THESIS SUMMARY

Debreceni János

Examination of the relationship between materialism, values, voluntary simplicity and social media use among teenagers

of doctoral (PhD) dissertation

Supervisor:

Dr. habil Hofmeister-Tóth Ágnes
Professor Emerita

Budapest, 2022

Department of Marketing Research and Consumer Behaviour

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I.   Background and justification to the research topic

The acquisition of tangible goods, the use of services and the experience gathering are integral part of our lives. As a member of consumer society, we are sometimes critical of the importance of our belongings, car or smartphone beyond their function. We can often face with how much we desire an object or consumer experience. Sometimes the desire is so overwhelming that we make unreasonable, unnecessary decisions. We cannot be sure that everything we buy is necessary for us, so we often feel compelled to consume. We are reassured by the explanation that the world, the media, the behaviour of our fellow human beings trigger the need to buy and buy from us. This is perhaps the simplest answer to our constant spending and renewing consumer desires. It is important to accept the fact that the desire to acquire and possess goods is a deep human trait and the need for consumption must be accepted. Acquisition is not an externally influenced action or a superficial purpose in life, but an integral part of human nature. Since our needs have long been met not through the production of goods but through their acquisition, it is worth thinking of consumption as part of a large system, a network of action and experience ranging from our individual well - being to our community relationships. The correlation system, which I examine in the present dissertation, has been compiled along similar ideas as the experience of several antecedent studies.

According to Belk's (1985) definition, **materialism**: „*The importance a consumer attaches to worldly possessions. At the highest levels of materialism, such possessions assume a central place in a person's life and are believed to provide the greater sources of satisfaction and dissatisfaction.*" (Belk, 1985, p. 265.).

The concept and context of materialism, the work of Belk, Richins, Chaplin, Roadder John, and others, had a great impact on my first experimental research from the beginning of my doctoral studies. As I focused on the research of adolescents during the doctoral program and in the dissertation, the research of young adults and adolescents was also the focus of the literature. The broad and comprehensive literature on materialism soon led to the realization that the system of antecedent variables and consequences was well known. However, understanding the broader context of materialism and its adult consequences, I still considered it important to examine it in a novel approach.

This is how the research series examining the relationship between materialism and values was compiled, the results of which are reported in the present dissertation as well. **Values**, as cultural principles, express behaviours that are considered desirable by their bearers. Value concepts are used differently in different disciplines. In consumer research, values are standards for judging an individual's own behaviour and attitudes, as well as for judging others, which are internalized during social

socialization (Hofmeister-Tóth, 2014). Values not only embody the deeper layers of consumer behaviour, but also provide a link between materialism and the socialization processes that take place at a young age. Although the literature provides results regarding the relationship between materialism and values, the field is less researched. The fact that no similar research has been carried out with the Schwartz value set in Hungary so far further strengthens the novelty of the dissertation.

Also, by processing the literature on materialism, it was recognized that materiality and **social media** use are less researched areas. The identification of this research gap is also important because, as can be seen from the relevant chapters, social media platforms are part of the daily routine in adolescence and one of the (virtual) arenas of social socialization due to the phenomenon of social comparison based on their visuality. A similar comparison has not been made only in Hungary but neither worldwide.

The social message of the dissertation is based on the context explored in the dissertation on how attachment to material goods is related to a more conscious, small-scale consumer behaviour. Involvement of **voluntary simplicity** was needed to examine this. Using the idea of Gregg (1936), Elgin and Mitchell (1977) argue that voluntary simplicity is a life that is outwardly simply but inwardly rich, restrained and environmentally conscious. This approach represents a return to a human-scale living space for spiritual growth in the community. Although at first reading voluntary simplicity appears as the opposite of materialism, the literature and our own research show that this is far from clear. Examining the direction of the relationship is also relevant because, like the values, we are confronted with a less researched but more important relationship for the future.

Finally, it is my personal assumption that personal values and materialism are already formative forces at a young age that can play a role in decisions such as school choice. My assumption is that young people for whom material possessions are more important prefer a type of school (vocational education) that expects them to establish an independent existence as soon as possible. In addition, since neither materialism, nor values, nor voluntary simplicity can be independent of a person's financial situation, the dissertation presents and compares the income status, satisfaction, and relevant part of the spending structure of people living in different economic regions of Hungary.

The scientific aim of the dissertation is to contribute to our knowledge, as these are less or not researched connections at all. The practical value of the thesis is to understand the materialism value preferences and willingness to give up of a birth cohort (2003-2007) whose members will soon appear on the commodity market as consumers with independent income and freedom of choice. Openness to voluntary simplicity weak materialism and the demonstration of collective value preferences would send an encouraging message to those working to strengthen the conscious, responsible behaviour of consumers. Otherwise, the correlations can point out the values, motives and motivations along which the attitude formation can be successful.

I.1. Preliminary studies

In the context of the chosen topic, several pilot studies were conducted during the doctoral program. Although the tools of data collection and methods of data processing have always changed to refine research design, the objectives have always focused on the relationship between young people's materialism and value orientation and the impact of social media use on this relationship.

Results of a quantitative study from 2017: relationships between materialism, values, and social media use

The results of a questionnaire survey of 189 high school students between the ages of 15 and 19 in 2017 were presented at the 6th International M-Sphere Conference and published in the International Journal Multidisciplinarity in Business and Science. (Debreceni & Hofmeister-Toth, 2018). The survey consisted of LOV value set (Kahle et al. 1983) and Goldberg's Youth Materialism Scale (Goldbert et al. 2003), which is abbreviated as YMS. Among the elements of LOV, safety, fun and enjoyment of life, good relationships with others and self-realization proved to be the most important. Out of the 10 YMS statement „*The only kind of job I want when I grow up is one that gets me a lot of money*" and „*I would be happier if I had more money to buy more things for myself.*" received the highest respondent rate. By principal component analysis, two factors could be identified from the YMS: money orientation and acquisition, possession factor, which had the significant relationships with some LOV values.

The correlations reveal the strong relationship of materialism with social recognition, material success, and the pursuit of security, while at the same time the non-material nature of the sense of accomplishment. What is interesting are the positive correlations between the sense of belonging, warm relationships with others, and self-fulfilment, even if the relationships are weak. It is also noteworthy that although entertainment and enjoyment in life were very important to the respondents, their relationship with materialism was not significant.

Part of the research design was the Uses & Gratifications Scale (U&G), already involved in Sheldon and Bryant's (2016) research, which examines the motivations of respondents for social network sites. Four of the five factors distinguished by principal component analysis showed a significant relationship with the main mean of YMS or YMS factors. The influence of social media use was demonstrated by regression analysis. The dependent variables for the three models of multiple linear regression analysis are the main mean materialism, the acquisition, possession, and money orientation factors. At a significance level of 5%, all three models were found to be significant. The independent variables significantly influenced the outcome of dependents such as the mean of acquisition, possession, and YMS main average. While surveillance and coolness had all three dependent variable effects,

friendship was limited to materialitsm; and the gender of the respondents only affected acquisition and possession.

Quantitative study results evoked the need for a qualitative research on what the studied variables mean for the target group? After lengthy preparation and multi-step methodological fine-tuning, this took place in the spring of 2018.

Results of a qualitative study from 2018: examination of the relationship between materialism, happiness, success and experiential consumption among teenagers

Research in 2017 has revealed the research questions that can best be answered by information gathered using qualitative methods. What does success or happiness mean for teenagers? What is the role of experiences in teenagers' consumption? Do the meanings of the concepts relate to the property possessed or the money? What does it mean for young people to be material, what do they think when it comes to money or a status symbol? The results of a series of interviews with 12 participants and two classes of a secondary vocational school (technikum) were published in the scientific journal Vezetéstudomány (Budapest Management Review) in 2020 (Debreceni & Hofmeister-Tóth, 2020).

Interviews were conducted using a happiness collage (Chaplin et al. 2014), participants were required to construct a collage of their own happiness from images of five pools: people, material goods, achievement, sports, and recreation. They had to choose the images that depict the things, goals, activities that contribute the most to their happiness. Interviewees recognized and understood the options in the images. In making their decision, they were able abstract from the brand or the circumstances of the activity depicted. Not surprisingly, the *people* pool was dominated by family and friends. Participants have confirmed their research experience so far: their sense of happiness is fundamentally determined by the quality of human relationships. It has been said that *material goods* contribute more to their personal happiness through the function of the goods. At the same time, money is as a threshold condition, according to them, a certain degree of material well-being is essential for their happiness, such as covering the expenses of the household, meeting basic needs, and freedom to spend. Of the *achievements*, school performance contributed the most to young people's sense of happiness. As we will see later, this factor was also of paramount importance in the group tasks. The significance of the learning outcomes can be assumed from the life situation of the students: on the one hand it is essential for achieving the life goals and for the career path, on the other hand school performance is an everyday success factor. Of the *sports* pool, interviewees chose running almost exclusively. Their responses confirmed our preliminary assumption that running as the form of movement requiring the least objective conditions is the most obvious, but exercise is also important to them because of body shaping. The

frequent selection of music came as no surprise from the *recreation* pool. Proximity to nature is also very important for students. In their explanations, the motive of liberation and dissolution appeared, as well as the company and gaining experience as drivers. The answer ont he question „*With whom?*" is more important than where and how they are connected.

In addition to in-depth interviews we carried out association based exercise in two classes. We were looking for answers on the questions: *what contributes most to the happiness of young people? What do concepts such as money, success, happiness, the status symbol, experience, and materiality mean to them?* The task of the participants was to associate thoughts related to the above concepts. First, the associations referring to the concepts had to be recorded as much as they could, then the most important ones were halved, and finally the three most important ones were ranked.

After aggregating the associations, it turned out that their conceptions of *money* are about obtaining it, those about *success* are about external reinforcement, and those about *happiness* are about intimate human relationships. Of the *status symbols*, the phone and the house are the most typical, and the *experience* is a vacation and time with friends. Finally, *materialism* means saving money, not spending it for the participants. Associations of *money* can be divided into three categories: acquisition (work, salary), use (purchase, tangible goods) and individual status (success). Since work is very common among both all responses and ranked associations, we can assume that their conceptions of money are dominated primarily by the way it is obtained. Overall, a very low proportion of associations involving spending money were consumption of experience (eg holidays), and tangible goods were more common

Although the research provided interesting results and very useful research experience, the qualitative methodology in this area is not necessarily expedient, for several reasons. On the one hand, the involvement of secondary schools in the selection of the sample, the increase in the number of participants and the management of the research was difficult. Due to the novelty of the topic and the generally reluctant attitude of the schools, it was only possible to interview in an institution where there was a direct or indirect personal contact of the researchers. On the other hand, school year schedule and timetable made the research difficult, and only available and opened classes could be invited, and students who volunteered for personal and group interviews could be invited. Lastly, it is not possible to filter out the participants' compliance with the interviewer. As it is difficult or extremely expensive to conduct research on this topic in addition to in-depth interviews and focus group tasks (e.g. tracking the spending of real money), another quantitative data collection was conducted in 2019 to finalize the research design of the dissertation..

Results of a quantitative study from 2019: relationships between materialism, values and media use among teenagers

Based on previous research experience, materialism has become necessary to examine the relationship between individual goals, supplemented by voluntary simplicity and a willingness to make sacrifices. In addition to the already known use of social media (U&G), general media preferences were also the subject of the review. The questionnaire, completed by 85 high school students aged 15-20, contained validated attitude scales ranging from 1 to 7 (1 = not true at all or not important; 7 = completely true or very important). Materialism was measured on the 15-item shortened Richins-scale (Richins, 2004), values with the LOV value set, voluntary simplicity with the Shama-Wisenblit scale (Shama & Wisenblit, 1984), and willingness to sacrifice was rated by the implementation of Davis-scale (Davis et al., 2011 The results of the research are published by the Association for Marketing Education and Research XXVI. Conference (Debreceni & Hofmeister-Tóth, 2020).

The negative relationship between the centrality dimension and the protection of nature suggests that possession is at odds with natural concerns. This is reinforced by a strong negative relationship with attitudes towards sacrifice and voluntary simplicity. It can be assumed that the efforts to balance the needs of the community and natural resources is barriered by the individual's desire to own. Since centrality is positively related to self-respect, renunciation is not merely a renunciation of new goods, but a threat to self-esteem. Some of the mediums are primarily related to the importance of success: while print media negatively, visualization-based films and online news portals interact positively with the materialism dimension of success. It is noteworthy that for those who prefer to communicate with their family members, happiness does not mean an increase in material wealth, while the use of online news portals is associated with a higher material happiness.

In addition, thw willingness to sacrifice and voluntary simplicity are significantly positively related to three LOV values: the sense of creation (p <0.05, p <0.05) and the protection of nature (p <0.01, p <0,01), and safety (p <0.01, p <0.01). As the sense of creation is more about inner personal development, for those who value it, it is presumably easier to give up material goods. Positive and strong relationships with nature (correlation coefficient for sacrifice: 0.646; for voluntary simplicity: 0.499) reinforce the assumptions regarding materialism. And the relationships of security suggest that security means not only security of existence or materials, but also environmental and social security. After all, based on the results, for whom security is more important, they are willing to give up acquiring new goods.

Similar to the research in 2017, the U&G scale was included in the comparison after dimension reduction. This time the principal component analysis resulted four well-distinguished factors: *self-*

extension, remembrance, observing others, and *primary functions*. Contrary to expectations, U&G factors are related to the few variables examined. Of the materialism dimensions, only success correlated with the memory factor (Pearson: 0,238; p < 0,05). Neither the willingness to sacrifice nor the attitude of voluntary simplicity showed a significant relationship. However, there are a number of correlations with individual values that are positive without exception. The *observating others* factor was related to warm relationships with others (Pearson: 0.227; p <0.05), the *sense of belonging* (Pearson: 0.246; p <0.05) and *security* (Pearson: 0.232; p <0.05). Unexpectedly, the primary functions of social network sites were positively related to almost every value. The interaction between *enjoyment in life* (Pearson: 0.551; p <0.01), *warm relationships with others* (Pearson: 0.441; p <0.01) and *self-respect* (Pearson: 0.408; p <0.01) were remarkable. There was a moderate correlation with *self-fulfilment* (Pearson: 0.390; p <0.01) after comparison with the *sense of belonging* (Pearson: 0.365; p <0.01) and *being well-respected* (Pearson: 0.329; p <0.01).

II.   Research methodology

The research questions and hypotheses of recent dissertation are determined by the review of the literature on materialism, especially adolescent materialism, and the conclusions that can be drawn from our own empirical research. The target group of the research is teenagers completing their high school studies. Among the scientific goals, the primary one is to explore the relationship between adolescents' value preferences and material attitudes. Since adolescence is one of the key stages of consumer socialization, the results can help us to understand what values adolescents see as their own, how they relate to the material and material goods around them, and what strengthens or weakens materialism. Complementing the relationship between materialism and value preferences, the attitude of voluntary simplicity is also expected to answer the question of how open teenagers are to a simpler consumer behaviour. Another scientific goal is to discover the external factors influencing the above system of relationships. A review of the literature evidenced that the antecedents of materialism at young age and the consequences in adulthood have already been explored. Therefore, the present thesis attempts to include previously or less researched variables in the complex of materialism and personal values. Moreover, the relationship between social media use and materialism and value preferences is less well known. Whether is there a difference between the different social network sites in the above context? Since the school is an important place for adolescents' social relations, together with its spirituality and the goals of secondary school studies, it may be interesting to examine whether there are definite dividing lines between the value systems and materialism of young people choosing three different school types. In this context, the focus is not on learning outcomes or cognitive abilities, but on the assumption that

teenagers commit to a given type of school based on a medium-long-term life strategy aimed at either establishing an independent material existence as soon as possible, or continuing education, fulfilling as many levels of education system as possible. In addition to the use of social media and the type of school chosen, another goal is to find out whether the different income, financial situation and purchasing power of the regions where young people live are important in the development of values and materialism.

The practical significance of the research lies in answering the role of tangible goods and consumer goods in the lives of young people who later become consumers with an independent income and the freedom of consumer choice. The connections revealed can help to articulate marketing messages related to goods and services by learning about the value preferences, priorities, and latencies of young consumers. Examining the extent of identification with voluntary simplicity is important because future consumers with a self-sufficient, disposable income and own household can easily be forced to reduce their own consumer desires due to sustainability concerns, reduced energy consumption, and vulnerabilities in supply chains. Being open at a young age to the "less for more" approach, to small-scale consumer behaviour, can help to promote more conscious, thoughtful and even better consumption.

The personal goal of the research is to get to know and understand the importance of adolescence as a significant, transitional period of personality development and socialization. The objectives are relevant because materialism has not yet been studied in Hungary or in any other country in this context.

1) *What values relate to materialism? Which values strengthen and which weaken materialism?*

2) *What values relate to voluntary simplicity? Which values strengthen and which weaken voluntary simplicity?*

3) *What is the relationship between materialism and voluntary simplicity?*

4) *Does the motivation for social media use influence the strength of materialism?*

5) *What is the relationship between the frequency of use and preferences of different social media networks and materialism?*

6) *What is the relationship between school type and materialism?*

7) *Is there any difference between teenagers of different school types regarding voluntary simplicity?*

8) *Are there differences in terms of values and voluntary simplicity for teenagers living in a different income region?*

9) *Is there a difference in terms of materialism between adolescents living in regions with different economic state?*

Based on the above and the general results of the value-research, it can be assumed that

H1: *Individualistic values (a) and values expressing self-enhancement (b) strengthen material attitudes.*

H2: *Collective values (a) and self-transcendence values (b) weaken material attitudes.*

H3: *Values for self-transcendence (a) and prosocial values for community well-being (b) have a positive effect on identification with voluntary simplicity.*

H4: *Materialism is negatively related to voluntary simplicity.*

H5: *Among the motivations for social media use, self-extension (a) and observation of others (b) have a positive effect on materialism.*

H6: *The frequency of visual social media use is positively correlated with materialism.*

H7: *Students in general secondary education are less material compared to students in secondary vocational (a) and vocational education (b).*

H8: *Voluntary simplicity is more important for students in general secondary education, than students in secondary vocational (a) or vocational education (b).*

H9: *Young people living in regions with better economic state are less material than those living in regions with worse economic state.*

H10: *Young people living in regions with better economic state are less likely to identify with voluntary simplicity than those living in regions with worse economic state.*

II.1. Validated scales applied in national sampling

The research questions formed by the processing of the literature, as well as the experience of the historical research, projected the need for a large size national sampling by questionnaire. Measures due to the coronavirus epidemic made it impossible to collect on the paper-pencil as originally planned. Therefore, an online questionnaire was the tool for data collection, which, along with the use of the following scales and demographic variables, required respondents to rate 70 responses.

Variable	Scale	Source	Items	Range
Materialism	Richins Materailism Value Scale	Richins, 2004	18	1-7
Values	Schwartz-értékkészlet	Kapitány & Kapitány, 2012	21	1-6
Voluntary simplicity	Voluntary Simplicity Scale	Shama & Wisenblit, 1984	6	1-7
Social media use	Uses & Gratifications Scale	Sheldon & Bryant, 2016	20	1-7

Source: own edition

Data collection took place between November 2021 and February 2022 in four waves, in a regional breakdown, by directly contacting the director of the school. Out of 206 requests, 23 support and 6 rejection responses were received, and 177 letters were not answered. The sampling resulted 513 valid cases. Comparing the composition of the own sample with the proportions of the total number of secondary school students in Hungary by regional and school type, the non-representativeness of the sample for either region or school type is confirmed. In spite of non-representativeness, there was no similar national data collection covering all parts of the country on the topic of materialism, values, social media motivation and voluntary simplicity.

Based on the initial research design set up for the dissertation, I expected to investigate the relationship between the variables using one of the most complex methods, PLS-SEM (partial least squares structural equation modelling) modelling. However, with the help of ADANCO software, the indicators of the constructs constructed from the variables, with the exception of Cronbach's alpha, did not meet the methodological recommendations. The average variance extracted (AVE) of the constructs remained under 0,5. There was only one exception: the centrality dimension of the materialism scale. The model measuring the relationship between variables was well above the threshold of SRMR (standardized root mean square residuals). The unweighted least squares discrepancy (d_{ULS}) also received a red, i.e., unacceptable colour. The same was true for the geodesic discrepancy (d_G), which is another method for quantifying how strongly the empirical correlation matrix differs from the correlation matrix of the model used. The smallest possible indicator would indicate the good fit of the theoretical model, but the d_G was also in the red colour range due to its high value.

Due to the errors in the methodological adequacy of the examined variables, I turned to simpler statistical analysis during the data analysis. Linear correlation calculations between groups of respondents created by the hierarchical cluster analysis of the Schwartz set of values, motivational factors created by the principal component analysis of the U&G scale, the three dimensions of the materialism scale (happiness, success, and acquisition-centricity) and voluntary simplicity were performed. Through statistical analysis, I was able to perform all hypothesis tests and provide reasoned answers to all questions.

III. Key findings and conclusions

Based on the statistical analysis of the sample from the national data sampling, the results of the hypothesis tests are summarized in the table below:

Number of hypothesis	Statement	Result
H1a	*Individualistic values strengthen material attitudes.*	supported
H1b	*Values expressing self-enhancement strengthen material attitudes.*	supported
H2a	*Collective values weaken material attitudes.*	supported
H2b	*Self-transcendence values weaken material attitudes.*	supported
H3a	*Values for self-transcendence have a positive effect on identification with voluntary simplicity.*	supported
H3b	*Prosocial values for community well-being have a positive effect on identification with voluntary simplicity.*	partially supported
H4	*Materialism is negatively related to voluntary simplicity.*	supported
H5a	*Among the motivations for social media use, self-extension have a positive effect on materialism.*	supported
H5b	*Among the motivations for social media use, observation of others have a positive effect on materialism.*	rejected
H6	*The frequency of visual social media use is positively correlated with materialism.*	supported
H7a	*Students in general secondary education are less material compared to students in secondary vocational education.*	partially supported
H7b	*Students in general secondary education are less material compared to students in vocational education.*	partially supported
H8a	*Voluntary simplicity is more important for students in general secondary education, than students in secondary vocational education.*	supported
H8b	*Voluntary simplicity is more important for students in general secondary education, than students in vocational education.*	supported
H9	*Young people living in regions with better economic state are less material than those living in regions with worse economic state.*	rejected
H10	*Young people living in regions with better economic state are less likely to identify with voluntary simplicity than those living in regions with worse economic state.*	partially supported

Source: own edition

Based on the hypothesis testing, the following answers can be given to the research question.

1) *What values relate to materialism? Which values strengthen and which weaken materialism?*

According to the data analysis for H1 and H2, power, achievement, stimulation and self-direction show significant explanatory power as individual independent variables, but in a multivariate model only the power and self-direction ha significant impact on materialism. At the same time, from the self-enhancement value set, power is the value that best strengthens the attachment to material goods. Among the collective values, the negative effects of universalism, tradition, benevolence and security are significant individually, but in the multivariate model, the benevolence is no longer significant. It can be stated that the happiness dimension of materialism - which is explained only by the self-enhancement value set - and success is relatively little influenced by values, but the centrality dimension is related to a wide range of values. In the theoretical approach of recent dissertation, the role of material goods can also be interpreted as a tool for individual well-being, social mobility, and coping strategy. Based on the above, it has also been proven that, in general, the desire for goods and expansion of consumption are not only the result of external influences, but of much deeper, internal motives. The wide range of values that explain the acquisition-centred attitude evidences this.

2) *What values relate to voluntary simplicity? Which values strengthen and which weaken voluntary simplicity*

Taking into account all the research results, it can be concluded that universalism and benevolence as values of self-transcendence reinforce the intention of voluntary simplification both individually and in a multivariate model, thus H3a has been supported. Among the collective values, conformity has a significant effect on simplification in the univariate model, but no longer in the multivariate model, however, the tradition exerts its explanatory power in the multivariate analysis. However, due to the negative sign of safety, hypothesis H3b is only partially supported in the end. If we accept that the pursuit of security is the part of the individual's coping strategy, then the voluntary simplicity-reducing effect of security further strengthens the assumption that the acquisition and possession of goods can strengthen an individual's self-determination and existence.

3) *What is the relationship between materialism and voluntary simplicity?*

One of the main questions of the dissertation is whether voluntary simplicity has a positive or negative relationship with materialism compared to the contradictory results in the literature. The assumption (H4) that materialism is negatively related to voluntary simplicity was examined from two directions in the dissertation. Regarding the dimensions of materialism (as independent variables),

neither univariate nor multivariate regression models could confirm the hypothesis. Despite the strong and significant effect between the variables, the results do not prove the explanatory power of the material attitude due to the non-normal distribution of residuals. If we interchange the dependent and independent variables, all univariate models are interpretable and show a significant effect: voluntary simplicity negatively influences the strength of materialism. The answer to research question 3 is also confirmed by the significant correlations of the relationship studies, so materialism is negatively related to voluntary simplicity.

4) Does the motivation for social media use influence the strength of materialism?

It can be determined from the meaning of the accepted Hypothesis 5a and the rejected Hypothesis 5b. that both the enhancement of happiness with material goods and the identification of success through material goods and the attitude towards the acquisition of new goods can be explained by the motivation for the self-extension on social media. That is, the more adolescents are willing to share self-created or self-depicting content, the more strongly they are attached to material goods in all three interpretations of materialism. However, the results did not fully support the hypothesis that passive, inclusive participation and monitoring the sharing of others would generally have an effect on materialism. This is because material success is explained only by the intention of self-expansion, that is, this subset of materialism is independent of social comparison. Considering the sign of the independent variables of the regression models, it can be said that in terms of social comparison, the material happiness and success of teenagers is more influenced by the effect on others (self-extension), while the attitude towards acquisition and possession is more shaped by online social observations.

5) What is the relationship between the frequency of use and preferences of different social media networks and materialism?

A comparison of motivational factors across different portals has shown that self-extension and perceptions of others vary with the use of visual-based social portals, so it is also implicit that more frequent use of Instagram, TikTok, and Twitter is a social comparison, strengthens the materialism of young people through its active (content-creating) and passive (inclusive) nature (H6).

More specifically, comparing materialism with the threefold frequency of use (never, infrequent, frequent) of each portal, it can be seen that young people's financial success and acquisition-oriented attitudes are lowest when they do not use Instagram and highest when they frequently use TikTok. Even the infrequent use of Twitter is associated with much above-average materialism, but this is because teenagers who rarely use Twitter also use other platforms intensively. Although Facebook, as materialism follows a similar pattern to other portals, may even question the conclusions about visual

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platforms, it is important to note that the frequent use of Facebook, like Twitter, is associated with more intensive use of other platforms. What underlines the importance of visual platforms is the material happiness, which shows a significant difference only in the case of Twitter and TikTok, but it is in these cases that we encounter the strongest materialism.

6) What is the relationship between school type and materialism?

Although among the dimensions of materialism, only the happiness dimension differed significantly between the three school types, it can only be stated partially that material and material goods are less important to general secondary education students compared to other school types (H7a and H7b are partially supported). In addition, the happiness of secondary vocational education students is mainly due to the goods they own or will have to own. In this research result, there is a difference between the perspective-minded atmosphere of general secondary institutions, which encourages further learning, and the atmosphere of technical schools, which focuses on everyday living and urges an independent existence as soon as possible. At the same time, the results confirm the middle-way nature of the technical school type.

7) Is there any difference between teenagers of different school types regarding voluntary simplicity?

Yes, there is: differences similar to materialism (research question 6) can be identified and proved. While general secondary education students identify with the simplification approach above the sample average, students in vocational education institution are less open to simplification than the average young person (H8a and H8b are supported). Those who attend to secondary vocational school are again among the results of general secondary schools and vocational schools.

8) Are there differences in terms of values and voluntary simplicity for teenagers living in a different income region?

There is no hypothesis for the evolution of Schwartz values by region because neither the research nor the literature had a precedent for the expected result. However, the differences can be identified without a hypothesis test. Regarding the income of households, the better economic state of adolescents in Budapest and Central Hungary can be assumed compared to the national average. Of course, this does not mean that the richest young people would live in this area or that all young people would live in better financial conditions, but the averages are the starting points. It can be stated that the preference of all values showing significant differences among teenagers living in Budapest and Central Hungary is below the national sample. This is especially true of universalism, which is by far the lowest, but it is

interesting that both security and independence are considered the least important. Of the regions, only the results of South Transdanubia are very similar to those of Central Hungary, despite the fact that the South Transdanubia region is one of the lowest-income regions. There is also a positive deviation from the sample average in the Western Transdanubia and Southern Great Plain regions, the identification of universalism, tradition and performance is particularly high in the former. An interesting fact is that while Western Transdanubia is the second (behind Central Hungary) out of the seven economic regions in the development of the average household income, while the Southern Great Plain is only the fifth. Overall, it can be stated that the collective-conservative values are more important for adolescents in Western Transdanubia and the Southern Great Plain than in other parts of the country. However, openness to openness and self-fulfilment are also stronger in the two regions.

Identification with voluntary simplicity perfectly reflects the significant differences between Schwartz values. In other words, young people in the Western Transdanubia and Southern Great Plain regions are much more open to moderate, small-scale and simple consumer behaviour in Central Hungary and Southern Transdanubia than in the national average. These results also confirm the relationship between voluntary simplicity and collective values.

In summary, the question of whether value preferences differ in regions with different economic state cannot be given a clear answer. Although the difference between the regions can be proved, the regions above (Western Transdanubia and Southern Great Plain) and under-represented (Central Hungary and Southern Transdanubia) show different income situations compared to the national average. Therefore, the reason for the difference is not to be found in economic development. The same is true of voluntary simplicity, as the partial acceptance of hypothesis H10 further strengthens - but has not yet proven - the likelihood that simpler consumer life, behaviour, and small-scale consumption are not related to financial means.

9) *Is there a difference in terms of materialism between adolescents living in regions with different economic state?*

To answer this question, minimal but significant differences can be considered (Figure 20), from which conclusions similar to the regional differences in values and voluntary simplification can be derived. The level of materialism in the Western Transdanubia and South Transdanubia regions is lower than the national average, which does not mean a difference between the households' economic state of the regions in terms of materialism (H9 is rejected) therefore the answer to research question 9 is no. At the same time, the result reinforces the negative relationship between materialism and collective values

and voluntary simplicity, because collective values and identification with voluntary simplification are stronger than the national average in these regions (H10 is partially supported).

III.1. Conclusion

Based on the research results, it can be proved that materialism is positively related to individualistic values for individual prosperity and aspiration, while it is negatively related to collective, prosocial values. From all this we can conclude that the role of material goods is significant in the assessment of individual well-being, achievements, and the attachment to goods weakens as social relations and community interests are strengthened.

Among the positive (Kuanr et al. 2020) and negative (Nepomuceno & Laroche, 2015) correlations between materialism and voluntary simplicity demonstrated in the literature, the present dissertation confirmed the existence of a negative relationship between the two variables. Compared to the values, it can be seen that the values of collective and self-transcendence are positively related to the intention to simplify. That is, small-scale consumer behaviour, the restriction of consumption of one's own volition, is related to the interests of the community, and the desire to transcend the current state of life.

Regarding social media use, the hypothesis that visualization-based platforms (e.g. Instagram, TikTok) are positively related to materialism has been confirmed. Considering the motivation to use, there is no difference between observing one's own content creation and sharing and observing the shares of others, both motivations are positively related to materialism. In other words, the intent to share and consume content in both social media can strengthen the attachment to goods.

Comparing the value preferences and attitudes of teenagers studying in different school types, it has been proved that general secondary school students studying in an educational environment, which is typically prepared for higher education and further education, are less materialistic and more inclined to study technically. In conclusion, it is not only in terms of general knowledge (general secondary school) and vocational (vocational school) studies that secondary vocational schools are midway between the two extremes in terms of materialism and voluntary simplicity. Finally, it can be said that the income and wealth situation resulting from the level of economic development of the regions has no effect on the development of materialism, values or voluntary simplicity. This correlation draws attention to the fact that the studied variables are more deeply rooted phenomena, they are not influenced by the income situation per se.

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