

# Communicative behavior of pedagogics students in relation to the structure of the parental families

## Comportamiento comunicacional de estudiantes de pedagogía en relación con la estructura de las familias parentales

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### Contents

- [1. Introduction](#)
  - [2. Materials and methods](#)
  - [3. Results and discussion](#)
  - [4. Conclusion](#)
- [Bibliographic references](#)

#### ABSTRACT:

The article presents a comparative study of the communicative behavior specifics in students of a pedagogical university in relation to the structure of the parental families (complete or incomplete family). The sample of the study included 92 full-time students enrolled in the 1-2nd academic years of the humanitarian specialties of a pedagogical university (mean age – 18-24 years; 7 males, 85 females). The results of the study allowed revealing the specifics of development of professionally relevant aspects of communication in prospective teachers that were raised in incomplete families. This allowed predicting certain risks in the future professional behavior and interaction in the educational environment. The authors stated the following empirical patterns and tendencies of the prospective teachers from incomplete parental families: statistically significant decrease of empathy and friendliness; increase of aggressiveness; dominance of manipulative vector of communication in comparison with the pedagogics students from complete families. At the same time, the authors also present a counterintuitive finding of their study: pedagogics students from incomplete families present the dialogical vector of communication significantly more often than the students from complete families (78.3% / 449.9%).

#### RESUMEN:

El artículo presenta un estudio comparativo de los comportamientos comunicativos específicos en estudiantes de una universidad pedagógica en relación con la estructura de las familias parentales (familia completa o incompleta). La muestra del estudio incluyó 92 estudiantes a tiempo completo matriculados en los años académicos 1-2 de las especialidades humanitarias de una universidad pedagógica (edad promedio: 18-24 años; 7 hombres, 85 mujeres). Los resultados del estudio permitieron revelar los aspectos específicos del desarrollo de los aspectos de la comunicación relevantes para el profesional en los futuros maestros que se criaron en familias incompletas. Esto permitió predecir ciertos riesgos en el futuro profesional y la interacción en el entorno educativo. Los autores declararon los siguientes patrones empíricos y tendencias de los futuros maestros de familias parentales incompletas: disminución estadísticamente significativa de empatía y amistad; aumento de la agresividad; Dominio del vector manipulador de la comunicación en comparación con los estudiantes de pedagogía de familias completas. Al mismo tiempo, los autores también presentan un hallazgo contrario a la intuición de su estudio: los estudiantes de pedagogía de familias incompletas presentan el vector dialógico de

Educational process in a pedagogical university and its psychological service might be more effective if they consider the factor of family structure while optimizing the communicative behavior of the pedagogics students.

**Keywords:** pedagogics students, communicative behavior, reflection, empathy, communicative vector, interpersonal qualities

la comunicación significativamente más a menudo que los estudiantes de familias completas (78.3% / 449.9%). El proceso educativo en una universidad pedagógica y su servicio psicológico podrían ser más efectivos si consideran el factor de la estructura familiar al tiempo que optimizan el comportamiento comunicativo de los estudiantes de pedagogía.

**Palabras clave:** estudiantes de pedagogía, comportamiento comunicativo, reflexión, empatía, vector comunicativo, cualidades interpersonales.

## 1. Introduction

Communicative aspect of pedagogics students' personality is of utmost importance for their readiness for the professional activity; furthermore, teachers' personal and professional establishment is primarily related to the development of the professional communicative qualities.

The development of students' pedagogical communication during the university education implies the development of the prospective teachers' skills of active attention, dialogical vector, empathy and reflection, friendliness and interest towards professional communication with the subjects of the educational process, as well as creation of safe educational environment by means of effective communication (Zimnyaya, 2010; Kan-Kalik, 1987; Markova, 1993; Rogers, 1994; Rubtsov et al., 2010; Ivanova et al., 2017; and others). However, students of pedagogical universities name the difficulties in communication within an educational institution as one of the most expected problems in the future professional activity of a prospective teacher (Akopov & Gorbacheva, 2003).

Communicative behavior of pedagogics students has been studied in the aspects of development of empathy and reflection mechanisms that provide the successfulness of pedagogical communication and activity (Rogers, 1984; Akhryamkina, 2003); dialogical and alterocentric vector of communication (Markova, 1993; Shabanova, Tarabakina, 2018); development of communicative culture and communicative competency (Alekseeva et al., 2018; Shishova, 2015; Berdud et al., 2013); conditions for overcoming the communicative characteristics that prevent effective professional communication and barriers for pedagogical communication (Temina, 1995; Yurchenko, 2000; Minaeva et al., 2017; and others).

Currently, the studies present extensive evidence of the negative psychological and social consequences of divorce and incomplete family for the development in youth and adulthood. It has been shown to affect academic performance, social adaptation, development of addictive behavior and the key relationships during adulthood (Barajas, 2011; Ottaway, 2010; Aro, & Palosaari, 1992; Conger, et al., 2000; Duran-Aydintug, 1997; Gabardi & Rosen, 1991).

The researchers also highlight the controversy of such influence and the importance of studying both the family structure (complete/incomplete family) and the variables related to the quality of relationships in the parental family, e.g., the level of conflict in the relationship (Demo & Alan, 1988).

In our opinion, it is important to study the specifics of communicative behavior in pedagogics students in relation to the family structure, complete or incomplete, because, in one way or another, a teacher translates the communicative models to children and adolescents. We suppose that this problem has not been studied enough and, at the same time, it is highly relevant for defining the risks of pedagogical interaction with children and school students. Studying the patterns of pedagogic students' communicative behavior would allow defining the methodology and methods of psychological work of the psychological service of a university that would be aimed at developing professionally relevant qualities, primarily communicative competency and communicative culture, in the pedagogics students.

## 2. Materials and methods

The aim of the present article is to present the results of an empirical study of the effect of the parental family structure on the specifics of communicative behavior development in pedagogics students: its mechanisms, vector and interpersonal qualities of the prospective teachers.

We hypothesized that the pedagogics students from incomplete families would present distinctive traits of the communicative field and communicative behavior related to the specifics of development and manifestation of reflection and empathy, communicative vector of behavior and communicative personality traits.

The study had the following goals: to explore the development specifics of the mechanisms of reflection and empathy; to study interpersonal qualities and communicative vector of pedagogics students depending on the type of the parental family; to develop principles of psychological and pedagogic optimization of communicative behavior in students of a pedagogical university.

The following methods were used: Scale of emotional response (A. Megrabian modified by N. Epstein); the method of diagnosing the level of reflection development (A.V. Karpov); questionnaire on the Personality orientation in communication (S.L. Bratchenko); questionnaire on the Diagnostics of interpersonal relationships (T. Leary, G. Laforge, R. Suzek).

The study sample consisted of students enrolled in the courses in humanitarian specialties of the pedagogical universities of Nizhny Novgorod: prospective teachers of Russian and foreign languages, social pedagogues, primary-school teachers and teachers of preschool organizations. Mean age of the participants was 18-24 years; they were 92 full-time students – prospective teachers of the 1-2nd academic years (7 males, 85 females).

### 3. Results and discussion

Firstly, we would like to point out that the proportion of complete and incomplete families of the evaluated pedagogics students was different from the population norm (50%/50%) and was 75% and 25%, respectively. Based on this, we can state the decreased influence of the factor of family structure on the personality development of the pedagogics students.

Pedagogical reflection is a mechanism of teachers' professional self-control and self-development, which implies constant analysis of one's own behavior and activity that manage students' activity, and rapid introduction of corrections in the educational process (Zimnyaya, 2010). The results of the evaluation of pedagogics students' reflection in relation to the family structure are presented in table 1.

**Table 1**  
Reflection in relation to the structure of the students' parental families

Types of reflection	Total		Complete family		Incomplete family		Significance of differences	
	M	s	M	s	M	s	Kruskal-Wallis H	p
<b>Retrospective reflection</b>	37.06	5.94	36.80	5.92	37.22	5.68	0.324	0.569
<b>Reflection of current activity</b>	36.45	5.64	36.73	5.95	35.52	5.04	0.131	0.718
<b>Reflection of future activity</b>	38.54	5.59	37.83	5.52	40.17	5.47	3.232	0.072
<b>Reflection of</b>	36.93	5.36	36.97	5.25	36.04	6.05	0.722	0.395

Table 1 shows a tendency of dominance of certain reflection types depending on the structure of the students' parental families. Students from complete families present a more levelled profile in all types of reflection with an insignificant dominance of the reflection of future activity (37.83). Students from incomplete families reveal a similar profile; however, in this case, the dominance of the reflection of future activity is stronger (40.17).

According to Kruskal-Wallis H test, the differences in the reflection of current activity are not significant between the students from complete and incomplete families and are present only as a tendency. However, a strong tendency of the dominating reflection of future activity in students from incomplete families points to a certain fixation on the upcoming activity and alertness in orienteering.

The levels of reflection in relation to students' parental family structure are presented in table 2.

**Table 2**  
The levels of reflection in relation to students' parental family structure

Family type	N of people/ %	Levels of reflection			Total	Significance of differences, Pearson's $\chi^2$
		low	average	high		
Incomplete	N of people	4	19	0	23	2.256 $p < 0.324$
	%	17.4%	82.6%	0.0%	100.0%	
Complete	N of people	13	50	6	69	
	%	18.8%	72.5%	8.7%	100.0%	
Total	N of people	17	69	6	92	
	%	18.5%	75.0%	6.5%	100.0%	

Table 2 demonstrates that the reflection profile of the pedagogics students is levelled, and all types of reflection are presented in a balanced manner. This allows suggesting that the former high school graduates and university applicants made a precise career choice.

No significant differences in the frequency of reflection distribution were revealed between the groups of pedagogics students in relation to the family structure. At the same time, there is an important pattern of influence of an incomplete family on the reflection characteristics: students from incomplete families do not display high level of reflection.

Empathy is the central mechanism of pedagogical communication between a teacher-facilitator and students (Rogers, 1997; Zimnyaya, 2010). In the conditions of modern education, empathy plays the key part in teachers' professional competency, because the increase of violence in the society increases the demand for teachers-facilitators in school communications.

Significant differences in empathy were revealed between the two groups of students depending on the family structure (Kruskal-Wallis H: 5.466,  $p < 0.019$ ). The level of empathy is significantly lower in students from incomplete families, which is related to certain emotional deprivation in the relationships within incomplete families where a mother (or a father) has to combine unconditional and conditional acceptance during the mentoring process. Hence, the empathy level is significantly lower in the students from incomplete families, which means that such students require special attention of the university's psychological service.

The respondents' levels of empathy in relation to the family structure are presented in table 3.

**Table 3**  
Students' empathy levels in relation to the family structure

Family type	N of people/ %	Levels of reflection			Total	Significance of differences, Pearson's $\chi^2$
		low	average	high		
Incomplete	N of people	2	19	2	23	3.127 $p < 0.209$
	%	8.7%	82.6%	8.7%	100.0%	
Complete	N of people	4	47	18	69	
	%	5.8%	68.1%	26.1%	100.0%	
Total	N of people	6	66	20	92	
	%	6.5%	71.7%	21.7%	100.0%	

Table 3 shows that the students' empathy levels depend on the structure of their parental families. Specifically, the highest empathy levels are three times more common in the students from complete families compared to the students from incomplete families (26.1% / 8.7%).

On the one hand, as the mechanisms of effective pedagogical communication, reflection and empathy allow teachers to focus on the process of solving the problems together with the students, and on the other hand, they allow supporting and encouraging the students. Empathy as the ability to put oneself in the student's position, to understand the goal and motives of his/her behavior, allows predicting student's activity and manage it in the process of positive cooperation. Reflection helps the teachers to correct their own behavior and communication in a fast and flexible way, therefore leading the students to success.

Studying the specifics of communicative behavior with the T. Leary's questionnaire on Diagnostics of interpersonal relationships allowed obtaining the following results about the communicative traits of the pedagogics students (see table 4).

**Table 4**  
Interpersonal traits of the pedagogics students in the interaction process in relation to the family structure

Interpersonal traits	Total		Complete family		Incomplete family		Significance of differences	
	M	s	M	s	M	s	Student's t test	p
Authoritarian	5.87	3.06	5.94	3.14	5.65	2.85	0.392	0.696
Selfish	4.93	2.11	4.60	2.14	5.48	1.83	1.569	0.120
Aggressive	5.54	2.49	5.02	2.39	6.86	2.34	3.175	<b>0.002</b>
Suspicious	6.85	3.20	6.07	3.29	8.44	2.71	3.106	<b>0.003</b>

Submissive	7.06	3.21	6.80	3.24	7.30	3.08	0.526	0.600
Dependent	5.80	2.32	6.10	2.26	5.35	2.08	1.407	0.163
Friendly	7.34	2.95	7.71	2.72	5.96	2.95	2.624	<b>0.010</b>
Selfish	7.28	3.84	7.57	3.70	6.17	4.00	1.519	0.132

Table 4 demonstrates that the students' interpersonal traits during interactions are rather favorable in the majority of characteristics. Our sample displays a levelled profile within 0-8 for all of the characteristics, i.e., they present low scores for dominance and hostility; average level of suspiciousness, criticism, dependence on the other and selfishness; high level of submissiveness, altruism and friendliness. The described profile corresponds with the requirements towards the professionally relevant qualities of teachers.

However, as table 4 shows, the profile of interpersonal traits of students from incomplete families is different in the unfavorable direction for almost every characteristic: those students are more selfish (4.60 / 5.48), more aggressive (6.86 / 5.02) and more suspicious (8.44 / 6.07); at the same time, they are less friendly (5.96 / 6.10) and less altruistic (6.17 / 7.57). The differences in the mean scores for aggressiveness, suspiciousness and friendliness are statistically significant according to the Student's t test (see table 4).

Furthermore, we studied the pedagogic students' communicative vector during interaction in relation to the family structure (table 5).

**Table 5**  
Pedagogic students' communicative vector during interaction in relation to the family structure

Students' communicative vector	Total		Complete family		Incomplete family		Significance of differences	
	M	s	M	s	M	s	Mann-Whitney U test	p
Indifferent vector	4.00	2.39	4.04	2.60	4.00	1.95	788.00	0.960
Conforming vector	4.51	2.18	4.75	2.08	3.913	2.57	585.00	<b>0.051</b>
Manipulative vector	4.96	2.31	4.66	2.33	6.13	1.74	466.00	<b>0.003</b>
Authoritative vector	3.89	2.15	3.89	2.32	3.78	1.70	781.50	0.913
Alterocentric vector	4.57	2.79	4.60	2.78	4.43	2.85	0.913	0.713

As Table 5 demonstrates, pedagogic students' communicative vector during interaction depends on the structure of the parental families. Specifically, the students from incomplete families have the highest scores for the manipulative vector (6.13), while the students from complete families have the lowest scores for this characteristic (4.96); the two groups are significantly different from each other, according to Mann-Whitney U test ( $U = 466.00$ ,  $p < 0.003$ ). Students from incomplete families have lower mean scores for conforming vector, which points to a more independent behavior during group interactions ( $U = 585.00$ ,  $p < 0.051$ ).

Table 6 presents the proportion of the types of communicative vectors during interaction in

relation to the family structure.

The types of students' communicative vector in relation to the experienced violence are presented in table 6.

**Table 6**  
Proportion of pedagogic students' types of communicative vectors during interaction in relation to the family structure

Family type	N of people/ %	General vector		Total
		Nondialogical	Dialogical	
Complete	N of people	5	18	23
	%	21.7%	78.3%	100.0%
Incomplete	N of people	38	31	69
	%	55.1%	44.9%	100.0%
Total	N of people	43	49	92
	%	46.7%	53.3%	100.0%

According to table 6, the types of students' communicative vector (dialogical / nondialogical) are equally present in the sample: a bit less than half of the students have nondialogical vector (46.7%) and a bit over the half of the students have dialogical vector (53.3%). Dialogical vector is a professionally relevant quality of a prospective teacher, therefore, these results demonstrate a certain problem in selection or training of the prospective teachers, which require further studies. Moreover, a lack of the dialogical position in interaction of a prospective teacher presents a certain problem and requires correction.

Table 6 also suggests that the types of students' communicative vector depend on the family structure. Namely, the majority of students from incomplete families demonstrate the dialogical vector (78.3%), while only half of the students from complete families show such orientation towards a dialogue (44.9%); these differences are highly significant ( $\chi^2 = 7.699$ ,  $p < 0.006$ ). In our opinion, this counterintuitive result might be explained by an unsatisfied need in a dialogue and interaction in general in the children that were raised in incomplete families, because the single parent in an incomplete family has to play both roles (mother and father), and therefore, there is less time for contacts and close interaction with the child.

## 4. Conclusion

To summarize, the study of communicative behavior of pedagogics students in relation to the structure of the parental families allowed obtaining the following results.

According to the respondents' data, three quarters of the pedagogics students were raised in complete families (75%), while one quarter of the students were raised in incomplete families (25%).

The general sample of prospective teachers demonstrated a balanced distribution of all types of reflection, which corresponded with the existing literature. Students from complete families presented a tendency for a more levelled profile of reflection, i.e., they had more balanced awareness of their own activity both at the present moment and in time perspective. However, students from incomplete families had more vivid tendency of domination of the future activity reflection, in comparison with the students from complete families (40.17 / 37.83). Such result could be interpreted as a symptom of certain tension

during orientation at upcoming activity. Moreover, high levels of reflection were observed only in the students from complete families (8.7 %).

The results also revealed a statistically significant difference in empathy between the two groups of students from families with different structure (according to Kruskal-Wallis H test: 5.466,  $p < 0.019$ ). The level of empathy was significantly lower in students from incomplete families, which was related to a certain emotional deprivation in the relationships of incomplete families. The students from complete families demonstrated a very high level of empathy three times more often than the students from incomplete families (26.1 % / 8.7 %).

Prospective teachers' interpersonal traits during interaction demonstrated a levelled profile within 0-8 for the negative characteristics of interaction (domination, hostility, suspiciousness, criticism, dependence from other and selfishness). However, at the same time, the similarly low scores were revealed for the professionally relevant qualities (friendliness), which was not a favorable sign. We revealed a statistical connection between such personality traits, as aggressiveness, suspiciousness and friendliness, and the family structure: the students from complete families were less selfish, aggressive ( $p < 0.002$ ) and suspicious ( $p < 0.003$ ), and more friendly ( $p < 0.010$ ).

Communicative vector also depends on the family structure. The students from incomplete families had statistically significant manipulative vector ( $U = 466.00$ ,  $p < 0.003$ ), while the students from complete families demonstrated significantly stronger conforming vector ( $U = 585.00$ ,  $p < 0.051$ ).

The types of communicative vector (dialogical / nondialogical) also revealed a connection with the family structure (78.3% / 44.9%) with highly significant differences between complete and incomplete families ( $\chi^2 = 7.699$ ,  $p < 0.006$ ). The students from incomplete families were significantly more prone to dialogical communication, which certainly required further exploration. Moreover, these data allow suggesting that the negative influence of an incomplete family on the personality development is, in fact, ambiguous. Dialogical orientation is a professionally relevant quality for a prospective teacher, and hence, developing the dialogical vector is a highly important point in the professional development of pedagogics students.

Therefore, communicative behavior of prospective teachers has certain specifics in relation to the family structure: in general, students that were raised in complete families demonstrated more adaptive and professionally-oriented communicative behavior. Nevertheless, a certain number of the pedagogics students need to improve the communicative behavior in the aspects of empathy, reflection, assertiveness and friendliness in the interaction with other people.

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