

# Intervention and stimulation programs in prospective teachers training

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**Abstract.** *Our article describes the intervention, development and stimulation programs that are part of preparing prospective teachers. They serve as a means to instigate the development of the teacher, especially in gaining and forming such capabilities, abilities, skills and forms of behaviour that are most significant from the perspective of current educational needs. We also describe the possibilities of including special preparation of prospective teachers in the area of improving interpersonal competencies, with the emphasis on developing empathy through the "E - Program for empathy development", designed by the authors.*

**Key Words:** *intervention and stimulation programs, undergraduate preparation of teachers, interpersonal competencies, "E - Program for empathy development"*

## Programy interwencyjne i stymulacyjne w prospektywnym kształceniu nauczycieli

**Abstrakt.** *Artykuł omawia programy interwencyjne, rozwojowe i stymulacyjne wchodzące w zakres prospektywnego kształcenia nauczycieli. Służą one zainicjowaniu rozwoju nauczyciela w kierunku wykształcenia w nim takich umiejętności i zachowań, które są najistotniejsze z punktu widzenia bieżących potrzeb edukacyjnych. W artykule omówiono także możliwości uwzględnienia w kształceniu przyszłych nauczycieli programów służących rozwijaniu kompetencji interpersonalnych, ze szczególnym uwzględnieniem rozwoju empatii poprzez wykorzystanie „E - Programu rozwoju empatii” opracowanego przez autorki.*

**Słowa kluczowe:** *programy interwencyjne i stymulacyjne, kształcenie nauczycieli na poziomie studiów I stopnia, kompetencje interpersonalne, „E - Program rozwoju empatii”*

## Introduction

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The teacher's role as an agent of creating the atmosphere in the class is a basic element of the educational process. The teaching profession is constantly determined by changes of a social, cultural and also a political nature. Changes that make schooling more humane and democratic require changes in the attitudes and mentality of teachers, their self-reflexion and a genuine interest in both their profession and students.

The main professional capacities, according to Fontana<sup>1</sup>, are as follows:

- *professional knowledge and capacities* associated with the content of the subject the teacher is engaged in,
- *didactic professional capacities* that are linked to the way the teacher teaches,
- *social, psychological and special educational capacities*, e.g. the capacity to understand the relationships in the class, the capacity to communicate appropriately with parents about students' achievements and problems.

In his concept for developing the teaching profession, Döring<sup>2</sup> differentiates four types of preparation:

1. The first type of preparation includes the needs of individual development, which means psychotherapeutic care, psychological consultations, methods and techniques of psychological relaxation, dynamical group training in sensitivity, and aspects of psycho-hygiene.
2. The second type of preparation is linked with general pedagogical training, which includes lectures and seminars, pedagogical analysis of situation with subsequent understanding of the domain, and analysis of interactions.
3. The third type of preparation consists of analysing lessons, inspections, audio-visual methods and models of education.
4. The fourth type of preparation consists of various types of skill-training.

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<sup>1</sup> D. Fontana, *Psychologie ve školní praxi*, Praha: Portál, 1997.

<sup>2</sup> K. W. Döring, *Ein Lehr- und Arbeitsbuch*, Wienheim: Deutscher Studien Verlag, 1992.

Most of the activities in the teacher's inventory of activities require the application of social and psychological skills to manage the complex interpersonal relationships in the class.<sup>3</sup>

Specific work activities primarily focused on the emotional and cognitive development of pupils and students should therefore be typical of the teaching profession, and these activities should be made primarily on the basis of direct social communication and interaction, which is characterized by a high level of personal authenticity and emotional engagement and also a high level of acceptance of pupils and students.

The crucial feature of this profession is acceptance, congruence, empathy and assistance, while the effectiveness is critically determined by the structure of personality with a high level of competence in the area of emotional, empathic and pro-social behaviour.

"The teacher does the 'emotion work', which can be defined as a work activity requiring one to express and properly regulate both negative and positive emotions. The ability to express a high level of sensitivity-empathy towards pupils and students, who frequently transfer their negative experience and emotions onto their teacher, is considered pedagogical mastery. A higher level of empathy in the personality structure of the teacher has a crucial meaning, as it constitutes the basis of effective interaction with pupils and students. Teachers should have at their disposal other competencies as well, such as a great degree of personal maturity with a satisfying level of self-reflection and self-regulation".<sup>4</sup>

E. Gajdošová<sup>5</sup> refers to serious changes which the 21<sup>st</sup> century brought into the education system in kindergartens, elementary schools and secondary schools:

- "new school legislation (education laws, ordinances, orders) and the related preparation of state educational programs for kindergartens, elementary schools and secondary schools (ISCED 1, 2, 3),

<sup>3</sup> Z. Helus, *Sociální psychologie pro učitele I*, Praha: UK, 1992; V. Hrabal, *Sociální psychologie pro učitele II*, Praha: UK, 1992; L. Hřebíček, *Profesní vývoj adepty učitelství*, "Pedagogická orientace" 1995, nr 17-18, pp. 70-77.

<sup>4</sup> Z. Mlčák, *Prosociální chování v kontextu dispozičních aspektu osobnosti*, Ostrava: Ostravská univerzita v Ostravě, 2010, pp. 124-125.

<sup>5</sup> E. Gajdošová, *Školský psychológ pre 21. storočie*, "Školský psychológ pre 21. storočie. Zborník príspevkov z medzinárodnej vedeckej konferencie", Bratislava: Fakulta psychológie Paneurópskej vysokej školy, 2012, pp. 112-113).

- the emphasis on further, life-long education for teaching professionals, especially the requirement of accredited continual education,
- preparation of standards for school professions, including standards and norms for school psychologists,
- a considerable increase in socially pathological phenomena in schools,
- the general lack of professionals at schools (not only pedagogues, but also school psychologists, special pedagogues, speech pathologists, social pedagogues),
- stress and burn-out in a significant number of teachers,
- the new proposals from the Ministry of Education of the Slovak Republic to decrease the number of schools and school facilities, merging schools and/or classes, integration and inclusion of pupils,
- the need for school psychologists and confirmation of the profession of school psychologist in the new school legislation.”

Thus, it is apparent that the pedagogical work of the teacher was, and still is, very demanding, and often brings about situations that require a great deal of time, patience and tolerance, which is one of the reasons for the high workload and pressure that could possibly result in particularly stressful situations.

These are the reasons why innovative methodical procedures are being implemented in the preparation of prospective teachers. They include intervention-oriented, stimulative programs aimed at the comprehension cultivation of the trainee teacher’s personality.

“Intervention programs represent the modern approach in education, enhancing the humanistic perspective of both education and a healthy lifestyle. They focus on the development of social and personal competency in helping professionals in the area of undergraduate and post-graduate preparation, and on the development of their expert competence with the aim of providing a methodological foundation for effective work with clients“.<sup>6</sup>

The focus of the intervention programs is on the following:

- enhancement of the ability to perceive social reality,

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<sup>6</sup> M. Popelková, M. Zaťková, *Podpora rozvoja osobnosti a intervenčné programy*, Nitra: UKF, 2009, pp. 14–15)

- functional expression of feelings, changing undesirable behavioural stereotypes,
- deepening self-knowledge,
- strengthening efforts for self-regulation,
- self-acceptance, self-esteem,
- acceptance of others,
- becoming more clear about one's own motives,
- interpersonal openness,
- training in constructive conflict resolution,
- training in effective stress coping/ management,
- training in the willingness to forgive oneself and others,
- effective communication training,
- assertiveness training,
- development of empathy and pro-social behaviour,
- understanding of group processes and group dynamics.

Successful completion of the intervention program depends on several variables related to personality, professional readiness, social capabilities and abilities, the trainer's experience, the range of techniques, activities, and the trainee group's characteristics and dynamics.

According to Hermochová<sup>7</sup>, "undergoing the training can generate latent psychological disturbances and may lead to psychotic reactions, mild emotional disturbances and negative reactions. However, training can prove extremely useful - like a cure, an invention or a tool - if it is applied at the appropriate time, and if it is used by the person that pays maximum attention to preparing and implementing this training."

## Preparation and realization of intervention programs

Intervention programs draw from the concept of social learning. Čáp<sup>8</sup> considers it as an "important form of human learning when an individual in an interaction with another person or social group acquires capabilities, habits and attitudes necessary for social contact and social life, takes

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<sup>7</sup> S. Hermochová, *Sociálně psychologický výcvik. Příspěvek sociální psychologie k metodice práce s přirozenou skupinou*, Praha: SPN, 1982, s. 16.

<sup>8</sup> J. Čáp, *Psychologie výchovy a vyučování*, Praha: Univerzita Karlova, 1997, s. 111.

on his or her social roles, moral, aesthetical and other norms of society, and his or her motives and characteristics are formed.“

Linhart<sup>9</sup> defines 3 phases of active social learning:

1. *Preparatory phase* – assessment of the current level of social behaviour of the group members takes place, and the optimal motivation for the change in the behaviour in group members is induced in accordance with the stated goals and objectives.
2. *Active social learning* – an atmosphere of trust plays an important role, contributing to the process of improving social competencies, required abilities and capabilities. Mutual perception and communication among individual members in the process of resolving the problems and tasks is also important.
3. *Final phase* – reinforces the new experience, competencies, abilities. Participants assess if their needs and expectations were met.

There are several experts and professionals in both the Czech and Slovak republics who apply the social and psychological training in their practice or conduct research into its effectiveness. These include Bakalář, Křivohlavý, Hermochová, Novák, Praško, Prašková, Beranová, Niklová, Dobešová, Medzihorský, Havránková, Orlík, Hřebíček, Kolman, Bratská, Gajdošová, Herényiová, Kopasová, Mačišáková, Sollárová, Hamranová, Verešová, Poliaková, Šrámová, Popelková, Obložinská, Mesárošová, Fandelová, Reichelová, Baranová, Zelinová, Drotárová, Smik, Labáth, Salbot and Sabolová.

Preparing intervention programs must include thoroughly elaborated cooperation on both the content and the formal concepts. The desired effectiveness of the program cannot be supplied by the content only; a good formal scenario for the intervention program, consisting of the optimal design of the meetings, is important as well. Other important elements are timing, organization, space, psychohygienic aspects, the range of methods and techniques, the number of participants of the training, goals etc.<sup>10</sup>

Štětovská, Gillernová<sup>11</sup> show that in preparing an intervention program, it is necessary to consider several basic criteria, which can be deemed a premise for the overall content and form of the program's realization:

<sup>9</sup> J. Linhart, *Základy psychologie učení*, Praha: SPN, 1982.

<sup>10</sup> M. Bratská, *Metódy aktívneho sociálneho učenia a ich aplikácia*, Bratislava: Univerzita Komenského, 1994.

<sup>11</sup> R. Komárková, I. Slaměník, J. Výrost, *Aplikovaná sociální psychologie III*, Praha: Grada Publishing, 2001, s. 224.

### **Timetable**

Training intervention programs are usually realized in the form of:

- shorter regular meetings – their advantage is the possibility of a gradual integration of the developed abilities and capabilities into real social situations; if some members need more time to open up and begin experimenting with their behaviour, problems can arise;
- training blocks lasting several days – their advantage lies in the intensity of the single training steps within group dynamics; transferring intensive experiences and acquired capabilities from the training group settings into daily life can, however, be problematic.

### **Organizational background of the training**

The most common organizational and material requirements include:

- room / space for realization – adaptable furniture, the possibility to work in a circle, room for presenting the results of group discussions (free space on walls), carpeting, availability of mats for relaxation exercises;
- tools – papers, pencils, crayons, flip-chart, scissors, sellotape, worksheets, dice...;
- psycho-hygienic conditions.

### **Social conditions**

These are the conditions or prerequisites fostering a favourable emotional atmosphere in the group and appropriate psychological safety – the definition of the training's goals, specifying the terms and conditions, setting up the basic rules, ensuring that the information the group members disclose will not be misused against them or talked about outside the group.

“Powerful” and “soft” techniques should be a part of each training program. The fabric of each program should be comprised of basic, demanding, extensive exercises and games that develop certain social skills. But these programs should also include relaxation and simple tasks that support the effectiveness of the basic exercises. Usually, games and activities that support both group cohesion and dynamics and a degree of playfulness among the members of a training group should be included.<sup>12</sup>

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<sup>12</sup> S. Hermochová, *Metódy aplikované sociální psychologie I. Interakční programy, interakční hry a tematická interakce*, Praha: UK, 1989.

In addition, emphasis should be placed on the diversity of techniques in the following aspects:

- content (games and/or activities that develop empathy, communication skills, creativity and self-reflexion);
- realization (artistic activities, verbal activities and discussions, movement, multidimensional activities);
- organization (alternation of group work and individual work, team work, pair work).

There is a rule that in preparing and implementing the program the priority should be given to those techniques that best suit the program instructor, those which she is most skilled in, and those she has mastered, both methodologically and experientially.<sup>13</sup>

## The roles of the trainer

The trainer is an important element of the social dynamics of the training group. He or she affects the group's activity, determines its content and takes part in defining the goals, values and norms of the group; she regulates and directs the pace of the group work, the direction of activities, formulates questions, manages time and, when necessary, stops the group process. The group's goal achievement is linked to his or her style of work.

In addition to having expertise and developed social competencies, the successful performance of their role, it is important that the trainer seems to possess certain characteristics related to personal maturity, be an understanding, sensitive individual, and accept himself or herself and others. The instructor should be able to assess reality, control his or her actions, create positive emotional bonds, exert effective forms of communication and strive for personal growth. Openness, being genuine, flexibility, tolerance and patience are personality traits desirable in a trainer.

According to<sup>14</sup>, the trainer, with his or her expertise and effective way of employing social skills, carries out various different tasks in preparing and implementing the stages of training. The preparation necessary for the role of the group leader is quite demanding, as it requires:

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<sup>13</sup> I. Gillernová, *Psychologické problémy člověka v měnícím se světě*, Praha: Karolinum, 2001.

<sup>14</sup> S. Hermochová, *Metódy aplikované sociální psychologie I...*, op. cit.



- extensive and relevant specialist knowledge (from social psychology, ontogenetic psychology, psychotherapy, psycho-hygiene, school and educational psychology, etc.);
- the trainer's own training experience, experience with the techniques and methods where the experiential learning prevails;
- the trainer's own experience with a similar form of specialist activity and an appropriate degree of assuredness (that can be gained as a co-trainer, or an experienced trainer's assistant).

Libermann, Yalom, Miles<sup>15</sup> have created an assortment of the ways groups can be led and the basic styles of a group leader's work:

1. *Stimulation of emotions*: the group leader takes a direct part in the group activities, modelling the behaviour for others, he or she expresses his or her own emotions, provokes, challenges other group members to express their opinions, feelings and attitudes.
2. *Expression of one's own personal attitudes*: the trainer creates an atmosphere of trust, warmth, acceptance, friendliness, protection and affection. He or she expresses positive attitudes towards the participants, teaches them to receive and understand feedback.
3. *Interpretation* – cognitive orientation: the leader explains the functional connection for the participants to understand the group processes, names the individual and/or group experiences. Problems may arise when the leader interprets too much, inhibiting the initiatives of participants and turning the training group into a professional seminar.
4. *Structuring* – the executive function: a trainer uses structured material to achieve training goals, sets rules and norms, directs activities, asks questions, makes decisions, watches the time and stops what is happening in the group. The shortcoming lies in the fact that it is the leader who sets the goals, not the participants themselves.

The task of the trainer should be to effectively combine and realize all of the four dimensions where the specific proportion of these dimensions forms the unique style of work of each leader.

A qualified specialist that can cooperate with trainer might also be a school psychologist.

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<sup>15</sup> Eadem, *Sociálně psychologický výcvik II. Příručka pro vedoucí skupin*, Praha: SPN, 1988.

A school psychologist is a professional working at the given school. Their competencies and work is by law defined in the following way: “The school psychologist does the expert, professional activities in the area of orientational psychological diagnostics, individual, group or mass consulting, psychotherapy, prevention and interventions to children and pupils with a special regard to the process of education in schools; he/she also conducts expert activities in psychological consulting in the area of family, partnerships and other social relationships. The school psychologist provides psychological consulting for legal representatives and pedagogical professionals at the school. He/she prepares the base for professionals in consulting facilities” (Law no. 317/2009 of the statute book on pedagogue and other professionals, issued on the 24th of June 2009).

Intervention activities undertaken by the school psychologist are an important part of his/her work; working in a school with groups of pupils, parents, teachers and other education professionals, he/she can apply various intervention programs aiming to increase the individual and social competences in students and teachers”.<sup>16</sup>

Programs of intervention or any other techniques that develop the professional competence in teachers are important for the school, especially because they are the prerequisites for the optimalization of their activities and they significantly enhance the effectiveness of their work.<sup>17</sup>

The teacher functions within a complex relationship interaction; most of all the interaction with the pupils, class, parents, colleagues, including both fellow teachers and school management. Each of these interpersonal relationships places different demands and requirements on the teacher. If we want to prepare teachers to be able to react appropriately and effectively in social interactions, it is important to develop various modifications of the necessary skills and abilities by using various intervention programs.

Our goal was to create a concrete intervention program, primarily aimed at developing empathy in the undergraduate preparation of trainee teachers.

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<sup>16</sup> M. Valihorová, J. Lajčiaková, Možnosti preventívneho a intervenčného pôsobenia školského psychológa. In *Determinanty rozvoja osobnosti človeka. 2. časť. Škola ako faktor rozvoja osobnosti dieťaťa*, Banská Bystrica 2010, p. 321.

<sup>17</sup> D. Fontana, op. cit; H. Kasíková, *Kooperatívni učení – kooperatívni škola*, Praha: Portál, 1997; Eadem, *Kooperatívni učení, kooperatívni škola*, Praha: Portál, 2010; Ch. Kyriacou, *Klíčové dovednosti učitele*, Praha: Portál, 1996; J. Mareš, J. Křivohlavý, *Komunikace ve škole*, Brno: MU, 1995.

## “E” Intervention – program for empathy development

*We assumed it was important to create an intervention program for empathy development in the undergraduate teacher training, which would draw directly on the needs and specifics of the teaching profession, and to verify these by observing and studying the key variables that indicate a shift towards higher empathic tendencies in the behaviour of teachers.*

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We have prepared trainee teachers in the field of empathy development on several levels:

- **Cognitive** – to increase teachers’ knowledge of empathy and how it develops, to inform and deepen knowledge about programs for developing empathic behaviour and to suggest possibilities for applying them in work with pupils (cognitive sensitization).
- **Emotional** – to guide towards a more human relationship between the pupil and teacher, where this relationship is characterized by empathy, congruence and acceptance. The goal is to teach trainee teachers to create such situations that would enable students to express empathic tendencies and receive appropriate rewards for doing so.
- **Volitional** – expressed in autonomous behaviour. This level is influenced by social factors. It is important for teachers to learn how to guide students in withstanding the negative influences from their environment, using the knowledge gained and their own value system.

Professor R. Roche-Olivar<sup>18</sup> emphasizes the effectiveness of the method consisting of the three steps we have applied:

1. Step: **Sensitization of cognition** – enables understanding of certain facts, the sense and meaning of the topic; typical forms of work include observations, didactic games, presentation of positive models of behaviour, analysing and studying the autobiographies of people who dedicated their lives to others, development of moral assessment through open-ended stories, discussions, etc.
2. Step: **Practice – experimenting with a certain behavioural pattern**, trying out and practising the capabilities, role playing, routines, and interviews with fictional or real people. The feedback enhances

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<sup>18</sup> R. Roche Olivar, *Etická výchova*, trans. by L. Lencz, M. Hučko, L. Mikulcová, Bratislava: Orbis Pictus Istropolitana, 1992.

experimentation with a particular form of behaviour, while emphasizing even the smallest improvement.

3. Step: **Real experience – real life utilization.** Useful tools for this step are notes from observations of people's behaviour, keeping a journal about the experience, newspaper cuttings, and family discussions.

#### **PROGRAM CONTENTS:**

##### **A. Self-knowledge, self-concept, self-evaluation and self-esteem.**

###### **Positive evaluation of others.**

The basic attributes of empathy include an appropriate self-image and level of self-evaluation. Empathic behaviour involves an emotionally mature and stable personality with the appropriate self-assessment, self-esteem and sense of solidarity.<sup>19</sup>

*Activities:* What is my personal value?; What is my self-respect? Your special gift; Self Concept; If you were...; Experience with the negative attitudes towards oneself; Core cognitive schemes and conditional rules; Mr. Nobody; Negative predictions; I scare myself imagining...; Awards ceremonies; Rewarding the self

##### **B. Emotional and cognitive components of empathy.**

###### **Expressing the feelings and ideas.**

The ability to express feelings is an important prerequisite for empathy and communication. It is important to be able to recognize, identify and direct our feelings, as feelings influence the overall quality of our life. "Everything that helps to develop the emotional qualities helps develop the qualities related to the education and the shaping of our personality, at the same time."<sup>20</sup>

*Activities:* Having the energy – the elixir of life; Little heart; Positive sentences bombing; Colour your life; 101 items wish-list; Mastering the way of life; First wish fulfilling; Life's mission; The great revelation....

##### **C. Factors reducing empathy.**

###### **Overcoming fear and anxiety. Personal distress.**

<sup>19</sup> E. Koubeková, *Osobnostné a rodinné koreláty altruisticky motivovaného prosociálneho správania*, „Psychológia a patopsychológia dieťaťa“ 1993, nr 3(28), p. 244–254.

<sup>20</sup> M. Valihorová, G. Szalaiová, *Prosocialnosť a osobnosť žiaka strednej školy*, Banská Bystrica: UMB, Občianske združenie Pedagóg, 2011, p. 59.

A man becomes a human being when he learns to freely co-operate with other people, when he learns to communicate effectively, appreciate the work of others, express love and friendship and sacrifice for the good of others.

*Activities:* I am the creator of my fear, The fear analysis, The pie of fear, Overcoming fear, The meaning of rejection, Acts of unexpected kind surprises; Four seasons...

#### **D. Effective forms of communication. Empathic talks.**

***Empathy in relationships. Empathic teacher.***

***Real and presented models.***

Learning by imitation involves getting to know and experience the behaviour of the other, thus creating a cognitive and emotional image or a notion of this activity. Drawing from this notion, we imitate the behaviour of another person, either immediately, or after a certain time.

*Activities:* The fortress, Chinese sign, Empathic conversation, Dreaming about the life's meaning, Minorities, Useful role in the group, Cube 1, Cube 2, The threads of friendship, What are our friends good for? Infidelity, Touches, Role playing, Never this way, Always this way, Group portrait....

#### **E. The art and willingness to forgive.**

***Getting familiar with the various models of the process of forgiveness.***

***Positive effects of forgiving and the negative consequences of not forgiving.***

A place in the heart, A phenomenon of forgiveness, Complicated emotions, My social universe, The crater; Models of the forgiveness process, Therapeutic letters, Letters from the other side, Fire ritual, Who I really am...

#### **F. Empathic behaviour in real life - examples of empathic help to people who need it.**

***Voluntary activities, specific empathic help activities.***

*Activities:* Life for less than 1 euro per day, Group symbol, The same differences and many forms and dimensions of prejudice, Ideal image of school....

## The efficiency of the "E" intervention program in increasing the level of empathy in college students - prospective teachers

We have administered to college students the Index of interpersonal reactivity drawn up by M. H Davis<sup>21</sup>, who holds that empathy can be operationalized and measured as a set of hierarchically organized constructs; there is a so-called hierarchical structure of empathy, comprising 4 basic components: emotional concern, perspective taking, fantasy and personal distress.

We wondered if the significant changes between the control and experimental groups would be established within three measurements (one pre-test and two post-tests) at the level of the single individual variables being studied: EC - Emotional Concern (an affective component of empathy), PT - Perspective Taking, FS - the Fantasy factor, DS - Personal Distress.

Upon analysing the data, we observed significant differences between the experimental group, participating in the experiential intervention, and the group that did not take part in any intervention program during the course of testing; the changes observed were at the level of all four variables, different but significantly overlapping constructs that are related to the cognitive, emotional and behavioural reactions of an individual, who has a chance to watch the experiences of another person.

There were statistically significant differences between the experimental and control groups present in the individual measurements (in the pre-test and both post-tests) at the level of emotional empathy (EC subscale) and cognitive empathy (PT subscale).

From the results of the Mann-Whitney test we can note that the statistically significant variation, expressed by the level change in the EC subscale and by the level change in the PT subscale, was  $p < 0.001$  in the first post-test (after the end of the intervention program) and in the third measurement (5 months after the end of the intervention program), stood at the level of significance,  $p < 0.01$  between the experimental and control groups. We ensured that after the first measurement (in the pre-test) of the EC subscale (before the realization of the intervention program), the experimental and control groups did not differ significantly, since  $p = 0.393$ , which means  $p > 0.05$ . In the same way, the experimental and control groups did not differ

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<sup>21</sup> M. H. Davis, *The effects of dispositional empathy research*, "Journal of Counseling Psychology" 1983, nr 43, pp. 261-274.

significantly after the first measurement in the PT subscale, since  $p = 0.317$ , which means  $p > 0.05$ , which we consider to be a positive indicator.

Statistically significant variance can be observed, drawing from the results of the Mann-Whitney test, and expressed in the level change of both the EC and PT in the experimental group in the second measurement, namely in the first post-test (after the end of the intervention program) at a level of  $p < 0.001$  and in the third measurement, following the second post-test (5 months after the end of intervention program), at the level of significance  $p < 0.001$ .

We have not observed any significant changes in the control group within individual measurements.

The intervention program of the empathy development (“E” - program) in pre-gradual preparation of teachers has significantly increased the cognitive empathy level on the PT subscale, and the emotional level of empathy in the EC subscale.

We have also paid attention to eliminating fear and anxiety and to developing the ability to control one’s fear during the intervention program for empathy development. This goal drew on the analysis of individual situations where fear, tension and anxiety is dominantly present in students; Buda<sup>22</sup> states the fear and anxiety are the inner factors that decrease empathic ability.

The aforementioned negative emotions decrease concern for the other person and they can lead to various diseases that completely limit the ability to empathize.

Many of the activities were realized by means of imagination and guided imagination, and they helped the students better understand and feel their own emotions and the emotions of others, whether they be fictional people or real ones. We agree fully with the view expressed by Davis<sup>23</sup> that the fantasy subscale can be considered the most important component of empathy, and we agree with the stance of R. F. Dymond<sup>24</sup>, who defines empathy as a “process of transferring oneself into the thinking and acts of another person, this transferral is being realized in an imaginative way through images”.

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<sup>22</sup> B. Buda, *Empatia. Psychológia včítien a vžitia sa do druhého*, Nové Zámky: Psychoprof, 1994.

<sup>23</sup> M. H. Davis, *Empathy: A social psychological approach*, Boulder: Westview Press, 1996.

<sup>24</sup> R. F. Dymond, *Personality and empathy*, “Journal of Consulting and Clinical Psychology”, 1950, nr 14, p. 344.

The levels of Pthe D subscale and fantasy subscale showed statistically significant variations between the experimental and control groups, within individual measurements (pre-test and both post-tests).

From the results of testing using the Mann-Whitney test, we can observe that statistically significant difference were expressed in the changes in the fantasy subscale level revealed in the first post-test after the end of the intervention program, at a level of  $p < 0.001$ , and in the third measurement (second post-test) 5 months after the intervention program, at the level of significance, at  $p < 0.001$ .

The experimental and control groups did not differ significantly in the FS subscale, in the pre-test before the intervention program -  $p = 0.067$ , that is,  $p > 0.05$ ; we have observed a statistically significant difference between the control and experimental groups in the PD subscale in the pre-test, before the intervention program;  $p = 0.019$ , that is,  $p < 0.05$ . This can be explained by the fact that the personal distress is a subscale easily influenced by the momentary situation of respondents, and by momentary distress.

The results of data analysis using Wilcowon testing suggest that significant differences appeared between the pre-test and the first post-test in the experimental group, that is  $p < 0.001$ , and between the pre-test and second post-test as well (5 months after the intervention program), that is,  $p < 0.001$  in both of the variables observed, namely the FS and PD subscales. Significant variances were found between the individual post-tests (5 months after the intervention program) in the fantasy subscale, as  $p = 0.001$ , that is,  $p < 0.05$ ; this was a variance in time, which we interpret as a natural one. Certain differences were also found in the PD subscale, between the individual post-tests, as  $p = 0.010$ , that is,  $p < 0.05$ .

The intervention program for empathy development ("E" - program) in the training of teachers has significantly increased the empathy level on the "fantasy" subscale and it has significantly decreased the empathy level on the "personal distress" subscale.

S. L. Hatcherová and her colleagues<sup>25</sup> administered M. H. Davis' Index of interpersonal reactiveness in 104 pupils and students of secondary schools and colleges, before they completed the Rogerian course oriented towards

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<sup>25</sup> Sh. L. Hatcher, M. S. Nadeau, L. K. Walsh, M. Reynolds, J. Galea, K. Marz, *The teaching of empathy for high school and college students. Testing Rogerian methods with the Interpersonal reactivity index*. "Adolescence" 1994, nr 116(29), p. 961-974.



developing these skills, and following course completion. Divided in 7 groups, the students dealt with the identical model situations aiming to develop their empathic skills. According to M. H. Davis<sup>26</sup>, the EC subscale, PT subscale and FS subscale increase with age, while the PD subscale decreases with age, due to personal maturity. The score on the EC, PT subscales and also the average empathic score in students increased significantly, after their completing the Rogerian training. Therefore, the authors of this study could verify the hypothesis that empathy in students can be improved through training. The score on the DS subscale did not change as a result of training. The study showed that college students increased their own empathy due to training in a more significant way than students of secondary schools.

## Conclusion

The social form of autoregulation can be supported by an intentional intervention in the form of various intervention and training programs. These programs present a chance to try out a form of learning through the one's own experience, to support motivation for individual work, and openness to new approaches, views and ideas.<sup>27</sup>

Producing and implementing an intervention program requires more than just the work on the ready-made topics and issues. This task encompasses support for psychological health processes and the development of group processes, also enhancing the way individuals function. Not only does the group learn, but the leader learns, too. Living a life of individual and social wellbeing is a basic prerequisite for the effective work of the teacher. Only in this way can he / she be ready and able to apply effective strategies for stress management in a school environment.

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<sup>27</sup> M. Popelková, M. Začková, op. cit.

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