

**Examination of the emotional structure of mentally handicapped 7th-8th form pupils in the
base of comparing them to pupils with normal ability**

I. Goals set, delimitation of the subject

The general objective of the research reported within the study is shaping the vision of the specialists and pedagogues involved with handicapped people. Development should be focused not only on below-average features but also on average and maybe outstanding ones. We should also like to incite a new vision of the specialists involved with gifted people, partly to call attention to the traumatic population, partly to stimulate them to use gift definitions and investigation methods adapted to this target group. It is our aim to include emotional faculties as component part within the definition of talent (endowment).

The concrete subject of the work done was to map the structure of the emotional faculties of handicapped pupils in the 7-th and 8-th forms of general school, by comparison with the same faculties of normal pupils in the same forms. Similarities and differences found were subjected to detailed analysis. A work procedure suitable for dealing with handicapped pupils was developed to support the objectives of this research. This way, the practical purpose of the program consisted in elaboration of a practical procedure to test emotional faculties.

Consequently, our questions referred to the emotional faculties of handicapped pupils in the 7-th and 8-th forms of general school, to be more precise to peculiarities of the components of these faculties.

1. Our expectations related to the results of comparative analysis made upon the emotional faculties of normal vs. handicapped pupils were that no significant differences would be found, in spite of the different IQ level of the two groups, the basis of ranking them into separate groups. Therefore we supposed that the difference in intellectual faculties would not involve any difference in emotional faculties of handicapped pupils in the 7-th and 8-th forms of general school.

According to the research, we have expected the following conclusions with regard to the structure of emotional faculties:

2. First, we thought that the partial gift consisted of identification of the feelings would not show significant differences between handicapped and normal pupils.

3. For those parts of identification of feelings, where no human faces are involved, we thought that significant differences will be found between handicapped and normal pupils as long as paintings or music are concerned.

4. As for the deeper structures of emotional faculties, such as

- a) - understanding of feelings and thinking about them;
- b) - handlings of one's own feelings, as well as of feelings of others;
- c) - involvement of feelings in solutions to problems requiring observation and thinking;

we thought that significant differences would be found between handicapped and normal pupils.

5. Further, we supposed that the educational level of the mother would cause differences in the structure of faculties between handicapped and normal pupils.

6. Namely, we supposed that a higher educational level of the mother would reduce the differences of emotional faculties between handicapped and normal pupils.

7. We thought that no significant differences in recognition and handling of basic feelings were induced neither by the position of the student in the group (handicapped or normal) nor by the educational level of the mother.

8. Further, we supposed significant differences between girls and boys in handling own feelings and other people's feelings, as long as sexual-role-dependent situations were examined.

9. We thought that no significant differences between girls and boys could be identified as long as recognition of feelings was concerned.

II. Presentation of the methods applied

During the preparation phase, of the available literature has informed us on the available analytical procedures and results, and allowed selection of the useful ones as starting base for our study.

We selected participating schools situated in four distant areas within the country, i.e. eastern, western, southern and northern regions, showing different levels of development. In the selection process of the sample subjects, pupils with specific local educational needs were pre-selected by help of the form-masters. Based upon the specialist opinions of the rehabilitation committees, only pupils ranked as intellectually slightly handicapped were selected, i.e. with $51 < IQ < 70$. The total number of subjects was 986, of which 495 pupils ranked as handicapped, 491 pupils ranked as normal.

Prior to the decision to elaborate our own analytical procedure, we have inspected the home and international literature for useful methods. We have found no method suitable for handicapped pupils, neither in Hungary nor abroad. Therefore an analytical procedure tailored to our own goals was elaborated, in which pupils with normal faculties were used as reference. An emotional intelligence model based upon faculties was used as scientific background. This model defines four partial faculties: **1.** - recognition of feelings; **2.** - understanding of feelings and thinking about them; **3.** - handling of own feelings and other people's feelings; **4.** - involvement of feelings into observation and trouble-causing tasks.

The overwhelming methodical problem with measurement of emotional faculties is the fact that - contrary to measurement of cognitive faculties - any test situation is just an "*as if*" one. Therefore, we were looking for a new manifestation form to experience feelings in test situations. Finally, we found projection of video scenes as being most appropriate for that purpose.

This new methodical solution was chosen on the reason that this way the understanding moment could be eliminated. The test subject should not deal with imagination and understanding of the described situation, just let the image and sound work on them. We wanted the measuring tool to record the emotional experience, to focus on the capacity of the subject to perceive, "respond to" and manipulate emotional information, without understanding it.

During the development process, among other considerations, we have concentrated on help given to handicapped subjects to have equal opportunities during the tests. Further - formal and objective - points were also considered, but they are not detailed here. The procedure developed on this basis is consisted of projection of photographs, pictures and short video scenes, playback of music, and 60 related questions to be answered. Another, printed questionnaire is associated, containing answer options and open questions on the projected images and scenes.

Content of the CD:

- images (faces, paintings) photographed scenes, music and short video scenes;

- demonstration associated with a Power Point questionnaire, used to call the images and scenes by hyper-reference.

Once constructed, the procedure was tested in experimental runs, and subsequently improved upon the basis of the results. First, the tests were applied on three classes - two groups of handicapped pupils (32 people) and one group of normal pupils (28 people). For the handicapped pupils, the original questionnaire and CD were found to be too long and fatiguing. They had found it difficult to report data upon their parents. The questions were unequally distributed among the sub-tests aimed at the various partial faculties. The questionnaire was consisted of a total number of 72 questions. Based upon the results of the experimental runs, 12 questions were associated to each sub-test. Thus the various sub-tests were equally represented in the measurement, to improve reliability of the analysis. This way, the procedure included 60 + 1 questions, of which the first 7 ones constituted the "data" section. We aimed at a total duration of the test not more than 45 minutes and an easy-to-handle questionnaire.

The obtained data were submitted to mathematical statistics analysis, using the SPSS program. As we have obtained nominal data, a *Chi-square* test was used for comparison. Significance level analysis of the data set provides information on the differences obtained for the variables describing the emotional faculties of the handicapped and normal samples, i.e. on the probability that these differences are not due to random scattering but are caused indeed by the IQ-difference between the sample groups (handicapped or normal subjects). Other mathematical indicators were also used to better assessment of the results.

III. Thesis-type listing of the results

1. From the comparative analysis of emotional faculties of handicapped and normal pupils we expected no significant differences in spite of the fact that their different ranking was based upon a difference in their IQ level. Thus we started from the supposition that at these pupils in the 7-th and 8-th forms of general school the difference in intellectual faculties does not involve similar differences in emotional faculties.

Comparative analysis of the nominal variables using the *Chi-square* test has shown significant differences at a $0.05 > p$ probability level in all partial faculties of the emotional faculties, in all sub-tests and in all 60 questions.

Thus, the obtained results are absolute contrary to our expectations. The causes of this contradiction shall be searched partly in the analytical procedure used and its coding. Namely, the registered reactions on some of the questions are largely detailed and subdivided. At

measurement of the first partial faculty, the best answer has to be selected among 14 options, some of them denoting rather similar feelings. For example, the mathematical test shall record a difference between *sadness* and *sorrow*, the same way as between *sorrow* and *joy*. It is clear that the difference between the alternatives in the two pairs is quite apart. Other partial emotional faculties are measured within the procedure by open questions, thus allowing for an even larger selection of answers. There is another reason, too; the characteristic features of the socio-cultural background show that the distribution of the educational level of the parents is largely different between the two groups. Standard 8 years basic education is more frequent among parents of the handicapped pupils, whereas parents of the normal pupils' group show a higher educational level. This suggests another explanation, namely that emotional faculties are influenced by the educational level of the parents (especially of the mothers); thus a comparison should only be significant, if mothers of the highest education level are involved. The comparison is correct only if the difference between the two groups compared (handicapped and normal) is limited to only one parameter, namely their IQ value. Therefore, for a reliably image, the compared values shall refer to otherwise identical conditions.

As we preferred to make comparisons on the level of the entire group, we also analysed the modus values, the variances (relative scattering) and the frequencies of the answers obtained.

With respect to the structure of the emotional faculties, the following expectations were present:

2. At the level of the global sample, we expected no difference between handicapped and normal pupils, as long as the partial faculty of emotion recognition was concerned.

The mathematical analysis performed as specified above, has shown that the answers given during the sub-tests measuring partial emotional faculties have indicated the same emotion as the highest-incidence one, both within the handicapped and the normal group. As for the distribution among the possible answers, the handicapped groups' answers were more concentrated on the preferred emotion, whereas answers of the normal group showed a larger distribution among other possible answers (emotions).

Summarizing, we have seen that during sub-tests measuring the partial emotional faculty termed as "feeling recognition", from the 12 questions presented, the handicapped and normal subjects predominantly chose the same feeling for 8 questions.

3. For cases recognition of feeling, where no human face was involved, we have expected differences between handicapped and normal subjects, as long as paintings or music were concerned.

Having seen the paintings, members of the two groups in 2 cases among 3 questions having selected the same feeling, *sadness*, respectively *sorrow*. Heard the music fragments, members of the two groups having selected among 3 questions in 2 cases the same elementary feeling, *joy* or *sorrow*. That means, paintings and music are the less influenced by learning, emotion and intuition predominate.

4. In the following deeper structures of emotional faculties:

- a) - understanding and intellectual assessment of emotions;
- b) - handling of one's own feelings, as well as of feelings of others;
- c) - involvement of feelings in solutions to problems requiring observation and thinking;

differences shall be observed between normal and handicapped pupils.

Considered the additional parameters, identical or different highest incidence emotional responses are equally represented within the three partial emotional faculties. The emotional structure of handicapped pupils is best explained by the differences found. In the measurement of feelings and related thinking, the same modus value was found in both samples of test subjects (normal vs. handicapped pupils) in 8 questions among the set of 12 ones. That means, both groups preferred the same answer in 8 cases. As for the differences, normal pupils selected complex feelings (*concern*, *protection*) whereas the other group preferred elementary ones (*affection*). The same pattern was found in the other two faculties. The normal pupils have preferred feelings related to other persons (*compunction*, *comfort*), whereas the other group preferred self-standing, self-oriented feelings (*sadness*, *sorrow*, *faint*). As shown by the cited examples, and confirmed by the comprehensive analysis of the data, the normal group has preferred adaptive, consequent, future-effective feelings, whereas the handicapped pupils' group focused on the immediate emotional reaction to the momentary situation. Emotions related others (father, brother, friends, teachers) are more complex with normal pupils and rather elementary with handicapped pupils.

Having considered the frequencies, the modus values and the variances, the collected answers show more similarities than with the values of the *Chi* square test.

5. We have supposed that the differences in structure of the faculties would appear between the normal and handicapped pupils, related to the highest educational level of the mother. These comparisons were made in all possible defalcations related to the highest educational level of the mother, and in fact, there were several cases where no significant differences could be found against the overall sample values.

However - as mentioned above - the histograms of the sociology data have demonstrated the unequal distribution in the educational level of the parents between the two groups. Standard 8 years basic education is more frequent among parents of the handicapped pupils, whereas parents of the normal pupils' group show a higher educational level. Consequently, in most cases, the comparison has involved unequal numbers of elements, and thus induced distortion of the data. Attention shall be made of this circumstance, when conclusions are drawn.

6. We expected less and less difference between the emotional faculties of the handicapped and normal pupils, with increasing educational level of the mothers.

This expectation has been fulfilled; the incidence of significantly different answers has decreased with increasing educational level of the mothers. At first, this can be interpreted as a strong influence of the mothers' educational level upon the emotional faculties of the pupils. Caution is however necessary, because the number of elements available rapidly decreases with the increase of the educational level, therefore the data may be misleading, or at least less significant for a comparison.

7. We supposed no significant difference in recognition and handling of basic feelings related to the rank of the subject within the sample (normal or handicapped) or to the educational level of the mother.

Actually, such differences were demonstrated by the test results, and - as for the effects of the mothers' educational level - we have again faced the problem of the number of elements. Having considered also the frequencies, there were more than average similarities between the two groups, as long as basic feelings are involved.

8. We supposed significant differences between emotional faculties of boys and girls, as long as handling of own feelings and feelings of others is concerned, in cases where the test involves sexual-role-dependent situations.

When handling of own feelings vs. feelings of others is compared, at a significance level of $p > 0.05$, differences were found in 9 cases, and no difference was found in 4 cases. No significant difference was found when an elementary feeling (*anxiety*) or feelings of men or boys or handlings of such feelings were indicated. The feeling of *affection* was indicated in full concordance.

Significant difference was found in indication of boys' feelings toward their fathers. Expected answers were *respect* or *dutifulness*, but *affection* showed an incidence high enough to cause significant difference in distribution of the answers.

When substitution into the role of opposite sex was needed, girls showed better identify themselves with the boys' feelings and positions, than inversely. That means, there was no

significant difference, when girls should react to the boys' feelings or substitute themselves into the boys' role, on the contrary to the situations where girls were involved.

9. Another expected result of the tests was that there is no significant difference between emotional faculties of boys and girls, as long as recognition of feelings is concerned.

Less differences were found in the "understanding of feelings and thinking about them" section of emotional faculties, at a significance level of $p > 0.05$. Open questions were included in this section; therefore any response was possible, without predisposition. Among others, no significant differences were found in cases, where the given situation allowed conclusions to the feelings involved. The similarity of the answers given indicates that both girls and boys have understood the situation, though their reaction was based upon the context, not on the expression of some feeling.

IV. Papers by the author, published or accepted for publication

Papers:

- **Riesz, M.** (2004) - *Problematic of talent-scouting and -caretaking among handicapped people*. chapter in the volume: Balogh, L. and Koppány, L. (editors) - *15 years for the*

talented: theory and practice; joint edition by the "Koroknay Dániel" General School (Mád) and the University of Debrecen, Chair of Pedagogy and Psychology (Mád, Hungary).

- **Riesz, M.** (2004) - *Talent scouting among handicapped pupils, as a tool of mental-hygiene* - Budapesti Népegészségügy, 2., 173 - 179.
- **Riesz, M.** (2005) - *Die Förderung von emotionalen Fähigkeiten durch das Freudentraining - Support given to emotional faculties by pleasure training* - Heilpädagogie, (in press).

Lectures:

- **Riesz, M.** (2000) - *"Bed stand" - dream or reality? - talented handicapped people* - Talent for the New Millennium - 7-th ECHA Conference; University of Debrecen (Hungary).
- **Riesz, M.** (2005) - *"One sees better with the heart" Assessment of the emotional competence*. 12-th Primary Prevention Forum. OKK-OKBI, Budapest (Hungary);
- **Riesz, M.** (2003) - *Regions and talent development from standpoint of the need for bridging the gap* - Jubilee Conference on Education and Talent development; 10-th Anniversary of the Szolnok High School, Szolnok, (Hungary).
- **Riesz, M.** (2005) - *"Studying emotional faculties of pupils in need for special education* - 5-th National Conference on Education Science, Budapest (Hungary)