
30–39	183	4.73	6	1.67	0.35
40–49	110	4.27	5	1.86	0.44
50–59	45	4.18	5	1.57	0.38
<i>Education background</i>					
Secondary school (without graduation)	27	4.00	4	1.92	0.48
Secondary school (with graduation)	149	4.15	5	1.91	0.46
College, university	321	4.77	5	1.58	0.33
<i>Residence</i>					
Village	120	4.26	5	1.86	0.44
City	114	4.54	5	1.73	0.38
County seat	123	4.47	5	1.73	0.39
Capital city	142	4.81	6	1.59	0.33
Total	499	4.52	5	1.73	0.39

Table 4. Dunn test for x1 variable grouping by age.

Pairwise	No Adjustment	Bonferroni	Sidak
1-2	0.298	1.000	0.880
1-3	0.041 **	0.248	0.224
1-4	0.014 **	0.083 *	0.080 *
2-3	0.010 *	0.064 *	0.063 *
2-4	0.005 *	0.028 **	0.027 **
3-4	0.189	1.000	0.714

** and * indicate significance at the 1, 5 and 10% levels respectively. Notes: 1: age 16–29; 2: age 30–39; 3: age 40–49; 4: age 50–59.

Table 5. Dunn test for x1 variable grouping by education.

Pairwise	No Adjustment	Bonferroni	Sidak
2-3	0.295	0.884	0.649
2-4	0.020 **	0.061 **	0.060 **
3-4	0.001 ***	0.004 ***	0.004 ***

*** and ** indicate significance at the 1, 5 and 10% levels respectively. Notes: 2: Secondary school (without graduation); 3: Secondary school (with graduation); 4: College, university.

Based on the results, there is no difference in the willingness to pay electronically between those with a high school diploma and those without a high school diploma, but in the case of those with higher education, the modern form of payment is more accepted.

Finally, the first hypothesis was also examined according to the place of residence. Based on the statistical model (chi-squared: 5.148, DF: 3, probability: 0.1613), there is no difference in acceptance of electronic payment willingness according to the place of residence, so it is not necessary to run a Dunn test.

The second hypothesis was tested with statements x2–x4. One of the internal factors of cash use is security, according to a statement (x3), as keeping cash is safer than the

electronic form. The external factor is measured by the statement x2, which says “I need cash to be able to make daily payments”. The effect of payment pain is approximated by the “treating” of money, in statement x4, respondents answered as to whether cash can be better budgeted, whether cash payment holds back spending.

The second statement examined (x3) seeks to assess trust because the literature raises distrust as a barrier of the spreading of card payments (“I feel safer to keep my money (e.g., my salary) in cash than in electronic form.”), similar to the hypothesis test. Here we break down the analysis by age, education, and place of residence to reveal deeper correlations with cash use. The following Table 6 contains descriptive statistics for statement x3. Based on the descriptive statistics, it was expected to find a significant difference among the groups according to educational attainment.

Table 6. Results for variable X3.

“I Feel Safer to Keep My Money (e.g., My Salary) in Cash than in Electronic Form.”					
	n	Mean	Median	SD	CV
<i>Age</i>					
16–29	147	2.37	2	1.72	0.73
30–39	183	2.21	2	1.47	0.66
40–49	110	2.50	2	1.70	0.68
50–59	45	2.33	2	1.57	0.67
<i>Education background</i>					
Secondary school (without graduation)	27	3.41	4	1.85	0.54
Secondary school (with graduation)	149	2.74	2	1.83	0.67
College, university	321	2.07	1	1.41	0.68
<i>Residence</i>					
Village	120	2.58	2	1.71	0.67
City	114	2.39	2	1.68	0.70
County seat	123	2.31	2	1.59	0.69
Capital city	142	2.15	2	1.50	0.70
Total	499	2.36	2	1.62	0.69

As can be seen from the descriptive statistics, the Kruskal–Wallis test did not become significant by age groups (chi-squared: 1.395, DF: 4, probability: 0.707). The questionnaire was completed mainly by younger people aged 30–39, who answered an average of 2.21 on a six-point scale. Examining the other age groups as well, low values with low relative standard deviation can also be seen.

There are significant differences based on education (chi-squared: 21,952, DF: 2, probability: 0.000). The Dunn test shows which groups are statistically different from each other. The results of this are shown in Table 7.

Table 7. Dunn test for x3 variable grouping by education.

Pairwise	No Adjustment	Bonferroni	Sidak
2-3	0.036 **	0.109	0.105
2-4	0.000 ***	0.000 ***	0.000 ***
3-4	0.000 ***	0.000 ***	0.000 ***

*** and ** indicate significance at the 1, 5 and 10% levels respectively. Notes: 2: Secondary school (without graduation); 3: Secondary school (with graduation); 4: College, university.

According to the Dunn test, confidence in e-payments increases as education increases. Similar to age, there is no significant difference between settlement types in terms of trust in cash holdings (chi-squared: 3.096, DF: 3, probability: 0.377).

As an external factor, the compulsion was identified to not be able to pay electronically, so if somebody wants to shop at the given location, it needs cash. Descriptive statistics are provided in Table 8. Based on the descriptive statistics, it can be seen that the only outstanding value is in education, in every other case similar answers are seen.

Table 8. Results for variable x2.

“I Need Cash Because in Many Places Today, Making Daily Payments are the Only Possibilities Despite the Risk of the Epidemic.”					
	n	Mean	Median	SD	CV
<i>Age</i>					
16–29	147	3.55	4	1.67	0.47
30–39	183	3.54	4	1.59	0.45
40–49	110	3.65	4	1.66	0.45
50–59	45	3.58	3	1.67	0.46
>60	14	3.86	4	1.35	0.35
<i>Education background</i>					
Primary school	2	3.50	3.5	3.54	1.01
Secondary school (without graduation)	27	4.37	5	1.73	0.40
Secondary school (with graduation)	149	3.56	4	1.55	0.43
College, university	321	3.52	4	1.63	0.46
<i>Residence</i>					
Village	120	3.63	4	1.59	0.44
City	114	3.53	4	1.67	0.47
County seat	123	3.69	4	1.56	0.42
Capital city	142	3.48	4	1.68	0.48
Total	499	3.58	4	1.63	0.46

Based on the responses, it was found that all age groups agree with the question, and there is no difference between the opinions of the groups, which was also supported by the Kruskal–Wallis test (chi-squared: 0.321, DF: 3, probability: 0.954).

In terms of educational attainment, the highest median was for those without a high school diploma, based on the Kruskal–Wallis test, and the groups do not agree with each other (chi-squared: 3096, DF: 3, probability: 0.377). The results of the Dunn test are shown in Table 9.

Table 9. Dunn test for x2 variable grouping by education.

Pairwise	No Adjustment	Bonferroni	Sidak
2-3	0.008 ***	0.0225 **	0.022 **
2-4	0.004 ***	0.011 **	0.010 ***
3-4	0.386	1.000	0.768

*** and ** indicate significance at the 1, 5, and 10% levels respectively. Notes: 2: Secondary school (without graduation); 3: Secondary school (with graduation); 4: College, university.

There is no statistically significant difference in response between those with tertiary education and those with a high school diploma; however, respondents with a secondary education without a high school diploma tended to agree with this statement, i.e., they need cash because in many places it is only possible to pay with it.

In advance, it can be thought that the possibility of paying by debit card is much lower in the countryside, and people prefer cash for traditional reasons. In contrast, based on the results of the Kruskal–Wallis test (chi-squared: 1.144, DF: 3, probability: 0.766), there is no difference in responses based on the breakdown by residence. In the case of all types of settlements, higher value is shown than the average, and the lowest value is in the capital

(3.48), but these values are not significantly higher for the other types of settlements either. In connection with the statement, a starting point is mainly in terms of terminal coverage, so that the majority of respondents pay in places where the consumption can only and exclusively be done in cash.

In the last part of the second hypothesis, they were asked about payment pain, and respondents rated on a scale of one to six and if they pay in cash, they allocate their money better, i.e., the physical transfer of money forces one to consume more consciously. A breakdown of responses was performed similarly as before, see Table 10.

Table 10. Results for variable X4.

<i>"If I Pay in Cash, I Can Budget My Money More Easily."</i>					
	n	Mean	Median	SD	CV
<i>Age</i>					
16–29	147	3.31	4	1.96	0.59
30–39	183	2.79	2	1.77	0.64
40–49	110	2.98	2.5	1.86	0.62
50–59	45	2.82	3	1.71	0.61
>60	14	3.36	3	2.06	0.61
<i>Education background</i>					
Primary school	2	1.50	1.5	0.71	0.47
Secondary school (without graduation)	27	3.96	4	1.95	0.49
Secondary school (with graduation)	149	3.21	3	1.84	0.57
College, university	321	2.83	2	1.83	0.65
<i>Residence</i>					
Village	120	2.97	2	1.87	0.63
City	114	3.08	3	1.84	0.60
County seat	123	2.93	3	1.87	0.64
Capital city	142	3.04	3	1.87	0.62
Total	499	3.00	3	1.86	0.62

According to the descriptive statistics, there are no significant differences in the resolution by place of residence, but there are greater differences in age and education.

According to the Kruskal–Wallis test, age grouping is not significant (chi-squared: 5.306, DF: 3, probability: 0.151), i.e., people of different ages think similarly about cash allocation with cash. The answers are scattered around the average, and the relationship of the fillers to this statement is not clear. There is no significant difference between settlement types according to the Kruskal–Wallis test (chi-squared: 0.383, DF: 3, probability: 0.9483).

In contrast to age, the test result was significant in education (chi-squared: 10,066, DF: 2, probability: 0.377). The results of the Dunn test are shown in Table 11.

Table 11. Dunn test for x4 variable grouping by education.

Pairwise	No Adjustment	Bonferroni	Sidak
2-3	0.036 ***	0.110	0.105
2-4	0.002 ***	0.006 ***	0.006 ***
3-4	0.023 **	0.070 *	0.068 *

***, ** and * indicate significance at the 1, 5 and 10% levels respectively. Notes: 2: Secondary school (without graduation); 3: Secondary school (with graduation); 4: College, university.

There is a significant negative relationship between educational attainment and specific responses, i.e., with increasing educational attainment, there is less and less agreement with the statement that the use of cash aids money allocation better.

4. Discussion

The added value of the study is provided on the one hand by the answers to the hypotheses and on the other hand by the conclusions drawn from the literature. The first important finding is that younger people tend to consume rather than save, and even become indebted [5], while saving for retirement becomes more important as they age [6].

According to the H1 hypothesis, age, education and place of residence are decisive factors in the choice of payment method.

Within this, the hypothesis H1/a is accepted (the use of cash is increasing with increasing age) based on the results, despite the mixed assessment of the literature. Based on the literature, it has been concluded that according to family life cycles, the age of individuals living in households influences household consumption, which can be used to determine future consumption. According to [4,35], the 16–29 age group uses mostly cash (60%).

Concerning the H1/b hypothesis (higher education is associated with greater willingness to pay electronically), the literature suggests that the amount of cash is influenced by the number of people with lower incomes [35], people with less education and over 60s, as people in this category receive their salary more in cash [34], as well as those with a primary education (76%), the unemployed (67%), students (66%) with labor market status, and where household income is classified below HUF 100,000 (78%). Based on the research, similarly to the literature, the data show the difference in education in the choice of payment method, which is why the H1/b hypothesis is accepted. One of the reasons is that in jobs filled with lower education, a part of the wages comes back, in envelopes, which people do not pay into the bank to pay electronically afterward. As a result, a higher degree of acceptance of cash may develop. For those who receive their full salaries to a bank account and typically pay by debit card, there is a growing trust in electronic payment.

The hypothesis H1/c is rejected (the increase in the size of the settlement increases with the use of the electronic payment method.), i.e., the increase in the size of the settlement, the increasing prevalence of the electronic payment method has not been proven. This means that the place of residence is more differentiated from the expectations, and the existing electronic access is not related to the size of the settlement. Based on this, financial and cultural differences converge between rural and urban areas, however, further development is needed nationwide. This suggests that POS coverage in the area demarcated by the respondents needs to be improved or that the proportion of black trade is high. The state may be interested in additional targeted subsidies for the expansion of terminals, as this may contribute to the whitening of the economy.

According to the H2 hypothesis, the use of cash depends on internal and external factors as well as payment pain. In connection with the examination of the external factors of the H2 hypothesis, it was concluded that the majority of respondents do not have a choice when choosing the payment method, so they are forced to use cash in many places. Based on the internal factors of the H2 hypothesis (secure income classification according to different payment methods), this reflects confidence in electronic payment solutions. Examining the third subset of the second hypothesis (the area of pay pain as a second internal factor), it can be concluded from the results that each group believes that it can consciously plan its budget regardless of payment method. From the results, it can be concluded that each group believes that they can consciously plan their budget (alternative budget), but those with lower education do so on a cash basis, while those with higher education do so using non-cash payment methods.

As is known, the results obtained by the snowball method are not representative, so it is worthwhile to extend the analysis to a more systematic, broader sampling.

The article did not address the study of gender differences, which could be a possible research direction in the future. Furthermore, it may be obvious to strengthen communication about emphasizing a conscious budget and describing pay pain as a phenomenon.

5. Conclusions

The aim of our study is to present the relationship between overspending and the payment method, to highlight its causes. Poor financial decisions and the consumption financed by them lead to over-consumption at the societal level, which jeopardizes sustainability due to a lack of capacity. The latter can also be observed with the earlier avoidance of the day of overconsumption and the increasing amount of waste. It seems to be logical that by promoting sustainable behavior, over-consumption and thus waste can be reduced. With proper communication and awareness of these influencing factors, financial awareness can be strengthened. This will avoid over-spending, over-consumption and thus reduce the amount of waste, in line with United Nations Sustainable Development Goal 12.

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