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**PEDAGOGICAL ACTIVITY: FROM CREATING CONDITIONS  
FOR SELF-DISCLOSURE OF THE STUDENTS' PREDICTING  
ABILITIES**

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***Abstract***

The relevance of the study is due to the need to improve the effectiveness of the youth's higher education. The aim of the study is to identify the psychological and pedagogical predictors for the effectiveness of students' education. Demonstrating a multifaceted approach to a man, existential analysis being a method of research is intended to reveal the person's abilities for self-organization and self-management by means of available resources. The sample of the study included 187 students in the educational organizations of the Trans-Baikalian Territory. It is revealed that there are differences in the structure of the predictors for the educational effectiveness. The effectiveness of education for technical college students is primarily determined by the following predictors: the intrapersonal type of intellect, autonomy and sense of reality, responsibility, the motive «Learning of trade». While among the university students the predictors of the educational effectiveness are the adaptability to educational activity, the father's «positive interest» in relation to the daughter and the factor of criticism from the mother, the existentiality, the motive 'Getting a diploma'. It is concluded that the ability for deep and open interaction with the world can have an activating impact on the educational effectiveness. The results of the research make it possible to identify the predictors of improving the effectiveness of students' education and can be used in the educational process in order to design educational programs aimed at strategic quality control in education.

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**Keywords:** Pedagogical activity, adolescents, abilities, self-discovery of abilities, pedagogical intentionality, factors.



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## 1. Introduction

The creation of a competitive knowledge-based economy requires certain resources, among which the most significant is human capital, which includes the intellectual and social aspects of the construct under consideration (Storhay, 2001; Westlund, & Gawell, 2012). In the globalizing world, the enrichment of human capital is recognized as a civilization factor (Rodrigues, 2002), and therefore the quality of life in the future is linked to investments in human capital today. It seems that the educational achievements of young people are one of the significant indicators of the system knowledge and skills that determine the productivity of labor, the quality of life in the future. The report 'Education at a Glance 2016' provides an overview of education systems for 150 indicators. In the Russian Federation, the proportion of young people aged 25-34 at the secondary level is about 94.4%, which is 10.8% higher than the OECD average. Nevertheless, it should be recognized that graduates do not have the necessary skills for full-fledged activity in the innovation environment, which has a negative impact on innovation activity and productivity.

## 2. Problem Statement

The problem of psychological conditions for the disclosure of the student's abilities for themselves can be related to a certain extent both with vocational guidance and with the psychology of abilities. In the scientific literature there are many works containing data on the predictors of educational performance, which refer to academic achievements (academic progress, quality of knowledge), as well as the cultural level. One of the determinants of academic achievement is their inclusion in the system of personal values. Academic achievements (GPA - grade point average) are traditionally estimated as the average score of the student's performance over the last three semesters (Bacon, & Bean, 2006). Cognitive, motivational, personal and other factors, such as openness to experience and consciousness, are considered as favourable prerequisites for the development of valuable achievements for society (Deary, Strand, Smith, & Fernandes, 2007; O'Connor and Paunonen, 2007; Poropat, 2009; Gordeeva, & Osin, 2012; Kochergina, Naj Dzh, & Oryol, 2013). It was revealed that the influence of the subjective level of regulation and personal values on academic achievement is due to the 'flow state' (Batocynov, 2013). Significant predictors of students' academic achievements are intellectual, motivational and personal factors (Gordeeva, & Osin, 2012; Kochergina et al., 2013), a trial exam (Niessen, Meijer, & Tendeiro, 2016), expert assessment and self-assessment (Ying, & Liping, 2016), types of motives and learning strategies (Diseth, & Kobbeltvedt, 2010). The article presents new evidence of the direct and indirect influence of different types of motives and learning strategies on academic achievements. At present, the society needs not only an adequate assessment of the education quality, but, first of all, the development of students' individual potential. Abilities represent the potential for building competences. Self-disclosure of a person's abilities is a system process that is accompanied by qualitative changes in mental functions and mechanisms for their realization (Vygotskij, 1960; Emde & Harmon, 1984).

In the framework of the functional approach to the choice of profession, John Holland's theory of professional environments was developed (Holland, & Kilpatrick, 1991) which main principles include the conditioning of the profession choice by the person's hobbies or desires, depending on the person's openness, level of their abilities, originality, life goals, relations with parents, etc. Academic and professional achievements depend on the degree of coherence between a person and the environment in

which they work. In addition, the structure of interests, according to the theory of professional environments, is identical to the structure of an individual, the degree of expression of its characterological features: leading values, achievements, enterprise, etc.

### **3. Research Questions**

Despite the relative constancy of age-related changes, self-disclosure of abilities among different people will be carried out differently, since this process is conditioned by the peculiarities of interaction between the realizing genetic program and the educational environment. However, since there are ontogenetically stable psychological characteristics (Ravich-Shcherbo, Maryutina, Trubnikov, Belova, & Kiriakidi, 1996), it is possible to predict the effectiveness of education. Many authors have suggested that personal variables should be taken into account when predicting academic success as the predictive capabilities of cognitive characteristics do not allow to guarantee the success of the training with a greater degree of confidence and reliability (Mouw, & Khanna, 1993). As the predictors of academic success we can name synergy of learning, school assessments, standard testing, capacity for math and verbal reasoning (Gustin, & Corona, 1994; Erdyneeva, & Chernyavskaya, 2017), teacher optimism (Chernyavskaya, & Bolenkova, 2016), maternal social support (Pianta, & Egeland, 1994). The study of the possibility to predict the effectiveness of education is carried out through regression analysis.

The existential approach to predicting the effectiveness of students' education in the context of self-revelation of their abilities makes it possible to consider academic achievements as the result of inner work manifested in existential fulfilment. Existential analysis being a method of research is intended to reveal the person's abilities for self-organization and self-management by means of available resources. Nevertheless, it should be noted that the integration of existential approaches into the educational context is accompanied by certain difficulties. The methodological foundations of the existential approach are ontology, axiology, ethics and the theory of the meaning of human actions (Lehngle, 1951).

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

The study is aimed at identifying psychological and pedagogical predictors for the effectiveness of students' education. Despite the pre-assignment of educational path, conditioned by a complex of mastered disciplines, education is called upon to provide individual development, self-realization, the formation of a personal identity, self-revelation of abilities. Using the predictors for the effectiveness of students' education in the existential-analytic theory as a research methodology, Langle offers the possibility of self-revelation of abilities, activation of one's own resources by detecting the 'degree' of existential fulfilment, the level of meaningful things in students' lives.

### **5. Research Methods**

The empirical study among the full-time students was conducted from March to September 2017. The sample included 187 students in the first and fourth years at the educational institutions of the Trans-Baikal Territory (Trans-Baikal State University, Trans-Baikal Technical College of Professional Technologies and Service) aged 15-23 years who are in the situation of professional self-development. The proportion of young men was 48%. The testing procedure was carried out for two and a half hours on a

voluntary basis, individually or in small groups, under the conditions of confidentiality. The control over the accuracy of filling in forms was carried out by a psychologist.

The effectiveness of the students' education in the context of their abilities for self-disclosure was diagnosed by the following methods:

The questionnaire 'Mechanisms of Students' Abilities for Self-Disclosure' is aimed at revealing self-assessment of abilities and mechanisms of their self-disclosure.

To determine the correspondence between the type of social and professional orientation of the personality (type of personality, kind of activity and professional environment) and the direction and educational program specialization, we used the questionnaire of the professional personality type by Holland (Holland, & Kilpatrick, 1991).

The 'Adolescents about Parents' questionnaire (ERP) presents a modification of the Earl S. Schaefer's method (1965) and reveals the meaning and specificity of the parent's educational practice from the position of teenagers from 13 to 18 years. The results of the research show the influence of relations with the parent (separately with the mother and father) on the manifestations of benevolence, hostility, autonomy, directivity and inconsistency on the effectiveness of education.

The method by Motkova 'Personality self-assessment' (modified by Sosnovsky) was developed to study the overall self-evaluation for the positivity of personality development, as well as self-esteem indicators of individual's personality factors (morality, will, autonomy and a sense of reality, creativity, harmony, extraversion) (Sadykova, Kurmanova, Yergazina, & Kussainovna, 2017).

The adequacy of the student's professional choice and the satisfaction with it were studied with the help of Ilyina's method 'Motivation of study in the university'. The measurement of the subject's dominant motivational tendency was carried out using the technique 'Motivation of achievement' by Mohammed-Eminova (Czernikova, 2013).

The Existence Scale (ESK) is one of the psychometric tools reflecting the subjective evaluation of a person's life. The level of existential fulfilment shows the degree of meaningfulness in life, the inner consent of the person's essence with their decisions and actions.

Moreover, we analysed the effectiveness of students' education in the average grade in all the disciplines taught; also we conducted a study of teachers and curators' expert characteristics. Statistical processing of the data and regression analysis were carried out by means of the computer program AMOS (application SPSS v.21).

## **6. Findings**

To reveal the mechanisms of students' abilities for self-disclosure we carried out a survey of employers (7 people), managers at various levels in 3 educational organizations (8 people), which showed that the competitiveness of the graduate in the Trans-Baikal labor market ensures the availability of knowledge, propensity and ability to self-development, diligence, high motivation, focus on results, developed communication skills. The study showed that students have rather diversified abilities and hobbies. 75% of respondents are distinguished by their desire for new knowledge. 67% of the subjects speak foreign language (English) at the basic level, and spoken English - 4% of those surveyed. 16% of the students believe that they have the ability to research. 7% of the students have apparent mathematical

abilities, 30% of the students are engaged in sports. 40% of the respondents are passionate about creativity: design, graphics, dancing, and music. 23% of the respondents have communicative abilities and as they also called abilities the following: the ability to competently express their thoughts and listen to the interlocutor, tact and courtesy during the communication.

93% of the students claim that their parents provided disclosure and development of abilities, and 7% of the respondents believe that they are able to reveal their abilities independently. 36% of the students surveyed believe that the teacher is a wise mentor, a sensitive and attentive professional who helped them to reveal their abilities. 30% of students think that friends helped them to unlock abilities.

Conscious self-disclosure of abilities, according to the prevailing majority of respondents (78%), occurs at the age of 15 to 23. The students, who excelled in the field of sports achievements, believe that the development of high-speed qualities, power endurance began at the primary school age. 20% of students are sure that the interest in music classes, the recognition of familiar melodies by the first sounds, the desire to sing along was manifested at the age of 5-6. 38% of respondents began to develop their abilities from the age of 14, because they found certain problems with academic achievement, because of the teacher and / or classmates' attitude towards them, the desire to raise their authority, to meet the hopes of parents, chronic diseases.

Compulsory subjects for obtaining a certificate are the Russian language and mathematics. The most popular subject among those 'by choice' USE (United State Examination) for respondents is social science. On a voluntary basis, computer science (20%), English (12%), physics (36%), biology (12%) were chosen.

The subjects for the USE at school were chosen consciously, but under the influence of parents (90%), including parents and teachers (30%), parents, teachers and friends (10%). 60% of respondents are sure that their choice was, nevertheless, conscious, and the subjects are interesting. Independent and conscious choice belongs to no more than 12% of the respondents. There is not a single student who has chosen the subjects for the examinations under the influence of chance. 40% of the respondents chose subjects for the USE at the school consciously, because these subjects seemed easier to them.

9% of respondents emphasize that the profession which they are currently studying is not interesting for them, or important, and 10% of the students think that the profession they are currently studying does not take the first place in life plans. 46% of the respondents have a positive attitude towards their profession and consider it significant enough, they are sure that they are going to have normal relations with the profession. For 14%, the acquisition of this profession is very important at this life stage, the possibility of developing relations with the profession and in the profession seems attractive to them. 21% think positively of their profession, but do not consider it important and interesting. Thus, only 60% of the respondents believe in a positive dynamic of relations with the profession. 7% of the students think that thanks to their profession they feel they are included in something important.

So, self-disclosure is carried out during the process of a personal self-realization, identifying oneself as a subject by solving life problems, communication products, activities (Brushlinskij, 2003; Abulkhanova-Slavskaya, 1991, p. 99.). The results of the survey among students show that more abilities are revealed through the help of parents and teachers. The choice of subjects to take at the USE is by no means independent, parents and teachers play a significant role. All this shows that the mechanisms for self-disclosure of abilities are not sufficiently developed, therefore, this fact can affect not only the

actualization of the Self, but also the ability to make important decisions, which may change lives, independently.

The questionnaire by Holland allowed not only to determine the correspondence of the personality type of social and professional orientation (type of personality, type of activity and professional environment) to the direction and educational program specialization, but also to diagnose the degree of formation for the occupational outlook. The hypothetical type represents the result of the interaction between the individual's actualized potential and the multilateral social culture, including the immediate environment, parents, social class, national culture, etc. It was found that 46.7% of the students in the Trans-Baikal College of Professional Technologies and Service are realistic. Since all the subjects surveyed are young people, such personal characteristics as aggressiveness, efficiency, perseverance, rationality, practical thinking, low level of sociality; stability; focus on the present; the focus on activities related to specific objects (things, machines) and their practical use, are explained by their gender peculiarities. High homogeneity of the individual interests is expressed by 40% of the respondents, the code of average personality homogeneity takes place is shown by 13.3% of the subjects. Thus, only 53.3% of the students will be satisfied with the profession and in the profession. However, we are concerned about the degree of formation for an occupational outlook (46.7% of the subjects), characterized by a low level of personality differentiation and an inadequately defined circle of interests, poorly awareness of the individual strategy in a professional career.

The students, surveyed in the Trans-Baikal State University are dominated by social (60%), artistic (33.3%) and entrepreneurial (20%) types of professional preferences. Using communication skills, responsibility, convincing behavior and rich imagination increases the awareness about the image of the professional future. Since the type of personality corresponds to the social environment and activity, it seems that the effectiveness of education will be higher due to self-disclosure of abilities in the field of human relationships due to an adequate choice of activities, involving informing, training, development, education. High homogeneity of the individual interests is expressed by 73% of the students, 20% of the subjects have average homogeneity of personality, 7% of the respondents have low homogeneity of personality. It should be noted that the elements of the code are actually the same, which indicates a slightly differentiated sphere of interest.

Due to the age limitations of the method of psychological diagnostics for child-parent relations, which reveals the content and specificity of the parents' educational practice from the perspective of teenagers aged 13-18, the students at the Trans-Baikal Technical College of Professional Technologies and Services, whose average age is 16.96 (standard deviation - 1.02) and students in the 1st year at the Trans-Baikal University (the average age is 17.6 years) took part in the research. The methodology allows you to describe the relationship with the parent (separately with the mother and father) for the most common manifestations: benevolence, hostility, autonomy, directive and inconsistency. The subjects (boys) were brought up in a single-parent family, where the tendency of the 'mother' family is preserved.

The respondents showed high results on the Scales of Hostility (4.9) and Inconsistencies (4.7). The «hostility» of the mother is characterized, in the examinees' opinion, by her aggressiveness and excessive severity in interpersonal relationships. Analysis of the study results shows that the son is unconsciously perceived as a rival, which must be suppressed. The mother is oriented to the assertion of her own magnitude, her self-esteem, which excludes the adoption of her son. Unfortunately, various kinds of

manipulations are often used: emotional coldness is masked and often given out for restraint, modesty, adherence to 'etiquette' and even subordination to it. At the same time, the mother's hostile attitude towards her son is expressed in suspicion, a tendency to excessive criticism of him and people around, that is aimed at humiliation in the eyes of others. Mother's 'hostility' is manifested as a result of the struggle for their independence. At the same time, the positive activity and responsibility for their son's fate are constantly shown (mainly, at the verbal level).

'Inconsistency' in the line of the mother's education is assessed by the young men as alternating dominance of power, distrust, ambition and obedience (in adaptive forms), over-altruism, hyper protection and distrustful suspicion. There is a tendency to extreme and contradictory forms of manifestation with significant amplitude of oscillation. The 'directness' of the mother in relation to the son is assessed by respondents as imposition of guilt towards her, in her declarations and constant reminders that «the mother sacrifices everything for the sake of her son», takes full responsibility for everything that the child did, does and will do. The mother denies such forms of manifestation of a positive emotional attitude as responsiveness or sympathy. There is a tendency to exclude the son's misconduct, so that in the eyes of others the maternal status remains at an altitude. At the same time, according to the scale, mothers have a tendency to patronage, as they tend to use inductive techniques while affecting their children.

For the students in the first year of the Trans-Baikal State University as a predictor of the educational effectiveness in the context of abilities for self-disclosure we can use father's 'Positive interest' in relation to his daughter (4.2), combined with a high factor of criticism from the mother (4.2).

On the scale of positive interest (POZ), respondents perceive the mother's psychological acceptance as a relatively critical approach to them. The acceptance of the mother's help and support in the overwhelming majority of cases is expressed in a tendency to agree with her opinion. With a positive mother's attitude towards the examinees, the latter deny her power, suspicion, tendencies to leadership. At the same time, sons do not expect excessive conformism from the mother. However, just competent behavior, a friendly way of communication and normal emotional contacts are not enough for the respondent to be able to assert that the mother has a 'positive interest' towards them. From the students' point of view, mother's 'Positive interest' means a hyper patronage of a super-strong, adult and independent person.

On the autonomy scale (AUT), the mother is perceived as dictate, a 'blind' force of power and ambition, which must be obeyed. She does not take her son into account, does not think about his feelings, thoughts, perceptions and motivations. For autonomous mothers the adaptive forms of mother's authority, based on trust and respect, are by no means in evidence. There is a certain fence and mother's non-involvement in the young men's business.

The proximity factor characterizes the rejection of warm feelings manifestation and full acceptance of one's child (low standard score). The criticism factor has average standard values, which reflects, on the whole, the parents' interest and control of their children.

This kind of educational practice can lead to emotional and behavioral disorders in the form of aggression, antisocial behavior, withdrawal into oneself, and subsequently to partial or global disturbances of mental adaptation, which can invariably affect the self-disclosure of students' abilities and the effectiveness of their education.

Self-esteem as a personality central formation is a regulator of behavior and activity, including training. Using the Motkov's technique 'Personality Self-Assessment' (modified by Sosnovskij) made it possible to reveal a the overall self-evaluation for the positivity of personality development. Students are psychologically healthy people, have a high level of general self-esteem in the expression of positive aspects and personality traits, thus, the students of Trans-Baikal State University have the average value in the group of 4.07 points, while for the students of the Trans-Baikal Technical College of Professional Technologies and Service, the average value in the group is 3.99 points.

At the same time, the students of the Trans-Baikal State University (4.36 points) have a higher level of Harmoniousness (4.2 points) and Extraversion (4.17 points), whereas students of the Trans-Baikal College of Professional Technologies and Service have a higher level of Autonomy and Sense of reality (4.22 points), Will (4.125 points) and Morality (4.1 points).

The results analysis by the Ilyina's methodology showed that the motivating factor for university education for students is the knowledge acquisition (7.64 points) and receiving of a diploma (6.3 points). The predominance of motives on the scales under consideration indicates a lack of an adequate choice of the student's profession and satisfaction with it. Unfortunately, the desire to master professional knowledge and to form professionally important qualities is not significant for students (5.5 points). On the scale 'Acquisition of knowledge' only 32.3% of the students scored 12.6 points. 42% of the students on the scale 'The desire to obtain a diploma with formal mastery of knowledge, the desire to find workarounds for passing exams and tests' scored 7.25 points (maximum - 10 points).

According to the Magomed-Eminov's position, the motivation for achievement is a functional system of integrated affective and cognitive processes, which regulates the process of activity in the situation of achievement during its implementation. 41.3% of the subjects of Trans-Baikal State University are dominated by the motive for success, which means active involvement in activities, the ability to be more persistent in achieving the goal, the optimal choice of means to solve the problem, a sufficiently adequate assessment of one's own capabilities, the choice of a profession corresponding to their available competencies, the desire to achieve good results. 36% of the students do not possess any dominant motivation. 22.7% of the students have a defined domination of the desire to avoid failure. It can be assumed that the low level of the group representatives' educational effectiveness can be explained by their insecurity, fear of criticism. Negative emotional experiences are a barrier to self-disclosure of abilities; in addition, the orientation toward failure may result in an inadequate professional self-determination.

The results analysis on the subscale SD = 'Self-distancing' (the average score is 30.5 points) describes difficulties in distancing on relation to oneself, impossibility to think realistically, reduced and selective external perception, lack of ability to establish a reflective distance, dependence on random stimuli, unmet needs. 12% of the examinees have a very high score (43 points), which rather indicates that they do not notice their needs and feelings (the mechanism of self-abnegation). Judging by the indicators of ST, F and V, there is a motive for the need to overcome a difficult situation.

The average level for the subscale ST = 'Self-transcendence' is 76 points and it reflects the ability to sense values. Students are able to respond emotionally; adequately perceive deep internal relations, able to detect and live subjective values. The subjects are characterized by a sufficiently rich emotional inner world and an internal ability to feel the value bases and to look up to them ('participatory being').



Subscale F = 'Freedom' measures the ability to find the real possibilities for action, to use them to create a hierarchy in accordance with their value and thus come to a personally informed decision. While making a decision, respondents are able to correlate internal (strength, courage, concentration, ability to intercede for the Own) and external conditions (analysis of a particular situation potential).

The F-indicator (the average score is 44 points, the minimum is 28, the maximum is 51) indicates the inability to make decisions, indecisiveness and uncertainty in their own decisions. There is a fear of possible consequences, insecurity (an alarming form of reaction), lack of strength (depressive form of reaction); impression of meaninglessness of their actions (lack of existentiality). 10% expresses clarity and strength in making judgments, the search for opportunities for action and decision-making.

Subscale V = 'Responsibility' means comprehension of obligation, personal inclusion or a sense of duty (average score is 61, minimum is 32, maximum is 69). 13.8% of the respondents do not feel personally involved in life, they are in a waiting position, and they feel as spectators. A sense of duty is not very pronounced, but it can very well be formed. There is an alarming (fear of efforts, problems, threatening consequences), depressive (guilt, fear of inwardness) and hysterical (fear of constraint due to obligations) form of reaction.

All this leads to frivolity in behavior, carelessness, to the expectation of guarantees. The overwhelming majority (86.2%) have increased responsibility and involvement, and the ability to intercede for their own authenticity. Such qualities as compulsion, thoroughness and conscientiousness are being formed.

Indicator (P) = 'Personality' (average score is 106.5 points, minimum is 83, maximum is 120) reflects the person's cognitive and emotional availability for themselves and for the world. 10% of the subjects have basic personal abilities that are blocked and not used. Their individual closed nature can be caused by personal problems, immaturity, chronic dependence. Also we should note an increased readiness to psychosomatically react to the load. 24% of the respondents show «extraversion to the world» and in relation to themselves. Since there is a combination of  $SD < ST$ , we can note that emotional responsiveness, inner feelings, sympathy and a good ability to enjoy are tend to enhance, at the same time, difficulties in establishing distance and in preserving the internal free space are expressed. 'Emotional life style' may indicate active anxiety.

The indicator E = «Existentiality» (average score is 105 points, minimum is 60, maximum is 120) is associated with the ability to resolutely and responsibly go into the world and deal with it, to be engaged in life, to deal constructively with the outside world. 12% of the respondents have low level of E (below 81), therefore, they are characterized by uncertainty in the 'existential place', insecurity in decision-making, non-mandatory, ignorance of what needs to be done, restraint, low ability to withstand loads, sensitivity to interference, inclination to start acting on the basis of external stimulating reasons without internal correlation (the feeling of 'being called to'). 20% of the surveyed express the desire to organize their own world and their lives.

The analysis of the study results indicates a combination of  $F < V$ , which indicates a willingness to go into the world, but there is a sense of duty, lack of freedom, and the feelings act as a load (low SD and relatively high ST). So, for students, the «lifestyle based on duty» is quite typical. It seems that young people are not well-oriented in specific contexts and are confident about the correctness of their own decisions.

G-score (G-WERT) = ‘Overall indicator’ of the life fullness (the average score is 211.5 points, the minimum is 143, the maximum is 225). G-WERT shows the level of ability to cope with oneself and with the world and the ability to respond to internal and external demands and proposals by relating them to one's own values. 10% of the respondents is characterized by a low G-score (below 169), which indicates an unfulfilled existence. They are characterized by self-centeredness, closeness, emotional conversational inability, indecisiveness, lack of responsible inclusion in life. There are possible mental disorders under the influence of stress. 26% of the students have a reserved life with poor relationships, moderate existential fulfilment. 64% of the subjects have a clearly formed lifestyle and an average existential fulfilment.

Later, a multiple regression analysis was performed when a set of 48 variables was used as a source data. The effectiveness of the students' education was used as a dependent variable (adaptability to learning activity, to the academic group, academic achievements). When selecting the initial data, we took into account the fact that the variables are measured in a metric scale and it is unacceptable for their correlation coefficient to be equal to 1.

The results analysis of multiple regression analysis intended for studying the predictors of the students' educational effectiveness in the Trans-Baikal College of Professional Technologies and Service on measured characteristics showed that in the final model with the inclusion of 48 variables R (KMC or the coefficient of multiple correlation) is equal to 0.905, R Square (KMD or coefficient multiple determination) is 0.818. Therefore, the initial variables define 82% for the variance of the dependent variable (Table 01).

**Table 01.** The model of regression analysis (on the example of the respondents in a technical school)

Model	R	R-square	Corrected R-square	Std. evaluation error
1	0,905	0, 818	,809	1,86397

a. Predictors: Intrapersonal type of intellect, Autonomy and sense of reality, Responsibility, Learning of trade.

The value of the F-Fisher criterion and its p-significance level vary within the permissible values, respectively:  $F = 94,479$ ,  $p < 0,001$ . Hence, we can assume that the result of calculating the regression equation was significant (Table 2).

**Table 02.** Dispersion analysis (on the example of the respondents in a technical school)

Model	Sum of squares	st.sv.	Average square	F	Value
Regression	328,255	1	328,255	94,479	,000 <sup>b</sup>
Balance	72,962	21	3,474		
Total	401,217	22			

The calculations analysis shows that the educational effectiveness is primarily due to the following predictors (Table 3): Intrapersonal type of intelligence according to Howard Gardner ( $\beta = 0.850$ ,  $p < 0.001$ ), Autonomy and sense of reality ( $\beta = 0,381$ ,  $p < 0,002$ ). The next most important predictor is Responsibility (Subscale V, ‘Scale of Existence’ by A. Langle and K. Orgler). According to the theory of multiple

intelligence, this type of intellect can become not only a cognitive but also an affective constant for increasing the educational effectiveness, adaptability to learning activity and to an academic group. Respondents act with the awareness of the obligation to receive vocational education for themselves or as their duty to parents, primarily to the mother. A sense of confidence about the correctness in their actions allows the students of the technical school to withstand the process of implementing their own plans. Compensatory function in the absence of self-confidence realizes a sense of duty. Responsibility is the basis for the formation of stable self-worth. The contribution of the variable under consideration reflects the coefficient  $\beta = 0.368$ ,  $p < 0.01$ . Analysis of the data suggests that the motivation for mastering the profession (the desire to acquire professional knowledge and to form professionally important qualities) should be called sufficiently strong predictors of academic achievement for students in the technical school ( $\beta = 0,323$ ,  $p < 0,001$ ). It was found that the father's formalism and despotism ( $\beta = -0.123$ ), the lack of positive interest from the parents ( $\beta = -0.181$ ) adversely affect the educational effectiveness.

**Table 03.** Coefficients (on the example of the respondents in a technical school)

Model		Non-standardized coefficients		Standardized coefficients	t
		B	Std. error	Beta	
1	(Constant)	-5,545	1,711		-3,240
	Intrapersonal type of intelligence	1,296	,033	,850	39,422
	Autonomy and sense of reality	2,748	,151	,381	18,255
	Responsibility	2,657	,023	,368	18,255
	Motive «Learning of trade»	2,325	,613	,323	3,792

Looking into the predictors of the students' educational effectiveness at the Trans-Baikal State University through multiple regression analysis showed that in the final model with the inclusion of 48 variables, R (KMC or the coefficient of multiple correlation) is equal to 0.902, R Square is 0.814. Consequently, the initial variables determine 81% for the variance of the dependent variable (Table 04).

**Table 04.** Model of regression analysis (on the example of university students)

Model	R	R-square	Corrected R-square	Std. evaluation error
1	0,902	0,814	,805	0,25937

The value of the A-Fisher criterion and its p-significance level vary within the permissible values, respectively:  $F = 92,105$ ,  $p < 0,001$ . It follows that the result of calculating the regression equation was significant (Table 05).

**Table 05.** Dispersion analysis (on the example of university students)

Model	Sum of squares	st.sv.	Average square	F	Value
Regression	358,771	2	179,386	84,524	,000
Balance	42,446	20	2,122		
Total	400,217	22			

The calculations analysis shows that university students' educational effectiveness is primarily determined by the following predictors (Table 6): adaptability to the learning activity indicates that the student learns subjects easily, successfully and does academic tasks on time; if necessary, can ask a teacher for help, freely express their thoughts, can show their individuality and abilities in class ( $\beta = 0,865, p < 0,01$ ), Criticism factor, that is a high degree of parents' interest (mother) in their child's results ( $\beta = 0,368, p < 0,05$ ) in combination with the father's Positive Interest ( $\beta = 0,371, p < 0,01$ ). The next most important predictor is Existentiality (Subscale E, 'Scale of Existence' by A. Langle and K. Orgler). The indicator E (existentiality) reflects a person's ability to constructively find their way around in the surrounding world, come to decisions and responsibly implement them (coefficient  $\beta = 0,382, p < 0,05$ ). The data analysis shows that the motivation for obtaining a diploma should be called a significant predictor for academic achievements among university students, which reflects the desire to acquire a diploma with formal mastering of knowledge, the desire to search for workarounds when passing exams and credits ( $\beta = 0,283, p < 0,05$ )

**Table 06.** Coefficients (on the example of university students)

Model		Non-standardized coefficients		Standardized coefficients	t
		B	Std. error	Beta	
1	(Constant)	-15,565	0,125		-124,595
	Adaptability to the learning activity	1,320	,005	,865	257,541
	Criticism on the part of the mother	2,657	,023	,368	113,720
	Father's positive interest	2,423	,134	,371	109,680
	Existentiality	1,375	,012	,382	119,051
	Obtaining a diploma	,089	,003	,283	28,042

It was assumed that the effectiveness of the education of students can also be predicted by a system of variables that includes the following integrative and behavioral components: high homogeneity of the individuality, expressed differentiation of the subject's personality and a sufficiently defined range of their interests, a high level of overall self-esteem, expression of positive aspects and personality qualities, including high level of Morality, Will, Autonomy, Harmoniousness, Extraversion, aspiration to acquire knowledge, curiosity and the desire to learn professional skills and form professional qualities, motive of the desire to succeed. However, as it turned out, the specific weight of the variables is not high. The results of the study showed a lack of reliable differences between young men and girls.

## 7. Conclusion

The content of the predictors for the students in the technical school and the university is similar, but their structure is different. The main predictors of the educational effectiveness for the technical college students are the intrapersonal type of intelligence, autonomy and sense of reality, responsibility, the motive 'Learning of trade'. The expressed intrapersonal type is able to recognize their own motives, feelings and intentions, have a developed sense of self-worth, is capable of reflection, which cannot but affect academic achievements. Since the majority of the students in the technical school are male representatives, they are distinguished by personal qualities and values typical for a realistic type, that is, emotional stability, practicality, thrift, perseverance, autonomy, conformity. In addition, the subjects are brought up mainly in

an incomplete family; therefore, it is quite logical that the predictor of their educational effectiveness is independence and a sense of reality, responsibility to themselves and mother, the motive 'Learning of trade'.

Predictors of the educational effectiveness for high school students are the adaptability to educational activity, criticism factor on the part of the mother and the father's positive interest, existentiality. They easily master the academic disciplines, successfully and do training tasks completely and on time; if necessary, they are able to ask a teacher for help, freely express their thoughts, can express their individuality and abilities in the classroom, and take an active part in role-plays, debates. Their internal freedom and basic training are determined by the high level of parents' interest with simultaneous total control over their child. Personal inclusion and the ability to bring an issue to a close, based on personal values, or a sense of duty to the family, to themselves, not only provide a stable self-worth, but also, probably, contribute to the educational effectiveness, self-disclosure of abilities. One of the significant predictors is the indicator E (existentiality), which reflects the person's ability to constructively find their way around in the surrounding world, to come to decisions and responsibly implement them. However, uncertainty regarding the demand for the profession and development prospects of the profession in a depressed region determine the dominant motivation 'Obtaining a diploma', which is expressed in the desire to acquire a diploma in the context of formal knowledge acquisition.

The conducted research on revealing the interrelation of the educational effectiveness in the context of students' abilities for self-disclosure allowed to come to a conclusion of theoretical and practical importance. It consists in the following: a low level of existentiality can significantly reduce the likelihood of educational effectiveness, while an adequate level of existentiality in combination with a high level of intelligence is not necessarily an advantage in making a forecast of the educational effectiveness. The presented material is the first step to find the predictors of educational effectiveness; therefore the range of prediction reliability is quite wide, especially in the case of combining the affects of several factors. The results of the research can be used in the educational process, in particular, in order to design educational programs aimed at strategic quality control in education.

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