



The Value Priorities of Adolescents in Estonia, Lithuania and Finland: a Comparative Perspective

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Authors' contributions

This work was carried out in collaboration between all authors. Author HK designed the study and wrote the first draft of theoretical and discussion parts of the manuscript. Author PL developed instrument, collected Estonian data, designed the study, performed the statistical analysis and wrote the protocol. Author MT designed the study and participated in writing the first draft of the manuscript. Author HK designed Estonian sample, collected Estonian data and managed the final design of the manuscript. Authors DS and GS translated and adopted original tool for Lithuanian conditions and carried out Lithuanian part of the study. Authors MS and TMS translated and adopted original tool for Finnish conditions and carried out Finnish part of the study. All authors read and approved the final manuscript.

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ABSTRACT

Aims: Values are listed as motivational factors that determine an individual's lifestyle. This paper presents a study, which aims to compare value priorities in Estonian, Lithuanian and Finnish students. More than 3,000 teenagers (about 1,000 per country) ranked 16 values according to priority number. The data was gathered using an electronic questionnaire. The objective of the study was to answer two questions: (1) How do the value priorities of

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adolescents differ in the three countries? (2) Which are the most and least important values among adolescents in the three countries?

Study Design: Casual comparative study.

Place and Duration of Study: Estonia, Lithuania and Finland over two years.

Methodology: 3,043 participants, almost 1,000 from each country in two age groups: 13–15 years old and 16–18 years old. Differences in the ranking of values in the three countries were compared using an ANOVA analysis.

Results: Despite some differences in the value priorities of adolescents in these countries, the study generally shows that the priorities were similar rather than different. Adolescents of all three countries reported having friends and honesty as the most important value (in Lithuania shared with esteem from others). The Finnish respondents ranked having a good time and the respondents in both Baltic States the esteem from others (in Estonia this was shared with knowledge) as the third most important value. The least important in all the countries were modern clothes and high position in society, in Lithuania also the ability to work, in Estonia wealth and in Finland good looks.

Keywords: Adolescence; values; value priorities; value comparison.

1. INTRODUCTION AND LITERATURE REVIEW

1.1 Definitions of Values

There are several definitions for values in the literature. Rokeach [1] defined a value as an enduring belief that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite or converse mode of conduct or end state of existence, and divided the value system into two parts – one part devoted to instrumental or process-oriented values and one devoted to terminal or goal-oriented values. One of the most significant concepts in Rokeach's theory is that once a value is learned it becomes part of a value system in which each value is ordered in priority, relative to other values. Kitwood [2] used a slightly different approach: the domain of values, as a topic for empirical study in the social sciences may roughly be demarcated as that of the beliefs of human beings about what is right, good or desirable, and of their corresponding actions and attitudes. There are also other definitions, but Rokeach's definition of values was taken as the basis for this study.

1.2 Structures of Values

Early models of the structure of values (e.g. Feather [3], Rokeach [1]) laid the foundation for a comprehensive structural model put forward by Schwartz and Bilsky [4], and Schwartz [5].

Schwartz and Bilsky [4] proposed the first comprehensive model of the content and structure of human values. They argued that values represent the individual's conscious response to three types of basic human needs: physiological needs, social interaction needs and the need for societal institutions that ensure the survival and welfare of the group. Values, as they posited, are the individual's cognitive response to these basic needs, formulated as motivational goals. This assumption led Schwartz [5,6] to form a model of 10 motivational value types, which were identified and presented as a potentially universal set of motivational goals: Hedonism: pleasure and sensuous gratification for oneself; Power: social status and prestige, control or dominance over people and resources, status and prestige

(social power, authority, wealth); Achievement: personal success through demonstrating competence according to social standards (success, capability, ambition, influence); Stimulation: excitement, novelty, and challenge in life (daring, a varied life, an exciting life); Self-direction: independent thought and action choosing, creating, exploring (creativity, freedom, independence, curiosity, choosing own goals); Universalism: understanding, appreciation, tolerance and protection of the welfare of all people and of nature (broadmindedness, wisdom, social justice, equality, a world at peace, a world of beauty, unity with nature, protecting the environment); Benevolence: preservation and enhancement of the welfare of people with whom one is in frequent personal contact (helpfulness, honesty, forgiveness, loyalty, responsibility); Conformity: restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms (politeness, obedience, self-discipline, honouring); Tradition: respect, commitment and acceptance of the customs and ideas that traditional culture or religion provide for the self (humbleness, accepting my portion of life, devout, respect for tradition, mode); Security: safety, harmony and stability of society, of relationships, and of the self (family security, national security, social order, cleanness, reciprocation of favours).

Schwartz [5] mentioned that value types form a special structure on two levels. First, value types can be divided into two categories according to whether they serve individual or collective interests. Power, achievement, hedonism, stimulation and self-direction are value types that serve individual interests; and benevolence, tradition and conformity serve collective interests.

1.3 Studies across Cultures

Various researchers have provided universal frameworks to compare values across cultures (Hofer and Peetsma [7]; Hofstede [8, 9]; Inglehart [10,11,12]; Schwartz [6,13,14]; Spini [15]. Researchers have been interested in whether some cultural similarities or differences (factors related to history, climate, socio-political structure or types of institutions within various regions or neighbouring countries that are geographically close) can influence the value priorities of groups. Schwartz and Bardi [16] noted that beyond the striking differences in the value priorities of groups there is a surprisingly widespread consensus regarding the hierarchical order of values. Average value hierarchies of representative and near representative samples from 13 nations exhibit a similar pattern that is replicated among school teachers from 56 nations and college students from 54 nations. Benevolence, self-direction and universalism values are consistently the most important; power, tradition and stimulation values are the least important; and security, conformity, achievement, and hedonism are in between. Schwartz [14] updated his value theory, presenting seven cultural value orientations: West Europe, English Speaking Countries, Confucian-influenced region, Africa and the Middle East, South Asia, East Europe and Latin America. He argued that some of the cultural similarities within various regions of the globe were partially due to the shared values, norms and practices (and possibly other factors such as histories, climates, socio-political structures and institutions) in geographically close neighbouring countries. Inglehart [12] provided a mapping of cultures of different countries and found that neighbouring countries actually clustered around one another.

Recent studies have increasingly shown the dynamic and complex interrelatedness of the sociocultural context and socialization values, as socialization value systems in all cultures (despite the specific cultural ideology or developmental model) include aspects of independence [17]. Obtaining values depends on the cultural context, and values are influenced by a state's ideology, policy and economic resources. Radical changes in Eastern

Europe have caused/led to a changing of values and several values have lost their importance [18]. Countries differ in their value system as a consequence of specific political and economic history, religion and traditions. Most of the former communist countries have adopted the political and economic system of the West. These transformations may have had an impact on student value preferences [7].

1.4 Estonian, Finnish and Lithuanian Studies about the Values of Adolescents

According to the general view, the extensive development of values takes place during the adolescent years. Being aware of the value priorities of adolescents, teachers can more successfully reach a consensual approach in values education. At the same time, the values of adolescents as well as the changes in values during the adolescent years have thus far been understudied. In most studies young adults (often college students) are the youngest participants [19].

Verkasalo, Tuomivaara and Lindeman [20] studied the values of 15-year-old pupils and their teachers, and also their beliefs about the values of the ideal pupil. The sample included Finnish comprehensive school pupils and their teachers ($n = 124$). The results showed that the most important value types were similar for pupils and teachers; for example, both groups valued benevolence and universalism. By contrast, the image of the ideal pupil held by pupils and teachers were distinctly different. The pupils imagined the ideal pupil to be obedient, polite, capable, intelligent, ambitious, wise and respectful of parents and elders, while the teachers imagined the ideal pupil to be honest and broad-minded, valuing self-respect, family security, true friendship and meaning in life.

Aramavičiūtė and Martišauskienė [21] studied the values of Lithuanian students. In order to reveal the degree of acknowledgment of the importance of values, Rokeach's [22] terminal values methodology was adapted to identify an acknowledgment range of 18 (final, higher, values-goals), and 18 instrumental values (making it possible to identify the terminal values) were applied. By attributing a certain range to a value, the students recognized the level of its importance and expressed their own attitude to the value itself. Simultaneously, the level of change in the learners' attitudes to the above-mentioned values over an eight-year period was identified. The longitudinal research was organized in three stages (1998, 2001 and 2005). The data at the cognitive level revealed that more than half of upper secondary learners attached the highest acknowledgment to the performing function of the higher purposes of life: mature love, true friendship, internal harmony and a happy family. The attitudes to the same values did not change much during the eight years: the most considerable positive change (9.1 per cent) was observed in the evaluation of the importance of a happy family, whereas the most negative change was for true friendship (19.1 per cent). The lowest proportion of upper secondary learners (every 7th–8th) recognized the significance of beauty, equality, escape, national security, pleasures and creation. On the other hand, in the course of time, the attitude to beauty and equality demonstrated a tendency to improve, the evaluation of creation indicated a tendency to decrease and fluctuations have been observed in the acknowledgment of national security. The analysis revealed relatively superficial perceptions of the purport of terminal and instrumental values (only less than half of the respondents perceived them properly). This proves the tendency that at upper secondary age, orientation to values as a source of pragmatism, utilitarianism and hedonism is increasing. On the other hand, the learners were able to perceive the purport of terminal values better than instrumental values. In such a case, failure to perceive the purport of instrumental values may impede the realization of terminal values as the more supreme or terminal purposes of life.

Mizera and Tulviste [19] compare the value priorities of Estonian students (the age of the respondents varied from 17 to 20 years) in cohorts of 2000 and 2009 using a questionnaire based on five value types from the Schwartz Value Survey (Self-direction, Achievement, Conformity, Power, and Tradition). The study revealed a significant increase in the importance of Self-direction, Conformity and Tradition during the last decade, while Power and Achievement did not show any statistically significant differences between the cohorts. At the same time, the hierarchical structure (the respective rankings of the values) had remained the same – values related to Self-direction and Achievement were most important, and Tradition least important for the respondents. Values related to Achievement were found to be more important to boys in the gender comparison.

1.5 The Aims of the Study

The aim of the current study was to compare value priorities held by Estonian, Lithuanian and Finnish students. The fact that Estonia and Lithuania share a communist past, despite their rapid development towards a modern market economy, creates a list of questions about the similarities and differences of teenagers' values. Despite the fact that Lithuanian and Estonian teenagers have lived most of their life in a democratic market-oriented society, there is the possibility that the formation of their values has been influenced by former generations – by parents and teachers whose values were formed under a totalitarian Soviet regime and Soviet traditions. Vihalemm and Kalmus state [23], supporting Sztomka's [24] and Vogt's [25] results, that the cultural condition of post-Soviet transitional societies is characterized by the parallel existence of symbols, values and identities brought about by "new" (Western) cultural flows and "old" (Soviet) traditions, values and identities. In addition, the members of society who faced the challenge of coping with the social, economic and political changes may refer to both the "old" and "new" cultural pool [23, p. 903].

The objective of the study was to answer two questions:

- (1) How do the value priorities of adolescents differ in the three countries?
- (2) Which are the most and least important values among adolescents in the three countries?

2. METHODS

2.1 Sample

The study involved 3,043 students (Table 1) from Finland, Estonia and Lithuania. The students studied in year eight (13–15 years old) and year eleven (16–18 years old).

Where the respondents lived was classified according to the number of inhabitants. The largest towns in all countries were classified as cities, and towns included settlements that had town rights. All the other living places were classified as country (rural area) communities. Information about where the respondents lived was missing in a few cases.

Table 1. Description of the sample of the three countries

	Estonia	Finland	Lithuania	Total
Sample size	1071	1076	896	3043
Boys	497	534	424	1455
Girls	574	542	470	1586
Year 8	509	805	617	1931
Year 11	562	271	279	1112
City	311	206	64	581
Town	228	611	595	1434
Countryside	528	259	235	1022

The Estonian sample was rather homogeneous in terms of gender and age (forms). In Finland and in Lithuania, the majority of the respondents were from year eight and mostly from towns. As all three countries cultivate an egalitarian school system then classes of the same age are similar in the countryside, towns and cities.

2.2 Instrument

Schwartz proposed [26] that four sets of values form higher-order value types: openness to change joining stimulation and self-direction values; conservation joining security, conformity, and tradition values; self-enhancement joining power and achievement values; and self-transcendence joining universalism and benevolence values. Hedonism type values shares elements with both openness and self-enhancement.

This study uses the five value types from Schwartz [5] that describe personal interests, such as achievement, power, hedonism and self-direction, and collective interests, such as benevolence. Those values are considered to be more important in „Western individualism“ and „market economy“ countries compared to communist Eastern European countries [16]. Estonia and Lithuania are post-communist countries; Finland is the country of market economy and long-lasting democracy. Schwartz and Bardi [16] find that Eastern European students and teachers are likely to attribute low importance to egalitarianism, intellectual and affective autonomy. Authors stress, that life under communism has clear value implications. Close supervision, strict rules and the suppression of initiative, risk and innovation all undermine autonomy values. This applies most obviously to intellectual autonomy values like curiosity and creativity; it also applies to affective autonomy values like exciting life, pleasure and enjoying life [16].

Korpinen [27] comparing Estonian and Finnish adolescence development depending on structure of society says: „...a comparison of the two countries defines a culture with attributes of Western individualism and Soviet collectivism. Marxist-Leninist collectivism is clearly manifest in the Soviet socialisation process. Individuals are not allowed personal goals; their behaviour is evaluated instead in terms of its relevance to the goals of the collective. A child is expected to develop a collective rather than a personal identity. ...the goal of Soviet education is to produce a Soviet citizen with certain personality characteristics and values, including obedience to official authority, loyalty to the communist homeland and a sense of social responsibility... Competition between groups, not between individuals, is the mechanism for motivating behaviour. In contrast, teaching in Finland has been more independent and offered more professional freedom. The vital point is to create values through which the child constructs new experiences and a healthy self-esteem“ [27].

The Schwartz measure [4,5] is presented using a Likert scale, and the value types are computed as the mean of single values. Schwartz' methodology assumes that people could rate different values in the same way (although according to Schwartz certain values oppose each other). The current study focused on value ranking. This method is derived from Rokeach and largely used by Inglehart. Inglehart [11] conceded that rating scales are better for assessing concrete levels of support for competing values. He claimed, however, that ranking scales provide the only effective way to demonstrate and test a theory related to prioritizing values [28].

Sixteen values were selected for the instrument. They were divided into the following five types of values: Benevolence: taking into account the opinion of others, having friends, honesty; Power: wealth, high position in society; Achievement: esteem from others, being successful, skills to master something, good marks; Hedonism: having a good time, modern clothes, athletics, having good looks; Self-direction: independence (self-made decisions), ability to work, knowledge. The choice of the number of values resulted from the research methodology – the authors proceeded from the idea that there should not be so many values that it becomes overly difficult for the students to determine the correct prioritized sequence.

The data was gathered using a large electronic questionnaire in which the values were addressed in one block of questions. Respondents ranked 16 values according to priority number. To obtain an overview of the adolescents' values, they were asked to assess 16 values and to put them in order of priority: place 1 meant the most important and place 16 the least important value.

Measurement invariance is a critical point of every comparative study. Several studies state that a questionnaire should measure identical constructs with the same structure across different groups [29, 30]. Kanengoni notes that measurement invariance is a complex issue that cannot be fully resolved [30]. Functional and to some extent structural equivalences cannot be directly tested using statistical methods. Expert judgements and qualitative methods are best to identify these forms of non-equivalence [31]. In the current study, functional and structural measurement invariance (the same understanding of the concepts originally developed in Estonian) was addressed on the basis of the translation of the questionnaire into Finnish and Lithuanian and then back into Estonian. Problematic expressions were then amended in the Finnish and Lithuanian versions of the questionnaire. Finally, the statements were discussed with those researchers whose mother tongue was Lithuanian or Finnish, so they used the same structure of the questionnaire but reformulated the questions in their mother tongue so they could understand the statements according to the original meaning.

2.3 Procedure

The study was carried out in 2007/08 in all three countries. All the participants completed the questionnaire using a computer at school. A teacher provided technical support (use of the computer or explanations of the questions) if necessary. The average time for completing the questionnaire was approximately 30 minutes.

The data was analysed using SPSS Statistics 17.0. Mean scores were calculated according to the ranked position of the value (the lowest mean score indicates the most important value and the highest mean score the least important value) as were standard deviations. The ranks for the values in the three countries were compared using the ANOVA and Tukey Post Hoc test.

3. RESULTS

The ANOVA test indicated that there were statistically significant differences between the three countries for all values. The descriptive statistics for each country and F statistics are given in Table 2. Mean scores are organized according to the five types of values explained in the method chapter.

Table 2. Descriptive statistics and comparison of the priority of values between the three countries (the smallest mean score indicates the most important value)

Value	Finland		Estonia		Lithuania		F
	M	SD	M	SD	M	SD	
Taking others' opinions into account	7.20	3.86	8.94	3.96	7.87	3.98	50.56**
Having friends	2.95	2.93	4.04	3.72	4.68	3.34	58.67**
Honesty	4.02	3.55	4.55	3.68	5.36	4.25	25.39**
Wealth	10.09	4.39	11.62	4.00	9.50	4.42	58.32**
High position in society	12.09	3.47	12.29	3.89	11.29	4.44	13.73**
Esteem from others	7.31	3.76	6.11	3.77	5.67	3.80	45.27**
Being successful	9.27	3.51	7.55	3.83	6.71	3.70	108.61**
Skills to master something	8.60	3.86	8.59	3.82	7.11	3.77	37.49**
Good marks	8.76	4.04	8.82	4.29	7.58	3.98	21.65**
Having a good time	5.87	3.48	9.34	3.90	9.88	3.61	324.72**
Modern clothes	12.32	4.24	12.04	3.86	11.61	4.04	6.16**
Athletics	7.77	4.51	9.04	4.22	8.96	4.46	25.43**
Good looks	11.38	3.65	10.62	4.16	10.42	4.05	14.79**
Independence (self-made decisions)	8.10	3.97	7.62	4.23	7.95	4.33	3.47*
Ability to work	10.28	3.97	8.08	4.10	11.82	4.45	172.04**
Knowledge	9.16	3.69	6.12	3.60	7.04	4.30	168.20**

* Statistically significant at the 0.05 level

** Statistically significant at the 0.01 level

When looking at benevolence values, Tukey's Post Hoc test indicated statistically significant differences between all the countries for all values in this type. The values *having friends* and *honesty* were the most important for Finnish students and the least important for Lithuanian students (all $p < .01$). The value *taking others' opinions into account* was most important for Finnish students and least important for Estonian students (all $p < .01$).

When looking at power values, Tukey's Post Hoc indicated some statistically significant differences in all the countries concerning all the values in this type. The value *wealth* was the most important for Lithuanian students and the least important for Estonian students (the difference level between Lithuania and Estonia and between Finland and Estonia was $p < .01$, between Finland and Lithuania was $p < .05$). The value *high position in society* was evaluated as more important by Lithuanian students than by students from Estonia and Finland (both $p < .01$), but there was no statistically significant difference between the rankings of Estonian and Finnish students.

When looking at achievement values, Tukey's Post Hoc test indicated the following statistically significant differences: The value *esteem from others* was the most important for Lithuanian students and the least important for Finnish students (difference level between

Lithuania and Finland and between Estonia and Finland was $p < .01$, between Estonia and Lithuania was $p < .05$). The value *being successful* was the most important for Lithuanian students and the least important for Estonian students (all $p < .01$). In addition, Lithuanian students considered the values *skill to master something* and *good marks* as more important than students from Estonia and Finland (all $p < .01$).

When looking at hedonism values, Tukey's Post Hoc test indicated statistically significant differences between the three countries. The value *having a good time* was the most important for Finnish students and the least important for Lithuanian students (all $p < .01$). Lithuanian students considered *modern clothes* more important than Finnish students ($p < .01$), but there was no statistically significant difference between the rankings of Estonian and Lithuanian students, or between Estonian and Finnish students (all $p > .05$). Finnish students regarded *athletics* more important and *good looks* less important than students from Estonia and Lithuania (all $p < .01$). There was no statistically significant difference between the rankings of Estonian and Lithuanian students.

Table 3. First six and last three values by priority for the three countries

Value	Priority order		
	Finland	Estonia	Lithuania
Taking into account others' opinions	4th – 5th		
Having friends	1st	1st	1st
Honesty	2nd	2nd	2nd – 3rd
Wealth		14th	
High position in the society	15th – 16th	15th – 16th	14th
The others' esteem	4th – 5th	3rd – 4th	2nd – 3rd
Being successful		5th – 6th	4th
Skills to master something			5th – 6th
Good marks			
Having a good time	3rd		
Modern clothes	15th – 16th	15th – 16th	15th – 16th
Athletics	6th		
Good looks	14th		
Independence (self-made decisions)		5th – 6th	
Ability to work			15th – 16th

The last value type in this study was self-direction. Tukey's Post Hoc test indicated that Estonian students considered *independence (self-made decisions)* more important than Finnish students ($p < .05$), but there was no statistically significant difference between the rankings of Estonian and Lithuanian students and between Lithuanian and Finnish students (all $p > .05$). The value *ability to work* was the most important for Estonian students and the least important for Lithuanian students (all $p < .01$). The value *knowledge* was the most important for Estonian students and the least important for Finnish students (all $p < .01$). Likewise, the priority list of values was different in the three countries (see Table 3).

4. DISCUSSION

After analysing the priorities of values among adolescents in Finland, Estonia and Lithuania, we can draw some parallels with Schwartz and Bardi's [16] results, which indicated that average hierarchies of values for representative and near representative samples from 13 nations exhibited a similar pattern that is replicated in school teachers in 56 nations and

college students in 54 nations. They indicated that benevolence and self-direction values were consistently the most important, power values the least important and achievement and hedonism values in between. The results of our study are similarly related to benevolence, power and achievement values, but self-direction values in our study were the least important (Lithuania) or between the least and most important. Hedonism values were spread over the scale – one (having a good time) was highly valued and one (good looks) considered the least important for Finnish students, and *modern clothes* was marked as the least important value for respondents of all three countries. Adolescents of all three countries reported *having friends* and *honesty* as the most important value (in Lithuania shared with esteem from others). The Finnish respondents ranked *having a good time* as the third most important value, while respondents from both Baltic States placed *esteem from others* in this position (in Estonia this was shared with *knowledge*). The least important in all the countries included *modern clothes* and *high position in society*, in Lithuania also *ability to work*, in Estonia *wealth* and in Finland *good looks*. Similar results were obtained by Verkasalo, Tuomivaara and Lindeman [20], who found that students valued the following most of all: security, honesty, inner harmony, health, responsibility, freedom and meaning in life. Of the broader value types, tradition and power were valued the least, and of the single values, social power and authority were assessed as the least important.

The comparison of the differences and similarities in the values of adolescents in different countries (at different social and economic levels of development) aroused two questions: firstly, how much can a country's social, political or economic situation influence the forming of adolescent values, and secondly, do these values influence an individual's behaviour, and if so, how much. The first research question has been discussed from several perspectives; for example, individualistic versus collective cultures (Fijneman, Willemsen and Poortinga [32]; Inglehart, Basanez and Moreno [33]; Ryckman and Houston [34]; etc.). The second research question has been analysed less so far. Thøgersen and Ölander [35] state: "Although most people with an interest in the relationship between basic values and behaviour – researchers as well as people with a more practical interest in the issue – seem to take for granted that values cause behaviour, the direction of the causality has hitherto not been scientifically documented. Since there are also theoretical arguments backing the view that a person's behaviour influences his or her value priorities, and because of the practical relevance of this issue, there is a need for scientific evidence to back claims of causal predominance in either direction" [33, p. 625].

It is interesting to mention that in the priorities of values among Estonian, Finnish and Lithuanian students the value *knowledge* is in different positions. That value was listed by Estonian students in position 3–4, by Lithuanian students 5–6, and by Finnish students 7–13. Previous studies by Hämäläinen, Kraav and Bizaeva [36], Kraav [37] and Kraav, Kala, Laihjala-Kankainen and Raschetina [38] indicated that Estonian students evaluated school progress and wisdom higher than Finnish and Russian students. School progress was the second value in priority for Estonian students [37]. It will be interesting to study how such a different position for values in the priority lists of adolescents relates to the time spent on learning activities and learning results in different countries.

The analysis of similarities and differences in the priorities of values among Finnish, Estonian and Lithuanian students according to value types from Schwartz [5] indicated that all benevolence values were considered more important by Finnish youngsters than by Estonian or Lithuanian youngsters. Despite the fact that all those benevolence values had a high position in all three countries observed, the above-mentioned result itself deserves attention when planning further studies to identify the nature and scope of the effect.

Hypothetical questions can be raised about the influence of the traditions and appreciation of collective values in post-communist countries. It would be interesting to observe the position of different benevolence values in the hierarchy and compare this with earlier studies. Kraav's [37] study indicated that honesty was the most important value for Finnish students, but in the priority order for Estonian students it was in fourth place, and for Russian students in sixth place. The current study indicates that honesty has risen in the hierarchy of values for Estonian youngsters.

One expectation of the study was that hedonism values would have a higher position in the priorities of values for Finnish adolescents than for Estonian and Lithuanian adolescents because of the recent transition to a market economy in the latter two countries. In Western cultures, adolescents are often portrayed or found to be self-absorbed, involved in hedonistic activities and seeking immediate pleasures rather than working towards "the greater good" [39,p. 143]. This proved to be the case when looking at two values: *having a good time* (Finnish students ranked it as the third value) and *athletics* (the sixth important value for Finnish students). Estonian and Lithuanian students had those values lower in their hierarchies.

5. CONCLUSION

Despite some differences between the priorities of values among adolescents in the three countries, the authors concluded that these three hierarchies are more similar than different. The result was unexpected because economic opportunities and sociocultural backgrounds differ quite broadly in the three countries. The most important result was that Finnish adolescents ranked benevolence values higher than Estonian and Lithuanian adolescents and this certainly deserves further study.

There are some limitations in the current study: measurement invariance was not checked using factor analyses, and therefore, it is possible that the measured construct is not identical in different countries. Chen [40] adds the lack of loading invariance to the lack of configural invariance, stating that where concepts have been translated they may not fully overlap across different cultures. In this instance, identical translated concepts were not used, but the researchers tried to find the concept in each culture in order to communicate the original idea. A common problem for intercultural studies is that social desirability causes a tendency to follow social norms; but that was one of the aims of current study. It is clear that such preferences for values are linked to social norms. Therefore, observed differences in student preferences (across cultural groups) could result rather than true differences across cultures.

COMPETING INTERESTS

The authors have declared that no competing interests exist.

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