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PSYCHOLOGICAL PREDICTION OF SELF-DISCLOSURE OF SCHOOLCHILDREN'S ABILITIES: MODEL AND FACTORS

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Abstract

This paper establishes the theoretical background for the prognosis of self-disclosure in schoolchildren. The definition of self-disclosure is based on the psychological and philosophical concept of internal monologue, which begins quite early in life and helps the person understand their capabilities, accept their experience, and develop sensitivity to themselves and their experience; another important implication of self-disclosure is the match between the actual/attested abilities and the choice of subjects for unified state examinations (USE), which are part of graduation from the high school. The paper demonstrates the family- and school-associated prerequisites of the child's progress towards self-disclosure at different ages. Crucial are their relationships with the mother, as the degree to which the mother accepts her child determines how far the child can accept themselves, including as a person of certain capabilities. The goal hereof is to establish and identify an algorithm for predicting self-disclosure in schoolchildren on the basis of prerequisites: personality traits and personal relationships, and the teaching environment (the learning process and the personal as well as professional trait of the teacher). The study involved 245 subjects from Grades 9 and 11; the results prove the theoretical model constructed from earlier exploratory research, which can predict self-disclosure in schoolchildren. Important factors of self-disclosure include: positive relationships with the parents, especially with the mother; student-teacher relationships based on fairness, interest, and recognition of the student's value; low trait anxiety; and the ability to maintain self-control under situational anxiety.

Keywords: Schoolchildren, self-disclosure, relationships, factors, learning outcomes

1. Introduction

General secondary education constitutes an important milestone for the society and its future members. Personal difficulties at school often transcend into adult life. First, the child has troubles with their studies and performance, which the parents, the teachers, and ultimately the schoolchildren themselves associate with their future wellbeing and success in life, or vice-a-versa. Academic performance and factors of self-disclosure, which is an important future identification of oneself with specific capabilities, are linked to USEs, which are the conclusive part of general education. The examinations showcase the final learning outcomes and as such, they have implications regarding the societal expectations, anxiety, and fears on the part of the schoolchildren, their parents and teachers; all of this makes it difficult to predict the child's self-disclosure and the factors of the effectiveness of general education.

2. Problem Statement

Today's learning process should be adjusted for the facts confirmed when testing the causes behind various learning outcomes, the attainment of which is predetermined by the schoolchildren's capabilities. It is important to predict the effectiveness of learning through the lens of self-disclosure, as it is the child's capabilities that education targets.

3. Research Questions

The learning process is organized by teachers and includes specific effort to develop subject-specific capabilities; it also involves such personality traits that can drive the schoolchild's performance. Abilities and capabilities do not simply 'emerge' without (the child's) participation in some activities (Teplov, 1985).

How exactly schoolchildren understand their capabilities remains largely unknown. The perception of their own learning experience could be of value under specific circumstances. Schoolchildren rely on this experience to choose which USEs to pass, which ultimately affects their career choice.

How does an individual progress towards self-disclosure, towards understanding what they are capable of? We believe that the internal monologue is the pathway to self-disclosure. Thus, Bakhtin (1963) states that, "The actual life of an individual can only be fully disclosed in an internal monologue, in which the person readily and freely reveals themselves to themselves" (p. 100).

Self-disclosure is defined herein as the person's internal monologue (or dialogue with oneself) that occurs at different developmental stages and helps realize their own capabilities, accept their experience, and thus choose such examinations, whether USEs or basic examinations, and then such a career that will match their actual, attested capabilities. Self-disclosure is contributed to by other people and relationships with them. Internal monologue reveals the child's self and capabilities through the lens of other people's attitudes towards the child and their performance. Self-disclosure can have external and internal factors, which in principle is similar to the externality-internality dichotomy.

A schoolchild, especially a high school student that wants to perform well at the exams may focus so much on the prospects of this success that they will lose touch with reality (Golovanova & Dermanova, 2018). Failure or underperformance will bring a sense of emptiness or a perception of hollow success.

Emptiness, or the void will demand more and more sacrifices, as the person will continuously desire ever greater achievements, undermining their mental and subjective wellbeing (Gorman et al., 2020).

Values can be understood as something that affects the person specifically, as the experience of values (Längle, 2018, 2019).

A child first learns values from their parents. Parents always play an important role in anyone's life. Child-parent relationships are an experience that will always be with the person. Relationships with others therefore remains obscure and hard to reflect upon, since it is the relationships with the parents that lay the foundations of later life. We believe that the parental attitude towards the child is of extreme importance in the context of self-disclosure, as their respect towards the child and their interests is the first and very important foundation of self-attitude and attitude towards the world; it is a building block of cognitive and emotional experience.

A. Längle deems mother-child relationships vital. Mother, he believes, is the protoimage of life... Relationships with the mother are like the nutrient that enables the person with be in this world and have the feeling that can be summed up as, "It's so good that I am." This is why lack of maternal love is so painful even if the person has no shortage of love from other people (Längle, 2018).

A teacher, especially a primary school one, can influence their pupils' motivation, interest in learning, and cognition. Fairness and objectivity are crucial to the teachers' attitude towards their students.

We believe it important to emphasize fairness, as fairness can help relieve the child's anxiety. H. Heckhausen and his coworkers found out experimentally how far the teacher's focus on performance targets (successes) affects schoolchildren's motivation (Heckhausen, 1985). The study tested different scenarios: comparing schoolchild's performance against others vs against their earlier performance. When compared against others, schoolchildren would grow more anxious. However, comparing against the child's earlier performance in a longitude reduced the anxiety and motivated the child to learn (Heckhausen, 1985).

A teacher capable of comparing the child's performance in the retrospect can reduce the anxiety and motivated the child to learn. People learn to understand fairness and unfairness before they enter school; however, the fact that fair attitude correlates with mental wellbeing in adolescence shows how important parental and pedagogical fairness is, since it is critical for schoolchildren to be included in their family and in their class (Astanina, 2016; Tikhomandritskaya et al., 2019).

Längle (2018, 2019) states that self-search and self-discovery, i.e. becoming oneself is an everlasting dialogue with the world and with oneself. He fleshes out four cornerstones of existence that self-disclosure requires: the world; life; being oneself; and the wider context, or the future which incorporates meanings and values (Längle, 2018, 2019).

Existential analysis shows that person needs three kinds of experience: respectful understanding, fair attitude, and recognition of their value. From this standpoint, all these experiences are external conditions that enable schoolchildren to understand who they are, who they can become, and who they actually are. Thus, self-discovery is a result of a dialogue with Another, e.g. with a teacher; this dialogue can help persons find themselves ('I have this in myself'), whilst acceptance and optimism give rise to authenticity, i.e. to the willingness to be open to yourself, to respect yourself so that what the person found in themselves could be let be (Längle, 2018). Self-disclosure is what enables schoolchildren to determine their future, as they can proceed towards their own self-image (Markus & Ruvolo, 2015).

4. Purpose of the Study

This research sought to find and prove how different factors (personality traits and cognitive traits, parental attitude, and the teacher's attitude) contribute to the effectiveness of education.

Statistical analysis was employed to model and systematize the internal and external predictors of learning outcomes in the context of self-disclosure.

Here is the hypothesis: (a) external self-disclosure predictors include supportive parental (and especially maternal) attitude, as well as teachers' objectivity and fairness; (b) internal self-disclosure predictors are based on high self-esteem that enables schoolchildren to positively perceive their experience, to understand their self-worth, to be on good terms with oneself.

5. Research Methods

The study involved 245 subjects from Primorsky Krai: Grade 9 students to take basic state examinations (BSE), and Grade 11 students to take unified state examinations (USE). Empirical data was collected in 2019 and early 2020 once the students decided which exams to take. Chernyavskaya's (2020) Self-Disclosure Questionnaire, where students would themselves ponder their abilities and capabilities, and reflect upon the internal factors contributing to self-disclosure; and a career profiler based on the Holland Codes and adapted by Vorobyev et al. (2001). In case a schoolchild's reflection of abilities, the career profile, and the chosen exams matched, they'd get a high self-disclosure score. This value was then used as the dependent variable in further statistical processing of empirical data by means of regression analysis.

In light of the theoretical model of the authors' making, and the available empirical data, we chose the following independent variables: parental attitude, learning motivation, anxiety, the actualization of fundamental existential motivations in student-teacher relationships. These indicators were evaluated by means of the ADOR test as adapted by Wasserman et al. (2004); Learning Motivation and Emotional Attitude to Learning as adapted by A.D. Andreyeva; Existential Motivations of Interpersonal Relationships Test (Ukolova et al., 2016), General Self-esteem Questionnaire by G.N. Kazantseva (Istratova & Exakusto, 2016); A. Längle's and C. Orgler's Existence Scale (Krivtsova et al., 2009), H. Gardner's Intelligence Types (Lobanov & Drozdova, 2018), and the average school grades as a performance indicator. The selection of methods was motivated by the original theoretical model.

For statistical processing of empirical data, we chose regression analysis (the dependent variable as a function of predictors), and correlation analysis. Calculations were run in SPSS Statistics 20.0.

6. Findings

Regression analysis highlighted the following predictors of self-disclosure in schoolchildren: positive maternal interest, authenticity and fairness of the teacher, anxiety and self-control. $R^2=0.75$ is the value of multiple correlation squared; this is a high value, which means that the effects of independent variables on the dependent variable were explained accurately; the regression model accounts for over 74% of the variance in the dependent variable; multiple correlation between the dependent variable and the independents was high at R=0.8, see Table 1.

Table 1. Statistics on the self-disclosure model in question

Model	R	R^2	Adjusted R^2	Standard error of the score
1	0.87	0.75	0.73	0.29
A	Predictors: positively interested mother, teacher's fairness and authenticity, optimal trait anxiety, self-control			
B	Dependent variable: self-disclosure			

Table 2 shows unstandardized coefficients that quantify the contribution of the three variables to the regression model; β coefficients quantify the contribution of each variable to the regression model.

Table 2. Unstandardized regression coefficients and their statistical significance

	Model	Unstandardized coefficients	Significance
		B	
1	Constant	1.05	0.109
	Positively interested mother	0.012	0.013
	Teacher's fairness and authenticity	0.015	0.009
	Anxiety	-0.028	0.006

From data presented in Table 2, we can now derive a model to predict self-disclosure.

Self-disclosure in schoolchildren = 1.05 + 0.012(positively interested mother) + 0.015(authenticity in student-teacher relationships) - 0.028(anxiety).

Therefore, self-disclosure is enabled by a positively interested mother and an authentic teacher provided that the child has low anxiety, the latter being the dominant component as it has the highest coefficient, which is also negative, meaning that it has a reverse impact on self-disclosure.

Spearman's rank-order correlation r showed a correlation between the scores on the scales used in these methods, and the self-disclosure score. For results, see Table 3.

Table 3. Indicators linked to self-disclosure

Measurable indicators	General self-esteem	Existential fulfilment	Average academic grade
Self-disclosure in schoolchildren	r=0.751 (2×st.val)0.026 n=245	r=0.816 (2×st.val)0.012 n=245	r=0.742 (2×st.val)0.031 n=245

Thus, we found a strong positive correlation between the objective performance scores, a high general self-esteem, schoolchildren's perception of life as meaningful, and self-disclosure.

The identified correlations helped build a model of self-disclosure predictors and contributing factors, see Figure 1.
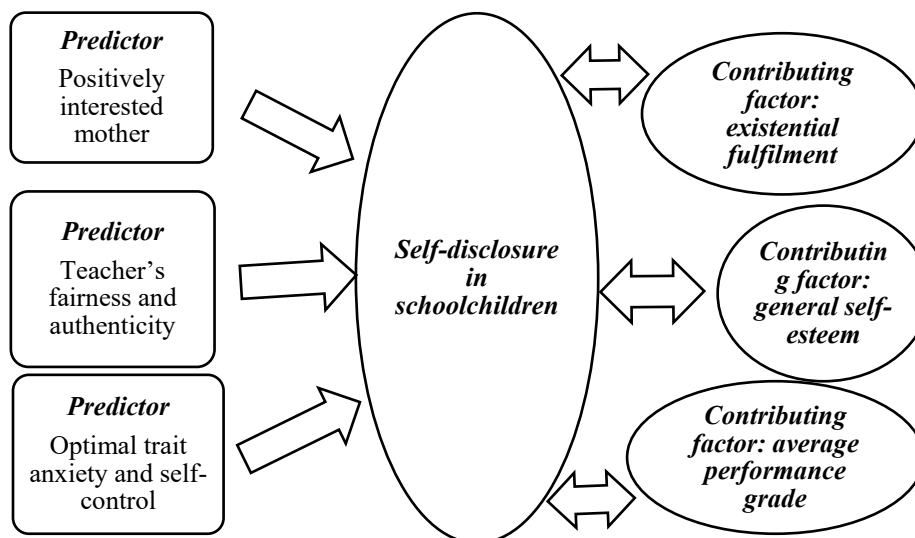
Figure 1. Model for prognosis of psychological and pedagogical indicators of self-disclosure in schoolchildren: predictors and contributing factors

The external predictors are: positive maternal interest, authenticity in student-teacher relationships, low trait anxiety, and self-control.

7. Conclusion

This research has identified circumstances that can help 'predict' self-disclosure and exam performance. The greatest contribution comes from several external factors including positive maternal interest. A child learns to pay due attention to themselves and their experience, to be on good terms with themselves, to stand up for themselves, if they know that the mother finds their deeds worthy. This helps the child to understand themselves and their capabilities, to stay committed to them despite all the trials. Another important external predictor is the authenticity in student-teacher relationships. If a child remains confident when asked or noted by a teacher, and expects fair and objective attitude, they will learn to be objective and confident about themselves and their own achievements. Anxiety negates the learning outcomes; harsh criticism from the family or the school, or constant comparison against other children and their successes is what triggers anxiety.

The internal predictors of self-disclosure and effective education are high self-esteem, existential fulfilment, and good grades. These results can be used by psychologists to design developmental courses for schoolchildren, teachers, and parents.

References

Astanina, N. B. (2016). Belief in a Just World as a Correlate of Psychological Well-being. *Klinicheskaia i spetsial'naia psikhologiia = Clinical Psychology and Special Education*, 5(4), 26-38. https://doi.org/10.17759/cpse.2016050402 [in Russ., abstr. in Engl.].

Bakhtin, M. M. (1963). *Problemy poetiki Dostoyevskogo [Problems of Dostoevsky's poetics].* Soviet Author. [in Russ.].

Chernyavskaya, V. S. (2020). Faktory` samoraskry`tiya sposobnostej podrostkov: adaptaciya oprosnika [Self-disclosure factors of adolescents: adaptation of the questionnaire]. *Razvitie cheloveka v sovremennom mire*, *4,* 86-92. [in Russ.].

Golovanova, N. F., & Dermanova, I. B. (2018). Napravlennost samoosushchestvleniya i lichnostnoye razvitiye podrostka [Direction of self-realization and personality development of adolescents]. *Psychological-Educational Studies,* *10*(3), 126-134. https://doi.org/10.17759/psyedu.2018100311 [in Russ.].

Gorman, E. L., Burke, H. H., Rubino, L. G., Vargas, I., & Haeffel, G. (2020). Spetsifika vliyaniya simptomov depressii i trevogi na akademicheskiye rezultaty [Teasing apart the effect of depression specific and anxiety specific symptoms on academic outcomes]. *Clinical Psychology and Special Education*, *9*(3), 91-104. https://doi.org/10.17759/cpse.2020090307 [in Russ.].

Heckhausen, H. (1985). *Motivatsiya i deyatelnost' [Motivation and action].* Pedagogika. [in Russ.].

Istratova, O. N., & Exakusto, T. V. (2016). *Psikhodiagnostika. Kollektsiya luchshikh testov [Psychodiagnostics. A collection of best tests].* Rostov-on-Don: Fenix. [in Russ.].

Krivtsova, S. V., Längle, A., & Orgler, C. (2009). Shkala ekzistentsii (Existenzskala) A. Längle i C. Ogler [A. Längle's and C. Orgler's Existence Scale (Existenzskala)]. *Existential Analysis*, *1,* 141-170. [in Russ.].

Längle, A. (2018). Ekzistentsialny analiz svobody. O prakticheskom i psikhoterapevticheskom obosnovanii personalnoy svobody (chast 1). [Existential Analysis of Freedom. On the Practical and Psychotherapeutic Substantiation of Personal Freedom. Part 1]. *Counseling Psychology and Psychotherapy*, *26*(4), 132-150. https://doi.org/10.17759/cpp.2018260409 [in Russ.].

Längle, A. (2019). Ekzistentsialny analiz svobody. O prakticheskom i psikhoterapevticheskom obosnovanii personalnoy svobody (chast 2). [Existential Analysis of Freedom. On the Practical and Psychotherapeutic Substantiation of Personal Freedom. Part 2]. *Counseling Psychology and Psychotherapy*, *27*(1), 119-139. https://doi.org/10.17759/cpp.2019270108 [in Russ.].

Lobanov, A. P., & Drozdova, N. V. (2018). *Praktichesky intellekt: kak i chemu uchit cheloveka umelogo [Practical intelligence: how and what to teach a capable person].* National Institute for Higher Education. [in Russ.].

Markus, H., & Ruvolo, A. (2015). Possible selves: Personalized representations of goals. In L. A. Pervin (Ed.), *Goal concepts in personality and social psychology* (pp. 211-241). Psychology Press.

Teplov, B. M. (1985). *Izbrannye trudy [Selected works]: in 2 volumes. Vol. I.* Pedagogika. [in Russ.].

Tikhomandritskaya, O. A., Malysheva, N. G., Shayekhov, Z. D., & Kabalnov, N. A. (2019). Rol lichnostnykh tsennostey v psikhologicheskom blagopoluchii sovremennykh shkolnikov [The role of personal values in the psychological well-being of modern high school students]. *Psikhologicheskie Issledovaniya*, *12*(63), 9. http://psystudy.ru [in Russ.].

Ukolova, Ye. M., Shumsky, V. B., & Osin, Ye. N. (2016). TEMMO - oprosnik dlya otsenki ekzistentsialnoy ispolnennosti v mezhlichnostnykh otnosheniyakh: faktornaya struktura, nadezhnost i validnost [TEMMO: existential fulfilment of interpersonal relationships test: factors, reliability, and validity]. *Existential Analysis*, *8*, 151-181. [in Russ.]

Vorobyev, A. N., Senin, I. G., & Chirkov, V. I. (2001). *Oprosnik professional`ny`x predpochtenij: Rukovodstvo [Occupational Preference Checklist: A Guide].* Moscow: Kogito-Centr. [in Russ.].

Wasserman, L. I., Gorkovaya, I. A., & Romitsina, E. E. (2004). Roditeli glazami podrostka: psixologicheskaya diagnostika v mediko-pedagogicheskoj praktike [Parents through the eyes of a teenager: psychological diagnostics in medical and pedagogical practice]. Rech [in Russ.].