



Article

Attitudes of Voluntary Simplifier University Students in Hungary

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Abstract: The Lifestyle of Voluntary Simplicity (LOVOS) segment is composed of consumers who attempt to achieve sustainable consumption. The segment has been examined by only a few research studies so far, and none of them were conducted among Hungarian consumers. Therefore, the aim of our exploratory research is to examine the occurrence of the LOVOS consumer group among university students from Debrecen, Hungary. To achieve our aim, we first identified the five main value groups of the LOVOS lifestyle with an expert focus group interview. Based on the interview, a questionnaire survey was conducted among university students from Debrecen (N = 500). Based on the results, four value-based segments were identified, of which the Voluntary simplifiers' cluster (39.6% of respondents) reflected the characteristics of the LOVOS lifestyle to the greatest extent. Based on the literature, it seemed necessary to segment this group further in terms of their commitment to individual values. As a result, three further clusters were created, of which, the Holistic simplifiers' group (9.8% of respondents) showed the greatest commitment to the values of the LOVOS lifestyle. We concluded that the characteristics of voluntary simplifiers have already appeared among university students from Debrecen, but further research is needed to reveal the value orientation of the whole of Hungarian society.

Keywords: lifestyle; sustainability; simplicity; LOVOS segmentation

1. Introduction

Sustainability and sustainable consumption have been central topics for researchers for years. It is less and less debatable that in future we will have to face environmental, social, and economic challenges that will need a change in consumer attitudes in order to be resolved [1–3]. Voluntary simplifiers are a consumer group who, in a world that typically overconsumes and exhibits a material value system, consider the conscious reduction of their consumption important, not only for the sake of sustainability but also for their own spiritual and mental health [4]. The members of this consumer group take into account all of the three aspects of sustainability—social, economic, and environmental—in their consumption [5]. To this end they aim to use products and services which meet their basic needs and result in a better quality of life, while minimizing the use of natural resources and poisonous substances and the emission of waste and pollutants over their whole lifecycle, in order not to threaten the needs of future generations [6]. Moreover, they take into account the three basic criteria of the attainment of sustainable consumption: less consumption, traditional consumption, and environmentally conscious consumption [4].

The lifestyle of voluntary simplifiers concept was first identified by Gregg in the USA in 1936; their occurrence was explained by researchers as a reaction to the disappearance and transformation of traditional American values [7,8]. However, based on their research, Elgin and Mitchell [9]

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thought that this segment can not only provide a solution to the problem of the disappearance of traditional values but is also able to initiate a multidimensional movement in which consumer habits, institutional development, policy provisions, and a transformation of society's structure can be realized. The authors defined voluntary simplifiers as "The essence of voluntary simplicity is living in a way that is outwardly simple and inwardly rich. This way of life embraces frugality of consumption, a strong sense of environmental urgency, a desire to return to living and working environments which are of a more human scale, and an intention to realize our higher human potential—both psychological and spiritual—in community with others [9]."

In other words, for the representatives of this lifestyle simplicity, the importance of environmental protection, and spirituality occur when creating their satisfaction with life. Based on this, "voluntary simplicity refers to the choice out of free will rather than by being coerced by poverty, government austerity programs, or being imprisoned, to limit expenditures on consumer goods and services, and to cultivate nonmaterialistic sources of satisfaction and meaning [10]." So, voluntary simplifiers seek to develop a lifestyle with which they can turn away from the overconsumption caused by materialism, and community interests come to the fore rather than the importance of individual interests [11]. A lifestyle resulting in low level consumption can positively influence not only the environment but mental health too [12–14].

Besides America, the appearance of the segment was also detected in Western Europe by researchers, but with slightly different characteristics, mainly due to cultural differences [15]. The main difference was related to spiritual values, since in Europe religious engagement is present to a lesser extent among the representatives of the lifestyle than in American research studies. On the other hand, however, according to Doherty and Etzioni [16], a lifestyle of voluntary simplicity can be more compatible with European culture than with American culture. This can primarily be attributed to the fact that in the case of ordinary products and services, production and consumption per capita in Western European countries are lower than in North American countries. Besides this, in the former countries people have more time for leisure, cultural, and educational activities, which are also important basic components of the development of this lifestyle [16,17].

Several researchers have tried to identify the basic values of voluntary simplifiers during the last few years. Although there are many common points in the results, there is still no unified definition. Besides the aforementioned cultural differences this can also be attributed to the fact that it is difficult to draw sharp boundaries among the values represented by the segment, because of overlaps. In their research, Craig-Lees and Hill [18] identified five key topics related to voluntary simplifiers:

- appearance of free will in a simpler way of life;
- decreasing material consumption;
- access to resources;
- education and development of individual abilities and capabilities; and
- control and personal satisfaction.

These topics were developed along the following five basic values identified by the authors: anthropocentrism, self-determination, ecological awareness, spiritual values, and self-development [18]. The definition by Elgin and Mitchell [9] is similar but not totally the same, they listed the following values:

- material simplicity: effort to satisfy real needs, decrease in dependency on material goods;
- human scale: decentralized institutions, occurrence of individual responsibility, life close to nature;
- self-determination: "do-it-yourself" and "grow yourself" movements, rejection of borrowing in order to avoid defenselessness;
- ecological awareness: efforts to decrease environmental burdens; and
- personal growth: developing physical and mental balance, spiritual values, religion [9,19].

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When examining the lifestyle of voluntary simplifiers, some researchers considered it necessary to segment voluntary simplifiers based on the extent of their commitment to the lifestyle. During the segmentation three groups were developed based on the extent to which the members of the various groups exhibit the characteristics of the lifestyle in their daily life. These segments are downshifters, strong simplifiers, and holistic simplifiers [10,11,17,19,20].

The members of the segment consciously try to decrease their own consumption and they purchase only those material goods that are really necessary to develop their individual wellbeing. It is important to note, however, that this kind of consumption reduction is always voluntary, based on the individual's own will and as a result no deprivation occurs, and it is not the same as poverty [19]. The main difference between voluntary consumption reduction and poverty is that while in the case of voluntary consumption reduction the individual could afford to purchase more or even overconsume based on his/her income, in the case of poverty consumption reduction is forced [5,21].

Beside this, in this lifestyle developing a physical–mental balance is an emphatic value, in which religion as a spiritual value can also be present. It is important to note, however, that the simple life is not the same as world-denying asceticism; it does not aim at the victory of the soul over the body. That is to say, representatives of the lifestyle do not try to reduce their consumption to an extent that would be accompanied by the mortification of their body; they do not stop satisfying their basic needs [9]. It is also important to note that voluntary simplifying cannot be considered a "back to nature" movement, where members would move to land close to nature and far from cities in order to develop a self-supporting life. Finally, members of the segment do not reject technological development, either, if it is in line with their value system (e.g., hybrid cars and the use of renewable energy sources) [5,22].

In sum it can be stated that in this lifestyle spirituality and self-actualization are also important. But when examining the segment, it is advisable to reject the extremes (e.g., total rejection of material consumption in order to reach self-actualization), since without this mental balance, one—if not the most important—aim of the lifestyle becomes unrealizable [23–25].

The size and consumer behavior of the Lifestyle of Voluntary Simplicity (LOVOS) segment has been examined only by a few studies so far. In the first research into the LOVOS lifestyle four segments were identified based on the extent of their commitment to the lifestyle (Fully committed, Partly committed, Sympathizers, and Indifferents). The research study revealed that 3% of the American population belonged to those committed to voluntary simplifying, the lifestyle of 6% showed the values of voluntary simplifiers, and ~40% of the population sympathized with some values of the lifestyle but these did not manifest in their lifestyle [9].

A research study conducted in Germany [15] examined the values and buying habits in the case of durable consumer goods (e.g., car, TV, washing machine, smartphone, etc.). The results show that those who are committed to the lifestyle of voluntary simplifiers avoid impulse purchases and prefer environmentally friendly products but they are proven to be less socially sensitive than expected. The only difference was the higher level of openness towards religions among those who are committed to the lifestyle compared to the segment of overconsumers. According to the research, 14.4% of respondents belonged to the group of voluntary simplifiers; the segment was mainly dominated by middle-aged (average age: 45.4 years) women with a higher education degree (54.3%), who worked full-time. Although the segment of voluntary simplifiers could be considered the second most well-off, their consumption was second lowest, following the low income group [15]. This result confirms that voluntary simplifiers do not try to reduce their consumption due to external compulsion, since based on their income situation they could afford overconsumption.

Beside the LOVOS segment it is also worth mentioning another consumer group committed to sustainability (LOHAS—Lifestyle of Health and Sustainability). Based on the literature, LOHAS can be considered the consumer group most committed to sustainability [26,27]. One important characteristic of the members of the segment is that they take into consideration all of the three pillars (economic, social, and ecological) of sustainability when making purchases. Based on the international literature, LOHAS consumers are mainly middle-aged women with a high income and a higher education

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degree. In sum, it can be stated that the members of the lifestyle group are characterized by a turning away from overconsumption; they aim to develop a healthy and environmentally conscious life, but a preference for authentic and human values is also present among them [26–28]. Beside this, individualism and hedonism also appear in their value system—values that seemingly contradict the previous values; therefore members of the LOHAS segment make up a kind of hybrid consumer group [29]. The importance of the individual is manifest primarily in their career orientation and their preference for purchasing unique, branded products. In their lifestyle the members of the segment do not want to give up hedonism, either due to the pursuit of experience maximalization and the need for convenience are also present among the characteristics of the lifestyle, as is the preference for semifinished, prepackaged products [26]. Because of the hedonism and the seemingly contradictory values they exhibit, some experts question whether members of the LOHAS lifestyle can be really considered the consumer group accomplishing sustainable consumption to the largest extent [26].

Based on the above we can state that although there are common elements of the value system of the two segments, we can also find basic differences between them. Table 1 summarizes the most important similarities and differences between the two lifestyles.

Table 1. Comparison of Lifestyle of Health and Sustainability (LOHAS) and Lifestyle of Voluntary Simplicity (LOVOS) values.

LOHAS (Lifestyle of Health and Sustainability)	LOVOS (Lifestyle of Voluntary Simplicity)	
Ecological awareness		
Ethica	l values	
Health consciousness	Material simplicity	
Authentic awareness	Self-determination	
Individualism	Personal growth	

Based on Table 1, we can state that ecological awareness and ethical values are typical value groups for both segments. However, while in the case of the LOHAS lifestyle individualist values are present, in the case of LOVOS segment community values dominate, while LOVOS consumers strive to achieve material simplicity, i.e., by consciously reducing their consumption. Beside hedonism and searching for experiences, a typical LOHAS consumer is characterized by authentic values (respect for traditions and purchasing domestic and trademarked products). Moreover, health consciousness is also present in the value system of LOHAS consumers (importance of sports and consumption of healthy foods). In contrast, a typical LOVOS consumer tries to reach his/her goals in a community, he/she willingly prepares his/her own tools, clothes, and gifts. Instead of the pleasure provided by the purchase he/she prefers to spend time with his/her family and friends, while personal growth, the pursuit of physical–mental balance, and spirituality are also important for him/her.

In sum, although striving to achieve sustainable consumption is important for both of the segments, individual interests also remain highly important for the LOHAS consumers, while in the value system of LOVOS consumers' community values come to the fore.

So far, relatively few research studies have aimed to identify the characteristics and values of the LOVOS segment, and to assess its size. It is important, however, to understand this lifestyle as completely as possible because voluntary simplifiers are truly committed to sustainable consumption. Through gaining a better knowledge of the main values and attitudes of this consumer group the possible future growth of the segment can be achieved more easily. Through an understanding of this segment and, as a result of this, an attempt to satisfy its needs better, the number of consumers who are voluntarily willing to give up overconsumption independently of their financial condition would increase; therefore, we could get one step closer to sustainable consumption, which has become a worldwide, increasingly urgent issue.

The aim of our exploratory research is to examine the occurrence, characteristics and value system of the LOVOS consumer group among university students from Debrecen. Beside its topicality,

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the necessity of our current research is confirmed by the fact that to the best of our knowledge no quantitative examination focusing on the LOVOS segment has yet been conducted in Hungary.

2. Materials and Methods

2.1. The Background to the Value-Based Lifestyle Segmentation

During our research we examined a consumer segment committed to sustainability, namely voluntary simplifiers, or in other words, the LOVOS (Lifestyle of Voluntary Simplicity) segment.

As a first step an expert focus group interview was conducted in order to reveal the attitudes of voluntary simplifiers [30]. The interview was conducted with the involvement of six experts whose research topics are related to sustainability or sustainable consumption at the University of Debrecen, Faculty of Economics and Business. Among the participants 1 was a nutrition marketing professional, 1 was a dietician, 1 was a market researcher, and 3 were experts in sustainability. The main topics covered in the focus group interview were an introduction, focusing, values of voluntary simplifiers, feasibility of the values of voluntary simplifiers, barriers to feasibility, consumption habits of voluntary simplifiers, and summary by the moderator. The main aim of the interview was to identify the values of voluntary simplifiers that served as a basis for the questionnaire.

After the interview a questionnaire survey was conducted among students of the University of Debrecen, Faculty of Economics and Business. Our choice of the composition of the sample was supported by Hungarian research conducted into the other lifestyle group committed to sustainability (LOHAS—Lifestyle of Health and Sustainability) [26]. The results of this research showed that members of the consumer group most committed to the values of sustainability ("Young trend followers") were typically young people between 18 and 29 years old who participated in higher education or had a higher education degree. With regard to the age of the representatives of this lifestyle, a difference could be detected compared to the experiences in Western countries, where the characteristics of the LOHAS lifestyle typically occurred in the case of an age group 10–15 years older. This presumably may be due to the fact that the change in the value orientation appeared that much later in Hungary than in the more developed countries. Based on this, we considered it was also worth examining the occurrence of the LOVOS lifestyle primarily in this age group, assuming a positive relationship between a higher education degree and the appearance of the values of sustainability.

2.2. Sampling

The University of Debrecen was chosen as the place of sampling, since this university is one of the Hungarian universities with the highest number of enrolled students. The survey was conducted in February and March 2018; the sample size was 500, the gender distribution of which reflected the gender distribution of the Faculty of Economics and Business (58% women and 42% men), which was assessed based on the data provided by the Education Office of the faculty before conducting the survey. The participants of the survey were recruited in February 2018 through the administration system of the university and the participation was voluntary. Before the beginning of the survey, students were introduced to the ethical rules related to the survey (the reference number of the resolution of approval of the Research Ethics Committee at the University of Debrecen, Faculty of Economics and Business is GTKDH/37/2019). To ensure the gender representativeness of the sample, a quota sampling was used. Since the number of students at the Faculty of Economics and Business was 3339 on 15 March 2018 [31], the required sample size was 345 at a 95% confidence level and 5% confidence interval (margin of error) [32], which was more than adequately met. However, because of the exploratory nature of our research which examined a homogeneous group (university students from Debrecen), conclusions drawn from our results can be applied only to the University of Debrecen.

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2.3. Questionnaire

The questionnaire survey was conducted along the values identified in the literature and the focus group interview (individualism, material simplicity, ecological awareness, personal growth, self-determination, and ethical values). Among the six value groups involved in the questionnaire, five (material simplicity, ecological awareness, personal growth, self-determination, and ethical values) characterize the lifestyle. We considered it important to examine the sixth value group, namely individualism as well, because this is the value which mainly differentiates voluntary simplifiers from the other consumer group committed to sustainability, i.e., the LOHAS segment [26]. Although the members of the LOHAS segment keep in mind the values of sustainability, the role of the individual also remains highly important for them, and besides this, they are not willing to give up hedonism either. In contrast, in the case of voluntary simplifiers the individual is relegated to the background and it is rather community values which become emphatic. Based on this we can assume that in the case of individuals committed to the lifestyle the value of individualism is rejected.

In the first part of the questionnaire we examined the extent of respondents' agreement with 58 statements about the lifestyle of voluntary simplifiers on a five-point scale (1 = do not agree at all, 5 = totally agree) and based on this, their consumer attitudes. Within the value groups statements about individualist values were based on the questionnaire created by Rácz [28]; the remaining statements were based on the characteristics of the LOVOS segment provided by the literature and the results of the focus group interview.

In the second part of the questionnaire we asked about sociodemographic background variables (gender, age, settlement type, education, marital status, primary food purchaser of the household, and monthly income). Besides this, in this part, among the background variables we also examined to what extent the respondents consider themselves health conscious, again using a five-point scale. Table 2 shows the most important sociodemographic background variables of the total sample.

Criterion –	Division of	f the Sample
Citterion —	N	%
Total	500	100.0
Gender		
Men	210	42.0
Women	290	58.0
Type of settlement		
Settlement with less than 2000 residents	33	6.6
Settlement with 2000 to 10,000 residents	107	21.4
Settlement with more than 10,000 residents	89	17.8
County town	260	52.0
Capital city	11	2.2
Marital status		
Single	282	56.4
Married or in a partnership	218	43.6

Table 2. The sociodemographic background of the sample.

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Table 2. Cont.

Criterion	Division of the Sample		
Cification —	N	%o	
Age			
18–22 years	315	63	
23–29 years	185	37	
Can you be considered the primary food purchaser of the	household?		
Yes	173	34.6	
No	327	65.4	
Monthly income of the family			
Can live on it very well and can also save	116	23.2	
Can live on it but can save little	261	52.2	
Just enough to live on but cannot save	77	15.4	
Sometimes cannot make ends meet	2	0.4	
Have regular financial problems	1	0.2	
Do not have an individual income	29	5.8	
Do not know	14	2.8	
To what extent do you consider yourself to be health conso	rious?		
Not health conscious at all	11	2.2	
Mostly not health conscious	35	7.0	
Both health conscious and not health conscious	203	40.6	
Mostly health conscious	212	42.4	
Very health conscious	35	7.0	
Do not know	4	0.8	

2.4. Statistical Analysis

The questionnaires were processed by mathematical-statistical analytical software (SPSS 23.0 and R Statistics 3.5.2). As the first step of the evaluation of data, validation of the dimensions of the LOVOS model was conducted by confirmatory factor analysis (CFA), in which 22 statements were eliminated among 58 statements in order to increase the internal consistency of the variables [33,34]. The descriptive statistics of the statements are presented in Table S1 (see Supplementary Materials), the results of the confirmatory factor analysis (CFA) can be seen in Table S2 (see Supplementary Materials). The analyses, however, were carried out by dimensions, one by one. The convergent validity of the characteristics of the LOVOS group was tested by CFA, and was then optimized by dimensions (see Table S2), because the LOVOS is a consumer group and not a second level latent variable consisting of latent dimensions; moreover, the dimensions measure individual degrees of characteristics independent from each other. After convergent validity was ensured, reliability of scales was tested by the composite reliability coefficient, which exceeded 0.7 in each case (see Table S3). The composite reliability was chosen instead of Cronbach's alpha because the latter is especially sensitive to the number of items [35,36]. The assumptions of discriminant validity are also met in each case, i.e., the values of average variance extracted (AVE) are higher than their coefficient of determination (R²) with any other dimension [37]. The evaluation of data was started by using descriptive statistical methods (standard deviation, relative standard deviation, mean, mode, median, and skewness). For the next stage of research data reduction was carried out by principal component analysis by dimensions in order to continue with a cluster analysis using the previously identified components [38].

Finally, in order to be able to divide the sample into homogeneous groups a value-based segmentation of Debrecen university students was carried out by a hierarchical cluster method, where intercluster variance analysis was performed by using ANOVA [39].

3. Results

3.1. Results of Expert Focus Group Interview

The value groups identified in the focus group interview well reflected the values of LOVOS segment found in the literature: material simplicity, ecological awareness, self-determination,

personal growth, and ethical values. Beside this, the focus group interview highlighted the difference between the two lifestyles committed to sustainability (LOHAS and LOVOS); based on this, it seemed necessary to examine individualism as a sixth value group, which—based on the literature—characterizes only the LOHAS segment. Based on the literature and the results of the focus group interview, as the next step these six value groups were examined in the questionnaire.

3.2. Results of Data Reduction

Data reduction was carried out step-by-step by dimensions of the questionnaire, in order to create the conditions for cluster analysis (e.g., correlations). During this process 36 statements were retained from the original 58; the other statements were eliminated in order to increase the internal consistency of the variables. Therefore, in this case the aim of principal component analysis was to examine to what extent the given value groups shape the value system of the respondents and to reveal the relationships among the variables [39].

For the aforementioned reasons the principal component analysis was conducted for each value group (individualist, ecological awareness, and ethical values, and values related to material simplicity, self-determination, and personal growth).

In the first component the individualist value group is present, along which two extreme component loadings appear, related to the purchase of fashionable and branded products (0.805 and 0.766, respectively). However, the other two statements also received component loadings higher than 0.5. Based on this we can state that the values examined are sharply separated in the value system of university students and significantly influence their value judgments.

The second component includes the values related to material simplicity. Among the statements the highest component loadings are present in the case of conscious reduction of consumption (0.680) and preference for utility (0.659). This value group contains the highest number of statements that have relatively low component loadings (do-it-yourself presents, preference for borrowing in libraries, and buying high quality but expensive products).

The third component involves values related to self-determination; all of the statements except one (trying to fix broken products) show relatively high values (>0.62). Based on this, it can be stated that this preference is also present in the value system of the students from Debrecen, but it is likely that it has a real effect only in certain consumer groups. This is confirmed by the skewness of the distribution to the left, which suggests that the university students examined tend not to consider this value to be true for themselves.

The fourth component includes ecological awareness values, in which dominant separations are found based on the component loadings, primarily in the case of recyclable packaging (0.802) and purchasing organic/green and local products (0.742). The high component loadings well represent the separation of ecological awareness values from the other components, and the skewness of the distribution (to the right) also confirms this.

In the fifth component values of personal growth appear. The value group does not show any extremely high values, but except for one value (importance of family unity), all of the statements received component loadings higher than 0.58; therefore, we can state that overall this value group is also present in the value system of the university students, although the skewness of the distribution rather indicates that they do not consider this value to be true for themselves.

In the sixth component—showing ethical values—all statements have high component loadings, among which values related to the rejection/boycott of unethical company activities [40] and the preference for "buycott" initiatives stand out the most (>0.71). The high component loadings of the value group may suggest that these values are separated from the other value components, which is confirmed by the skewness to the right.

In sum, it can be stated that all components are present in the value system of the respondents, although to varying degrees. Based on the ecological awareness component loadings, ethical and individualist values shape the value system of university students the most. Beside this, values of

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material simplicity, self-sufficiency, and personal growth are also present in the value systems of university students, although with less weight.

3.3. The Results of Cluster Analysis

After examining the value groups, a value-based segmentation of university students of Debrecen was conducted with the use of hierarchical cluster analysis (the Ward method). The aim of cluster analysis is to develop homogeneous groups in such a way that members in one group are similar to their groupmates but dissimilar to members of other groups [41]. The value-based segmentation was conducted along the five basic values identified (material simplicity, ecological awareness, personal growth, self-determination, and ethical values), related to the lifestyle of voluntary simplifiers. The sixth value—individualism—was later analyzed separately in the developed clusters. The reason behind this is that based on the literature individualism is not one of the basic values followed by voluntary simplifiers; moreover, this is the most striking difference between LOHAS and LOVOS lifestyles (see Table 1). Therefore, it was hypothesized that individualist values characterizing the LOHAS segment do not appear in the value system of the consumer group committed to the LOVOS lifestyle. To confirm our hypothesis, this value group was examined separately, in the previously developed clusters.

During the analysis the following four well-separable clusters were identified (Table 3): Voluntary simplifiers, Indecisive persons, Antisustainability persons, and Socially passives.

Average Deviation					
Cluster	F1: Material Simplicity	F2: Self-Determina	F3: Ecological ation Awareness	F4: Personal Growth	F5: Ethical Values
1	0.6912	0.7561	0.7814	0.7063	0.6441
2	-0.3504	-0.1727	-0.1995	-0.1514	0.3297
3	-1.5643	-1.4653	-1.5898	-1.1801	-1.261
4	-0.1882	-0.5244	-0.4927	-0.5654	-0.9707

Table 3. Appearance of value factors in each cluster (N = 500).

Based on Table 3 it can be stated that in the "Voluntary simplifiers" segment (Cluster 1) all of the five values are present. This segment contains 39.6% of respondents. Although the weights of each value are almost the same in this segment, ecological awareness is present to the largest extent, while ethical values are present to the least extent among the cluster members. Among the segment members, women dominate (64%), and this is one of the segments with the highest proportion of those with a higher education degree (40%) and those living with a partner (45%).

The members of the second cluster (Cluster 2) are called "Indecisive persons", and compose the second largest group in the sample. It can be clearly seen in the table that they are either neutral towards or slightly refuse almost all component values. Among the segment members women dominate again (60%), and the majority of the group members (72%) has a secondary school certificate, and are therefore likely to be studying in bachelor university programs. In terms of living with a partner, singles are in a slight majority (54%).

The members of the third and smallest cluster (Cluster3) (8.4%), i.e., "Antisustainability persons", totally reject all of the aforementioned five value groups. They show rejection to the least extent in the case of the values of personal growth, and are the only value group which cannot be related directly to the topic of sustainability. By analyzing the results it is obvious that the members of the segment form a small but more homogeneous group, who consciously oppose the values of voluntary simplifiers and thus those of sustainability. In the segment men are in a slight majority (52%), and concerning their educational level, the proportion of those with a higher education degree is the lowest in this group (14%), as is the proportion of those who live with a partner (38%).

Finally, the members of the fourth cluster (Cluster 4) are called "Socially passives", which compose 24.6% of respondents. Similarly to the previous group, they reject all of the examined values,

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are almost neutral only in the case of material simplicity, and reject ethical values to a great extent. Men are slightly overrepresented in this segment too (52%), and similarly to the group of Voluntary simplifiers, the number of respondents with a higher education degree is noticeable here (40%) as well. Concerning living with a partner, singles dominate (61%).

Based on their subjective income situation university students of Debrecen constitute a relatively homogeneous group, and no significant differences were found between clusters: 72% of Voluntary simplifiers, 80% of Indecisive persons, 70% of Antisustainability persons, and 78% of Socially passives stated that they can live on their income very well and can also save, or they can live on it but can save little. Based on this, it is confirmed that consumption reduction forced by poverty can be excluded among voluntary simplifier students.

In sum, we can state that in the segment of Voluntary simplifiers all of the five value groups related to the LOVOS lifestyle appeared. Women and those living with a partner dominate this segment to the largest extent. Beside this, the number of those with a higher education degree is one of the highest in the case of Voluntary simplifiers; however, it is important to note that the proportion of respondents with a higher education degree is exactly the same in the case of the group refusing the LOVOS values to the largest extent, i.e., the Antisustainability persons.

Based on the review of the literature [10,11,19] it was expedient to further segment the group of Voluntary simplifiers along the value factors already known. Within the segment of Voluntary simplifiers the development of subclusters was accomplished, based on the extent of commitment to individual values.

Based on the results, three new groups were developed: Downshifters, Strong simplifiers, and Holistic simplifiers. Based on Table 4, it can be seen that in the case of two of the three groups (Strong simplifiers and Holistic simplifiers) all of the values related to lifestyle appeared. The difference between the two subclusters manifests itself in the commitment to values; in the case of Holistic simplifiers all values related to lifestyle are more overrepresented among the members of ı), al ıe t n st ıd ۲

Average Deviation					
Cluster	F1: Material Simplicity	F2: Self-Determination	F3: Ecological Awareness	F4: Personal Growth	F5: Ethical Values
Strong simplifiers	0.301	0.745	0.526	0.655	0.606
Holistic simplifiers	1.211	0.885	1.320	1.349	1.231
Downshifters	1.261	0.610	0.868	-0.045	-0.073

To sum up, the group of Holistic simplifiers shows the highest level of commitment to the values of voluntary simplifiers. This subsegment makes up 9.8% of the total sample. Their pursuit of a simpler lifestyle is presumably not forced, since the members of the group live in the best financial conditions.

Based on the literature and the results of the focus group interview it was necessary to examine the appearance of individualism related to the lifestyle of voluntary simplifiers. To achieve this, the appearance of individualist values was examined in the questionnaire survey, since we assumed that in the case of students who are neutral towards or reject this value group, the lifestyle of voluntary simplifiers prevails more. Therefore we examined the appearance of individualism in the four segments

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identified in our research (Voluntary simplifiers, Indecisive persons, Antisustainability persons, and Socially passives), as illustrated in Table 5.

-	Average Deviation		
Cluster	Material Simplicity	Individualism	

Table 5. Appearance of individualism and material simplicity in the clusters (N = 500).

0.691 -0.1062 -0.3500.104 3 -1.5640.243 -0.188-0.027

Based on the results we can conclude that individualism shows a reciprocal relationship with the value of material simplicity. Individualism is rejected by Voluntary simplifiers (Cluster 1) to the greatest extent, while Antisustainability persons (Cluster 3) show it to the greatest extent. The judgement of material simplicity shows an opposite pattern in the aforementioned two segments. The same relationship was detected in the further segmentation, too, where the group of Downshifters rejected individualism to the greatest extent and showed the value of material simplicity to the greatest extent (Table 6).

Table 6. Appearance of individualism and material simplicity in subclusters (N = 198).

	Average D	eviation
Cluster	Material Simplicity Individu	
Strong simplifiers	0.301	0.015
Holistic simplifiers	1.211	-0.162
Downshifters	1.261	-0.436

Although health consciousness does not appear as a separate value group in the lifestyle of voluntary simplifiers, based on the literature, physical-mental balance is very important for this segment. To achieve this, a healthy lifestyle is necessary, therefore it is worth examining the relationship between health consciousness and voluntary simplicity; the results of this are shown in Table 7.

Table 7. Appearance of health consciousness in clusters (N = 500).

Health Consciousness			
Cluster1	67%		
Cluster2	49%		
Cluster3	17%		
Cluster4	33%		

The results show that the more committed to voluntary simplicity somebody is, the more their health consciousness also appears. Among the four basic clusters the most health conscious respondents are in the Voluntary simplifiers segment (Cluster 1) (67%), while among the three subclusters resulting from the further segmentation (Table 8) the proportion of health conscious respondents was outstanding in the case of Holistic simplifiers (82% of the group).

Table 8. Appearance of health consciousness in subclusters (N = 198).

Health Consciousness			
Strong simplifiers	59%		
Holistic simplifiers	82%		
Downshifters	71%		

4. Discussion

The aim of our research was to examine the appearance of the LOVOS lifestyle among university students in Debrecen. Among the four clusters identified based on the questionnaire survey, the Voluntary simplifiers segment (39.6% of the respondents) showed all of the value groups related to the LOVOS lifestyle (material simplicity, self-determination, personal growth, ecological awareness, and ethical values). Although all examined value groups were overrepresented among the members of the segment, values related to ecological awareness were present to the greatest extent and ethical values were present to the least extent in their value system.

Based on the literature [10,11,19], it was necessary to further segment the Voluntary simplifiers group. Based on the extent of commitment to the values of the LOVOS segment, three subclusters were separated within the Voluntary simplifiers group (Downshifters, Strong simplifiers, and Holistic simplifiers). Among the three subsegments, the Holistic simplifiers group (9.8% of the total sample) showed the highest level of commitment to the values of voluntary simplifiers. Although this classification of voluntary simplifiers appears in several literature sources, due to the lack of quantitative research the size of segments from various studies cannot be compared.

Similarly to our study, the research of Elgin and Mitchell [9] also identified four clusters (Full Voluntary Simplicity, Partial Voluntary Simplicity, Sympathizers toward Voluntary Simplicity, and Opposed to Voluntary Simplicity). Among these clusters the Full Voluntary Simplicity cluster showed the highest level of commitment towards voluntary simplicity; at that time this group contained only 3% of the respondents [9]. Although the study of Elgin and Mitchell [9] and the current research are very far from each other in time and space, and the former study examined the whole of American society instead of a more homogeneous group (university students from Debrecen), it is worth noting one similarity between the two studies. In the research of Elgin and Mitchell [9], 40% of the population sympathized with the lifestyle of voluntary simplifiers, while in the current research, 39.6% of the respondents fell into the group of Voluntary simplifiers.

The result of another research study conducted in Germany [15] shows that 14.4% of respondents belonged to the group of Voluntary simplifiers. Although this study also differs from the current research in several respects (e.g., it examined the whole of German society, but was limited to the durable consumer goods), it is worth noting that ethical values were present to the least extent in both of the studies; however, in our research, the appearance of this value was still outstanding compared to the other segments. A further similarity between the German study and our research can also be found: it is clear in both cases that the group of Voluntary simplifiers could afford to consume more, but because of their value approach they do not do it. This result confirms that this lifestyle is not the same as the reduction of consumption forced by poverty.

Finally, it is worth comparing our results to those of a previous Hungarian study examining the other lifestyle committed to sustainability, i.e., the LOHAS segment [17]. This study was conducted among the whole Hungarian population; therefore comparison can be limited again. The research revealed that 8.7% of the Hungarian population can be seen as members of the LOHAS segment. In contrast to the international patterns, the typical LOHAS consumer in Hungary is not a middle-aged woman, but a younger (18–29-year-old) person who is committed to sustainability because of his/her higher education studies. Similarly, the typical LOVOS consumer in Hungary might be not a middle-aged woman as in the German study [15], but a younger consumer. This can explain why the proportion of respondents following the values of the LOVOS is relatively high (39.6%); however, the most committed subcluster, the Holistic Simplifiers constitutes only 9.8% of the total sample. To make more sound comparisons, it is necessary to extend the research to the whole Hungarian population in the future. Beside the LOVOS values, we also examined the appearance of individualism in the value system of each segment. Based on the results we can conclude that material simplicity and individualism show an inverse relationship. Based on this, in the case of the segment of Voluntary simplifiers committed to material simplicity, individualism is de-emphasized.

The appearance of health consciousness was also examined in the clusters, assuming a positive relationship between voluntary simplicity and health consciousness. It was obvious that the proportion of respondents considering themselves health conscious was the highest in the case of Voluntary simplifiers (67% of the segment) and within the case of Holistic simplifiers (82% of the segment). In our research we examined the relationship between possessing a higher education degree and the appearance of the values of voluntary simplicity [42]. In this case, however, no significant difference was found compared to the other groups, since in the Voluntary simplifiers segment the number of respondents with a higher education degree was exactly the same as in the Antisustainability persons segment. Nevertheless, to assess these results more accurately, it would be appropriate to conduct research with a larger sample including all age groups.

5. Conclusions

In our research based on the literature and an expert focus group interview, five basic values of the lifestyle of voluntary simplifiers (LOVOS) segment were identified (material simplicity, ecological awareness, self-determination, personal growth, and ethical values). Based on these values, a questionnaire survey was conducted along the values prevalent among university students in Debrecen, which served as a basis for the segmentation of our respondents. The segmentation resulted in four value-based clusters (Voluntary simplifiers, Indecisive persons, Antisustainability persons, and Socially passives). In the case of Voluntary simplifiers (39.6% of respondents), all of the basic values related to the LOVOS segment appeared. By further segmenting the group of Voluntary simplifiers three further groups were identified (Downshifters, Strong simplifiers, and Holistic simplifiers) based on the extent of their commitment to the values, of which, Holistic simplifiers (9.8% of all respondents) showed the basic values of voluntary simplifiers to the largest extent.

This is the first quantitative research in Hungary related to the Voluntary Simplicity segmentation and as a result, among university students of Debrecen the LOVOS segment was identified for the first time within the Hungarian population. However, because of the exploratory nature of the research, the questionnaire survey was conducted in a relatively homogeneous population; therefore the results are limited to the university students of Debrecen. As a next step it is planned to extend our research in the topic to the whole Hungarian adult population (representative descriptive research) in order to determine the size and characteristics of the LOVOS segment in Hungary.

We think that it is worth paying more attention to a consumer group which, although it consumes less as a result of its values, due to its quality orientation and favorable financial conditions also consumes more premium products than the average consumer. Besides this, as a practical implication, the values shown by the segment make it possible to accomplish value-based marketing communication which may make it easier for firms to address the segment successfully and efficiently.

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