

Value Orientations in the Digital Era: Comparison of Adolescents and Parents

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Abstract

The digital universe becomes a place where values and rules of communication are created, shaped and redefined, especially in children and adolescents. Objective. To compare value orientations of parents and adolescents and to reveal a possible role of user activity and digital competence in their value orientations. Methods. 313 adolescents aged 14-17 years and 356 parents of adolescents aged 14-17 years from five Russian Federal Districts appraised their user activity and excessive Internet use (based on EU Kids Online methodology), filled Mixed Activity Scale, Brief Index of Digital Competence, Schwartz's Short Portrait Values Questionnaire and Ten-item Personality Inventory. Results. Self-transcendence and openness to change values (benevolence, universalism, self-direction) dominate in adolescents but it is not because these values are more significant for them than for their parents but because conformity, tradition and security values are less important for them. Extraverts choose conformity and tradition less often and hedonism, stimulation and achievement more often than introverts. Higher level of agreeableness is related to higher benevolence and lower power value. Openness to experience is related to denying conformity and tradition values and to the importance of self-direction. Among the adolescents, user activity is not related to value orientations. Higher digital competence is related to weaker disposition to conformity. Among the parents, time spent online is related to power value, and combination of online and offline activities to hedonism and achievement. Among all the respondents, self-direction value is related to digital competence within the safety component. Conclusion. Data are discussed in accordance to the psychological model of digital socialization.

Keywords

Values, digitalization, user activity, digital competence, generations, adolescents, parents

1. Introduction

Nowadays, the digital universe appears to be a place where values and rules of communication are created, shaped and redefined, where new digital 'cultural tools' are mastered [1], where world and one's image is transformed [2]. For children and adolescents, the Internet appears to be a place where digital socialization happens [3, 4]. And it is perhaps where they shape new values that differ from age to age, depend on user activity experience, on what a person does online and other factors. Some authors even suggest to describe a specific phenomenon of "digital childhood" as a specific historical type of the childhood [5].

According to psychological model of digital socialization [1], digital aspects of social situation of development are crucial characteristic of the development defining direction and content of child's development as well as social expectations and demands in the system of his/her relationships. Using the term suggested in the extension of Bronfenbrenner's ecological systems' model [6], there is a

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techno-subsystem [7] that is becoming one of the most important ecological levels in the developmental perspective and that includes interactions between child, technologies and others.

However, taking into account that values and value orientations are universal in the world, digital universe raises a set of interesting questions: (1) Do values change with generations considering that these generations are going more and more digital? (2) Are differences in values between generations related to user activity and digital competence? Or maybe the differences are defined exclusively by personality traits?

For the authors of one of the most popular concepts of generations [8, 9] who offered to divide generations according to X, Y and Z classification, values and orientations act as one of criteria to differentiate generations along with social, historical and cultural factors. It is natural to assume that, by becoming a part of socialization of Z-generation children and adolescents, the digital world influences the children's value system and aspirations so that they might differ from and be unclear to the generations Y and X. Although the strict differentiation of generations based on analyzing social and cultural changes within one country is notional, the aim of comparing values of adolescents and adults and also comparing them to digital competence and user activity is a relevant task for modern studies on digital socialization of children and adolescents. The obvious difficulty for such comparisons is impossibility to differ between the role of socialization (including digital socialization) that is specific for generations and the role of age that is also important factor of values. However, such correlational comparisons could provide hypotheses for further research of values in "digital era".

The Schwartz model (see Fig. 1) provides a convenient methodology for such research that allows to assume that, for modern adolescents, self-transcendence and self-direction values are first, and conformity, tradition and security values recede into the background [10]. However, in our opinion, present value orientations, expectations for the future, and a vision of the future might be different for adolescents and youth. And their correlation is frequently left out by classical models. This especially applies to the digital universe with its changeability and transitivity, and its unapparent perspectives for further development.

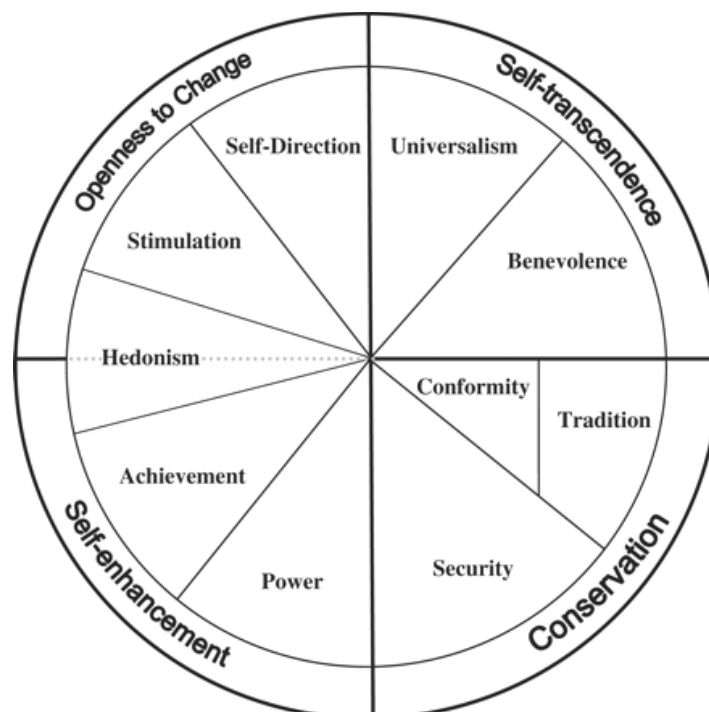


Figure 1: Schwartz Model of Value Orientations

The aim of this study is to compare value orientations of parents and adolescents and also to reveal a possible role of user activity and digital competence in what type of values they prefer.

2. Methods and Procedure

2.1. Sample

A total of 669 participants took part in the study: 313 adolescents aged 14-17 years (129 boys (41.2%) and 171 girls (54.6%) and 13 people did not state their gender), 356 parents of adolescents aged 14-17 years (51 males (14.3%) and 276 females (77.5%) and 29 respondents did not state their gender). Among the parents, 133 people (37.4) are parents of boys, and 192 people (53.9%) are parents of girls, and 31 respondents (8.7%) did not state the child's gender. The sample comprised respondents from the following towns and cities in Northwestern, Volga, Central, Southern, Far Eastern Federal Districts: Vologda (14.9%), Kirov (18.8%), Moscow (23.0%), Moscow Region (6.7%), Rostov-on-Don (17.6%), Khabarovsk (18.8%). The parents' age varied from 29 to 65 years (41.99 ± 5.78 years). It should be noted that although the majority of parents referred to Y generation, some of them should be considered as X generation [8;9]. However, the aim of this study was to compare value orientations in adolescents (Z generation) with adults (X and Y generation). Exclusion of parents from X generation led to the same patterns of results. The sample of adolescents and parents was balanced in accordance with the place of their residence and socioeconomic status of the family.

2.2. Methods

The following methods were used in the study:

1. The *user activity* was appraised in accordance with the methodology of EU Kids Online [11] and Russian Kids Online [12] and included items on how much time children and adolescents spend online during the week and over the weekend. The answers to the questions were evaluated according to the scale from “Almost do not spend” to “12 hours and more” with an hour difference in between the questions (Cronbach's alpha of 0.82 for adolescents and 0.70 for parents).
2. Mixed activity as an activity that is combined with the Internet usage at daytime and nighttime was measured by 11 items describing different activities. The participants were asked to appraise how frequently they use the Internet during each of the activities using a 5-point Likert scale (from “Never” to “Always”): “Immediately after awakening”, “While eating”, “During classes / at work”, “During school breaks / during work breaks”, “While doing homework / while doing housework”, “While communicating with friends”, “On the way (on the bus, subway or in the car)”, “In public places (cafes, museums, shops, etc.)”, “In the bathroom”, “Just before bedtime”, “When up at night” [13] (Cronbach's alpha of 0.83 for adolescents and 0.82 for parents).
3. Excessive Internet use was assessed in accordance with the methodology of EU Kids Online [9] using 7 items describing disturbance in communication, habitual activities and other areas of life due to activities on the Internet (Cronbach's alpha of 0.78) and evaluating the answers by a 5-point Likert scale (“I did not sleep or eat because of the Internet”, “I felt discomfort when I could not use the Internet”, etc).
4. Brief Index of Digital Competence [14] consists of 32 items and designed to measure four components of digital competence (knowledge, skills, responsibility (safety) and motivation) in four areas (work with content, communication, technosphere, consumption). Index of digital competence is measured using percentage of the maximum possible value – 100%.
5. Schwartz's Short Portrait Values Questionnaire [15] consists of 21 items and measures 10 types of values: power, achievement, hedonism, stimulation, self-direction, universalism, benevolence, tradition, conformity, security.
6. Ten-item Personality Inventory [16] consists of 10 items that are consistent with Big Five traits model and designed to evaluate distinctiveness of personal traits like neuroticism, extraversion, agreeableness, conscientiousness, openness to experience.

2.3. Procedure

The respondents filled in paper questionnaires in the presence of a specially trained interviewer. The staff of the Faculty of Psychology of the Lomonosov Moscow State University controlled and supervised the interviewers' work. Data collection was performed in autumn 2019.

2.4. Data processing

Data were processed in SPSS Statistics 23.0 using descriptive statistics, Student's t-test (Cohen's d were reported as effect sizes), correlational analysis.

3. Results and Discussion

3.1. Value orientations of adolescents and parents

Core values of the older adolescents are related to self-transcendence and openness to change and to which benevolence, universalism, self-direction are related, whereas values like tradition and conformity are more likely to be denied. For the parents, security, benevolence and universalism are the most important. They deny the importance of stimulation and power in their lives the most.

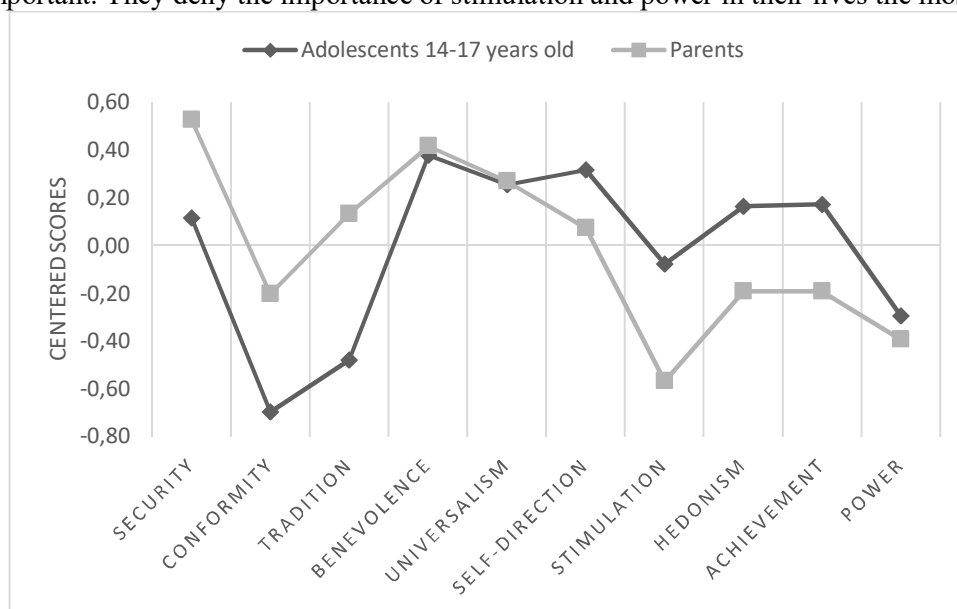


Figure 2: Value orientations of adolescents aged 14-17 years and parents (upon centering, the mean score for the respondent in the whole method is deducted from the mean score on the scale)

The statistical comparison shows that (Fig. 2), comparing to the parents, for the adolescents, security, conformity and tradition are less important, and self-direction, stimulation, hedonism and achievement are more important. This result is intuitively comprehensible. As an adolescent, it is especially important to enjoy your life and gain independence, achieve as much as possible, whereas, with age, security and following established practices become more important than freedom and achievements.

In our opinion, the other result is interesting: the core values of the adolescents - benevolence and universalism - are not higher but on the same level with the parents. In other words, this is not about something new but about the fact that these values became a priority for the adolescents because security, conformity and tradition are less important for them than for the adults.

From the digital socialization perspective [1;3;4], it could be hypothesized that in adolescents early Internet-related experiences are related not to higher benevolence or universalism but to less emphasize on conformity, security and tradition that is related to the opportunity to see different social relationships.

Table 1

Comparison of value orientations of adolescents aged 14-17 years and parents: Student's t-test

Value orientations	Adolescents aged 14-17 years		Parents		Student's t-test	Cohen's d effect size
	Mean	Standard deviation	Mean	Standard deviation		
Security	0.12	0.84	0.53	0.79	-6.43**	-0.50
Conformity	-0.70	1.11	-0.20	0.79	-6.61**	-0.52
Tradition	-0.48	0.99	0.13	0.81	-8.61**	-0.68
Benevolence	0.38	0.76	0.42	0.72	-0.65	-0.05
Universalism	0.26	0.69	0.27	0.62	-0.21	-0.02
Self-direction	0.32	0.86	0.07	0.76	3.86**	0.30
Stimulation	-0.08	0.94	-0.57	0.93	6.72**	0.53
Hedonism	0.16	0.92	-0.19	0.90	5.00**	0.39
Achievement	0.17	0.82	-0.19	0.82	5.63**	0.44
Power	-0.29	0.90	-0.39	0.83	1.46	0.11

* - $p < 0.05$, ** - $p < 0.01$

No differences in value orientations were found between the boys and girls and also between the parents of boys and the parents of girls (see Table 1). The male parents said about the importance of power for them more often than the female parents ($t=4.20$, $p < 0.01$, $d=0.64$). The older parents show a little bit less disposition to hedonism value ($r=-0.17$, $p < 0.01$) which can be explained by common age-related changes. Comparing to the adults, for the adolescents, hedonism appears to be more important. And for the younger parents, hedonism appears to be more important than for the older ones. Perhaps, that is with age when people are more often willing to live, as the famous saying goes, "not for satisfaction but for conscience".

3.2. Preference of value orientations with different personality characteristics: comparison of adolescents and parents

Differences in value orientations often raise a question whether we talk about differences in personality characteristics between generations or about the fact that, in a new situation, the same personality characteristics start to dictate other values and ways of their implementation.

Table 2

Relations of value orientations and personality characteristics among adolescents and parents (correlations are shown in the form of adolescents/parents)

Value orientations	Extraversion	Agreeableness	Conscientiousness	Emotional stability	Openness
Security	-0.08/-0.05	-0.04/0.07	-0.03 / 0.23**	-0.08/-0.10	-0.08/0.07
Conformity	-0.28**/-0.32**	-0.12*/-0.23**	0.02 /-0.12*	-0.01/-0.17**	-0.26**/-0.29**
Tradition	-0.30**/-0.28**	0.04 /0.05	-0.02/ -0.04	-0.02/-0.11*	-0.34**/-0.25**
Benevolence	0.16**/0.04	0.27**/0.22**	0.13* /0.10	0.06/0.12*	0.10/0.03
Universalism	0.03/-0.04	0.09/0.17**	0.00/0.05	0.05/-0.02	0.04/0.00
Self-direction	0.10/0.23**	0.03/0.12*	0.02/0.18**	0.10/0.23**	0.23**/0.32**
Stimulation	0.17**/0.11*	0.11/0.02	-0.04 /-0.07	0.07/0.14**	0.21**/0.10
Hedonism	0.23**/0.19**	0.08/0.01	-0.12* /-0.05	0.00/-0.02	0.14*/0.10
Achievement	0.14*/0.14**	-0.12* /-0.12*	0.12* /-0.05	-0.09/-0.05	0.10/0.03
Power	-0.08/-0.04	-0.33** /-0.31**	-0.06 /-0.18**	-0.07/-0.04	-0.03/-0.12*

* - $p < 0.05$, ** - $p < 0.01$

According to the results of the correlation analysis, both the adolescents and parents' preference of certain values correlates to similar personality characteristics. The extraverts choose conformity and tradition more seldom and hedonism, stimulation and achievement more often. With a high level of agreeableness, the benevolence value is important, and power value is not important. Openness to experience is related to denying conformity and tradition values and to the importance of self-direction.

All these relations are clear and natural. But it is important that they are true for both the adolescents and the parents. This result is in line with universality of value orientation [10] although the profile of them could be different for adolescents and adults (Table 2).

3.3. Value orientations, user activity and digital competence

Among the adolescents, no time on the Internet, no disposition to excessive user activity are related to any of value orientations ($r < |0.12|$). The disposition to combine different activities with online activities is typical of the adolescents for whom hedonism is important ($r = 0.17$, $p < 0.01$). For the parents, the time spent on the Internet is related to power value ($r = 0.22$, $p < 0.01$) and has a weak positive correlation with hedonism ($r = 0.13$, $p < 0.05$) and a weak negative correlation with benevolence ($r = -0.13$, $p < 0.05$). Combining online and offline is more common for the parents with stronger disposition to hedonism and achievement ($r = 0.13$, $p < 0.05$) and weaker disposition to universalism ($r = -0.15$, $p < 0.01$).

Digital competence is related to weaker disposition to conformity, especially among the adolescents, although the differences in values of correlation coefficients between the adolescents and parents do not reach the acceptable level of significance. In relation to safety, digital competence is related to the importance of self-direction. One could speculate that better skills for safety online are related to wider opportunity to various online activities and as a result more opportunity to find and compare different opinions. Importance of self-direction could provoke intention to realize it online safely and vice versa better safety skills could allow to become more self-directed because of higher confidence. These patterns seem to be closer related to general effects of informational society than to the age and experience of digital socialization as a child [2].

Among the adolescents, the importance of stimulation is in general related to different components of digital competence which is natural, given that the Internet offers maximum options for interesting experience that, basically, reflects stimulation value (Table 3).

Table 3

Relations of values and digital competence among adolescents and parents

Value orientations	Index of Digital Competence - knowledge	Index of Digital Competence - motivation	Index of Digital Competence - skills	Index of Digital Competence - safety	Index of Digital Competence - overall
Security	0.02/0.03	0.11/0.11*	-0.02/-0.01	-0.05/-0.05	0.02/0.02
Conformity	-0.26**/-0.12*	0.04/0.04	-0.22**/-0.09	-0.23**/-0.13*	-0.26**/-0.12*
Tradition	-0.12*/-0.09	0.02/0.06	-0.12*/-0.07	-0.13*/-0.12*	-0.14*/-0.08
Benevolence	0.07/0.01	-0.02/0.10	0.03/0.03	0.03/0.03	0.04/0.06
Universalism	-0.02/0.00	0.00/0.05	0.06/0.05	0.17**/0.05	0.08/0.05
Self-direction	0.13**/0.11*	-0.12*/0.01	0.13*/0.08	0.20**/0.20**	0.15*/0.17**
Stimulation	0.19**/-0.02	-0.01/-0.12*	0.13*/0.05	0.16**/0.04	0.17**/-0.01
Hedonism	0.06/0.11*	-0.05/-0.14**	0.02/0.07	0.05/0.15**	0.03/0.09
Achievement	0.06/-0.03	-0.02/-0.01	0.06/-0.06	-0.02/0.08	0.03/-0.08
Power	-0.07/0.03	0.00/-0.08	-0.03/-0.05	-0.17**/	-0.10/-0.10

* - $p < 0.05$, ** - $p < 0.01$

4. Conclusion

The major limitation of the study is its correlational design that did not allow to distinguish between effects of generation (especially social and ecological situation including techno-subsystem) and age. Moreover, although most of parents in our sample were formally from generation Y, there were some of them from generation X according to the classical typology [8;9]. While borders between generations should be considered as flexible and exclusion of them did not affect patterns of results, this study concentrates on general comparison of adolescents ("generation Z") with adults. In general, some results seem to be important for the further discussion of values changes in the digital era and their relationship to personality, user activity, digital competence.

1. In the structure of value orientations of modern adolescents, self-transcendence and openness to change values (benevolence, universalism, self-direction) dominate. But it is not because these values are more significant for them than for their parents but because conformity, tradition and security values are less important for them. Although in this study we could not differentiate effects of social situation (generation) and age, results are in line with the hypothesis that early digital experience provoke more flexibility as opposed to conformity and tradition [5]. In other words, we suggest that that digital socialization do not lead to higher openness to new ideas and behaviors than in parents but to less rigid point of view of different opportunities [1]. The other differences in value orientations between the adolescents and parents could possibly reflect age distinctions: stimulation, hedonism and achievement are more important for the adolescents than for the parents.

2. Personality characteristics of both the parents and the adolescents are equally related to the preference of certain value orientations. In other words, it is not argued that the new generation is a totally new kind of people who see values differently [10]. More likely they have their own personality characteristics that distinguish them from the previous generations [8;9], and for this reason they hold certain values in their lives. Thus, both among the parents and the adolescents, the extraverts choose conformity and tradition less often and hedonism, stimulation and achievement more often. With a high level of agreeableness, benevolence value is important, and power value is not important. Openness to experience is related to denying conformity and tradition values and to the importance of self-direction.

3. Among the adolescents, user activity is not related to value orientations which overturns the hypothesis on impoverishment of the value sphere of the adolescents who spend "too much time" on the Internet. Those for whom hedonism is important more often combine the Internet with other activities, and it makes sense: unpleasant activities can be combined with something pleasant without losing any productivity. From the perspective of techno-subsystem [7], it could be hypothesized that in adolescents not user activity but the content of this activity and its characteristics (e.g., combining online and offline activities) is important for value orientation [1].

4. Among the parents, the relation of time spent online to power value, and combination of online and offline activities to hedonism and achievement, in our opinion, is consistent with the model of digital socialization [1]: for the adults, that is values that appear to be an "engine" of their user activity, and that is not observed among the adolescents who do not need such "engine" for online activities. A combination of online and offline activities allows you to fulfil more tasks easier (and get distracted by pleasant online activities). And, for many adults, a need for power is easier to satisfy online than offline.

5. The correlation between digital competence and value orientations does not depend on group (adolescents versus parents). Greater digital competence (but not user activity) is related to weaker disposition to conformity. Probably, the reason is a better perspective and opportunity to compare different opinions. Among all the respondents, self-direction value is related to digital competence within the safety component. Probably, this correlation is bidirectional: the desire to be self-directed requires that the adolescents and adults protect themselves from the dangers related to self-direction. And the better you ensure safety, the better you understand the importance of self-direction.

6. Among the adolescents, the importance of stimulation is in general related to different components of digital competence which is natural, given that the Internet offers maximum options for interesting experience that, basically, reflects stimulation value [5;7].

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