ADOLESCENT VALUES AND RISK BEHAVIOR: PREDICTING DEVELOPMENTAL PATHS IN YOUTH

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Abstract

This paper reports on empirical survey data conducted with 437 Croatian adolescent participants in 2017. A total of 194 male (44,4%) and 243 female (55,6%) adolescents in the age from 15 to 19 years old were examined. The research is aimed at studying the relation between risky behaviour and adolescent beliefs and value orientations, with special emphasis on the most important risk and protective factors. The paper analyses major developmental theories of adolescent risk behaviour aetiology, with emphasis on the most prominent risk and protective dimensions. The survey instrument consisted of 4 major elements: the first part was aimed at socio-demographic traits. The second survey part examined personal beliefs and value orientations. The third part examined risk behaviour and the last survey part focused on leisure time activities. Descriptive and inferential statistical methods were employed. The results were examined using the t-test for independent samples, ANOVA, correlation analysis and hierarchical regression analysis. Results show multiple significant statistical differences based on gender, with boys reporting significantly higher risky alcohol behaviour ($p<,001$) and material value orientation ($p<,001$), while girls report significantly higher traditional value orientation ($p<,001$) and humanistic value orientation ($p<,001$). Older adolescents report significantly higher participation in risky alcohol behavior ($p<,001$) and younger adolescents report significantly higher traditional value orientation ($p<,01$). Academic success established a significant difference between participants in risky alcohol behaviour ($p<,001$), with participants who have high academic success score lower on risky alcohol behaviour than participants with average and low academic success. A significant negative correlation was established between risky alcohol behaviour and traditional value orientation ($r= -0,30$, $p<,001$) and between risky alcohol behaviour and humanistic value orientation ($r= -0,13$, $p<,01$). Participants reported significant positive correlation between risky alcohol behaviour and material value orientation, ($r= 0,22$, $p<,001$). Results of hierarchical regression analysis for risky alcohol behaviour indicate academic success and traditionalistic orientations as protective factors ($p<,001$), while materialistic orientations and more leisure time activity positively predict risky behaviour ($p<,01$).

I. Introduction

Reflections on the concept of value lie in the focus of philosophy, but also in many other social sciences such as psychology, sociology, political sciences, and economics. Values are used to characterize individuals, cultural groups and whole societies, to explain the motivational bases of attitudes and behavior. Contemporary pedagogical authors emphasize the relevance of the topic of value in postmodern times as well as the need to research the same, pointing out that the crisis of contemporary society is actually a crisis of values in that society. The risky forms of behaviour of young people are closely related to their value orientation.

According to developmental theories, adolescents are susceptible to different family, peer, media and other socialization factors. Everyday adverse situations to which children are exposed to in family and beyond it, such as adverse impact of environment and psychosocial stressors, can provoke development of adolescent risk behaviour (alcohol consumption, drugs, school absenteeism

and risk sexual behaviour). Such behaviours present developmental risk not only for children and adolescents, but also for others in their surroundings [1].

The consumption of alcohol in a modern society becomes a commonly accepted behaviour, and part of the growing culture, although it is a detrimental to both the individual and the society as a whole.

II. Theoretical background

Questioning the value system goes back as far to the works of ancient philosophers such as Aristotle, Plato or Socrates. Work by Thomas Aquinas, Kant, Moore or T. Campanella led to scientific analyses established by R. H. Loetz, who believed values to be "*either conscious or unconscious standards of orientation and fundamental guidelines that led individuals and groups in their choice of action*" [2]. Although values are the fundamental concept of philosophy, we believe that it is justified to investigate them from the perspective of education, i.e. give them a pedagogical discourse, given that values of young people are a very interesting subject of research, as they enable insight into the (dis)continuity of new generations, and therefore modern societies. The ongoing process of socialization in youth is more exposed to different environmental impacts than it is with the older population. By studying young people one can, at the same time, gain knowledge on the existing processes and relationships in a society, but also reveal trends that anticipate probable future change [3]. Values are an organized set of general beliefs, opinions and attitudes about what is right, good and desirable. Rokeach considers values to be "*a permanent belief that some particular mode of behaviour, or the ultimate state of existence, is personally or socially preferable to some other way of behaviour*" [4]. Bolscho presents two concepts of determining value: the Inglehart's and Schwartz's concept.

a) Ingelhart's concept lies in studying the process of globalization and changes in the Western world. It starts from the thesis that social development is associated with a specific structure of value, meaning that value orientations are actually consequences of political and economic development. It differentiates three value orientations: traditional, modern and postmodern. The last two are the result of the industrial revolution. Postmodern orientation replaces materialistic values (aimed at meeting the needs of consumption and safety) with post-material values (humanistic values). Ingelhart considers that (according to Maslow's theory of necessity) physiological and safety needs have a materialistic nature, whereas social needs - the need for respect and self-confirmation can be characterizes as post-material needs. By following Maslow's theory of necessity, post-material needs occur only by saturation of material needs, only then the value orientation changes. The progress of post-materialist values, in contrast to materialistic reflection, can be seen in growth of ecological sensitivity, tolerance, cosmopolitanism, and multiculturalism.

b) Schwartz's concept explains altruistic behaviour. According to Schwartz, two sets of norms affect the behaviour of an individual: personal and social, while individual actions are proportional to the intensity of the personal norm. Each individual perceives personal norms as a form of moral obligation. Social norms "activate" under social pressure. The concept rests on the activation of the personal system of norms in specific situations, where altruistic behaviour depends on the intensity of the sense of moral obligation an individual has while offering help [5]. Values represent an important, almost central component of our self and personality, distinct from attitudes, beliefs, norms, and traits. Therefore, values are critical motivators of behaviors and attitudes [6].

III. Method

III.1. **The aim** of empirical research was to examine the relation between risky behaviour and adolescent beliefs and value orientations.

III.2. **The objective** of this research was to examine the role of sociodemographic traits, adolescent beliefs and value orientations as risk or protective factors and finding possible correlation with adolescent risk behaviour.

III.3. **The research problem** was to describe relations between sociodemographic traits, adolescent beliefs and value orientations with adolescent's risky behaviour. Moreover, research problem is to identify the most important risk and protective factors in aetiology of adolescent risky behaviour.

III.4. Hypotheses

H1 There is a significant difference in the likelihood of adolescent risky behaviour with respect to the socio-demographic traits.
H2 There is a significant difference in adolescent beliefs and value orientations with respect to the socio-demographic traits.
H3 Significant correlation between risky behaviour and adolescent value orientations is expected.

III.5. Participants
The research was conducted with 437 adolescent participants aged 15-19. A total of 194 male (44,4%) and 243 female (55,6%) adolescents were included.

III.6. Instrument
A multidimensional four-part questionnaire was implemented. The first part consisted of questions concerning sociodemographic traits. The second part consisted of questions concerning examined personal beliefs, which are divided in three value orientations with satisfying Cronbach's Alpha coefficient: Traditional value orientation [(α=,75); People should go to church regularly; People should live in premarital purity; The family should live harmoniously in peace; I go to church every Sunday]; Material value orientation [(α=,82); Wealthy people are happy; Power and reputation in society bring happiness; Money can buy everything]; Humanistic value orientation [(α=,68); Friendships are important; Love is the purpose of life; Honesty is important in friendships; Leisure time is best spent with friends, I volunteer and do charitable work; Volunteering evokes pleasure and happiness].The third part consisted of questions concerning adolescent risk behaviour. The fourth part consisted of questions concerning leisure time activities as passive and active leisure engagement.

III.7. Procedure
The research was conducted in the 2017 with high school students from Croatia. A paper survey was implemented during regular school activities. Written consent from the participants and their parents was obtained prior to the research. The students filled questionnaire in the presence of the researcher who helped them clarify certain questions and checked if they fully completed the questionnaire.

IV. Results and discussion
Table 1 presents results of t-test for independent samples on gender differences and risky alcohol behaviour and value orientations.

Table 1 T-test for independent samples on gender differences

Variable	Gender	N	M	SD	t
Risky behaviour alcohol	M	194	12,98	5,57	**3,80*****
	F	243	11,17	4,38	
Traditional value orientation	M	194	12,22	3,81	**-3,77*****
	F	243	13,62	3,88	
Humanistic value orientation	M	194	26,89	3,58	**-4,28*****
	F	243	28,39	3,65	
Material value orientation	M	194	8,60	3,21	**8,64*****
	F	243	6,22	2,56	

Note: $p < ,05*$; $p < ,01**$; $p < ,001***$

The t-test on gender differences showed significant differences between boys and girls, with boys reporting higher risky alcohol behaviour (t=3,80, p<,001, M=12,98), which is consistent with the findings of past research [7], and material value orientation (t=8,64, p<,001, M=8,64), which is consistent with previous studies [8, 9]. On the other hand, girls reported significantly higher traditional value orientation (t=-3,77, p<,001, M=13,62), which is in contrary to previous research [10], and humanistic value orientation (t=-4,28, p<,001, M=28,39), which is in line with previous research [9].

Table 2 T-test for independent samples on school type differences

Variable	School type	N	M	SD	t
Risky behaviour alcohol	Gymnasium	245	11,93	5,26	-,24
	Vocational	192	12,04	4,71	
Traditional value orientation	Gymnasium	245	12,62	4,15	**-2,32***
	Vocational	192	13,48	3,52	
Humanistic value orientation	Gymnasium	245	27,40	3,890	**-2,06***
	Vocational	192	28,14	3,38	
Material value orientation	Gymnasium	245	7,80	3,02	**4,09*****
	Vocational	192	6,60	3,08	

Note: $p < ,05*$; $p < ,01**$; $p < ,001***$

The t-test for school type differences showed significant differences between participants and their value orientations, with Gymnasium students reporting higher material value orientation (t=4,09, p<,001, M=7,80), and Vocational school students reporting higher on traditional value orientation (t=-2,32, p<,05, M=13,48) and humanistic value orientation (t=-2,06, p<,05, M=28,14).

Table 3 T-test for independent samples on age differences

Variable	Age	N	M	SD	t
Risky behaviour alcohol	Younger	218	10,76	4,37	**-5,17*****
	Older	219	13,18	5,33	
Traditional value orientation	Younger	218	13,62	3,93	**3,38****
	Older	219	12,37	3,78	
Humanistic value orientation	Younger	218	27,71	3,86	-,05
	Older	219	27,73	3,51	
Material value orientation	Younger	218	7,17	3,02	-,65

Older	219	7,37	3,17	

Note: p< ,05*; p< ,01**; p< ,001***

The t-test on age differences showed significant differences between participants in risky alcohol behaviour (t=-5,17, p<,001), with older students having higher scores (M=13,18) than younger (M=10,76). These results are consistent with previous research [7]. Furthermore, t-test on age differences showed significant differences between participants in Traditional value orientation (t=3,38, p<,01), with younger students reporting higher traditional value orientation (M=13,62).

Table 4 T-test for independent samples on father's educational level differences

Variable	Father's education	N	M	SD	t
Risky behaviour alcohol	Lower	262	11,84	4,843	-,78
	Higher	166	12,23	5,39	
Traditional value orientation	Lower	262	13,25	3,81	1,49
	Higher	166	12,69	3,91	
Humanistic value orientation	Lower	262	27,83	3,91	,70
	Higher	166	27,57	3,15	
Material value orientation	Lower	262	6,90	3,01	**-3,23****
	Higher	166	7,89	3,14	

Note: p< ,05*; p< ,01**; p< ,001***

The t-test on father's educational level differences showed significant differences in Material value orientation, with adolescents whose fathers had higher educational level reporting higher Material value orientation (t=-3,23, p<,01, M=7,89). This is in contrary to the previous study [8]. The t-test on mother's educational level differences didn't show any significant differences.

Table 5 T-test for independent samples on family structure

Variable	Family structure	N	M	SD	t
Risky behaviour alcohol	Both parents	356	11,80	4,58	-1,47
	Single parent	81	12,71	6,61	
Traditional value orientation	Both parents	356	13,34	3,92	**4,01*****
	Single parent	81	11,45	3,44	
Humanistic value orientation	Both parents	356	27,74	3,60	,26
	Single parent	81	27,62	4,08	
Material value orientation	Both parents	356	7,22	3,09	,69
	Single parent	81	7,49	3,11	

Note: p< ,05*; p< ,01**; p< ,001***

The t-test on family structure showed statistically significant differences in Traditional value orientation (t=4,01, p<,001). Adolescents who have both parents received higher scores (M=13,34) than adolescents who have single parent (M=11,45).

Table 6 ANOVA for academic success

Variable	Academic success	N	M	SD	F
Traditional value orientation	Low	93	12,39	3,72	
	Average	181	12,81	3,85	2,93
	High	163	13,54	4,01	

Humanistic value orientation	Low	93	27,55	3,94	
	Average	181	28,02	3,24	1,01
	High	163	27,49	3,98	
Material value orientation	Low	93	7,66	3,53	
	Average	181	6,94	2,85	1,96
	High	163	7,42	3,08	
Risky behaviour alcohol	Low	93	13,81*	5,77	
	Average	181	12,61*	5,12	**19,23*****
	High	163	10,21 *<1,2	3,77	

Note: p< ,05*; p< ,01**; p< ,001***

A one-way ANOVA was implemented in the analysis of the importance of adolescent's academic success. Academic success established a significant difference between participants in risky alcohol behaviour [$F_{(2,434)}=19,23$, p=,000], with participants who have high academic success score lower on risky alcohol behaviour (M=10,21) than participants with average (M=12,61) and low academic success (M=13,81). These results are in line with previous study [11].

Table 7

Correlation
analysis
matrix

Variable		**1**	**2**	**3**	**4**	
Risk behaviour alcohol (1)	R	-	,215***	-,295***	-,133**	,032
Material value orientation (2)	R	,215***	-	-,231***	-,296***	-,071
Traditional value orientation (3)	R	-,295***	-,231***	-	,382***	,287**
Humanistic value orientation (4)	R	-,133**	-,296***	,382***	-	**,500*****
Leisure time activity (5)	R	,032	-,071	,287***	**,500*****	-
	N	437	437	437	437	437

Note: p< ,05*; p< ,01**; p< ,001***
Correlation matrix legend: Risk behaviour alcohol (1), Material value orientation (2), Traditional value orientation (3), Humanistic value orientation (4), Leisure time activity (5).

The correlation matrix shows significant relation between risky alcohol behaviour and value orientations. There was a negative, weak correlation between risky alcohol behaviour and traditional value orientation r(435)= -0,30, p<,001, and a negative weak correlation between risky alcohol behaviour and humanistic value orientation r(435)= -0,13, p<,01. Furthermore, there was a positive weak correlation between risky alcohol behaviour and material value orientation, r(435)= 0,22, p<,001. These results are in line with previous studies, such as Miller et al. [12] and Romero et al. [13] who found that traditional value orientation negatively correlates with risky alcohol behaviour. Goff and Goddard [14] point to the humanistic value orientation as a protective factor in engaging in risky behaviour, and to the material value orientation as a risk factor in engaging in risky behaviour. Leisure time activity correlates positively with humanistic value orientation r(435)=0,50, p<,001 and with traditional value orientation r(435)= 0,29, p<,01.

Table 8 Regression analysis for risk behaviour alcohol (N= 437)

Risk behaviour alcohol		Model 1			Model 2		
	B	**SE(B)**	**β**		**B**	**SE(B)**	**β**
Gender	-1,58	,46	**-,15****		-,72	,49	-,07
Age	-,56	,21	**,13****		,41	,21	,09

School type	-,50	,25	**-,11***	-,19	,25	-,04
Father education	,17	,24	,04	,16	,23	,03
Mother education	,03	,16	-,01	,002	,15	,001
Family structure	,35	,30	-,05	,08	,29	,01
Academic success	-1,77	,37	**-,27*****	-1,53	,36	**-,23*****
Material value orientation				,17	,08	**,11***
Traditional value orientation				-,29	,06	**-,22*****
Humanistic value orientation				-,09	,07	-,06
Leisure time activity				,13	,05	**,14****
R²		**,135**		**,204**		
R Square Change		**,135**		,068		
F for change in *R²*		**9,60*****		**9,09*****		

Note: p< ,05*; p< ,01**; p< ,001***

The hierarchical regression analysis for risky alcohol behaviour, with a total of 20% of the variance explained, predicts older male adolescents with lower academic achievement from vocational schools to be at greater risk in Model 1 (p<,01). Model 2 indicates academic success and traditionalistic orientations as protective factors (p<,001), while materialistic orientations and more leisure time activity positively predict risky behaviour (p<,01).

V. Conclusion

Society values are the basis of its preservation and prosperity, which makes researching the system of youth values a focus of pedagogy as a science, but also as a practical discipline. The notion of upbringing is inextricably related to the value system adopted by young people, and the research results represent a signpost towards systematic, intentional and curriculum-minded upbringing. Young people are exposed to different forms of risky behaviour, alcohol consumption being just one of them, which becomes a big problem when it comes to growing up and maturing in modern societies. The prevention of all forms of risky behaviour in youth becomes an imperative of educational activity. Described research has confirmed traditional and humanistic value orientation as a protective factor from risky behaviour of young people related to alcohol consumption, while materialistic orientation proved to be a risk factor. These value dimensions are consistent with the *theory of social control*, which emphasizes the importance of adolescent bonds to conventional institutions in preventing delinquent behavior [15]. Also, school commitments and school success, as well as planned, active and structured leisure time of youth, prove to be a link to a humanistic and traditional value orientation, i.e. a protective factor in relation to alcohol consumption. The obtained results have been confirmed by a series of research and represent clear guidelines in reflection and conceptualization of the institutional educational activity in today's postmodern society, burdened with a materialistic view of the world. In modern education that prefers positivistic outcomes, and ignores educational activities, it is necessary to emphasize the importance of adoption of values that are shown to be protective factors in the prevention of risky behaviours of children and young people.

VI. Literature

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