

Knowledge and Behaviour in the Field of Saving by Young with Asperger Syndrome. Challenges for Financial Education

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The importance of savings in providing the financial well-being of an individual (a household) is unquestionable. Spending less money than one earns and saving for the future is a valuable rule and a good habit enabling one control personal finances. However, in real life circumstances, it does not always prove to be easy — people are often unable to gather incomes and/or rationally save. Conscious saving requires proper financial knowledge and skills, which are focused on making conscious and rational financial decisions and lead to effective financial behaviour, including in the field of saving. The quality of financial behaviour is determined by numerous factors, the special importance among which is attributed to incomes and the level of own knowledge and financial skills as well as individual traits of particular financial consumers are essential. The aim of this article is to study the level of basic financial knowledge and skills as well as fundamental behaviour in the field of saving among young people with Autism spectrum and Asperger syndrome.

Keywords: Financial education, financial behaviour, savings, young people with Autism, Asperger syndrome

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Introduction

The necessity of allocation of resources (saving) is a very important issue in the hierarchy of financial needs of households [Frączek, 2017; Bywalec, 2009; Smyczek, 2007]. This is why modern households more often look for safe ways of allocating saved resources. The most important reasons for gathering financial resources from the perspective of a household include: guaranteeing or improving a proper level of economical conditions for the future, achieving current and future financial independence, protecting from results of unforeseen fortuitous events, plans of purchasing relatively expensive goods or services, starting or developing economical entrepreneurship, and many other.

Saved resources enable attenuating sudden fluctuations of incomes and expenditures, thus increase chances for more effective management of financial liquidity. In many countries where the majority of the society faces unemployment and a lack of stable incomes, collected savings of households may decrease the threat of poverty, at least partially [Steinert et al., 2017]. Saved financial resources (usually in case of professionally active persons) allow one to survive periods of unemployment as well as increase chances for financial well-being at the pension age [Munnell et al., 2014]. What is more, people with savings are more eager to invest in education or preventive care [Dupas & Robinson, 2013], thus, they are less threatened to results of sudden fortuitous events (e.g. a loss of job or illnesses) [Demircug-Kunt & Klapper, 2013].

The need of allocating financial resources is related with the dilemma concerning a choice between consumption and saving. In case of households with limited incomes or struggling with the problem of insufficient financial resources due to other reasons (e.g. expensive medical treatment, therapy), the necessity of saving is related with numerous sacrifices. Spending less money than one earns and saving for the future is a valuable rule (a good habit) enabling one control personal finances as well as favours achieving financial well-being. However, in reality it not always proves to be easy — people are often unable to gather incomes and/or rationally save. A great significance of savings of households stresses the necessity of proper financial behaviour in this field, which, in turn, is influenced by the level of financial knowledge, proper financial skills, and financial awareness related with premises for and results of saving or its lack [Frączek, 2017]. Financial knowledge and skills, as well as consciousness, experiences and good habits favour making conscious (and most often right) financial decisions in the field of saving and on proper financial behaviour.

When analysing financial behaviour in the field of saving, one should focus on the differentiation of the behaviour in various groups of consumers. Other essential factors (apart from incomes and the level of financial skills and knowledge) determining differences in behaviours of financial consumers are age and generation differences. Age is an important determinant of financial behaviour in the area of consumption and saving. Differences in age have an influence on the rate in which young people differ from adults (older people) as far as selected values, attitudes, and habits in the field of saving are concerned. Additionally, consumer behaviour can be also influenced by traits and conditions of particular social groups. Especially research about children with Asperger syndrome are characterised by a problem with behaviour functioning translates into other social activities [Gagat Matuła & Frączek, 2018].

The aim of this research article is to study selected aspects of financial knowledge, skills, and behaviour among young people with Autism spectrum with Asperger syndrome.

Financial behaviour of young people concerning saving

Economical, including financial, behaviour of young people is a subject of interest of their parents as well as financial institutions. A prerequisite of the interest of parents in this scope is mainly a care for financial well-being of their children, which much depends on financial behaviours such as saving, borrowing financial resources, and positive habits in these areas. The reason why financial institutions are interested in financial behaviours of young people is different — they see a great potential of future clients in the youth.

Teenagers in many countries are economically (financially) active, many of them have part-time jobs and have bank accounts (often supervised by parents). Studies conducted in numerous countries confirm that young people often get allowance as well as money in the form of gifts [Frączek, 2015]. Many young people have incomes from full-time or part-time jobs or from other sources. Thus, they have financial resources allowing them to save. Many of them have the habit of saving. Although it was often stated that people of older age groups save more often than younger persons [The Little, 2015], results of numerous studies acknowledge that young people are able to save more consciously (regularly, in a planned way) than members of older age groups [Kanjanapan, 2002].

Table 1 presents results of exemplary studies conducted among young people in various countries in the field of financial behaviour related with saving.

Table 1. Conclusions from studies conducted among young people in various countries in the field of financial behaviour related with saving.

| Source/country | Research sample | Conclusions concerning saving among young people (participants of studies) |
|---|--|---|
| Furnham (1999) United Kingdom (survey) | 158 boys and 122 girls aged 11 — 16 | Have regular and irregular incomes Most of them have bank account (supervised by parents), collect savings. |
| [Erskine et al., 2006] Canada (survey) | 1806 Canadians aged 12 — 24 | The habit of saving observed among many young people, especially in case of persons oriented on achievements, e.g. having educational plans Working youth (studying and not studying) is more eager to save. |
| [Sabharwal, 2016] India (survey) | Undergraduate and post graduate students of universities of Delhi/NCR, India (352 men and 148 women) | Studying youth has incomes from various sources (allowance, gifts, festivals, job). Youth shows interests in the importance of savings and wants to save. They are conscious of own problems with financial self-control and bad consumption habits. Part of them save collected financial resources and is aware of the necessity of saving, including developing and caring for the habit of saving. Many of them say that their parents are responsible for the habit of saving (developed during childhood). Studies showed that savings can be increased thanks to knowledge of financial issues. |

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|--|--|--|
| [Frączek et al., 2017] Poland, Czech Republic, Slovakia, Hungary (survey) | 1201 students of economical studies | Students have incomes from various sources, including full-time and part-time jobs, and gather savings. Despite studying economical majors, their financial decisions (also in the field of saving) are not always conscious (i.e. they do not have fundamental knowledge in the area of finances). |
| [Sreetrakul et al., 2013] Thailand (survey) | 450 students | Although boys and girls are raised by their parents in different ways, differences of sex had no significant influence on behaviour in the field of saving. However, it was observed that women had a more positive attitude towards saving and a greater care of the future or having a large amount of money than men. |
| [Zou et al., 2015] Ghana and Kenya (Case study — in-depth interview) | 3 triads (representative of youth, parent or guardian, representative of school) | Most of young people in Sub-Saharan Africa do not save money. Youth struggles with limited financial resources, however, the support from parents, school staff, and financial institutions favours changes aimed at increasing engagement of young people in saving. |

Source: own work

In case of children and youth, habits in the field of financial behaviour, including saving, very often result from models observed in their parents/guardians, as well as among peers. Also, a support from schools or financial institutions (e.g. in the form of financial education) is crucial. However, in case of financial bodies, there is the risk of tendentious education on behalf of promoting products of a particular institution.

A family environment as a factor determining financial behaviour is especially important in case of children and youth. Results of studies presented in the literature of the subject confirm that *childhood financial socialization experiences are positively associated with savings behaviour and financial asset ownership in adulthood*.

Analysing factors having an influence on saving at the level of a household/family, one should take notice of the role women/mothers in this process. Women play a special role in the process of saving. On the one hand, participating in the management of financial resources, they often solve problems of spending resources on realisation of needs and saving at limited resources [Stewart et al., 2012]. On the other hand, they shape saving habits of their children.

The influence of the family environment on financial behaviour is especially visible in case of individuals with various deficiencies and limited independence.

Principles of own research

In relation to the theoretical analysis, the aim of studies was to determine the level of selected aspects of basic knowledge and behaviour in the scope of saving of young people with Autism spectrum with Asperger syndrome.

The aims were expanded in the form of the following research questions:

1. What is the basic knowledge of young people with Autism spectrum with Asperger syndrome in the field of saving?
2. What are the financial behaviours of young people with Autism spectrum with Asperger syndrome in the field of saving?

This work does not state a hypothesis to the research problems as the character of the problem is explorative. The character of studies was pilot. The method of diagnostic survey was used in the conducted research. An own survey questionnaire was used in the study.

The research was conducted in 2019 at the Specialised Clinic for People with Autism in Leżajsk. The purpose sampling was used (due to the character — hardly accessible group). 34 persons with Autism spectrum with Asperger syndrome took part in the study.

The age of respondents ranged from 16 to 19 years.

The group included 32 men and 2 women (what corresponds to the regularity that Asperger syndrome is 4 times less often among women). Young people under this study were high school students. Education level of respondents most often was secondary (21), next vocational (8) and higher (5).

Most of study participant live in cities (23), while the rest of them in villages (11).

The economical situation of families of 28 respondents is good, while average of 6 other.

Analysis of own research

The analysis of selected aspects of the level of knowledge and behaviours in the field of saving of young people with Autism spectrum with Asperger syndrome was conducted on the basis of empirical (survey) studies. The selected aspects of the level of knowledge in the area of saving was studied on the basis of 6 questions from own survey and selected behaviours were analysed on the basis of 4 other questions from the same questionnaire.

Financial knowledge and skills concerning saving

Financial knowledge and skills (elements of financial alphabetisation) are necessary in making conscious financial decisions. The fundamental financial knowledge covers having and understanding information, data, facts, understanding mechanisms and relations occurring between financial phenomena and processes. The basic knowledge in the field of saving includes understanding main financial concepts and mechanisms such as straight interest, compound interest, inflation, diversification of financial portfolio vs. risk, and knowing basic features of financial instruments enabling capital allocation. Practical activities utilising owned knowledge are not knowledge any more but financial skills, influenced by financial knowledge [Hung et al., 2009]. Thus, financial skills concern practical aspects of using knowledge in making financial choices and decisions. They usually amount to skills of doing various calculations concerning changing value of capital (e.g. calculating the value of future or present value of capital, as well as calculating straight and compound interest) using right tools (e.g. formulas, tables, function calculators). Financial skills have an influence on right financial behaviours, e.g. a choice of a proper for of allocating saved financial resources.

Table 2. Selected aspects of financial knowledge concerning saving of young people with Autism spectrum with Asperger syndrome.

| Survey question | Percentage of answers | |
|---|---|---------------------------|
| Declaration in the scope of skills in calculating percentages | Yes 100% | No 0% |
| Calculating percentage (3% of 200) | Correct calculation 88% | Incorrect calculation 12% |
| Task to calculate straight interest (interest rate of 2%, capital of 200 PLN) | Correct calculation 97% | Incorrect calculation 3% |
| Declaration in the scope of knowledge of the issue of interest compounding | Yes 82% | No 18% |
| Simple task concerning compound interest (interest compounding) | Correct calculation 91% | Incorrect calculation 9% |
| Knowledge of financial instruments enabling capital allocation | Capital investment 91% Deposit 0% Saving account 9% | |

All respondents, i.e. young people with Autism spectrum with Asperger syndrome, declare their skills of calculating percentages, what is necessary in calculating interests, having an influence on the attractiveness of financial products enabling capital allocation. Unfortunately, the verification of these declarations was not fully positive as only 88% of respondents correctly calculated the percentage of a given sum. What is interesting, a practical tasks utilising the same skill (calculations of percentages) concerning calculating straight interest was correctly completed by 97% respondents, what acknowledges declaration in the scope of skills of calculating percentages. It may happen that a specific situation, especially related with financial resources, increases focus and efforts in doing calculations. It is worth to compare the obtained result, which should be regarded as satisfactory, with the percentage of correct answers in similar studies conducted by the World Bank in 2014 in 143 countries among adults (aged over 15), which amounted to 60% for Poland [S & P, 2014].

Another aspect of financial knowledge concerns interest compounding, i.e. calculating compound interest. The results show that some part of respondents had correct calculations despite declaring that they do not know the concept of interest compounding. Although only 82% of respondents declared the knowledge of the issue of compound interest, as much as 91% gave correct answers. This most probably results from a lack of knowledge of specialised terms (interest compounding) attributed to particular skills. It should be noted that in similar studies concerning the issue of interest compounding conducted by the World Bank in 2014, the percentage of correct answers of respondents (aged over 15) in Poland amounted to 45% [S & P, 2014].

Another aspect included in the research concerned the knowledge of basic financial products enabling capital allocation. In this area, the knowledge of young people with Asperger syndrome was limited. 91% of them selected capital investment, 9% — saving account, while

no one selected a deposit, which is one of the basic financial instruments for saving. This may result from problems of people with Asperger syndrome in the field of evaluation of a specific financial concept and conditions of using a particular financial instrument [Mansfield and Pinto, 2008]. Another reason may be characteristic for people with Asperger syndrome repeatability of behaviour resulting in attraction to a single product, e.g. a capital investment [South et al., 2005; Cuccaro et al., 2007; Lehnhardt et al., 2013].

Selected financial behaviours in the field of saving

Financial behaviours of individual consumers relate to earning and spending money, as well as include cash, credit, and saving and investment behaviours [Xiao, 2016; Raaij, 2012]. Financial behaviours concerning saving include e.g. having any savings, saving at supervised financial institutions, saving at not supervised financial institutions, e.g. in so called saving clubs, saving for a particular aim (e.g. education, car, house, retirement) or without any specific plan/aim [The Little, 2018].

The basic financial behaviour in the field of saving is saving understood as collecting financial resources as a result of spending less money than earned from so called net income. Having such “financial surplus” (savings) determines making particular financial decisions, which have an influence on further behaviour related with saving, e.g. safe allocation of saved resources in the bank system. Making such decisions and resulting financial behaviours require proper financial knowledge and skills.

Table 3. Selected financial aspects concerning saving of young people with Autism spectrum with Asperger syndrome.

| Survey question | Percentage of answers | |
|--|-----------------------------------|---|
| Declaration concerning saving financial resources | Yes 94% | No 6% |
| Form of collecting savings (among those who save) | Financial instrument “Piggy bank” | 0% 100% |
| Aim of saving (among those who save) | For a particular aim | 88% On principle, without specific aim 12% |
| Declaration concerning participation in any event of financial education (e.g. course, lecture, workshop, talk, competition, etc)? | Yes 0% | No 100% |

The majority of respondents (94%) have any savings. This percentage is very high if compared to the result of an average adult Pole (aged over 15), which amounted to 46,6% in 2014 (56,5% in the global scale), while 51,9% in 2017 (48,4% in the global scale).

Children and youth having financial resources at their disposal can represent a higher percentage of people who save than an average adult as, in principle, they do not have an obligation of any expenditures. A high percentage of young people with Asperger syndrome who have any savings may additionally result from overprotectiveness of their parents and limited independence in the scope of using collected resources for consumption.

Despite having collected funds, respondents do not use offers of financial institutions in the scope of allocation of these resources. In this case, a lack of engagement in the financial market may result from limited independence in everyday lives of these young people, as in this way, many parents of children with deficiencies decides to protect them from various problems, including those financial ones. Some studies confirm the necessity of support reported by people with Asperger syndrome in the field of management of personal finances [We Belong, 2013: 39-42].

Conclusions and inclinations

Fundamental financial knowledge and skills represented by young people with Autism spectrum with Asperger syndrome can be regarded as satisfactory. At the same time, we have to point to some lacks in knowledge of terminology, which should be complemented in order to achieve full management over owned knowledge and to be aware of own knowledge.

It must be also noted that the subject of the conducted research was only the basic financial knowledge, which, in case of respondents, is most probably intuitive or acquired in the course of experience (education through practice) as none of respondents participated in any event related with financial education. A result of a lack of participating in the process of financial education may be a lack of knowledge of basic terms and unfamiliarity of basic instruments/ways enabling allocation of capital, such as deposits of saving accounts. Despite having saved funds, none of respondents allocates own savings in financial institutions. On the one hand, this may be a result of limited knowledge in the field of basic saving offer. On the other hand, the reason may be limited independence of these persons in their everyday lives. It would be right to adjust educational methods in the scope of financial education as well as financial offers (their conditions and the way of presenting information about these offers) to people with various deficiencies (including those with communication disorders), considering their needs, as well as their traits having an influence on financial behaviour.

The research results stress the intellectual and capital potential of people with Autism spectrum with Asperger syndrome. The fact of collected and unallocated financial resources of certain social groups is essential information for financial institutions, which constantly search for new customers. In the context of these results, similar studies conducted for other social groups could be advantageous.

It should be also mentioned that there was observed a lack of participation of young people with Autism spectrum with Asperger syndrome in financial education. This is a clear signal that it is necessary to prepare proper activities for people with certain deficiencies, including communication disorders, within the scope of financial education.

Another issue included in further studies should be stated differences concerning results of solving abstract problems (e.g. calculating percentages without any practical use) and real problems (e.g. calculating percentages using examples related with money).

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