MICROFINANCE CENTRE

The impact of reminders on financial behavior of financial education training participants

Results of the evaluation of the reminders program

1. Introduction

The reminders program was implemented by the Microfinance Centre (MFC) between May and December 2011 among low-income people participating in financial education trainings. The program aimed at testing the influence of the reminders about proper financial practices delivered for a period of time after the training on strengthening the effects of the training.

The population eligible for the reminders program consisted of 517 people who received "Plan your Future" or "Debt Management" training. All of them were invited to participate in the reminders program but 28% refused to participate.
Among the remaining 372 people who joined the program 129 people received SMS reminders (35%), 115 received postcard reminders (31%) and 128 people (34%) constituted the control group which did not receive any reminders.

2. Evaluation methodology

Before the financial education training the participants completed a questionnaire about financial practices, attitudes, perceptions about their knowledge and financial situation of their households. Also, some demographic and psychological information was collected in order to be able to profile the participants before the treatment.
The questionnaire consisted of 26 closed-ended questions and was self-completed on paper by the participants.

The impact study was conducted among 191 people who were in the treatment group (SMS or postcard) or did not as they constituted the control group.
Additionally, people who did not join the reminders program because they refused to receive any educational materials after the training (self-excluded) were surveyed.

The interviews were conducted after the end of the treatment, within 6 months after the training. The questionnaire consisted of up to 21 closed-ended questions.
The CATI method (computer assisted telephone interview) was chosen because of the distribution of program participants throughout the territory of Poland (over 90 locations).
As a consequence, only people who disclosed their phone numbers participated in the impact study. This most strongly affected the selection of respondents from the control group where only 35% stated their phone numbers in the initial survey.

The following numbers of interviews were conducted:

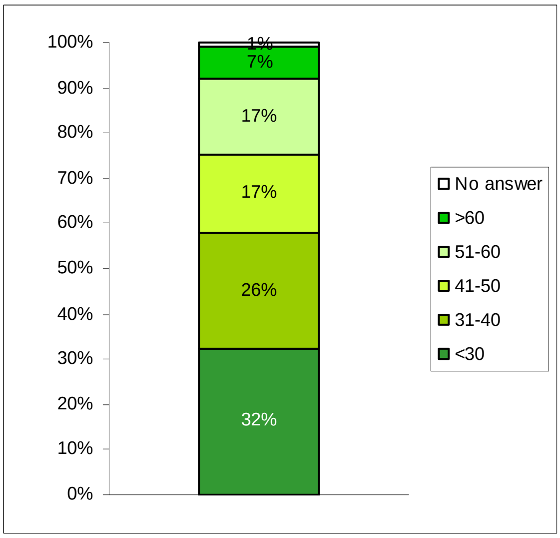
		Number of participants	Number of participants who disclosed phone numbers	Respondents in the impact study	% coverage with impact study (c)/(a)
		(a)	(b)	(c)	(d)
control group		128	36	30	23%
treatment group	SMS	129	129	85	66%
	postcard	115	115	76	66%
self-excluded		145	95	70	48%
Total		517	375	261	50%

3. Description of the participants of the reminders program prior to the treatment

3.1. Socio-demographic characteristics

The average age of a program participant was 39 years. The vast majority (88%) of the participants were women.

Figure 1: Age distribution of program participants (% participants)



The participants lived in households consisting on average of 4 people, including 2 children. Single person households were rare (4%). 18% of the participants had no children in the household, while 28% had three or more children.

- **Financial situation**

Almost half of the participants felt that their financial situation was bad but the other half thought that their financial situation was quite good.

Only 34% of the participants' households had income from permanent jobs, while 38% earned from temporary jobs. At the same time 30% received social benefits and 17% had pensioners in the household. Self-employment was very low – 7% of the participants ran their own businesses.

Figure 2: Perception of financial situation of the household (% participants)

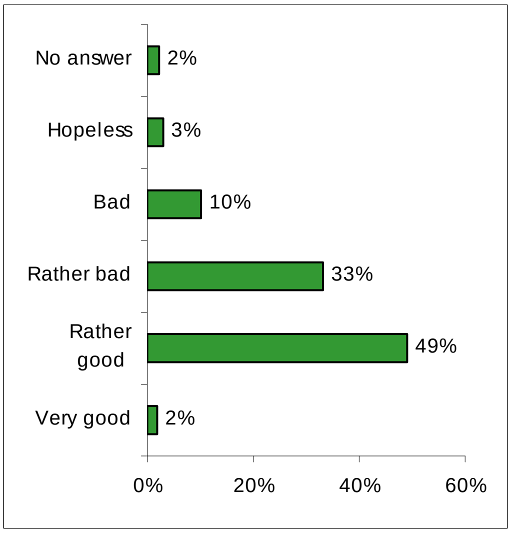
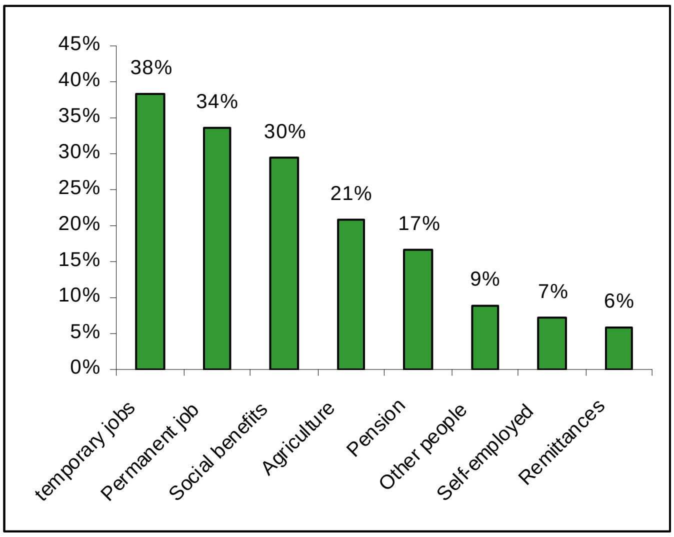


Figure 3: Income sources of participants' households (% participants)

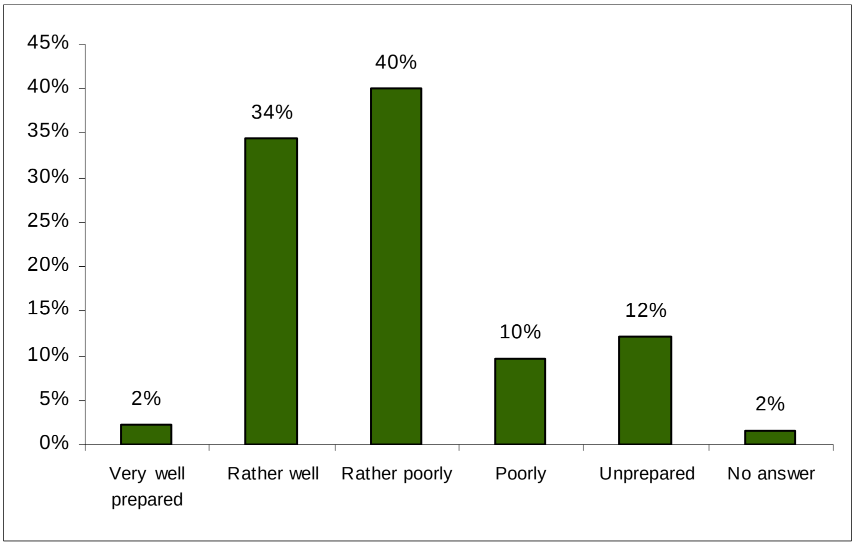


- **Preparedness for financial emergencies**

Only 36% of the participants felt prepared for emergency expenses. These were predominantly those who considered their financial situation as good, who saved and who were not over-indebted even though they had debts as often as the others.

Such people also had more internal locus of control (17 vs. 20.2 for people unprepared for emergencies) and had fewer children in the household (1.6 vs. 2.1), and someone in the household had own business or received pension.

Figure 4: Preparedness for unexpected expenses (% participants)



- **Priorities in spending additional money**

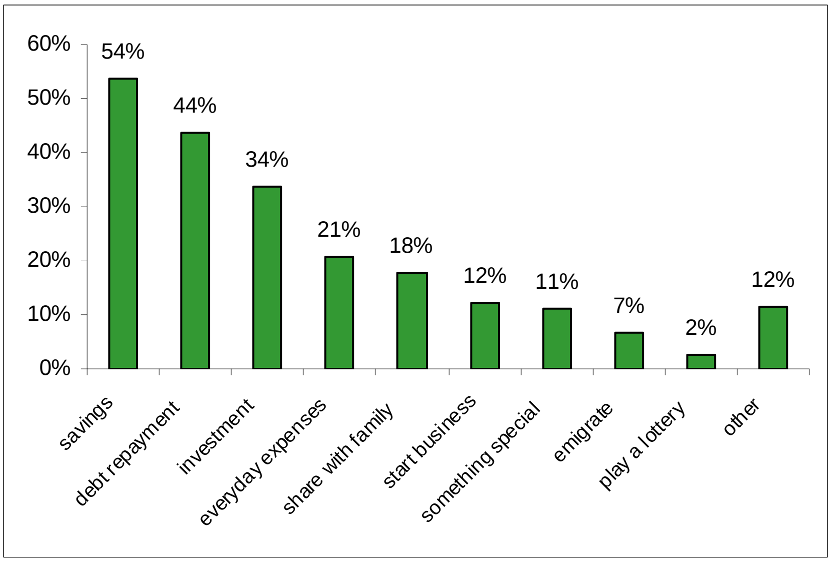
In order to better understand the priorities that participants have in spending unexpected additional money a hypothetical question was asked about the choice for spending extra cash of 10,000 zł (about 3,000 USD or the equivalent of over 10 monthly social minima).

Usually, people would use this sum for three different purposes, but the most common use was saving some part of it for later, repaying debts, investing or a combination of these with other options.

Over half of the participants (54%) said that they would save some of it and 44% would use some of it for repaying debts. This shows that a large proportion of the participants is savings-oriented and also debt-averse, that is they would repay debts as soon as possible.

In particular, people who perceived themselves over-indebted, but also those who lived on social benefits, had bad financial situation and were unprepared for financial emergencies more often listed the debt repayment as a priority.

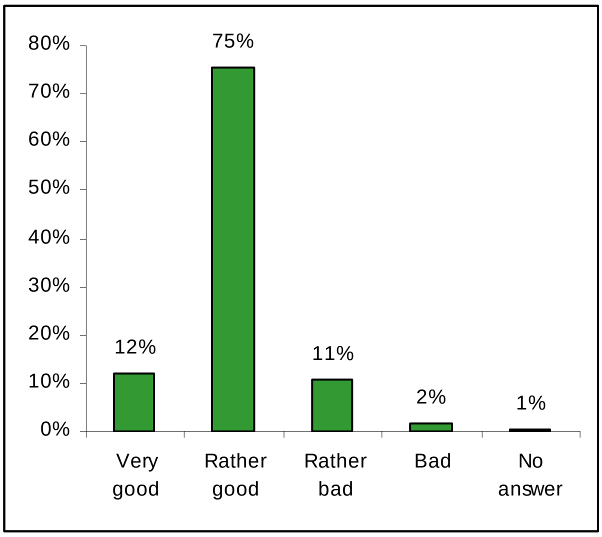
Figure 5: Preferred ways of using extra income (% participants)



3.2. Perception of one's own financial knowledge

The participants considered their knowledge about financial matters as rather good (74% of participants). Only 13% thought that it was bad.

Figure 6: Knowledge about financial management (% participants)



Locus of control is defined as a general, relatively stable propensity to see the world in a particular way and the perception of one's place in the world. More specifically, locus of control is a measure of an individual's belief about cause and effect within their life. Locus of control has two extremes—external and internal. Someone who has an external locus of control believes that outside forces and events dictate their actions, decisions, and behavior. Those with an external viewpoint are more likely to feel that powerful others construct barriers that limit one's accomplishments. Internals generally believe that they possess the skills, abilities, and knowledge to dictate outcomes experienced in their lives. Those with an internal locus of control perspective are apt to be goal-driven and more often than not, they exhibit responsible financial decision-making skills.

3.3. Locus of control

The largest group (49% of the participants) was moderately internally-driven, that is they, although to a limited extent, believed that they were in control of their lives. The second largest group, although far less numerous, comprised people who believed that to some extent their lives are driven by external forces (moderately external locus of control).
The participants with more internal locus of control were younger (below 30 years old), felt that they knew how to manage finance and more often perceived the financial situation of their households as good.
On average, the locus of control score was 19 on a scale from 7 to 35.

Figure 7: Locus of control (% participants)

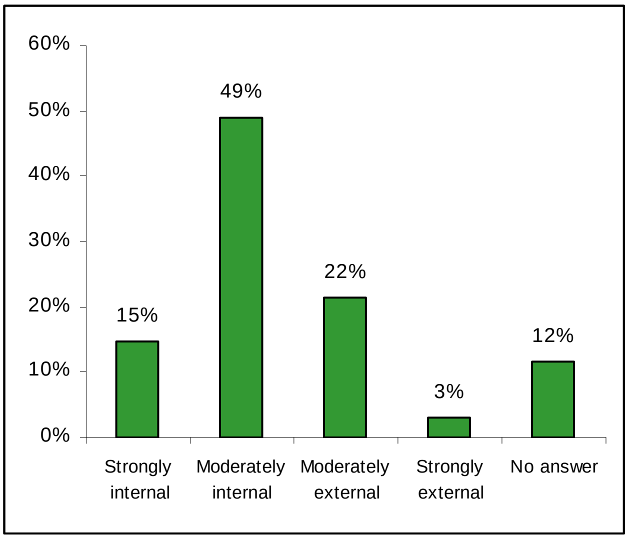
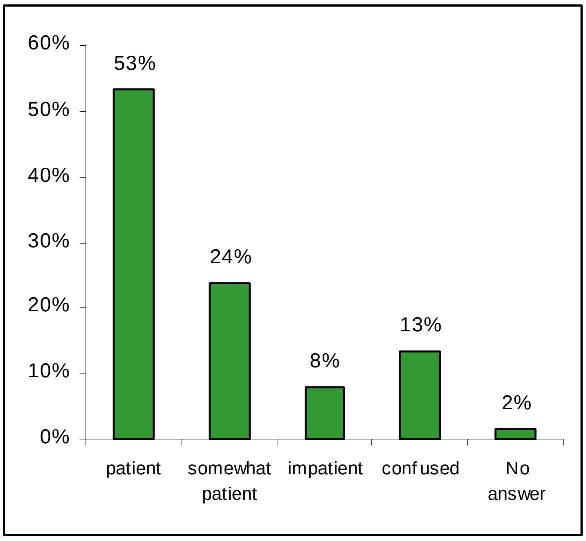


Figure 8: Time preferences (% participants)



Time preferences

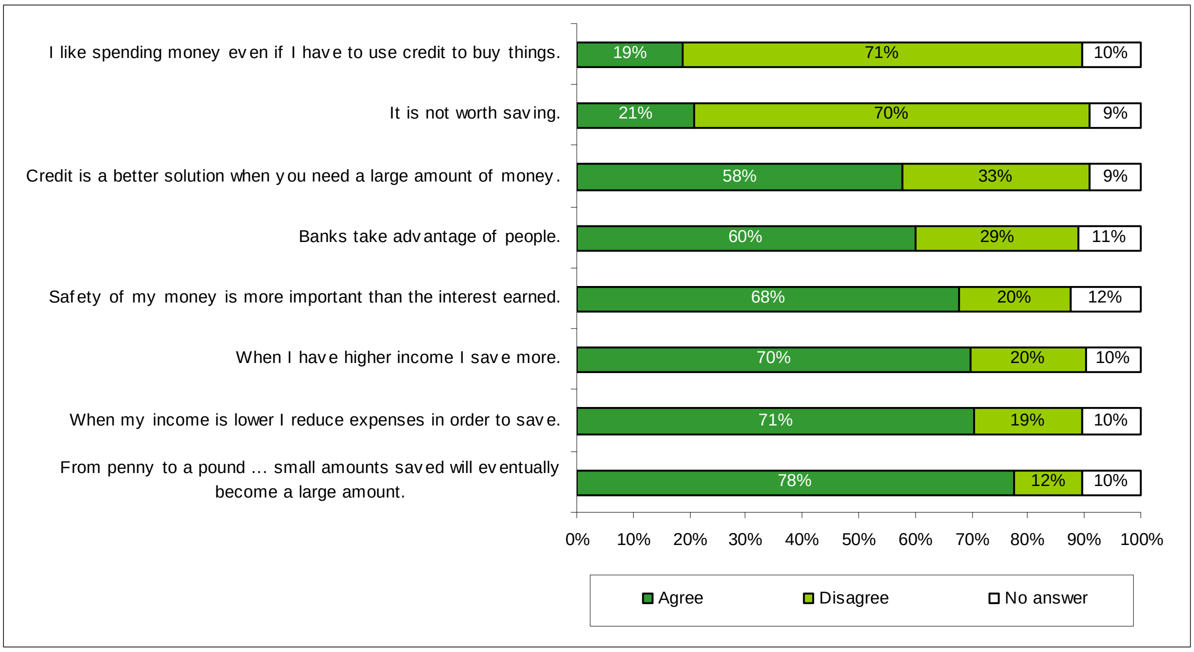
Slightly more than half of the participants (53%) were found to be patient to wait for money - they exhibited preference towards a delayed higher reward over an immediate smaller amount of money. Further 24% (somewhat patient) would wait only if the amount was considerably high. Only 8% were found to be impatient and wanted a small sum today even if offered more next month.

Time preferences or hyperbolic discounting refers to the choice between immediate small awards over the delayed larger awards and reveal how people value costs and benefits that occur in the future versus those in the present.
Individuals tend to systematically overvalue immediate costs and benefits and undervalue those in the future (i.e., hyperbolic discount) - their preferences are not time-consistent and they give greater importance to present events in comparison to those in the future. As regards the credit decisions, the hyperbolic discount factor pushes individuals, in the moment they have to decide whether to purchase on credit terms or not, to opt for immediate purchase. This decision is made despite the fact that the individual is rationally able to judge that the level of debt taken on is unsustainable in comparison to future income receipts. This behavioral factor explains why individuals choose "buy now, pay later" solutions that bring immediate gratification at a future cost. It means that individuals adopt impatient, short-sighted behavior patterns which make it difficult for them to be fully aware of the consequences of their spending decisions on the sustainability of personal debt.

3.4. Attitudes

The vast majority of the participants displayed proper attitudes towards money management – they appreciated the importance of saving (78% of the participants), reduced expenses in order to save (71%) and saved additional earnings (70%), did not buy unnecessary things on credit (71%) but appreciated credit for larger purchases (58%).

Figure 9: Attitudes towards saving and borrowing (% participants)



The majority (68%) was also risk averse – they preferred secure investments over risk-bearing ones with higher returns.

Only the trust in banks was rather low – 60% of the participants believed that banks take advantage of people.

3.5. Financial habits

- **Income tracking**

Only 43% of the participants were well aware of the value of their spendings, while half of the participants only had general idea about the amount of money they spent The latter were older (average age 44 years), more often had a pensioner in the household, and less often someone in the household had a permanent job. People aware of their expenses had more internal locus of control (average of 18.4 versus 19.3 for those unaware).

Figure 10: Awareness of the amounts spent (% participants)

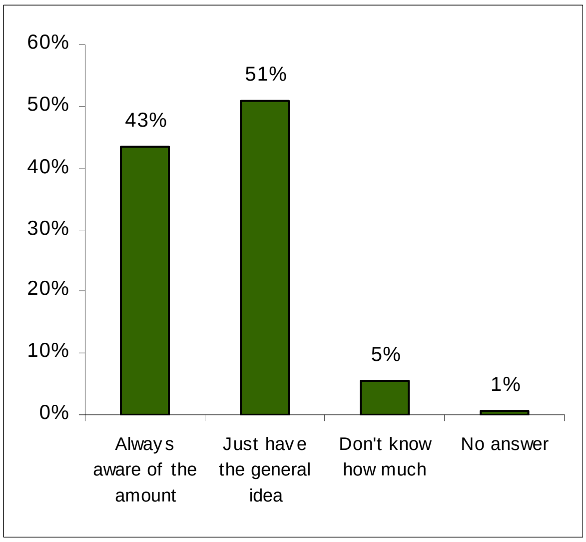
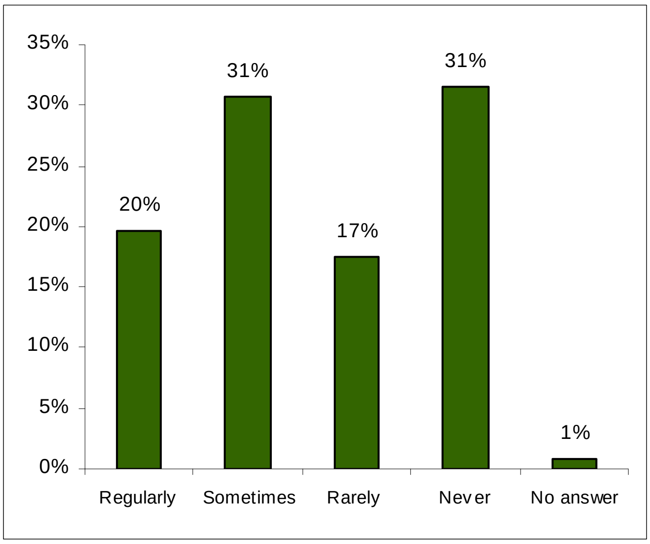


Figure 11: Frequency of preparing household budget (% participants)



- **Planning income and expenses – household budget**

51% of program participants regularly or from time to time planned their income and expenses. People who planned household budget were more often savers and saved proactively putting aside money before making expenses. They more often were prepared for unexpected expenses, had savings for rainy days and saved for specific goals. But they also more often made purchases using installment credit. They also more often were aware of their expenses.
Planners had more internal locus of control (average of 18.4 versus 19.5 for non-planners).

- **Saving**

Before the program, 51% of the participants saved, but only 54% of them saved proactively, that is put aside some part of their earnings before making expenses.

Savers were younger (37 years old) and had more internal locus of control (17.9 versus 20.2). People with permanent jobs, self-employed and those who did not receive social benefits were more often savers. Savers also more often considered their financial situation as good and thought that they had good financial knowledge. They were patient to wait for a delayed monetary reward. Savers were less often over-indebted, even though they used debt as much as non-savers.

Figure 12: The fact of saving (% participants)

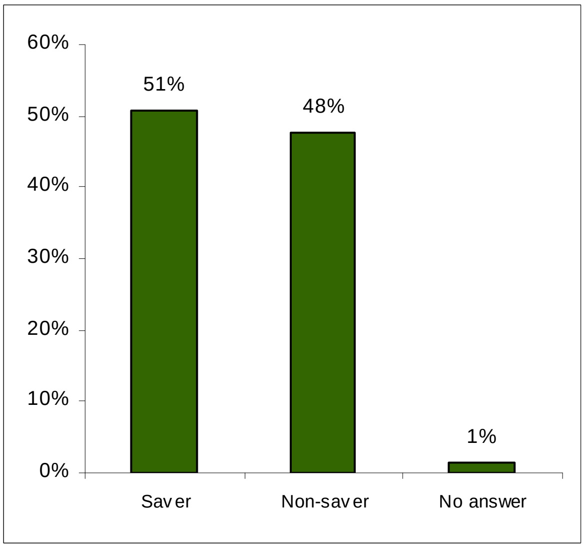
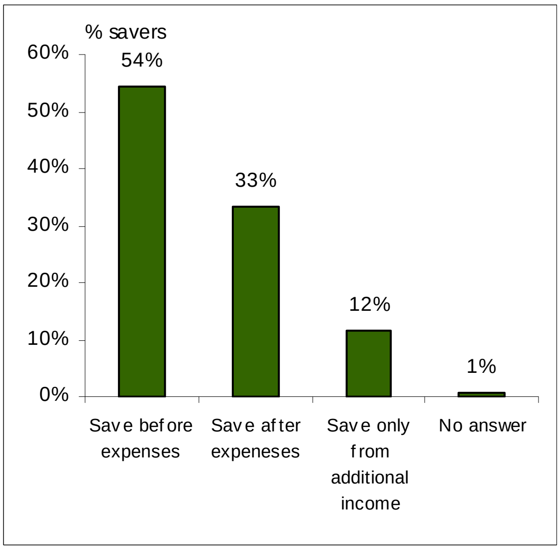


Figure 13: Saving patterns (% participants)



87% of savers had saving goals. Most often the goals were related to housing and education. Additionally, 66% of savers put aside money for rainy days.

Figure 14: Saving goals other than emergency fund (% savers)

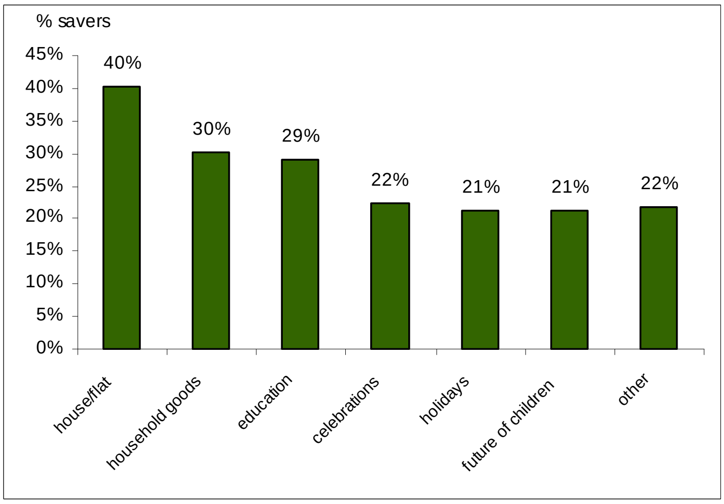
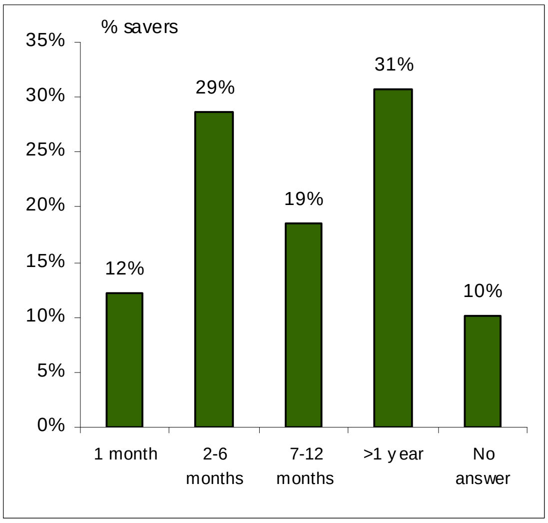


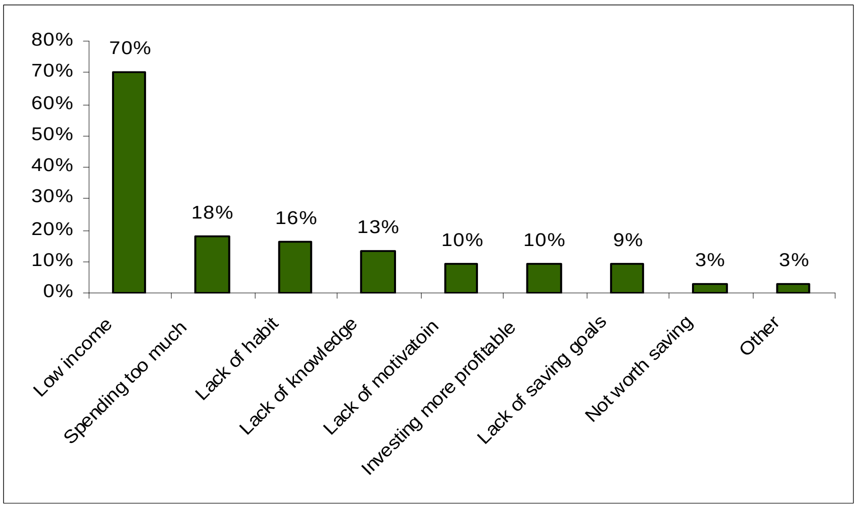
Figure 15: Saving horizon (% savers)



The main reason for not saving was lack of sufficient income. Indeed, people who did not save more often perceived their financial situation as bad, had nobody in the household with a permanent job or own business and more often received social benefits.

However, 39% of non-savers said that they could save. These were younger people (36 years old vs. 44) who had some savings stored for unexpected expenses but they presently did not save because of the lack of habit. They were more often than those without saving potential over-indebted.

Figure 16: Reasons for not saving (% non-savers)



Saving potential was also significant among savers as 62% of savers stated that they could save more money than in fact they did. Again, these were younger people (34 years old vs. 41 for people who could not same more), with a smaller number of children, with permanent jobs and more internal locus of control (17.5 vs. 18.8).

- **Borrowing**

At the same time over half of the participants (54%) had debts and the use of non-bank credit was high as 59% of the participants admitted to ever borrowing from non-bank financial institutions, most often making installment purchases.

16% of the participants (or 30% of people with debt) felt that they were over-indebted. Over-indebted people lived in larger households (average of 4.6 people in the household vs. 4.0 for not over-indebted) and with a larger number of children (average of 2.5 children vs. 1.8) and had more external locus of control (20.7 vs. 18.6).
They more often considered their financial situation as bad, as they earned income from temporary jobs, felt unprepared for financial emergencies, used non-bank credit and did not save.

Figure 17: Self-assessment of debt situation (% participants)

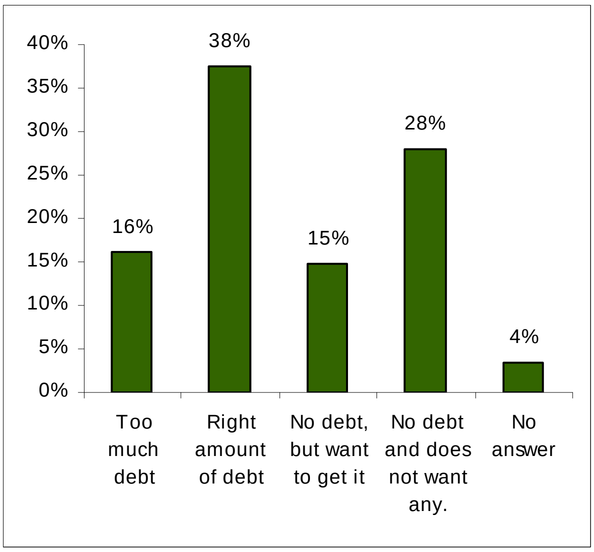
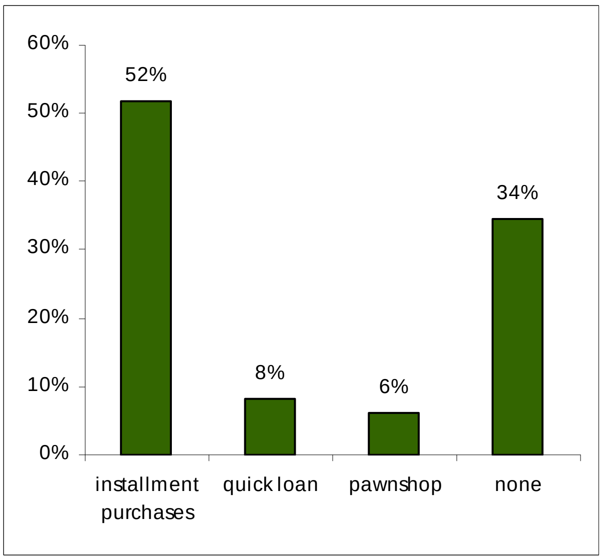


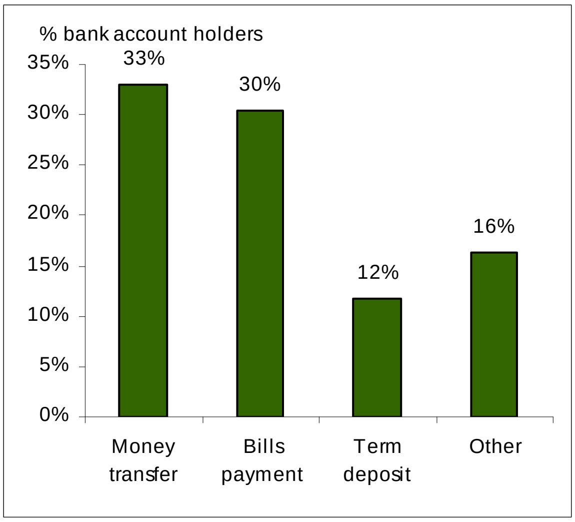
Figure 18: Types of non-bank credit ever used by participants (% participants)



- **Use of transaction services**

65% of the participants had a bank account. The most common transaction was the money transfer to another account and bills payment.
But, 22% of the account holders did not use any transaction services, such as bills payment, term deposits, money transfers, or other.

Figure 19: Use of various transaction services by bank account holders



4. Results of the program

4.1. Project take-up: self-selection into the program

28% of the population eligible for the reminders program did not agree to participate, that is they did not agree to receive materials helping to manage household finance after the training.
There were no distinct characteristics distinguishing those who agreed to participate and those who did not.

4.2. Differences between the groups prior to the treatment

The analysis of the groups of people who received treatment in the form of the SMS reminders and or postcard reminders and those with no treatment (control group) showed that they did not differ in saving habits. However, differences were seen in demographic characteristics and some other financial management characteristics.

SMS recipients
People who received SMS messages were on average younger (35 years old) and more often than in other groups engaged in temporary jobs.
As to the psychological features – people receiving SMS reminders had more external locus of control (19.8).
They also less often managed the household budget by tracking expenses or planning.

Postcard recipients
Recipients of postcards were on average older than SMS recipients (41 years old), with the more internal locus of control (average of 18.7). There were more women among postcard recipients than in the other groups and also more often they had pensioners in the household.
Bank account holders were also more often seen in this group than in the others.

Control group
The participants in the control group were on average 41 years old, of all groups had the most internal locus of control (18.4) and less often had income from temporary jobs.
People in the control group more often than in the other groups were aware of their expenses.

4.3. Assessment of the treatment

The vast majority of the treatment recipients recalled receiving the reminders but postcards were significantly better remembered. The attention to the messages also varied – postcards were read by 97% of the recipients while SMS reminders by 87% (the difference is statistically significant).

Figure 20: Recall of the treatment

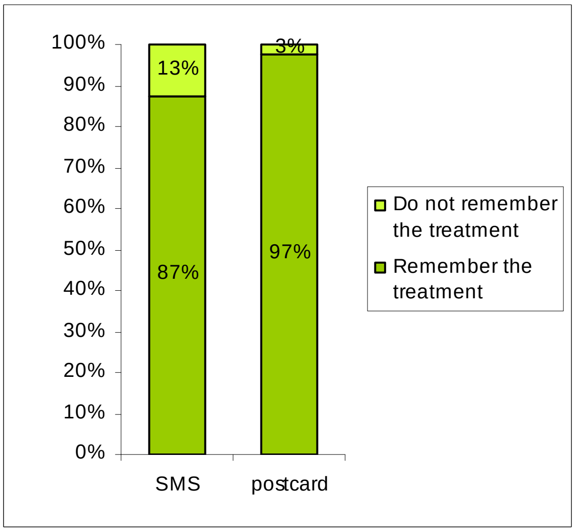
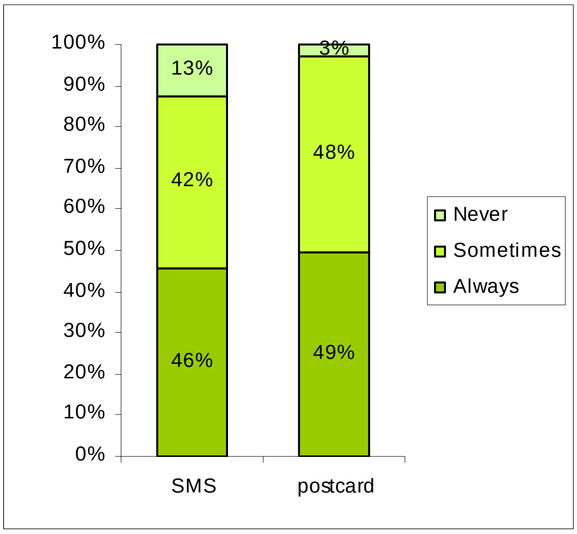


Figure 21: Frequency of reading SMS messages/postcards



Altogether the vast majority of the participants realized that the treatment was part of the educational follow-up and positively evaluated the messages. Again, postcards received higher appreciation than SMS reminders.

Figure 22: Assessment of the treatment

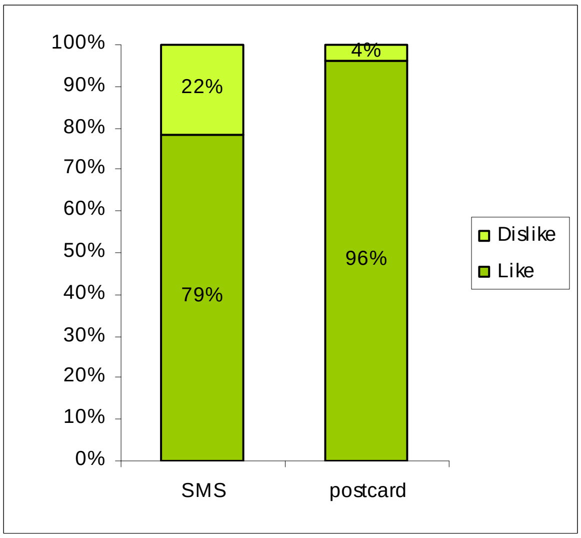
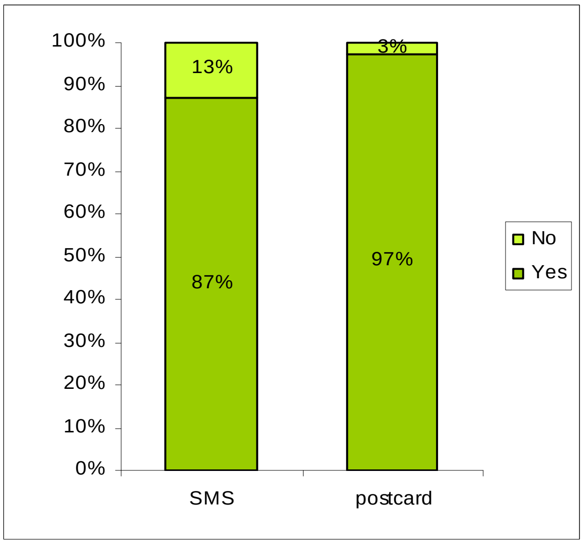


Figure 23: Awareness of the treatment as a follow-up to financial education training



However, the perception of the effectiveness of the treatment on saving habits was far weaker. Only less than half of the reminders recipients (47%) admitted that the messages had positive influence on their saving habits. Postcards recipients were significantly more convinced that the treatment positively affected the way they saved.

The perception of the positive impact of the reminders was seen among those who:

- received postcards
- did not have an emergency fund before the training
- had a bank account before the training

Figure 24: Influence of the reminders on saving habits among recipients of SMSes and postcards

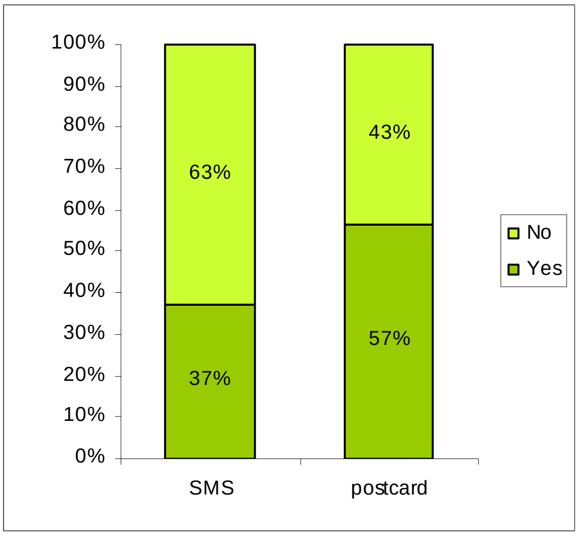
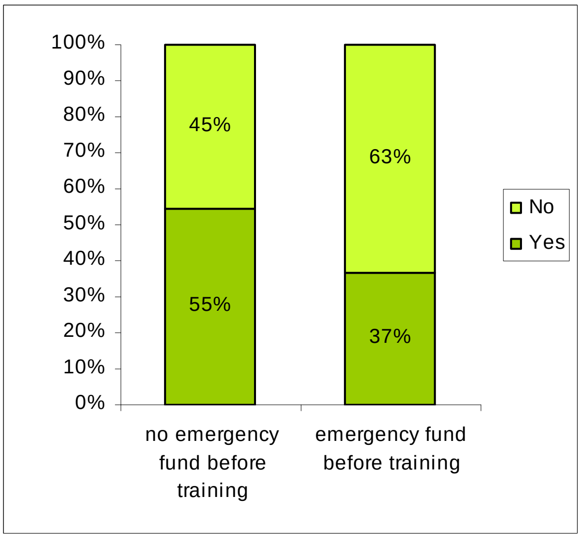
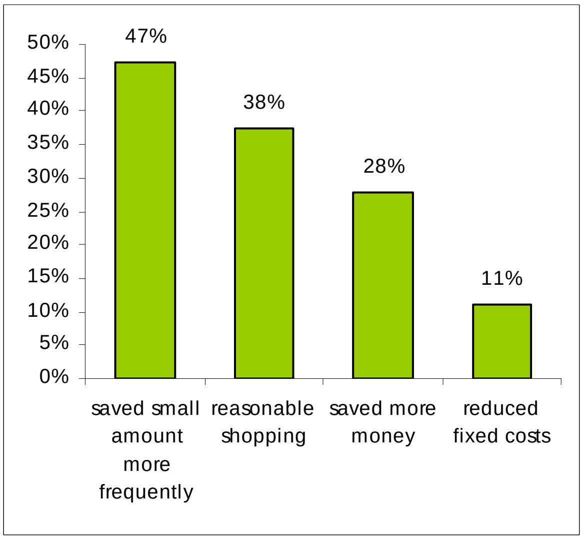


Figure 25: Influence of the reminders on saving habits among people



Most often the reminders helped to save little sums frequently or reduce unnecessary expenses when shopping.

Figure 26: New saving practices employed after the training



As a consequence, people who believed that the program had positive influence on their saving more often started saving after the training and created the emergency fund which made them feel better prepared for unexpected expenses. They also more often declared that they plan to continue saving in the next 12 months.

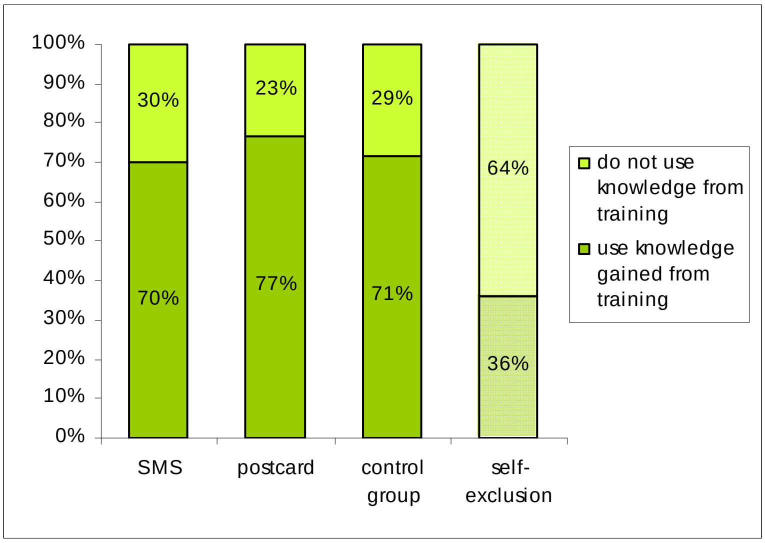
4.4. Influence of the reminders program of household financial management

The results show that the treatment did not have significant influence on the application of knowledge and skills gained during the training. Although postcard recipients more often than other groups stated that they used the knowledge, the differences were not statistically significant. Declarations of control group and the SMS recipients about the utility of the training were on the similar level.

However, joining the program was the factor that influenced the financial behavior after the training rather than the treatment (reminders) itself. People who voluntarily joined the program far more often stated that they turned into practice the teachings compared to people who did not agree to participate in the program (self-excluded people who did not agree to receive follow-up materials about household finance).

As Figure 25 shows, around 70% people from both treatment and control groups applied the knowledge in their everyday life. In comparison, only 36% of those who refused to receive support after the training used knowledge and skills from the workshop.

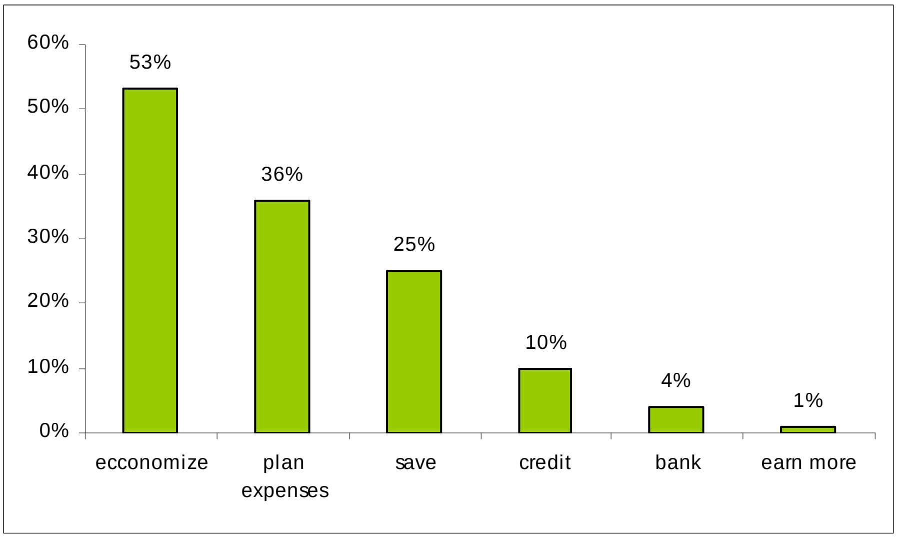
Figure 27: Application of knowledge and skills after the training



The willingness to receive support in managing finance after the training indicated the readiness of a person to improve financial behavior. This willingness was in fact the driver of changes rather than the reminders program which followed the training.

Most often, the participants started economizing – saved electricity and water, bought cheaper equivalents of products or started planning their expenses, especially by preparing the shopping lists.

Figure 28: New practices employed after the training



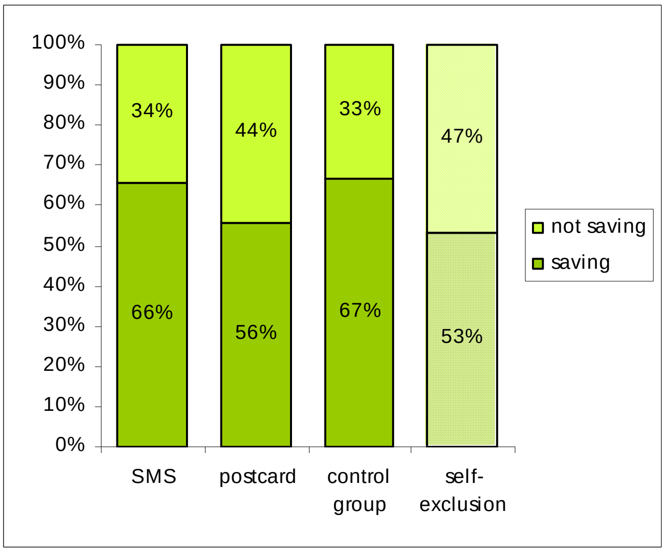
4.5. Influence of the reminders program on saving rates

Even though the participants of the reminders program were convinced about its positive influence on their saving habits, we could not detect any significant differences between the treatment and the control groups.

The program did not significantly increase the number of people who saved. After the program, 62% of non-savers started to save, but it happened independently from the intervention. There was no

difference between the SMS and the control groups. Slightly lower saving rate was seen among the recipients of postcards but the differences were not statistically significant.
Also, the group who did not participate in the reminders program (self-excluded) did not differ from the treatment or control groups.

Figure 29: Saving of non-savers during the reminders program



Also, the regularity of saving was not significantly better in the treatment groups compared to the control group.

The difference in the amount saved monthly was seen only among postcard recipients and the other two groups. A large share (37%) of postcard recipients managed to save less than 20zł per month which was rare among SMS recipients and not seen at all in the control group.

Figure 30: Frequency of saving among non-savers during the reminders program

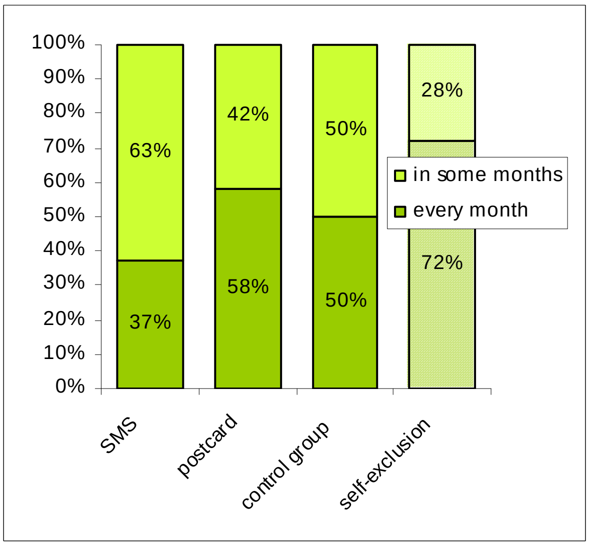
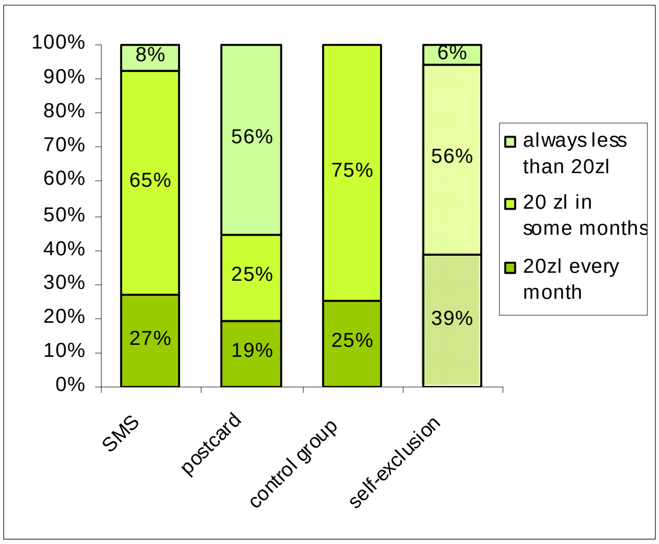


Figure 31: Amounts of money per month saved by non-savers during the reminders program



Over 90% of people who started saving after the training declared the intention to continue saving in the coming months. There were no differences between the control and treatment groups.

More than half of the participants who did not have any savings for unexpected expenses created the emergency fund. However, this move was independent of the treatment, as there were no differences between the SMS, postcard or control groups.

The only difference was between the program participants and non-participants: people who did not agree to receive the reminders far less often created the emergency fund after the training. This finding is consistent with the findings from paragraph 4.4 – the self-excluded from the program did not apply the knowledge and skills after the training.

Figure 32: Intention to continue saving among participants who started saving during the program

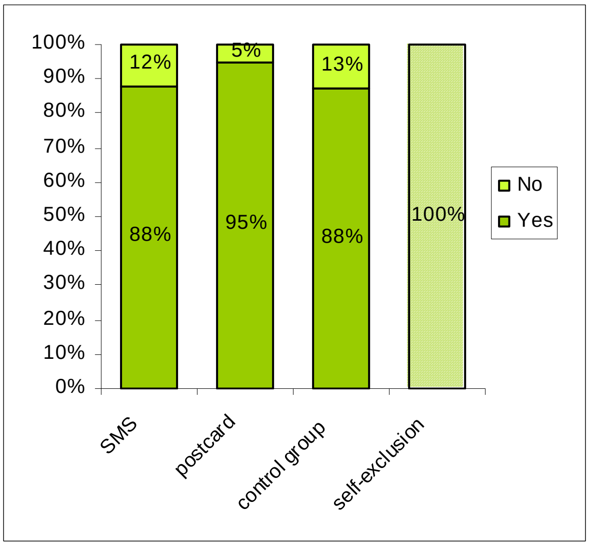
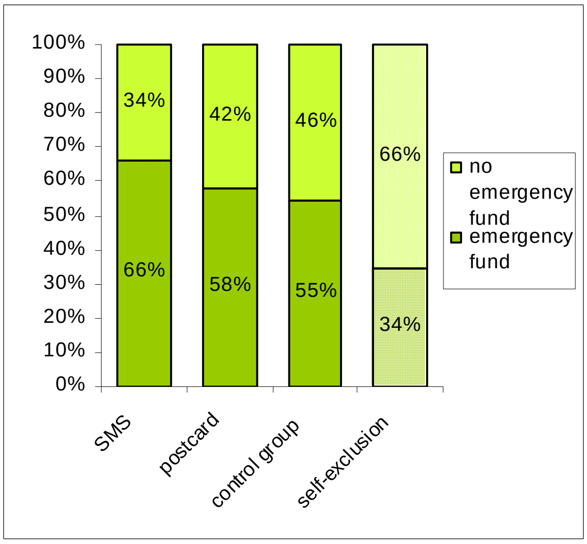


Figure 33: Creation of the emergency fund among those participants who did not have it before the training



4.6. Influence of the financial education training on saving rates

Given the fact that more than half of the non-savers started saving after the training, the deeper analysis was conducted among the training participants, including those who did not participate in the reminders program.

It seems that the training itself, rather than the treatment motivated people to start saving. The deeper analysis showed that the training helped those people who did not save before because of the lack of habit and insufficient knowledge on how to do it. The training allowed them to gain the knowledge and skills and as a result they started saving.

Figure 34: Saving rates among the participants who did not save before the training due to lack of habit

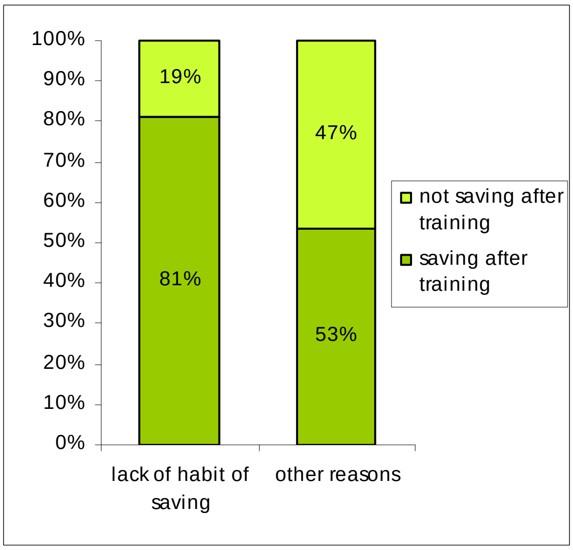
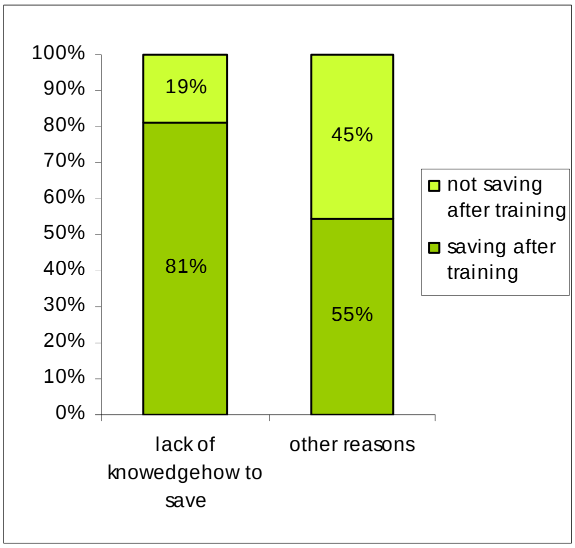


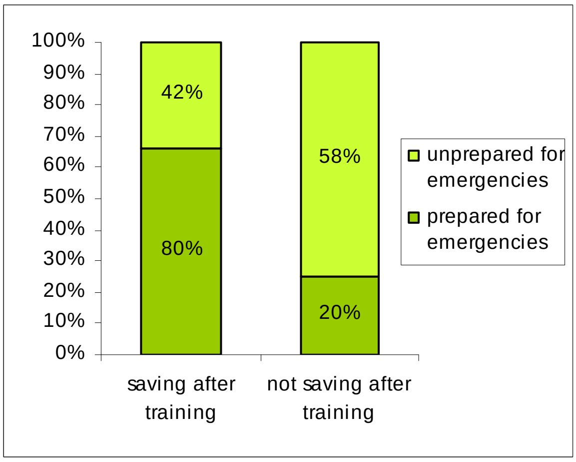
Figure 35: Saving rates among the participants who did not save before the training due to lack of knowledge



Additionally, certain groups of participants were more susceptible to the conversion from non-saver into the saver. The average age of a person who started saving after the training was 37 and such participants usually lived in households with smaller number of children.

As a result, people who saved after the training felt more prepared for financial emergencies as they had some money put aside for rainy days.

Figure 36: Preparedness for financial emergencies among savers and non-savers after the training



5. Conclusions

- The reminders program reached the target group - people who often had no permanent income, lived in difficult financial situation and felt unprepared for financial emergencies.

- Reminders were positively evaluated by the participants with the preference towards postcards – they were more often remembered, were more liked and were thought to have greater impact on saving behavior.

- However, the impact of the reminders on the change of financial habits was not detected. People from the control group just as often as those who received reminders started applying the practices recommended during the training.

- The impact of the willingness to participate in the reminders program influenced the financial behavior after the training, rather than the fact of receiving those reminders. People who agreed to receive reminders more often admitted that they used knowledge from the training in managing household finance than people who did not want to participate in the program.

- However, the more careful analysis of the saving habits after the program allowed to conclude that the conversion from a non-saver into a saver was not affected by the willingness to participate. People who self-excluded themselves from the reminders program just as often saved as the participants, and even did it more regularly and in larger amounts.