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**THE CHILD AND THE CITY: URBAN ENVIRONMENT'S VALUE**  
**AND PSYCHOLOGICAL SPACE SOVEREIGNTY**

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*Abstract*

The present research aims to investigate the probability of personal space sovereignty influence on forming propensity for vandal behaviour in the urban environment in children. In our assessment experiment, we use personality questionnaires for investigating children's life space sovereignty and their motivational propensity for vandal behaviour. The research sample consists of 155 children, aged 11 – 13, living in a megapolis. The respondents are divided into three groups by types of psychological space sovereignties: broken, normative, and excessive. The research data are processed using comparative statistics and linear regression models. The analysis shows that both broken and excessive sovereignties of children's psychological space are significant risk factors for developing their propensity for vandalism in the urban environment. The children with normative sovereignty of psychological space demonstrate less propensity for vandal behaviour. We have come to the conclusion that sovereignty of psychological space is one of the most significant predictors of the child's propensity to choose such destructive strategy of interaction with the urban environment as vandalism.

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**Keywords:** Childhood, urban environment, vandalism, psychological space sovereignty.

## 1. Introduction

Human is the only creature on the Earth who consciously and purposely changes the environment all their life since early childhood. Artificial, in particular, urban environment has been developing as a result of human activity. Urban environments are actively created by citizens of almost all ages. While adults mainly use normative means of the urban environment transformation, children and adolescents often choose unauthorized destructive strategies of interacting with and changing the urban environment. Children's craving for changes does not end with creating elements of the urban environment, they change elements created by others, refusing to perceive these elements as given, as a result of other's efforts.

Transformation itself can be socially-approved or asocial. The majority of uncontrolled transformations of the urban environment by children are asocial and vandal. Nevertheless, society is quite indulgent toward vandal children's behaviour because it is considered by adults as a psychological specificity of forming children's personality, their sovereignty and independence. Herewith, permissiveness toward children destructive behaviour does not favour the development of children's understanding of the urban environment value. On the contrary, adults' permissiveness fixes children's destructive behaviour model (Agapov, & Malkov, 2006). Thus, there is a situation of ambiguous social attitude toward children's vandalism. The brightest example is Graffiti. According to legislation norms, Graffiti is an asocial activity that violates the law, brings destructive changes into the urban environment, and evolves anxiety and depression among citizens observing it (Ellaway et al., 2009). On the other hand, modern art critics consider Graffiti and Street-art to be one of modern culture manifestations (Martha Gama-Castro et al., 2016).

Vandalism and appreciating attitude toward the artificial environment are polar points of the transaction continuum "Human – Environment." The problem arises when these polar points exist as complementary in the child's motivational sphere and behaviour. Children adopt constructive and destructive ways of interactions with urban environments mainly through operant conditioning and vicarious learning. Vandalism (destroying things, spoiling walls, making inscriptions and pictures in unauthorized places and etc.) is one of destructive strategies of interaction and communication with material, social and informational urban environment. Vandal behaviour gives children an opportunity for self-manifestation in a society or in subgroups, declare personal problems, mark the location or show self-identity (Zlokazov, 2014). We should take into account that children demonstrate vandal behaviour in local spaces (home, school, etc.) mainly in early childhood. Coming to adolescent period, children extend their space of activities and test their adopted strategies of communication with the environment within the town.

Nevertheless, not many investigations aim at answering the following questions: What specific factors define children's choice and their further attachment to destructive strategies of communication with the urban environment? What are the possible reasons of devaluating the urban environment by children? Some studies show that significant risk factors of developing children and adolescent aggression are low level of parental attachment, abnormal parental styles of upbringing, high family income, destructive parental upbringing motivation, unacceptable relationships with peers and inadequate social atmosphere in school (Kruzhkova et al., 2018; Dou, 2015). All these factors lie in the base of forming a child's personal psychological space and feeling of safety. According to A.B. Eisman et al. (2016), encouraging the extension of children's rights and opportunities (Psychological Empowerment) can help increase the probability of their positive prosocial behaviour and decrease aggressiveness. In other words,

creating favourable conditions for developing normative sovereignty of the child's psychological space and personal activeness can decrease the risk of the child's vandal behaviour as a destructive strategy of interaction with the urban environment and its subjective devaluation. Anyhow, there is still a lack of understanding the factors of forming and decreasing the propensity for vandal behaviour.

## **2. Problem Statement**

Vandalism can be applied by a child as a destructive strategy of interaction with the urban environment, but there is a lack of research on significant factors influencing the propensity for vandal behaviour. In particular, the correlation between particular child psychological space sovereignties and types of vandal behaviour is unknown.

## **3. Research Questions**

To solve the research problem, we need to answer the following research questions:

- Can personal psychological space sovereignty predict the propensity for children's vandal behaviour in the urban environment?
- How can broken, normative or excessive types of children's psychological space sovereignty contribute to children's propensity for destructive interactions with the urban environment in the form of vandal behaviour?
- What motives of vandal behaviour correlate with children's psychological space sovereignty?

## **4. Purpose of the Study**

The purpose of this study was to define the correlation between the characteristics of psychological space sovereignty and children's propensity for vandal behaviour in the urban environment.

## **5. Research Methods**

The research sample is 155 respondents in total. They are children aged 11 – 13, 70 boys and 85 girls, living in a megapolis.

We use the following diagnostic instruments:

- The questionnaire "Sovereignty of psychological space," developed by Nartova-Bochaver (2014). It aims to measure sovereignty as a condition of personal borders in different spheres of life activities which provide human personal and social prosperity. The questionnaire is standardized and has a satisfactory content, divergent, and convergent validity. The results are interpreted by means of seven scales: cumulative rate of sovereignty of psychological space (SPS), sovereignty of physical body (SPB), sovereignty of territory (ST), sovereignty of habits (SH), sovereignty of values (SV), sovereignty of things (STh), sovereignty of social connections (SSC).
- The questionnaire "Motives of vandal behaviour," developed by Vorobyeva, Krzhkova, and Ostrikoval (2015). It diagnoses the propensity for vandalism and leading motives of this

destructive behaviour. Results are described by ten motives of vandal behaviour: acquisitive vandalism (AcV), aggressive vandalism (AgV), tactic vandalism (TV), investigating vandalism (IV), esthetic vandalism (EsV), existential vandalism (ExV), protesting vandalism (PV), conforming vandalism (CV), adopting vandalism (DV), entertaining vandalism (EnV).

The used standardized questionnaires meet all the requirements for the scientific diagnostic instruments, and have satisfying validity and reliability.

## 6. Findings

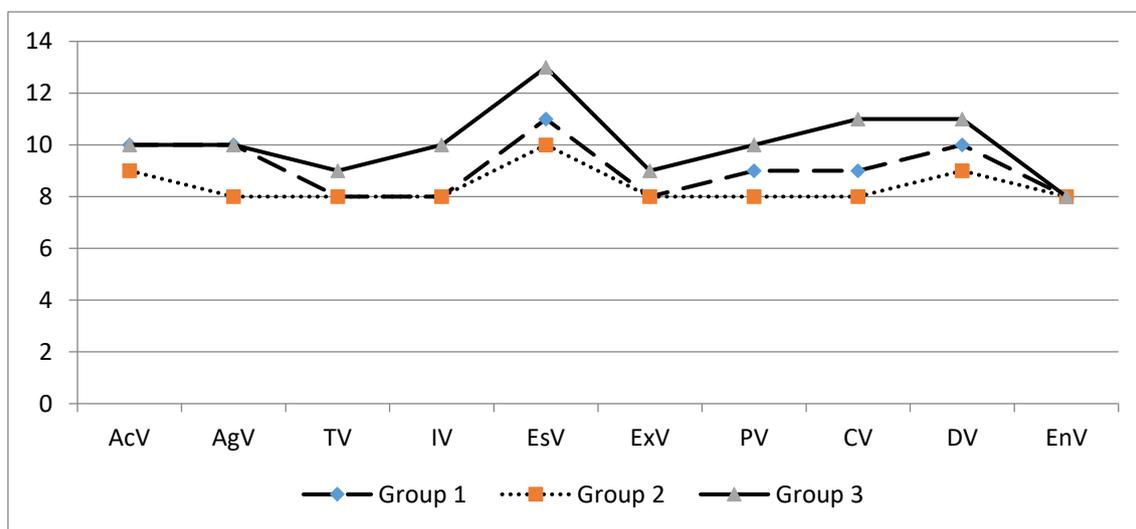
The data were divided into three groups by the level of cumulative rate of psychological space sovereignty:

The first group (Group 1) – children with low SPS cumulative rate (broken sovereignty) - consisted of 13 children (8,4% of the total sample).

The second group (Group 2) – children with average SPS cumulative rate (normative sovereignty) - consisted of 73 children (47,1% of the total sample).

The third group (Group 3) - children with high SPS cumulative rate (excessive sovereignty) - consisted of 69 children (44,5% of the total sample).

Descriptive and comparative statistical analyses in each group discovered statistically reliable difference between almost all motives of vandal behaviour. The Kruskal-Wallis H test did not show any significant difference between the groups ( $p \leq 0,01$ ), except the case of acquisitive vandal motives (AcV). The median values of vandal motives in each group of children were demonstrated at Figure 1.



**Figure 01.** Median values of vandal behaviour motives in groups with different psychological space sovereignty

Further we tested possible stipulation of the children's propensity for vandalism by psychological space sovereignty characteristics in each group of the children. We used the linear regression method with step-by-step exclusions of statistically unreliable elements of the model (see the results in Table 01). Statistical processing of the data was done with the software IBM SPSS Statistics V.19.

**Table 01.** The results of regression analysis

Motives for vandal behaviour	Linear regression model					
	Coefficient of multiple determination (R <sup>2</sup> )	Fisher coefficient (F)	Significance level (p)	Models' elements	Regression coefficient	Significance level of model's element (p <sub>i</sub> )
<b>Group 1 - children with low sovereignty cumulative rate (SPS)</b>						
Acquisitive vandalism	68,7	4,40	0,036	Sovereignty of physical body	-1,036	0,011
				Sovereignty of territory	-0,871	0,033
				Sovereignty of habits	0,811	0,008
				Sovereignty of social connections	1,044	0,015
Aggressive vandalism	46,0	4,25	0,046	Sovereignty of social connections	0,821	0,017
				Sovereignty of values	0,638	0,052
Investigating vandalism	55,6	13,75	0,003	Sovereignty of habits	-0,745	0,003
Conforming vandalism	62,7	5,04	0,025	Sovereignty of physical body	-0,417	0,084
				Sovereignty of values	0,603	0,041
				Sovereignty of social connections	0,973	0,005
<b>Group 2 - children with average sovereignty cumulative rate (SPS)</b>						
Tactic vandalism	15,0	6,16	0,003	Sovereignty of things	-0,287	0,013
				Sovereignty of habits	0,250	0,027
Investigating vandalism	15,9	6,60	0,002	Sovereignty of things	-0,253	0,034
				Sovereignty of social connections	-0,232	0,051
Existential vandalism	7,4	5,70	0,020	Sovereignty of social connections	-0,273	0,020
<b>Group 3 - children with high sovereignty cumulative rate (SPS)</b>						
Acquisitive vandalism	10,0	7,35	0,009	Sovereignty of values	0,314	0,009
Aggressive vandalism	13,3	19,31	0,002	Sovereignty of habits	0,365	0,002
Investigating vandalism	10,2	7,63	0,007	Sovereignty of social connections	-0,320	0,007
Esthetic vandalism	9,5	7,06	0,010	Sovereignty of social connections	-0,309	0,010
Existential vandalism	15,1	5,87	0,005	Sovereignty of territory	-0,234	0,043
				Sovereignty of social connections	-0,323	0,006
Protesting vandalism	7,7	5,62	0,021	Sovereignty of social connections	-0,278	0,021
Conforming vandalism	12,0	9,12	0,004	Sovereignty of social connections	-0,346	0,004

## 7. Conclusion

We have got the following answers to our research questions:

- Based on comparative and regression analysis, we can consider the characteristics of the children's psychological space sovereignty to be quite reliable predictors of children's propensity for vandal behaviour.
- The respondents from the group with average (normative) total rate of psychological space sovereignty demonstrate less propensity for vandal behaviour. The children from the groups with low (broken) and high (excessive) psychological space sovereignty have a higher propensity for the vandal behaviour strategies.
- In all the three groups of the children, the graph of median values (Figure 1) has the same peaks, meaning that the most marked motives of vandalism in the groups are esthetic (to make the environment better according to one's own ideals), conforming (to be pushed by a group), and adoptive (to be initiated by some discomfort). This finding reflects general child motivation regularity and reveals the need for further specification of vandal behaviour factors and predictors.
- Complex determination correlation model reveals the vandal behaviour motives characteristic for the specific types of psychological space sovereignty:
  - Thus, the children from the first group (with low sovereignty level) are prone to vandal behaviour based on acquisition motives (grabbing others' property for their own profits and possessions) on the background of deprivation of physical body sovereignty, lack of their own territory, but having the opportunity to choose friends and lifestyle by themselves. Aggressive vandalism is less probable for this group. Possibility of vandal behaviour manifestation grows together with the increasing sovereignty of social connections and values. Active external interference in the children's daily routine can activate investigating vandalism. Moreover, the problems of their own body perception and inadequate extension of freedom in the choice of friends and life values favour the wish to imitate vandal behaviour of other group members (conforming vandalism).
  - The correlations between different vandal behaviour motives and sovereignties in the group of children with average (normative) level of psychological space sovereignty significantly differ from the first group. Relative independence in the choice of one's own life style and behaviour patterns and, at the same time, strong anxiety because of the lack of personal things can provoke tactic children vandalism (as a means to seek some other aims). Similar problems with personal possessions and strict control of social contacts can incentivize the child to excessive curious, destructive experimenting (investigating vandalism). The motive of self-affirmation realized through attracting social attention (the existential motivation of vandalism) increases if the child is limited in an independent choice of partners in interpersonal communications.
  - In the group of the children with excessive sovereignty, almost all the significant statistical models include the sovereignty of social connections. Thus, deprivation of children's freedom in the choice of friends can provoke investigating, conforming, protesting, and esthetic vandal behaviour. Such deprivation,

together with the absence of children's own territory, is highly probable to form the propensity for existential vandalism. But the most specific vandal motives for this group are acquisitive and aggressive, which go together with unlimited freedom in the choice of life values and lifestyle accordingly.

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