
Articles

HOME ENVIRONMENT AND FAMILY ATTITUDES: HOW DO THEY INTERRELATE?

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Резюме

In the current paper, the interrelation between the friendliness of the home environment and family attitudes is investigated. The friendliness of the home environment includes three parameters: the number of functions provided by home (functionality), the congruence of these functions with inhabitants' needs (relevance), and home attachment. We assumed that friendly home environment positively contributes to the inhabitants' family attitudes, and positive family attitudes, in turn, predict a perceived friendly home image. The sample consisted of 393 participants (295 females and 98 males), students of different faculties of the Higher School of Economics. We used the Functionality of the Home Environment Questionnaire, the Relevance of the Home Environment Questionnaire (short version), the Home Attachment Questionnaire, and Attitudinal Familism Scale. The results of the regression analysis show that family attitudes are significantly related with such parameters as the Home Attachment, Pragmatism, Protection, Plasticity, Self-Presentation, Ergonomics, and Development of the home environment. And, vice versa, almost all the parameters of the functionality and relevance of the home environment have been significantly impacted by family attitudes. Home Attachment is significantly mutually related with attitudes towards family. The study's results can be helpful in designing home environment, in forming individual profiles of preferred home environment preferences, and intensification home' resource function as a factor of family atmosphere's improvement.

Keywords: functionality and relevance, home environment, home attachment, family attitudes.

Home as a special living environment

Home is a special living environment tightly connected with the biographies of inhabitants and the family as a whole. While at home, people change it according

to their needs and personalities, and the house, in turn, sets the life style parameters of people who live there. We can say that the house is a text (palimpsest) that changes along with the text of the lives of its inhabitants (Mitin, 2005).

Mechanisms of interaction between home and family are presented in philosophical and socio-anthropological works, mainly of phenomenological direction. E. Husserl (1970) was one of the first philosophers who emphasized an inseparable connection between a person and the place where they live. Human life is always "being-in-the-world," and place (including home) contributes to the person's existence. Following him, M. Heidegger (1971) argued that "dwelling" is not only a routine activity that people perform at home but also is a way of existing in the world. Independently on whether the individual spends time at home or is away from it; the very home image, "home archetype", influences their personality. But how is this connection maintained and kept?

The contemporary phenomenologists believe that the origin of personality is rooted in nonverbal "being-at-home" experiences of childhood and inextricably associated with the place, space, and environmental objects (Case, 1996; Korosec-Serfaty, 1985). Moreover, they use a term "appropriation" (Aneignung), which was introduced into environmental psychology in Europe (Graumann, 1996) and initially, in its originally Hegelian-Marxian conception, described the dialectical nature of the person-environment relationship. This term suggests that the world becomes a truly human habitat only by means of mental and bodily activities of people. This understanding is very familiar to the cultural-historical tradition emphasizing a role of the sociocultural and interpersonal context as a subject of the appropriation and a source of human development.

According to the phenomenological understanding, the person and their environment should also be considered in unity, and the characteristics of human behavior are set not only by objective environmental qualities, but also by what significance and meaning these qualities have for a person. "The meaning of an environmental object, as, for example, a toy or weapon, home or pub, garden or wilderness, is not restricted to a person environment relation, but for all practical purposes is an inter-subjective matter of people-environment relations" (Graumann, 2002, p. 111). D. Case (1996) understood home as 'routine' + 'togetherness'. The dialectical processes 'freedom from routine - routine' and 'together - alone' reveal how fundamental 'routine' is to the definition of home, and that home is not necessarily an isolation of self from others but rather a place that simultaneously separates and connects people. State of personality defines which of these functions are more preferable to the person in the current moment but home includes all of these functions.

After J. von Uexküll, every living thing is included in the so-called functional circle: being in the environment, it signifies firstly objects of the outside world according to its own needs (Merkwelt), and then, if necessary, appropriates or transforms them (Wirkwelt) (Kull, 2001). Relationship between the living thing and its environment is based on the feedback from the environment. M. Muchow, also influenced by J. von Uexküll, acknowledged that life space in everyday language use refers to the space "in which one lives" (Muchow & Muchow, 1980).

Moreover, home is not only a place, home and being-at-home (Dovey, 1985; Graumann, 1996) models perfectly our life world which is primarily our habitat, as the human way of living is always inhabiting or dwelling.

In line with phenomenological understanding of people-in-the-world are some famous environmental theories. Thus, E. Brunswik (1956) in his Lens Model emphasized a high person's selectivity in perceiving environmental objects which is led by person's needs and activities. According to J. Gibson (1986), every person selects affordances from an "objective" environment, satisfying their needs, and, as a result, inhabitants' representations of the home are always different and connected with their current events and tasks. Further, J. Gold (1980) in his behavioral geography also wrote about the circular connections between a person and an environment.

Home Environment and Family Attitudes

Recent studies and theories also keep on the idea of mutual relations between a person and their environment. Thus, person-environment fit theory examines the degree to which individual and environmental characteristics match (Edwards, Caplan, & Harrison, 1998; Kahana, Lovegreen, Kahana, & Kahana, 2003).

Theory of behavioral residues investigates everyday manifestations of personality due to which inhabitants personalize their homes (Gosling, Ko, Mannarelli, & Morris, 2002). We would also mention the developmental theory of place attachment which discovered processes underlying both attachment to place and attachment to people in this place (Morgan, 2010). This theory is of very high value for the current study as it states that these attachments emerge in parallel with affected experiences of place in childhood. As grief, empathy, love, and pleasure develop and manifest in the specific place, social features, such as attitudes toward family, are also expected to be connected with this place (in our case – home). Finally, researchers use a term "people-environment congruity" that refers to the interrelation between the person and their (especially, residential) environment (Moser, 2009).

The family as an integral agency is a special inhabitant of home. However, the general rules of interaction with the environment, apparently, remain. Over time, circumstances change the physical environment and the family's life (death, birth, marriage, unemployment or retirement) (Case, 1996). All of these events reflecting the stage in the family life-cycle are followed by changes in home as a physical environment and, in turn, in the meaning of home. The family appropriates their house through everyday routine duties.

Last but not least we could also point out social anthropologists' works emphasizing mutual relationships between a person and their home (Ingold, 2002). A. Lang (1993) asked what the real research subject should be: the house developing with the family or the family with the house. Independently on what happens earlier or later, the family gets pertinent homes matching their personalities. "Typically, people tend to express satisfaction with their home environments, and "misfits" may be "solved" via...modifying the home environment,

changing life-style and behavior ...moving again, and so forth" (Rapoport, 1985, p. 278).

One of the lines in social-anthropological research is investigation into home and family rituals, e.g., blessing of the home. O.B. Naumova studied a family order of the Kazakhs in connection with the 'house-yurt' design and ensuring the privacy of family members (Naumova, 2014). The low need for a private space in traditional people is explained by the high "threshold of shame" in collectivistic cultures.

On the contrast, in Western individualistic cultures, it is very important, to separate from parents and to keep one's own household. Thus, to leave a parents' home and live in lodgings means a lot to Dutch students. It is considered the most important step in one's life, a real rite of passage into adulthood, domestic independence, and public citizenship (Cieraad, 2010). Moreover, it is a point of no return: even when the student fails in college, he or she will not go back to live with his or her parents. "Failing in college is one thing, but failing to live independently is a major embarrassment" (Ibid., p. 87). To sum up, reality depends of the meaning of home that could be an object of attachment or separation, depending on a culture and a development task, but participates in the family's life, anyway.

Surprisingly, there are very few sociological and psychological studies devoted to the interaction of the physical home environment, especially, material home-making, and the characteristics of family life. One of the first studies in this area demonstrated an interesting relationship between the amount of affective meaning giving by the family members to the domestic objects and a family atmosphere (Csikzentmihalyi & Halton, 1981). Families who invested more meaning in the domestic environment also appeared to be warmer and closer in their relations. In line with this outcome, the French sociologist J.-C. Kaufmann (1992) describes the way new couples organize their relationship through reaching an agreement in seemingly trivial routine practices – not only in defining clean and dirty, but also, for example, in ironing – whether or not to iron jeans and T-shirts. In line with these observations, S. Saegert (1985) has shown that the decision to buy a house or move is almost always connected with the structure and dynamics of the family, for example, the estimated number of children.

Other data was also obtained in K. Lijk's work carried out by sociological methods in Estonia (Lijk, 1985). The relationship of the population density with the level of emotional intimacy in the family was studied. 98 couples with children, living mainly in two- or three-bedroom apartments, where the number of people per room was 1.6, were examined. It turned out that more than half of the respondents were not satisfied with their living conditions (they complained that the rest of the family disturbed them, and they have had no way to be alone). It is noteworthy that, according to these results, satisfaction with the family and marriage was not affected by density, but by the opportunity to get a piece of privacy at home.

In Russian research, V. N. Kunitsyna and E. A. Yumkina (2012) investigated what is referred to in Russian as "semeinyi uklad" (family lifestyle) that is defined as a stable form of the family members relationship intended toward keeping the family integrity and transmission of values from older to younger generations. The authors emphasize that family lifestyle, along with the composition and structure

of family, interpersonal relations, contacts with the outside world, also includes internal environment of home. One more study was devoted to the adaptation of adopted adolescents to the foster families (Nartova-Bochaver, Reznichenko, & Kovaleva, 2017). There it was revealed that Functionality, Relevance, and Family Allocentrism scores were higher in parents than in children whereas Home Attachment scores were not. It was shown as well that similarity of the home representations in children and parents impacted the family attachment but not home attachment.

Thus, the home determines family atmosphere, and the state of a family, in turn, defines how inhabitants feel their home as a part of the world (Nartova-Bochaver & Kuznetsova, 2018).

Current study

Our study is aimed at investigating into the connection between family attitudes and the home environment. Our research was based on the principles of ecological psychology and our model of *the home environment friendliness*. Relations between a person and their home environment are settled through a number of levels (Nartova-Bochaver, Bochaver, Dmitrieva, & Reznichenko, 2016):

1. The pre-psychological level is specified by the quality of housing – metric area, its location, whether it is temporary or permanent for inhabitants, and so on.

2. The objective level is set by the physical qualities of the home as a living environment. They are presented in **the functionality of the home environment**. It means that the environment efficiently meets challenges, for which the house was designed, built or purchased. Physical environment is a limit and an opportunity for home experiences: given places, spaces and things allow only certain ‘affordances’ or uses.

3. The intermediate subject-objective level is specified by the degree of **relevance** between **home functions and the inhabitants’ needs**. In other words, it means that these home functions are congruent to their needs. Promoting human well-being requires looking beyond singular effects of environmental features and considering people’s overall relation to their environment. This leads researchers to look at home as a place where “people-environment” congruity is crucial, and to propose a framework of analyses of the conditions of congruity between objective and subjective assessments of environmental stressors in relation to the individual and social expression of well-being (Moser, 2009). To sum up, this level concludes a system of affordances – ‘relations between abilities to perceive and act and features of the environment’ (Chemero, 2009, p. 150).

4. The subjective level is set by deep personal feelings, meanings, and attitudes to the house and is presented by **home attachment**. Home attachment is associated with a personality’s meaning and values, socio-cultural and information processes. Hence, home attachment affects psychological health and well-being (Lewicka, 2011).

The more relevant a home environment is, the more functions there are, the more strongly inhabitants are attached at their homes, and the higher the home friendliness level in general (Khachaturova & Nartova-Bochaver, 2017).

We assume that people living in friendly homes and spending more time there are attached to their families more strongly and have more positive attitudes towards a family. Vice versa, people who have positive family attitudes more likely participate in domestic activities, and, as a result, get a more positive image of their homes. Finally, as domestic activities depend on the gender role, we expect that all results obtained in the current study could be influenced by gender but, in absence of previous results, we will do without any explicit hypothesis regarding gender.

Thus, we hypothesize:

1. A friendly home environment contributes positively to the inhabitants' family attitudes.
2. Positive family attitudes positively predict a friendly home representation.

Method

To test these hypotheses, we have conducted an empirical study using four questionnaires.

Participants. The sample included 393 participants (295 females and 98 males), students of different faculties of the Higher School of Economics. They were aged between 16 and 25 (the median age was 19.2, $SD = 7.8$).

Materials. To study the main variables we have used the following questionnaires.

1. *The Functionality of the Home Environment Questionnaire* measures the opportunities that a house provides for its residents. It consists of 55 statements and includes four scales: Development, Stability, Protection, and Pragmatism (Nartova-Bochaver, Dmitrieva, Reznichenko, & Kuznetsova, 2015). Cronbach's alpha reliability coefficient of all scales in our research is from .75 to .92, in the original research – from 0.75 to 0.89. Responses on these scales were scored on a seven-point scale ranging from 1 (my home cannot ... at all) to 7 (my home can ... very much) to indicate the degree of the participants' agreement with the statements. Examples of FHEQ items are these: "My home can ... demonstrate the level of wealth, give an opportunity to sleep when I want to, afford an opportunity to have pets," and so on.

2. *The Relevance of the Home Environment Questionnaire* reflects the extent to which home environment is congruent to the inhabitants' needs. A short version of RHEQ contains 35 items (a full version included 108 items) and consists of seven scales: Privacy, Ergonomics, Home Detachment, Plasticity, Historicity, Potential, and Self-Presentation (Nartova-Bochaver et al., 2015). Cronbach's alpha reliability coefficient of all scales in our research varies from .73 to .85, in the original research – from 0.69 to 0.88. Responses on these scales were scored on a five-point scale ranging from 1 (does not apply to me at all) to 5 (fully applies to me). Examples of RHEQ items are these: "At home I rest well and quickly recover," "My house can 'tell' a guest about my victories and hobbies," "I like that there are a lot items of furniture and interior in my house," and so on.

The method of expert evaluations of the tasks and Ant Colony Optimization (Olaru, Witthoft, & Wilhelm, 2015) were used to create a short version of RHEQ. The questionnaire was reduced to 35 items. The quality of the updated question-

naire was tested in the framework of the Item Response Theory. Psychometric analysis showed that a short version of RHEQ has satisfactory characteristics and can be used in the study.

3. *The Home Attachment Questionnaire* consists of 14 statements and has one scale that reflects the overall level of home attachment and emotional intimacy between an individual and the house (Reznichenko, Nartova-Bochaver, & Kuznetsova, 2016). Cronbach's alpha reliability coefficient in our research is .89; in the original research it equals .93. Responses on these scales were scored on a 5-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Examples of HAQ items are these: "I feel that my house is a part of me", "My house means a lot to me", "I am ready to invest my efforts and soul in a house where I live", and so on.

4. We chose *The Attitudinal Familism Scale* (Lugo Steidel & Contreras, 2003) to study respondents' attitudes towards a family. Attitudinal familism has been defined as a cultural value that involves an individual's strong identification with and attachment to his or her nuclear and extended families and strong feelings of loyalty, reciprocity, and solidarity among family members (Cauce & Domenech-Rodriguez, 2002).

There are English and Spanish versions of this questionnaire but it has not been adapted to the Russian sample until now. Thus, first of all, we chose the English version of questionnaire for the aims of our research. Three experts-psychologists independently translated the AFS English version. One of the experts has a certificate in translation from English into Russian. All versions of the items were discussed, and the most appropriate items were selected and edited. After this, two short pilot studies on the small samples of 30 and 35 students were conducted in order to get feedback from respondents and to check the items distribution at a glance. After every pilot study, instructions and wordings were slightly changed.

The Attitudinal Familism Scale includes 18 items and consists of four scales: Familial Support, Familial Interconnectedness, Familial Honor and Subjugation of Self for Family. Responses on these scales were scored on a 10-point Likert-type scale ranging from 1 (strongly disagree) to 10 (strongly agree). Examples of the AFS items are these: "A person should rely on his or her family if the need arises", "Aging parents should live with their relatives", "Children should live with their parents until they get married", and so on. Psychometric analysis of the AFS questionnaire showed that the internal consistency of the overall scale was high. Analyses of each subscale indicated adequate levels of internal consistency for all subscales. Cronbach's alpha reliability coefficient of all scales in our research varies from .71 to .84, in the original research – from .83 to .88. Each scale of the AFS questionnaire is one-dimensional, in other words, it measures only one construct. Thus, the psychometric analysis showed that the AFS questionnaire has a satisfactory quality and can be used without additional modifications. However, the adaptation of this questionnaire to the Russian sample is in progress in our current research.

Procedure. Respondents filled in the questionnaires individually and anonymously. Data was collected from students as a part of their individual home work

in a course on “Psychology” during 2016–2017. Participation was voluntary and evaluated as an elective (extra) part of their credit in this subject.

Results

We used SPSS 21.0 for statistical data processing. To test our hypothesis we used pair regression analysis.

Firstly, we tested the first hypothesis of our research: a friendly home environment contributes positively to the inhabitants’ family attitudes.

The Impact of the Parameters of the Home Environment and Gender on Attitudes towards a Family

Since the variables describing the home environment were highly correlated, regression analysis with the including of two predictors was used. One of these predictors was Home Attachment, because it has strong correlation with the variables of the AFS questionnaire. Thus, all the results of regressions are at control of this variable.

Table 1 demonstrates descriptive statistics of the parameters of the home environment and family attitudes. Table 2 shows that various aspects of family attitudes are significantly related with scales of the Home Attachment, the FHEQ, and RHEQ (the significance level, $p \leq .05$). Home attachment is significantly correlated with all the scales of the AFS questionnaire. Pragmatism has a significant positive impact to Familial Support and Subjugation of Self for Family scales. Protection is positively related to Familial Interconnectedness and Subjugation of Self for Family.

Plasticity, Self-Presentation, Ergonomics, and Development also have a significant impact on Familial Interconnectedness.

Our results show that there are gender differences in Familial Interconnectedness — women have higher scores than men.

Figure 1 also schematically demonstrates our regression model.

Then, we tested the second hypothesis of our research: positive family attitudes positively predict a friendly home representation

Impact of Attitudes towards a Family on the Parameters of the Home Environment

Since the variables describing family attitudes were not strongly correlated, regression analysis with the including of all the predictors was used. Tables 3 and 4 show that almost all the parameters of the functionality and relevance of the home environment have been significantly impacted by the AFS components. But there are not significant relations for Potential (the RHEQ) and Stability (the FHEQ).

Table 5 shows that Familial Support and Subjugation of Self for Family are significantly related with the scale of the Home Attachment.

Table 1

Descriptive statistics of the parameters of the Home Environment and Attitudes towards a Family

Variable	Mean	SD	Median	Min	Max
Familial Support (logits)	1.08	1.55	0.94	−6.36	6.47
Familial Interconnectedness (logits)	1.08	1.51	0.86	−5.23	5.63
Familial Honor (logits)	−0.75	1.83	−0.50	−6.06	6.14
Subjugation of Self for Family (logits)	0.38	2.19	0.58	−5.70	6.17
Pragmatism	5.44	0.98	5.60	1.00	7.00
Development	4.95	1.11	5.00	1.00	7.00
Stability	5.28	1.27	5.57	1.00	7.00
Protection	4.71	1.04	4.73	1.00	7.00
Historicity	0.03	1.44	0.00	−5.69	4.69
Home Detachment	−0.03	0.53	−0.06	−1.48	1.42
Plasticity	−0.01	0.59	0.00	−1.99	1.69
Privacy (logits)	−0.04	0.66	0.00	−2.14	1.87
Potential	−0.06	1.26	−0.01	−4.05	3.42
Self-presentation	−0.03	1.05	−0.01	−4.06	3.06
Ergonomics (logits)	−0.04	0.99	0.00	−3.45	2.80
Home attachment	3.45	0.86	3.50	1.00	5.00

Table 2

Impact of the parameters of the Home Environment and Gender on Attitudes towards a Family (linear regression analysis)

Dependent Variable	Predictor	B	SE B	t	R ²
Familial Support	Home attachment	0.637	0.087	7.265	0.13
	Pragmatism	0.235	0.095	2.454	0.14
Familial Honor	Home attachment	0.627	0.108	5.771	0.08
Subjugation of Self for Family	Home attachment	0.967	0.124	7.744	0.14
	Pragmatism	0.275	0.136	2.011	0.16
	Protection	0.295	0.129	2.280	0.16
Familial Interconnectedness	Plasticity	0.348	0.166	2.086	0.14
	Self-presentation	0.293	0.097	3.004	0.14
	Ergonomics	0.296	0.105	2.798	0.13
	Protection	0.267	0.089	2.988	0.14
	Development	0.249	0.081	3.084	0.13
	Home attachment	0.575	0.086	6.640	0.11
	Gender	0.445	0.187	2.375	0.01

Figure 1

Impact of the parameters of the Home Environment and Gender on Attitudes towards a Family

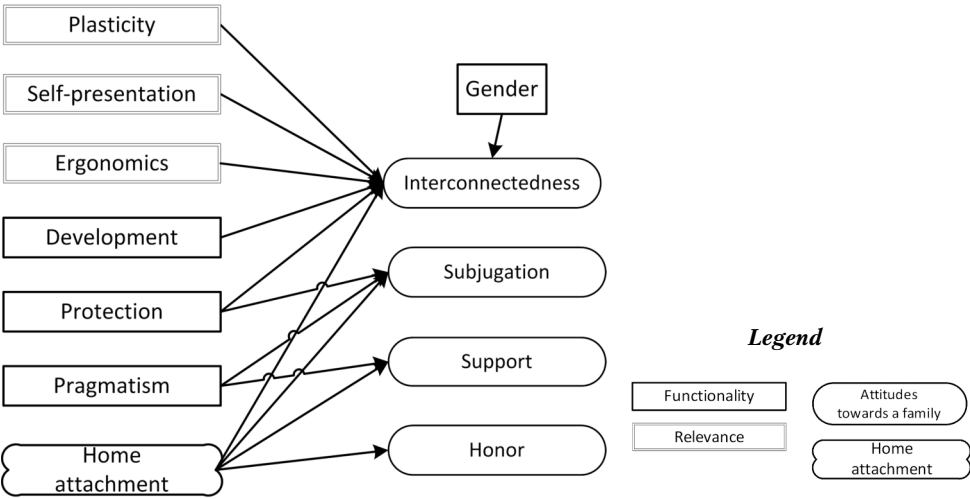


Table 3

Impact of Attitudes towards a Family on the Perceived Relevance (linear regression analysis)

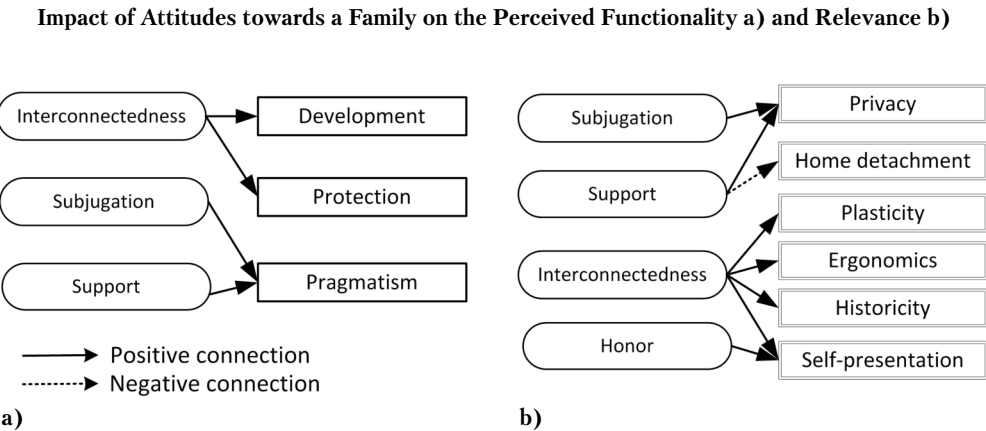
Dependent Variable	Predictor	B	SE B	t	R ²
Historicity	Familial Interconnectedness	0.178	0.076	2.323	0.06
Home Detachment	Familial Support	−0.065	0.026	2.437	0.03
Plasticity	Familial Interconnectedness	0.067	0.031	2.165	0.10
Privacy	Support	0.069	0.032	2.137	0.09
	Subjugation of Self for Family	0.048	0.024	1.981	0.09
Self-presentation	Familial Interconnectedness	0.135	0.054	2.481	0.12
	Familial Honor	0.008	0.040	0.187	0.12
Ergonomics	Familial Interconnectedness	0.123	0.051	2.382	0.12

Table 4

Impact of Attitudes towards a Family on the Perceived Functionality (linear regression analysis)

Dependent Variable	Predictor	B	SE B	t	R ²
Pragmatism	Familial Support	0.125	0.048	2.587	0.12
	Subjugation of Self for Family	0.082	0.036	2.213	0.12
Development	Familial Interconnectedness	0.146	0.058	2.492	0.10
Protection	Familial Interconnectedness	0.113	0.055	2.061	0.10

Figure 2



Note. See a legend under Figure 1.

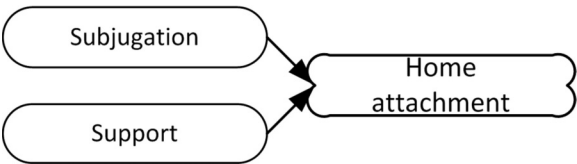
Table 3

**Impact of Attitudes towards a Family on the Experienced Home Attachment
(linear regression analysis)**

Dependent Variable	Predictor	B	SE B	t	R ²
Home Attachment	Familial Support	0.099	0.041	2.429	0.17
	Subjugation of Self for Family	0.088	0.031	2.839	0.17

Figure 3

Impact of Attitudes towards a Family on the Experienced Home Attachment



Note. See a legend under Figure 1.

Discussion

The meaning of our results is open to a number of interpretations. We predicted and found a partial support for both hypotheses. Attitudes towards a family were predicted by Home Attachment and Functionality of the Home Environment in a first line, and Family attitudes, in turn, predicted both perceived Functionality and Relevance, and also experienced Home Attachment. This result is in line with a previously obtained fact regarding a role of Relevance and Functionality in the adapting of the adopted children to the foster family: it was shown that Relevance

was a stronger predictor of the children's family attachment than Functionality (Nartova-Bochaver et al., 2017).

As expected, the obtained results demonstrate reciprocal connections between investigated variables: positive home predict positive family attitudes, and vice versa. Moreover, Familial Support was found to be an anti-predictor of Home Detachment (a negative feature of home). At the same time, Familial Support and Subjugation of Self for Family are predictors of Home Attachment. It means that young people who consider their families very supportive experience less domestic stress, in line with all previous outcomes (Nartova-Bochaver et al., 2016). Thus, positive homes are connected with positive atmosphere. Why is it so?

We would refer to some previous research familiar to our outcomes. As we mentioned above, attitudinal familism is defined as a multidimensional construct constituting four interdependent components. The first component of attitudinal familism is Familial Support or the belief in the familial reciprocity in times of need. It is a belief that individuals should provide and expect any kind of support from the members of their family in hard times and in everyday life. The second component of attitudinal familism has been labeled Familial Interconnectedness. It entails the belief that adults should be in a strong emotional and physical bond and relations with their family even if they have their own independent personal life. This persuasion is highlighted by an individual's decisions to live near his or her families in order to be involved in their way of life, spend and cherish time together. The third component of attitudinal familism reflects the belief in Familial Honor. This represents the fact that individuals have a responsibility to upkeep, protect, and not to tarnish the family name and honor. It is also a duty to defend any attacks against the family unity. The fourth component of attitudinal familism is Subjugation of Self for Family or the belief that the family is primary before the individual. This means that individuals believe in sacrificing their own needs and desires if they interfere with those of the family because the family is most important. A person is convinced that he or she should be submissive, respect the family rules and patterns of family life (Lugo Steidel & Contreras, 2003).

We assume that the friendliness of the home environment includes three aspects: functionality and relevance of the home environment, and home attachment (Khachaturova & Nartova-Bochaver, 2017).

Our model is consistent with R. Gifford's studies. He describes the following dimensions of home environment: haven, order, identity, connectedness, warmth, and physical suitability (Gifford, 2002).

Home-haven provides security, privacy, shelter and the sense of protection from adversity. Home-order regulates a person's existence in the world, his or her spatio-temporal ordering. The house is strongly connected with a feeling of continuity – childhood events, departures and returns, habits of daily life. A house is the center that a person leaves and where returns. Having the opportunity to compare the experience of staying in and out of the house, people learn themselves better. The house helps a person to understand his or her place in the world. Home-identity reflects the relation between individuals and their family, their ethnicity or socio-economic status. A house represents a person, reveals his or her interests and character.

In this dimension, the house is the symbol of “Self”. Individuals transform an ordinary place of residence into a house, expressing their personality in its physical space. Home-connectedness means that a person establishes relations with certain people, with a place, with the past and the future. It helps a person to feel a member of a definite community. People feel part of the family, the group, the culture. Thus, both spatial and temporal aspects are involved in the establishment of this connectedness. Home-warmth symbolizes cordiality of family hearth. This dimension is based on the previous ones. Home as physical suitability represents a suitable place of residence, the extent of congruence between the house and a person’s needs and desires.

If a person has a house that meets the above characteristics, the house has a great personal and social significance for him or her. If the dwelling does not meet these dimensions it may mean that a person feels homeless. And they can feel homeless even living in a luxurious house (Ibid.).

These characteristics also demonstrate strong relation between the home environment and attitudes toward a family. In J. Sixsmith’s research participants were asked to describe the ideal model of a house in their past, present or future, and also to reflect on what places they would never call “home”. The answers allowed revealing three groups of features – physical, personal, and social. Firstly, home is a physical environment where a person can satisfy his or her basic physical needs. The physical characteristics of the house have high importance for some people. The building must have a definite architectural style and a sufficient number of rooms. For other people the house included the working environment, so they highlighted the opportunity for a calm and comfortable working atmosphere. Secondly, it was discovered that the house reflects a wide range of feelings and personal events. The house is connected with privacy, security, affection, responsibility and self-expression. Thirdly, home accentuates different social relations and, first of all, attitudes towards family members of other roommates. All these groups of features are strongly correlated with each other (Sixsmith, 1986)

Our results are also consistent with several prior investigations (Bell, Greene, Fisher, & Baum, 2001; Kuller, 1980). P. Bell and colleagues suggested the importance of environment-behavior relations and supposed that the objective environmental conditions, such as physical parameters and building design characteristics, exist independently from the individual, although the individual can act to change them. Their model involves individual differences, such as individual’s adaptation level, the length of exposure in the environment, perceived control over the situation, personality, privacy preference, place attachment, competence to deal with the environment, social support, and like or dislike toward others in the situation. Social support of the members of a family and roommates in the environment-behavior model refers to the feeling that an individual is cared about and valued by others as well as the feeling that one belongs to a group (Bell et al., 2001).

Our results can also be explained by the means of A. Maslow’s theory of motivation (Maslow, 1987). We showed that attitudinal familism and its components – Familial Support, Familial Honor, Familial Interconnectedness, and Subjugation of Self for Family – have significant correlations with Home Attachment, with

Pragmatism, Development, and Protection as parameters of the home environment functionality, and with Ergonomics, Plasticity, and Self-Presentation as parameters of home environment relevance.

A. Maslow's hierarchy of needs has five levels. We assume that the interrelation between parameters of the home environment and family attitudes is mostly strong at several levels. Physical aspects of the house, the functionality and relevance of the home environment are extremely important for meeting a person's safety needs. At the same time, the house is a place where a person establishes, maintains, and develops social relations. This is a place where people communicate, start families, bring up children, spend time with friends and relatives. In this case the home environment meets affiliation needs. Hence, if a person is home attached he or she have positive attitudes towards the members of a family or roommates, feel their support and can be proud of his or her belonging to them.

Moreover, the definite home environment can meet status and esteem needs. A house is a place where a person can express his or her individuality and his or her successes. Individuals can show their material success by moving to an expensive house or apartment in the poshest districts. Spacious lounges, several bathrooms and so on can present the owner as a successful person. In the context of the home environment, self-actualization needs can meet in creation of a special, carefully planned environment where there are no random things, but each detail expresses the personality traits of its owner (Smolova, 2015).

Our results showed that attitudinal familism and its components have significant correlations with Home Attachment. Home attachment is a positive emotional association between people and the home environment, an association that creates feelings of comfort and safety (Shumaker & Taylor, 1983; Rivlin, 1990). In this case, leaving home for a long time, for instance, studying in another city can cause strong feeling of nostalgia and sadness (Bell et al., 2001). It is important to note that the sample of our study partly consisted of the students who lived in dormitories (Khachaturova, 2011).

Strong home attachment is usually associated with a person's satisfaction with his or her own home and experiencing stability in the future (Shumaker & Taylor, 1983). Some researchers believe that the true home attachment is caused by the physical characteristics of home space – furniture, family relics, and other objects (Stokols, 1978; Tognoli, 1980). Another crucial factor for forming home attachment is age. The elderly are most often attached to their homes in contrast to young people (Norris-Baker & Scheidt, 1990; Taylor, 1988).

Putting forward the second hypothesis of our research we assumed that positive family attitudes positively predict a friendly home representation. This research hypothesis has been partially confirmed since components of attitudinal familism does impact Potential as a parameter of the home environment relevance and Stability as a parameter of the home environment functionality. We suggest this result by the characteristics of our student sample.

In our previous research we suggested that when individuals become adults, they want to separate from their parents and live in their own houses. But in most cases young people cannot afford it and they have to stay in their parents' house.

Usually young people of this age spend less time at home preferring parties, clubs, trips, flat parties, and so on. Besides, young people, when moving from other towns and entering universities, often have to live in dormitories and compete with roommates for living space (Khachaturova & Nartova-Bochaver, 2017). In big families their turn to access the toilet and bathroom in the mornings or the lack of private space in the house threaten physiological needs. Passing rooms, often with no sound insulation, prevent satisfying love and privacy needs. D. Pedersen revealed that people with a high level of the need for privacy have a strong need for intimacy with members of their family (Pedersen, 1982).

Home attachment and satisfaction of the functionality and relevance of the home environment are correlated with a person's opportunity to bring own changes to their rooms. A. Schiffenbauer compared students who had possibility change the order in their rooms, for instance, remove, add or change furniture, paint on walls, and so on, and those who did not. Greater freedom was significantly associated with satisfaction with the space of the house as a whole and with member's family and roommates (Schiffenbauer, Brown, Perry, Shulack, & Zanzola, 1977).

Thus, our results show that Home Attachment is significantly mutually related with attitudes towards family: it means young people are still strongly home attached and associated with their own family. Positive attitudes towards a family can be fueled by this home image and project to the current residence.

Our results are also gender sensitive. We revealed gender differences in Familial Interconnectedness – women have higher significance than men. We assume that women are more family attached, social support from the members of their families plays a great role in their life. Moreover, a woman's close emotional and physical bonds with her family are socially approved in Russian society (Kunitsyna & Yumkina, 2012). For Russia, unlike many Western countries, relations with parents are also very important, due to the traditional structure of multicultural Russian families that have a very significant influence on a person's self-perception (Robinson & Robinson, 1997).

The present study had several limitations. Firstly, we used the Attitudinal Familism Scale (Lugo Steidel & Contreras, 2003) to study respondents' attitudes towards a family. This questionnaire is new and has not been fully adapted to the Russian sample. Although the results of our psychometric analysis mentioned previously are very encouraging, replication should be performed before strong conclusions can be made about the psychometric properties of the scale.

This is the aim of our current research. Secondly, the sample consisted mainly of female students. In the future research, it could be interesting to extend our sample due to male participants. Thirdly, to broaden the understanding of the interrelation between parameters of the home environment and family attitudes, it is essential to study this issue not only regarding youth, but also regarding other age groups (childhood, adolescence, adulthood, and elderly age).

Thus, our research allows us to make the following conclusions.

1. Family attitudes are significantly related with such parameters of the home environment as Home Attachment, Pragmatism, Protection, Plasticity, Self-Presentation, Ergonomics, and Development of the home environment.

2. Almost all the parameters of the functionality and relevance of the home environment have been significantly impacted by family attitudes. There are not significant relations for Potential and Stability of the home environment.

3. Home Attachment is significantly mutually related with attitudes towards family.

4. Women have higher significance than men in such a family attitude as Familial Interconnectedness.

The study's results can be helpful in forming individual profiles of the home environment preferences. They can be used in child-parent and family counseling in order to improve their relations and to reveal the incongruence between a home as a special living environment and a person's needs, expectations and attitudes towards members of a family. Besides, our results can become a basis for personal training programs.

We hope that other scholars will extend our findings by focusing on additional aspects of the friendliness of the home environment – age, gender, social, cultural, material, and others. Besides, contextual variables of family attitudes such as the number of family members that live near the individual, work or school environments characteristics may define the extent of a person's closeness with the family. Further research is needed to determine the generalization of these findings.

References

- Bell, P., Greene, T. C., Fisher, J. D., & Baum, A. (2001). *Environmental psychology* (5th ed.). Fort Worth, TX: Harcourt College Publishers.
- Brunswik, E. (1956). *Perception and the representative design of psychological experiments*. Berkeley, CA: University of California Press.
- Case, D. (1996). Contributions of journeys away to the definition of home: An empirical study of a dialectical process. *Journal of Environmental Psychology*, 16(1), 1–15.
- Cauce, A. M., & Domenech-Rodriguez, M. (2002). Latino families: Myths and realities. In J. M. Contreras, K. A. Kerns, & A. Neal-Barnett (Eds.), *Latino children and families in the United States: Current research and future directions* (pp. 3–25). New York: Praeger.
- Chemero, A. (2009). *Radical embodied cognitive science*. Cambridge, MA: The MIT Press.
- Cieraad, I. (2010). Homes from home: Memories and projections. *Home Cultures*, 7(1), 85–102.
- Csikszentmihalyi, M., & Halton, E. (1981). *The meaning of things: Domestic symbols and the self*. New York: Cambridge University Press.
- Dovey, K. (1985). Home and homelessness. In I. Altman & C. M. Werner (Eds.), *Home environments. Human behavior and environment* (Vol. 8, pp. 33–64). New York/London: Plenum Press.
- Edwards, J. R., Caplan, R. D., & Harrison, R. V. (1998). Person-environment fit theory: conceptual foundations, empirical evidence, and directions for future research. In C. L. Cooper (Ed.), *Theories of organizational stress* (pp. 28–67). New York: Oxford University Press.
- Gibson, J. J. (1986). *The ecological approach to visual perception*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gifford, R. (2002). *Environmental psychology. Principles and practice*. Colville, WA: Optimal books, 2002.

- Gold, J. R. (1980). *An introduction to behavioral geography*. Oxford, UK: Oxford University Press.
- Gosling, S. D, Ko, S. J., Mannarelli, T., & Morris, M. E. (2002). A Room with a cue: Personality judgments based on offices and bedrooms. *Journal of Personality and Social Psychology*, 82(3), 379–398.
- Graumann, C. F. (1996). Aneignung [Appropriation]. In L. Kruse, C. F. Graumann, & E. O. Lantermann (Eds.), *Ökologische Psychologie: Ein Handbuch Schlüsselbegriffen* [ПЕРЕВОД] (pp. 124–130). Weinheim, Germany: Psychologie. (in German)
- Graumann, C. F. (2002). The phenomenological approach to people-environment studies. In R. B. Bechtel & A. Churchman (Eds.), *Handbook of environmental psychology* (pp. 95–113). New York: John Wiley & Sons.
- Heidegger, M. (1971). Building, dwelling, thinking. In M. Heidegger, *Poetry, language and thought* (pp. 145–161). New York: Colophon Book.
- Husserl, E. (1970). *The crisis of European sciences and transcendental phenomenology*. Evanston, IL: Northwestern University Press.
- Ingold, T. (2002). *The perception of the environment. Essays on livelihood, dwelling and skill*. London/New York: Taylor & Francis.
- Kahana, E., Lovegreen, L., Kahana, B., & Kahana, M. (2003). Person, environment, and person-environment fit as influences on residential satisfaction of elders. *Environmental Behaviour*, 35, 434–453.
- Kaufmann, J.-C. (1992). *La trame conjugale. Analyse du couple par son linge* [ПЕРЕВОД]. Paris: Nathan. (in French)
- Khachaturova, M. R. (2011). Hardiness and self-efficacy as personal resources of coping with difficult situations in adaptation education. *Psychology in the University*, 6, 114–129.
- Khachaturova, M. R., & Nartova-Bochaver, S. K. (2017). The home environment as a resource of coping behaviour in youth. *Psychology. Journal of Higher School of Economics*, 14(3), 555–566.
- Korosec-Serfaty, P. (1985). Experience and use of the dwelling. In I. Altman & C. M. Werner (Eds.), *Home environments. Human behavior and environment* (Vol. 8, pp. 65–86). New York/London: Plenum Press.
- Kull, K. (2001). Jakob von Uexkuell: An introduction. *Semiotica*, 134, 1(4), 1–59.
- Kuller, R. (1980). Architecture and emotions. In B. Mikellides (Ed.), *Architecture and people* (pp. 97–100). London: Studio Vista.
- Kunitsyna, V. N., & Yumkina, E. A. (2012). Semeinyi ukld v social'no-psikhologicheskome aspekte [The family life style in a social-psychological perspective]. *Sovremennye Problemy Nauki i Obrazovaniya*, 4, 367–367. (in Russian)
- Lang, A. (1993). Non-Cartesian artefacts in dwelling activities: Steps towards a semiotic ecology. *Schweizerische Zeitschrift für Psychologie*, 52(2), 138–147.
- Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years? *Journal of Environmental Psychology*, 31, 207–230.
- Lijk, K. (1985). Ispol'zovanie domashnego prostranstva, vzaimootnosheniya v sem'e i udovletvorenost' [Using a home space, family relationships, and satisfaction]. In T. Nijt, M. Hejdmetts, & Yu. Kruusvall (Eds.), *Social'no-psihologicheskie osnovy sredobrazovaniya* [Social-psychological foundations of environmental development] (pp. 277–280). Tallinn: Estonian Branch of the Psychological Society of USSR. (in Russian)
- Lugo Steidel, A. G., & Contreras, J. M. (2003). A New Familism Scale for use with Latino populations. *Hispanic Journal of Behavioral Sciences*, 25(3), 312–330.
- Maslow, A. H. (1987). *Motivation and personality*. New York: Longman.

- Mitin, I. I. (2005). Mythogeography: spatial representations and multiple realities. *Communitas*, 2, 12–25.
- Morgan, P. (2010). Towards a developmental theory of place attachment. *Journal of Environmental Psychology*, 30(1), 11–22.
- Moser, G. (2009). Quality of life and sustainability: Toward person-environment congruity. *Journal of Environmental Psychology*, 29(3), 351–357.
- Muchow, M., & Muchow, H. (1980). *Der Lebensraum des Grossstadtkindes* [The lifespace of the urban child]. Bensheim, Germany: Riegel. (in German)
- Nartova-Bochaver, S. K., & Kuznetsova V. B. (2018). Friendly home and inhabitants' morality: mutual relationships. *Frontiers in Psychology*, 8, 23–48.
- Nartova-Bochaver, S. K., Bochaver, A. A., Dmitrieva, N. S., & Reznichenko, S. I. (2016). *Dom kak zhiznennaya sreda cheloveka: psikhologicheskoe issledovanie* [Home as a people's living space: a psychological study]. Moscow: Pamyatniki istoricheskoi mysli. (in Russian)
- Nartova-Bochaver, S. K., Reznichenko, S. I., & Kovaleva, A. I. (2017). The home representation impact on the adopted adolescents' adaptation to the foster families. *Klinicheskaya i Spetsial'naya Psikhologiya [Clinical Psychology and Special Education]*, 6(4), 75–89. (in Russian)
- Nartova-Bochaver, S. K., Dmitrieva, N. S., Reznichenko, S. I., & Kuznetsova, V. B. (2015). The instrument for assessment of dwelling friendliness: "functionality of home environment" questionnaire. *Psikhologicheskii Zhurnal*, 36(4), 71–83. (in Russian)
- Naumova, O. B. (2014). Chastnoe prostranstvo v sisteme tsennostei traditsionnogo obshchestva [The private space in the values system of traditional society]. *Etnograficheskoe Obozrenie*, 4, 77–93. (in Russian)
- Norris-Baker, C., & Scheidt, R. J. (1990). *Place attachment among older residents of a "ghost town": A transactional approach*. In R. Selby, K. Antony, J. Choi, & B. Orland (Eds.), *Coming of age* (pp. 333–342). Oklahoma City, OK: Environmental Design Research Association.
- Olaru, G., Witthoft, M., & Wilhelm, O. (2015). Methods matter: testing competing models for designing short-scale big-five assessments. *Journal of Research in Personality*, 59, 56–68.
- Pedersen, D. (1982). Cross-validation of privacy factors. *Perceptual and Motor Skills*, 55, 57–58.
- Rapoport, A. (1985). Thinking about home environments. In I. Altman & C. M. Werner (Eds.), *Home environments. Human behavior and environment* (Vol. 8, pp. 255–286). New York/London: Plenum Press.
- Reznichenko, S., Nartova-Bochaver, S., & Kuznetsova, V. (2016) The instrument for assessment of home attachment. *Psychology. Journal of Higher School of Economics*, 13(3), 498–518. (in Russian)
- Rivlin, L. G. (1990). The significance of home and homelessness. *Marriage and Family review*, 15, 39–56.
- Robinson, M. B., & Robinson C. E. (1997). Environmental characteristics associated with residential burglaries of student apartment complexes. *Environment and Behavior*, 29(5), 657–675.
- Saegert, S. (1985). The role of housing in the experience of dwelling. In I. Altman & C. M. Werner (Eds.), *Home environments. Human behavior and environment* (Vol. 8, pp. 287–309). New York/London: Plenum Press.
- Schiffenbauer, A., Brown, J., Perry, P., Shulack, L., & Zanzola, A. (1977). The relationship between density and crowding: Some architectural modifiers. *Environment and Behavior*, 9, 3–14.
- Shumaker, S., & Taylor, R. (1983). Toward a clarification of people-place relationships: A model of attachment to place. In N. Feimer & E. Geller (Eds.), *Environmental psychology: Directions and perspectives* (pp. 219–256). . New York. Praeger.

- Sixsmith, J. (1986). The meaning of home: An exploratory study of environmental experience. *Journal of Environmental Psychology*, 6, 281–289.
- Smolova, L. V. (2015). *Psikhologiya vzaimodeystviya s okruzhayushchei sredoi (ekologicheskaya psikhologiya)* [Psychological study on the person-environment relationship]. Moscow: Flinta. (in Russian)
- Stokols, D. (1978). Environmental psychology. *Annual Review of Psychology*, 29, 253–295.
- Taylor, R. (1988). *Human territorial functioning: An empirical, evolutionary perspective on individual and small group territorial cognitions, behaviors and consequences*. Cambridge: Cambridge University Press.
- Tognoli, J. (1980). Residential environments. In D. Stokols & I. Altman (Eds.). *Handbook of Environmental Psychology* (Vol. 2, pp. 655–690. New York: John Wiley.

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Домашняя среда и установки по отношению к семье: как они взаимосвязаны?

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Abstract

В статье обсуждается взаимосвязь между дружелюбностью домашней среды и установками по отношению к семье. Дружелюбность домашней среды включает в себя три параметра: количество функций, который выполняет дом (его функциональность), соответствие этих функций потребностям его обитателей (релевантность) и привязанность к дому. Мы предполагаем, что дружелюбная домашняя среда вносит позитивный вклад в

развитие установок по отношению к семье, а позитивные установки на семью, в свою очередь, предсказывают восприятие образа дома как дружественного места. В исследовании приняло участие 393 респондента: 295 девушек и 98 юношей, студенты различных факультетов НИУ «Высшая школа экономики». Были использованы следующие опросники: опросники Функциональность домашней среды, Релевантность домашней среды (краткая версия), Привязанность к дому и опросник Установки по отношению к семье. Результаты регрессионного анализа показывают, что установки по отношению к семье значимо связаны с такими параметрами домашней среды как Привязанность к дому, Прагматичность, Защищенность, Пластичность, Самопрезентация, Эргономичность и Развитие домашней среды. И, наоборот, установки по отношению к семье значимо предсказывают восприятие практически всех параметров функциональности и релевантности домашней среды. Привязанность к дому взаимно и значимо связана с установками по отношению к семье. Результаты исследования могут быть использованы в дизайне домашней среды, а также в психологическом консультировании для создания индивидуальных профилей предпочитаемой домашней среды и усиления ресурсной функции дома как фактора улучшения внутрисемейного климата.

Ключевые слова: функциональность и релевантность домашней среды, привязанность к дому, установки по отношению к семье.

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