

## 11A.

# Summary of the most important research results

The main objective of the project was to gain new scientific knowledge about the level, structure and chosen interrelations of prosocial, empathic and affiliative tendencies within a sample of college students specialising in helping professions.

This objective was set with a view to the fact that there is little empirical evidence proving that people engaged in helping professions display a relatively high level of prosocial, empathic and affiliative tendencies, though according to expert literature these characteristics are generally considered to be the most important component of the individual traits which are needed for practising helping professions. These traits are considered to constitute decisive competencies of people engaged in helping professions and represent principal factors of each personality-based authentic helping relationship. Czech professional literature lacks such empirical evidence in spite of the rapid extensive and diversified development of helping professions and related study branches after 1989.

Despite this extensive diversification, the problems of prosocial, empathic and affiliative tendencies remain a common denominator for all helping professions and related fields of activity, and their investigation can be beneficial across all specialisations.

Prosocial, empathic and affiliative tendencies were investigated in context with other relevant variables which include the basic dimensions of five-factor personality model, aspects of philanthropy, arousability, optimism, orientation of values, individualism and collectivism, and social desirability. The project also takes account of independent variables such as gender, branch orientation and volunteering experience.

The research project includes two partial, relatively independent projects which are referred to as partial project A and partial project B. Whereas project A was based exclusively on a sample of college students preparing for various helping professions, project B included a comparison of helping professions students and students of chosen technical and economic branches.

In partial projects A and B, the study of chosen variables was based on *dispositional personality approach*. The authors therefore decided to investigate the chosen variables exclusively from the viewpoint of dispositional paradigm and

thus to consciously refrain from a wide range of unconscious, interpersonal, group-related or organisational aspects connected with the theme of prosocial behaviour and related psychological constructs. The authors mainly focused on gender-related personality differences, on the investigation of personality differences from the point of view of study branch orientation, and on monitoring personality differences in persons with and without volunteering experience. Finally, they were also interested in certain interrelations of the investigated variables.

The research was based on the battery of sixteen methods; in project A the students were questioned by means of nine methods, in project B by means of eight methods. One method of domestic origin (NEO FFI) was used in both projects, fourteen methods were taken over and adapted from foreign literature, one method was created ad hoc.

To gain a number of data as large as possible, the authors used methods aimed at analogical variables. These methods, however, were not completely identical. A detailed description of the methods used, along with their psychometric parameters, was presented above; the following list of methods should contribute to better orientation in the results within both projects and their comparison.

#### Outline of methods used in research projects A and B

<b>Methods used in project A</b>
1. The Prosocial Personality Battery (PSB)
2. The Big Five Inventory (NEO FFI)
3. The Philanthropy Scale (PHS)
4. Marlow-Crowne – Social Desirability Scale (SDS – 10)
5. Multi-dimensional Scale of Emotional Empathy for Adolescents and Adults (MEE)
6. Arousability and Optimism Scale (AOS)
7. Wypadek w górach – exocentric and endocentric altruism (EEA)
8. Schwartz Value Survey (SVS)
<b>Methods used in project B</b>
1. Initial Instructions to Questionnaire Battery
2. NEO The Big Five Inventory (NEO FFI)
3. The Questionnaire of Prosocial Tendencies (PTM)
4. Interpersonal Reactivity Index (IRI)
5. The Scale of Interpersonal Orientation (IOS)
6. Self-report of Altruism (SRA)
7. The Emotional Contagion Scale (ECS)

In partial project A, the above mentioned research methods were applied to the sample of 828 students preparing for various helping professions, in project B to the sample of 940 college students studying helping professions as well as those preparing for technical and economic professions.

The total number of respondents participating in this research project was 1 768.

Both partial projects led to relatively numerous findings which were summarised in the form of research conclusions and discussed within this monograph. The following text offers a possibility of their synthetic recapitulation, both from the point of view of the influence of independent variables and their possible interrelations.

To provide for better understanding, each variable is followed by the abbreviation of appropriate method given in brackets. The variables are to be considered in the context of the operation within particular methods, i.e., *the meaning was determined within the method of measuring*. The psychological basis was explained in the theoretical parts of this monograph and in the sub-chapters related to the problems of the methods used in partial projects A and B.

### Summary of project A results

1. It was found on the basis of five-factor personality model that among the students of helping professions, women display a higher level of neuroticism (NEO FFI) along with a higher level of agreeableness (NEO FFI) in comparison with men. Women also display a higher level of almost all traits of prosocial personality (PSB). Their interest in other people is more intense, they are able to assume responsibility for enhancing or maintaining other people's benefit (PSB). Women also significantly differ from men considering their level of cognitive and emotional empathy (PSB, MEE). Compared with men, women's higher level of arousability can represent a blockage to prosocial behaviour (AOS). More than men, women incline to altruistic thoughts and feelings. However, men claim larger numbers of altruistic, really accomplished deeds aimed at others' benefit, and helpfulness (EEA, PSB).
2. Women and men in helping branches are rather focused on the collective (SVS) and their value preferences include such aims of life as benevolence, conformity, tradition. Women accentuate cooperation with others, care for others more than men; unlike men, they do not pay much attention to values connected with boosting the self, they do not pursue success, might or prestige (SVS). Both genders appreciate the value of self-direction.
3. It was proved in project A that the sub-sample of persons with volunteering experience basically did not differ from those without this experience considering some of the observed variables. Nevertheless, some differences

were found which positively correlate with prosocial traits and tendencies. In comparison with persons lacking volunteering experience, the volunteers displayed a higher level of extraversion (NEO FFI), agreeableness (NEO FFI) and conscientiousness (NEO FFI). Regarding the interaction of gender and volunteering, it was proved that women volunteers had a higher level of extraversion (NEO FFI) and agreeableness (NEO FFI) than men volunteers. When compared with non volunteers, the volunteers do not display a globally different rate of emotional empathy; though, considering some partial components comprising emotional empathy, higher levels were found in volunteers as regards positive sharing and emotional contagion. The volunteers also display a higher level of dispositional optimism (AOS) and of exocentric and endocentric altruism (EEA). As regards the interaction of gender and volunteering, women reach higher levels of exocentric as well as endocentric altruism than men (EEA). As to the preference of values, benevolence is more expressed than in non volunteers.

4. Project A shows that men engaged in various helping specialisations characterised by a higher level of other-oriented empathy (PSB) display a higher level of extraversion (NEO FFI) and openness to experience (NEO FFI). The level of helpfulness in men (PSB) was not significantly connected with the dimensions of the Big Five model. Men with a higher level of other-oriented empathy (PSB), in comparison with men displaying a low level of this variable, preferred collective-related values such as universalism, benevolence, tradition (SVS).
5. Within project A it was found that women studying helping specialisations characterised by a higher level of other-oriented empathy (PSB) display a higher level of extraversion (NEO FFI), openness to experience (NEO FFI), agreeableness (NEO FFI) and conscientiousness (NEO FFI) in comparison with women having a low level of other-oriented empathy (PSB). A higher level of helpfulness (PSB) in women, in comparison with those displaying a low level (PSB), was connected with a higher level of extraversion (NEO FFI), of agreeableness (NEO FFI) and also with a lower level of neuroticism (NEO FFI). Women with more expressed other-oriented empathy (PSB) prefer collective-related values such as universalism, benevolence, tradition, conformity (SVS).
6. Disregarding the gender of the students of helping specialisations, the results of project A prove that the respondents with a higher level of exocentric altruism (EEA) also display a higher level of ascription to responsibility (PSB), empathic concern and perspective taking (PSB), and other-oriented empathy (PSB). The level of exocentric altruism is lower in respondents with more expressed arousability (AOS), neuroticism (NEO FFI) and personal distress (PSB).

**Summary of project B results**

1. In project B it was found that women, in comparison with men and disregarding whether they study helping study branches or technical or economic specialisations, statistically display higher levels of neuroticism (NEO FFI), agreeableness (NEO FFI), conscientiousness (NEO FFI), a lower level of public behaviour (PTM), a higher level of altruistic behaviour (PTM), higher levels of empathic concern (IRI), perspective taking (IRI), personal distress (IRI), empathic fantasy (IRI), social comparison (IOS) and emotional contagion (EMC). However, in some of the investigated characteristics men and women do not differ. The genders do not differ in the level of extraversion (NEO FFI), openness to experience (NEO FFI), anonymous behaviour, emotional behaviour (PTM), crisis management behaviour (PTM) and the level of overall prosocial tendencies (PTM). They neither differ in the level of emotional support (IOS), attention (IOS), positive stimulation (IOS), overall interpersonal orientation (IOS), altruism II (SRA), and the level of social desirability (MCSDS).
2. Project B proved that the students of helping specialisations, regardless of gender identity, had statistically significantly lower levels of neuroticism (NEO FFI), emotional support (IOS), positive stimulation (IOS) and social comparison (IOS) and overall interpersonal orientation (IOS) when compared with the students of economic and technical study branches. The students of helping specialisations also display a considerably higher level of extraversion (NEO FFI), openness to experience (NEO FFI), anonymous behaviour (PTM), altruistic behaviour (PTM), emotional behaviour (PTM), crisis management behaviour (PTM), empathic concern (IRI), perspective taking (IRI), empathic fantasy (IRI), altruism II (SRA) and emotional contagion (EMC). As regards specialisation, it was found that students of helping specialisations and economic and technical study branches do not differ as to the levels of agreeableness (NEO FFI), conscientiousness (NEO FFI), public behaviour (PTM), requested behaviour (PTM), personal distress (IRI), attention (IOS) and social desirability (MCSDS).
3. In project B, considering the interaction of gender and study specialisation, it was found that women studying helping specialisations compared to men of the same study branches displayed higher levels of agreeableness (NEO FFI), emotional behaviour (PTM), empathic concern (IRI) and perspective taking (IRI) including emotional contagion (EMC). It was also found in project B that students of helping specialisations incline to prosocial and empathic tendencies, which is manifested not just in the results of the tests but also in their practical activities, i.e. volunteering and blood donating. Here, too, appears certain interaction effect. Whereas men in helping study branches often donate blood, women in these branches more often work as volunteers in social and humanitarian facilities.

4. In project B it was proved that the basic structure of personality traits found in the respondents, both men and women, is rather close to average values. Slightly above average ranks only the level of conscientiousness (NEO FFI) in men and women students.
5. In project B it was found that Czech college students (both men and women) compared to American students globally reach lower values of most of the investigated partial prosocial, empathic and affiliative traits and tendencies. Czech college students also display a higher level of social desirability when compared to American students.
6. Project B proved that the level of neuroticism (NEO FFI) is significantly positively correlated with the level of personal distress (IRI). The level of extraversion (NEO FFI) is positively associated with prosocial tendencies (PTM, SRA). There is a significant positive connection between prosocial tendencies (PTM, SRA) and the level of agreeableness (NEO FFI), as well as between prosocial tendencies (PTM, SRA) and conscientiousness (NEO FFI). Nevertheless, the level of agreeableness (NEO FFI) and conscientiousness (NEO FFI) is positively connected with the level of social desirability (MCSDS). Generally it is possible to state that there is a positive link between the level of openness to experience (NEO FFI) and the investigated prosocial and empathic tendencies (PTM, SRA, IRI). None of the five factors of personality was significantly linked with affiliative tendencies (IOS).

**The comparison of project A and project B results** supports the statement that in both projects some gender-related differences were found. In both partial projects, women display a *higher level of neuroticism* (NEO FFI), a *higher level of agreeableness* (NEO FFI) and a *higher level of emotional empathy* (MEE, IRI) than men. In both projects, a positive association between the level of *empathic concern* (IRI, PSB) and the level of *openness to experience* (NEO FFI) was found in women as well as men. Considering the remaining aspects, the results concerning gender-related characteristics of men and women seem complementary within both projects. Here it is possible to pinpoint e.g. the finding that the combination of female gender and helping study specialisation positively influences the level of *agreeableness* (NEO FFI), *empathic concern* (IRI), *perspective taking* (IRI) and *emotional contagion* (EMC).

Other results of projects A and B distinctly refer to the fact that prosocial, empathic and affiliative tendencies, though relatively independent, are strongly interrelated and considerably affected by gender identity, orientation of study branch and volunteering experience, all of which can mutually interact.

The research projects results indicate relatively favourable levels of prosocial tendencies (PSB, PTM), altruistic tendencies (PSB, SRA), empathic tendencies (PSB, IRI, EMC) and collective-oriented values (SVS) in men and women

studying helping specialisations. Altruistic tendencies (PSB) are even more favourable in persons mentioning previous volunteering experience.

The above mentioned findings document that the concept of helping professions and specialisations is fully legitimate, indicating that the personality of these students is specific, mainly as regards higher prosocial, altruistic, empathic and affiliative tendencies. It might be even possible to assume that these study branches are preferred by students with *prosocially oriented personality profile* which typically displays a significantly lower level of neuroticism, extraversion and openness to experience, as well as inclination to prosocial, altruistic and emphatic tendencies including the preference of collective-oriented values.

These students seem to be satisfied with their branch of study and their prosocial bearing manifests itself through more frequent participation in volunteering and blood donation. On the other hand, the results based on the comparison with the students of technical and economic branches of study (project B) indicate that their level of prosocial and empathic tendencies is lower when compared to results found abroad. This fact can be interpreted in the context of various social and cultural factors and in connection with a number of existing domestic educational-organisational or pedagogical factors. It still remains a question whether and to what extent the prosocial and empathic tendencies are developed in the students during their preparation for helping professions, e.g., in the form of specific training programmes. There may still exist considerable reserves in this sphere.

It is documented by the presented results that both projects had to face a general methodological problem of current psychology arising from many new artificial psychological constructs formulated on the basis of mathematically expressed investigations; these constructs may semantically overlap, which makes the interpretation of the findings more difficult. Presumably the sphere of psychology concerned has not yet arrived at more elaborate concepts of the decisive variables. So far these variables have only been outlined and they rather form a fragmentary picture of the problems which is still far from what can be called principal theoretical and methodological integration. To document this statement it is possible to mention the arousability construct, which can overlap, at least to a certain extent, with emotional contagion construct or personal distress construct that significantly relates to neuroticism, etc. These theoretical and methodological difficulties may hamper the possibilities of the findings interpretation. Further insights into these variables are still needed as well as their gradual, more exact theoretical and methodological specification. These factors can contribute to deeper understanding of the problems of prosocial behaviour.

Both the projects involved cross-section, non experimental methodology. The results were mostly formulated on the basis of univariable and multivariable processes of variance analysis. The projects used data derived from respondents' self-reports. Therefore it is necessary to make provision for the methodological

imperfections connected with the use of this approach. Both projects utilized the scales for measuring social desirability, which were supposed to provide information on the influence of possible self-styling tendencies of the respondents.

Dispositional approach to chosen problems, with the use of self-report in both the projects, necessarily induces questions about the extent and situations in which the diagnosed prosocial, empathic or affiliative tendencies are projected into respondents' current behaviour, and how they will possibly manifest themselves in their future professions. At present this question has no answer based on valid empirical evidence, though it is probable that there is a positive answer. To prove that would however require a prospective and longitudinal plan. Unfortunately it was not possible for the authors to obtain information whether similar research had ever been accomplished abroad. Most of the available research programmes were based on cross-section, retrospective strategy, or prospective strategy with a very short timing interval. It is also possible that the functioning of prosocial and empathic tendencies is influenced by the well known deforming impact of helping professions, mainly a high working load with the risk of burnout syndrome.

As there is still a deficit in scientific information on the studied sphere in the Czech Republic, the theoretical aspects of the research were processed almost exclusively on the basis of foreign literature. Processing the theoretical data as well as the selection and adjustment of diagnostic methods therefore required an increased effort of both the authors. The reasons consist in the fact that the presented research represents the first widely based research activity of its kind and focuses on a relatively complicated sphere of current psychology. The problems of prosocial behaviour including further theoretical links are viewed in a rather ambiguous way and involve numerous unanswered questions. Here, unlike other spheres of modern psychology, the theoretical consensus is low. Its elimination is far from being easy and it can affect the results and their interpretation. In this sphere of psychology the basic causal relations between particular constructs are not clear, and there are different methodological approaches as well as varied ways of variables operation, and even a lack of theoretically specified diagnostic instruments. After a period of a temporary decline, this sphere of psychology has recently met with a lot of scientific interest, which was at its peak during the 1980s and 1990s, and at present permanently attracts attention mainly abroad. The topic presented in this study is often solved in a broader context and involves other constructs (e.g., emotional intelligence, social support, style of creating social relations) where many research activities are in progress.

As explained above, the theoretical and empirical findings presented in the study should be understood mainly as a set of information aiming at mapping a specific terrain within psychology domain under domestic conditions, and which offers useful and socially important potential, especially in the society ruled by strongly accented individualism.