

Researches and practical work on gifted handicapped children in Slovakia

VLADIMÍR DOČKAL¹, TOMÁŠ KOVÁČ²

Summary

The issue of gifted handicapped children in Slovakia was dealt with by professional workers only recently in relation to possibilities of integrated education of the disabled. In the Children's Center of the Research Institute for Child Psychology and Pathopsychology, several gifted disabled clients are followed. The presented contribution informs about three cases. Since 1997, the Institute has also been organizing summer integration camps for gifted, average and disabled children and their parents. Although the condition for participation of the disabled in the camp is intact intellect only, more of them manifested themselves as intellectually gifted with active approach to coping with difficulties. The research confirmed a positive influence of the camp program on the development of the children's creativity and the improvement of mutual relationships of gifted, disabled and average children and attitudes of adults to disabled children.

Key words: Gifted child, disabled child, gifted disabled child, attitudes, intelligence, creativity, coping

¹ Dr. Vladimír Dočkal, Research Institute of Child Psychology and Pathopsychology, Trnavská 112, 821 02 Bratislava, Slovak Republic

² Dr. Tomáš Kováč, Department of Psychology, Philosophical Faculty, St. Cyril and Methodius University, J. Herdu 2, 917 00 Trnava, Slovak Republic

History

When professionals first became interested in the group of handicapped children was back in the 70's of the last century. They appear in an apparent association with the movement for integrated education (Yewchuk & Lupart, 1993). We did not know anything about integration of the handicapped at that time in Slovakia. The socialist system of the so-called "unified school" did not allow any adequate internal differentiation. Therefore, almost all handicapped children were concentrated into special schools. Here, they achieved undisputed success in the compensation of their handicap and in educational development; however, more problematic were their effects on the socialization of children and their preparation for future life (Špotáková, Zvalová et al., 1992).

For gifted children, too, special schools and classes appeared here – mostly with focus on mathematics, languages and sports. A gifted child that was not educated in such a class did not receive any special attention in regular schools. Such an education may hardly be called an integrated one (Hoyningen-Süess, 1998), even if gifted and "average" children grew in a shared environment. Despite this, the existing education system secured the development of talents of Slovak pupils quite successfully when they attended school. This can be confirmed by many successes in numerous international pupil competitions. However, gifted children did not find themselves too successful after leaving school desks.

No consideration did take place in relation to talents of children that suffered health, physical or sensory handicap. They were included into a particular special school according to their type of disability and there, they were educated equally as other disabled pupils. It is true that as in regular schools, various circles worked and they enabled others to find children on the basis of their out-of-school interests, however, we can not speak about systematic development of giftedness.

The first remark about gifted children found among handicapped ones was brought to Slovakia by M. Musil (1989) from his personal experience in France. Only after 1990, when ideas of joint education of handicapped and normal children started to be forced (Špotáková, Zvalová et al., 1992), space was created for work with handicapped children that manifested above-average giftedness in a certain area. Although this subminority represents at most 1% of the population (Dočkal, 2001), we are convinced that it is valuable to pay attention to it. It is one of the ways of fulfilling the human rights, however, it also has quite a pragmatic function – it offers a chance to individual growth and possibilities to effectively cope with a handicap (Karnes et al., 1983). Simultaneously, it creates preconditions for the gifted handicapped to be employed in a society for which their talent can be a harvest.

We have paid intense attention to the issue of problems of gifted handicapped during the several past years in the Research Institute for Child Psychology and Pathopsychology. In 1991, the Institute built an experimental practical workplace – a Children's Center, where – according to the example of the Children's Center in Munich (Hellbrügge, 1990) – a team of multidisciplinary workers treat disabled and children endangered by their handicap. At work, we not only focus on weaknesses of disabled children (and possible compensation of their handicap), but also on their powerful and positive aspects. We employ a theory that understands giftedness as part of the personality of every single human individual (Dočkal & T. Kováč, 1994). So if we try to identify and form giftedness of all our disabled clients, we thus create preconditions to uncover those exceptionally gifted among them.

Principles of an approach to the gifted handicapped

Our work with these children has two levels – a practical one (diagnostics, counseling, intervention) and a research one.

The first problematic issue we must deal with is *identification of giftedness in handicapped children*. Disability often totally overlays manifestations of giftedness. If we want to identify potential talents of gifted children, we must fulfil certain conditions, i. e. to overcome more obstacles (Dočkal, 2001). It is important to suppress prejudices such as “if someone is different, he or she can not be qualified” (Yewchuk & Lupart, 1993) “gifted child must excel in all areas” (Whitemore, 1985; Musil, 1989), “children with cerebral palsy must be mentally retarded” (Lindemann, 1981), etc. In several types of disabilities, we can not use spoken language as a communication tool (Willard-Holt, 1998), so a communication channel must be found by which a contact can be established with these children (Dočkal, 1999). In psychological diagnostics, we can not only rely on tests, but also have to consider other data on children, their behavior and reactions (Whitemore, 1985). Diagnostic methods must be modified in the way of their administration, so that they could be used at work with a specific disabled child (Lindemann, 1981; Yewchuk & Lupart, 1993). Standard tests, too, should be administered in a nonstandard way with regard to the type of disability (Dočkal, 1999). A disability can lead to a developmental delay, which any child will gradually recover from (Požár, 2000). Therefore, the comparison of children’s performances with performances of similarly handicapped peers and with own performances in the course of long-term follow-up studies should be preferred to the comparison with the statistical norm for particular age (Yewchuk & Lupart, 1993). In addition to professional workers, teachers and parents, too, must be involved in the identification process (Karnes et al., 1993; Yewchuk, Lupart, 1993).

A significant part of psychological intervention is the *development of giftedness*. Developing tasks must be modified similarly to tasks in tests and alternative modalities of communication should be applied. Attention should be drawn mostly on those areas in which a child can achieve success and develop interests. The important part of giftedness is creativity (Dočkal & T. Kováč, 1994; B. M. Karnes et al., 1983) considers stimulation of creative potential to be an important part of talent development in handicapped children. Creativity can be seen as a characteristic that serves us overcoming obstacles (T. Kováč & Senka, 1995).

A disabled child finds relief in *coping with problems* also through the social network that provides it with important support (Koubeková, 2000). Because of that, its formation and functioning must be supported by all means. C. Willard-Holt (1998) highlights, that social integration of disabled children must be supported by means of its contacts and relationships with peers. As often as possible, a child must have a chance to work within its possibilities independently and obtain experience similar to experiences of intact children. In our practice, we fulfil this also by organizing summer camps for gifted children (Dočkal & T. Kováč, 1995; Dočkal & Matejík, 1996; Dočkal, T. Kováč & Páleník, 1998), where, since 1997, children with physical handicap participate, too (T. Kováč & Benkovič, 2001a).

Idiographic research

Research, regarding the specifics of the issue, mostly is a case follow-up study (seemingly like research of C. Willard-Holt, 1990). In the expert press, we reported about the most interesting cases from our clientele (e. g., Dočkal, 1996, 1999). Here, we mention cases that illustrate possibilities and significance of creativity development at work with gifted handicapped children:

Natalia has a diagnosis of *osteoporosis imperfecta*. At the age of 5, she came to the Children's Center, after having undergone 11 healed fractures of the lower limbs. Her parents mostly carried her on their hands. Psychological examinations confirmed an intellectual level in the range above 150 of IQ points. However, Natalia's fantasy and creativity in contrast were at the level of recognition and understanding (a similar type of talent described, for example, by J. Kathena, 1978). The girl did not know how to respond to tasks by which we regularly find out creativity at preschool age. After the three-month training, in which we also engaged Natalia's mother, the girl responded to creativity tasks adequately and achieved age-appropriate results in them (Dočkal, 1996). Unfortunately, we could not follow further the development of Natalia's talent, since her parents put her into a school for physically handicapped children.

Jacob attended the Children's Center five years ago with the main goal to rehabilitate his motoric ability. This is a boy with a quadruparetic form of cerebral palsy. He does not walk, but he learned how to move with all four limbs. Though clumsily, he writes and draws by hands. His intelligence moves in the range of the better average and his performances in the Urban's Creativity Test (Urban & Jellen, 1993) were average. The boy started attending mainstream school. After completing the second grade, in 1997, we took him to a summer camp for gifted children. The following year, he participated again. After an intense two-week course, his creative performance was highly above-average – rough scores in the Urban's Test at the end of the first camp stay increased by 52% and after the second camp it increased again a little. Interesting was his social integration, an unproblematic contact with healthy children, which took a fancy to him. In tests, this was demonstrated in the second camp, when Jacob's originally under-average scores of sociability scaled up to the above-average range (we used the SOGAG Test of own construction – Dočkal, 1998). After the 4th grade of integrated education at the basic school, his parents sent Jacob to a boarding school for physically disabled, so that our contact with him broke. However, the teachers' information is that Jacob is not doing too well at this school. This confirms our feeling that segregated education does not contribute to the appropriate talent development of a handicapped child.

Danka illustrates that inclusion in mainstream society can help even severely handicapped children with multiple disabilities to discover and develop exceptional talents. Danka suffers with a quadruparetic form of cerebral palsy, she does not hear and can not speak. In spite of experts' recommendations, her parents kept their child at home and were not afraid to beget three more children. Danka has never attended any schools, but when her healthy siblings started to be educated, she tried to imitate them by foot drawings. She underwent her first psychological examination at the Children's Center at the age of 15. Considering her performance she could be classified as moderately mentally retarded, but her spontaneous drawings with otherwise dysfunctional feet convinced us that we must be careful with a diagnostic conclusion. She progressed very quickly after some psychological interventions, so that she harvests results in nonverbal tests, which she solves without hearing an instruction, on the level of average adult person. In addition to various stimulation activities, we provided Danka with graphic education. Today, she is 23 years old and she not only puts a pencil between her foot fingers, but also a paint-brush. She underwent several successful group and individual exhibitions. Drawing became an important tool of her communication with the world (Dočkal, 1999).

Nomothetic research

The second research line is the *follow-up study of the effects of summer camp stays*. Both, healthy and handicapped children, participate in the research-project. For healthy children, a positive influence of the camp program on creativity development (Dočkal & T. Kováč, 1995; Dočkal & Matejčík, 1996) and sociability increasing (Dočkal, 1998; Dočkal, T. Kováč & Páleník, 1998) was confirmed. For handicapped children, we follow characteristics of their social integration including attitudes of healthy people towards them, characteristics of their giftedness and creativity, and methods they use for coping with life difficulties.

Attitudes of healthy persons to handicapped children

In 1997, Jacob also participated in a 14-day camp for gifted children and Danka was one week in camp, too. She could not be involved in shared activities with other children due to her character of disability; she had her own developing program, but the others could see her all the time. The parents participated in the camp, too, and 16 of them underwent a psychological examination at the beginning and at the end of the stay.

Part of this examination was fulfilling the form of *semantic differential*, where using 10 pairs of adjectives, terms such as **Self**, **Child** and **Danka** were evaluated. In the evaluation of these terms, no significant differences were found in the test and retest. However, Danka was perceived by her parents of other children as stronger, lighter, friendlier and more colorful, more kind-hearted and considerably closer than at the beginning. Other variables that we regarded were individual semantic distances between three evaluated terms. We show changes of their average values in the retest on figure 1. The position of the terms **Self** and **Child** in the semantic space of parents has not changed significantly during the course of the camp. Relationships between adults and Danka, judged from the semantic distance of terms **Self** and **Danka**, evidently became better. Significant approximation occurred between the terms **Danka** and **Child** ($t_{pair} = 2,271$; $p < 0,05$). While at the beginning of the camp, several parents did not relate the unknown disabled child to the rooted imagination of children, participants understood at its end that Danka is a normal child. The moderator in this case was a personal experience in which Danka's manifested talent certainly had a positive influence.

In our research in 2000 in the camp, we followed interdependent attitudes of three groups of children – “average” ones; those diagnosed as gifted; and children with disabilities. We used the test of *Semantic Selection* by V. Doležal (Maršálová, Mikšík et al., 1990) in which respondents evaluate given terms by associating nouns related to the given terms. The more equal words are associated with stimulation terms, the more closer these terms are to one another in the semantic space of the respondent. The scores of the semantic closeness between the two terms are ranging from 0 (maximal distance) to 8 (maximal nearness or identification). The forms were repeatedly filled out by 18 children between 9 and 15; two of these children were disabled; seven were gifted; nine were “average”.

Figure 2 shows that in the semantic space of child participants of the camp, the terms **Self** and **Gifted Child** are close. The terms **Self** and **Disabled Child**, as well as **Gifted Child** and **Disabled Child**, are relatively distant (even though the scores of semantic nearness lie above the theoretical average of 4). Understanding of all three terms converged in the retest; this signalizes improvement of mutual attitudes of various groups of children, albeit the change within the whole camp group did not achieve a required level of statistical significance.

If we want to look at this issue of problems through the eyes of three subgroups separately, let us start with disabled children. The data of the two disabled boys we have at hand can only be introduced in a case form. On figure 3, we see that the camp stay influenced them differently. The measure of identification of **Self** with **Disabled Child** remains equal for both all the time (score 5). While Michael – a child with cerebral palsy – gave up his original identification **Self** with **Gifted Child** after the camp experience (test score 8, retest 3), maimed by necrosis but still well moving, Jan responded contrary to it (test score 4, in the retest 8). This also corresponds to unchanged nearness between the terms **Gifted Child** and **Disabled Child** for Jan, and for Michael's delay in the retest.

In the groups of "gifted" and "average", though little children, certain statistical trends can be seen. The measure of identification of **Self** with **Gifted Child** (figure 4) at the end of the camp did increase moderately in gifted and significantly in "average" children ($t_{\text{pair}} = 1,941$; $p < 0,05$). Identification of **Self** with **Disabled Child** (figure 5) insignificantly increases in both groups, too. However, it is higher (score in retest 5,7) than what we found for both handicapped boys (they scored 5). Most significantly in the semantic space of the followed children, the terms **Gifted Child** and **Disabled Child** (figure 6) converged. Average children have a significant increase of scores ($t_{\text{pair}} = 2,286$; $p < 0,03$). This result mirrors a similar retouch in the children's awareness as we found, in 1997, in awareness of adults, when the distance of the terms **Child** and **Danka** decreased in their semantic space.

The above-mentioned findings aren't but illustrative; in our research we obviously elaborate and summarize data from all integration camps that we have organized during every vacation since 1997. The results indicate that shared experience of healthy children and children with disabilities has a positive influence on personality and social development mostly of healthy children – it leads to a tolerance of variety, to an understanding of others, to a willingness to help. We noticed more positive changes in the presented research in "average" children, which can be related to the fact that "gifted" children, from the beginning, achieved higher scores of semantic closeness of stimulating words. All "gifted" children from this research repeatedly participated in the camp, so that their empathy can be ascribed to this fact, too. It seems as if any integration of gifted children can be a suitable way of overcoming social problems brought up by several scholars (Webb, 1993). Integration of the disabled does not bring unambiguous, registerable changes in their attitudes towards the majority; however, their positive attitude to the conjoint camp is manifested by the interest of most of the children with disabilities to participate in our camp during next vacations. Integration gives the disabled bigger chances to manifest their giftedness and professionals can thus help with their development. We illustrated this in the above-mentioned case studies and we document this by the following research results.

Figure 1:

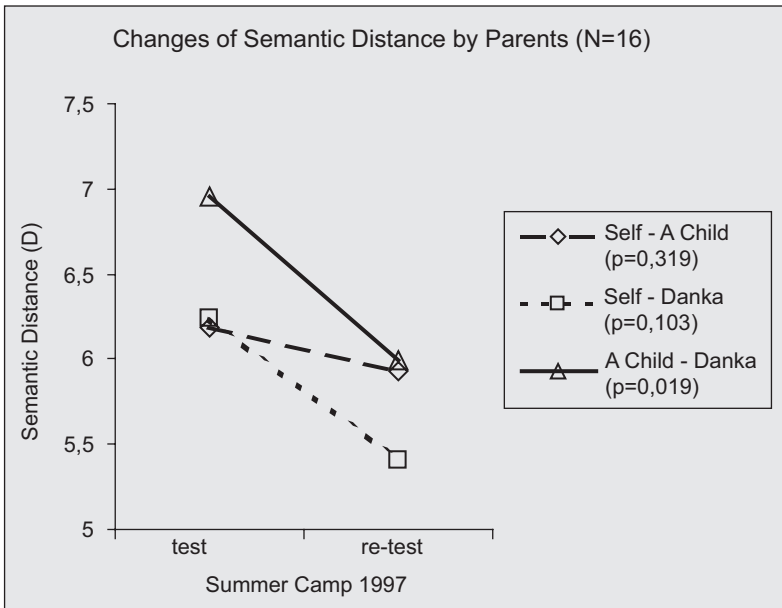


Figure 2:

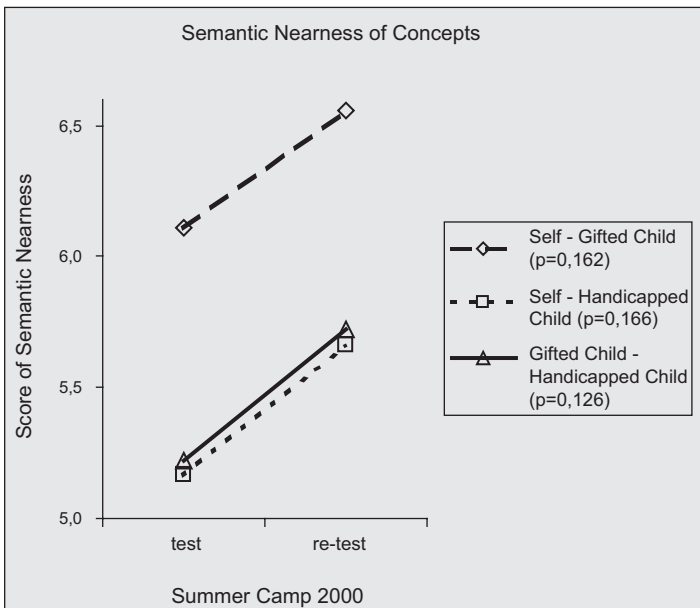


Figure 3:

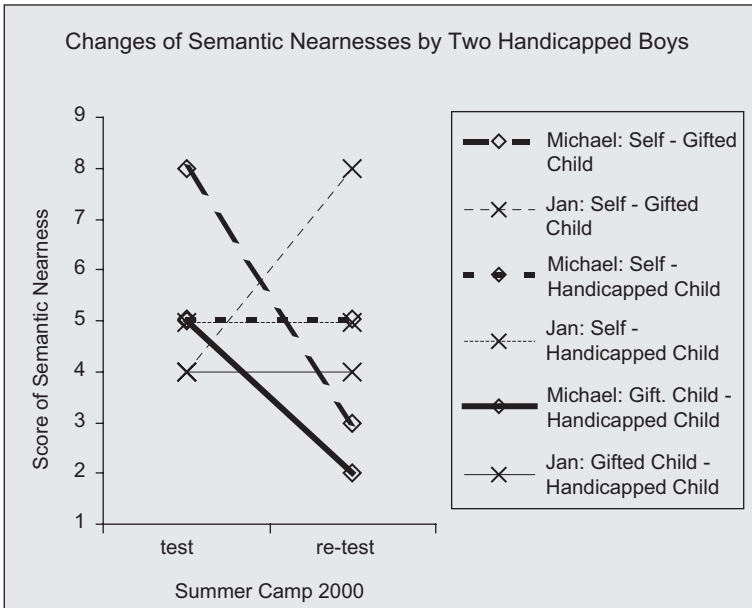


Figure 4:

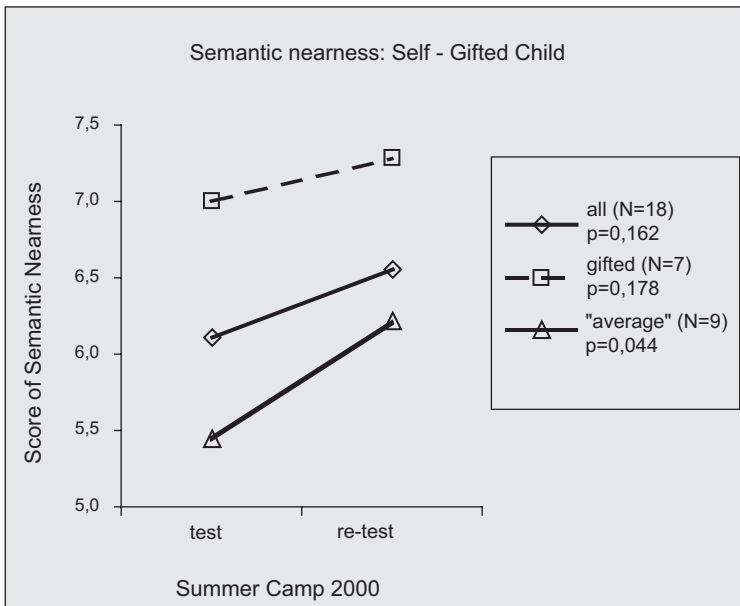


Figure 5:

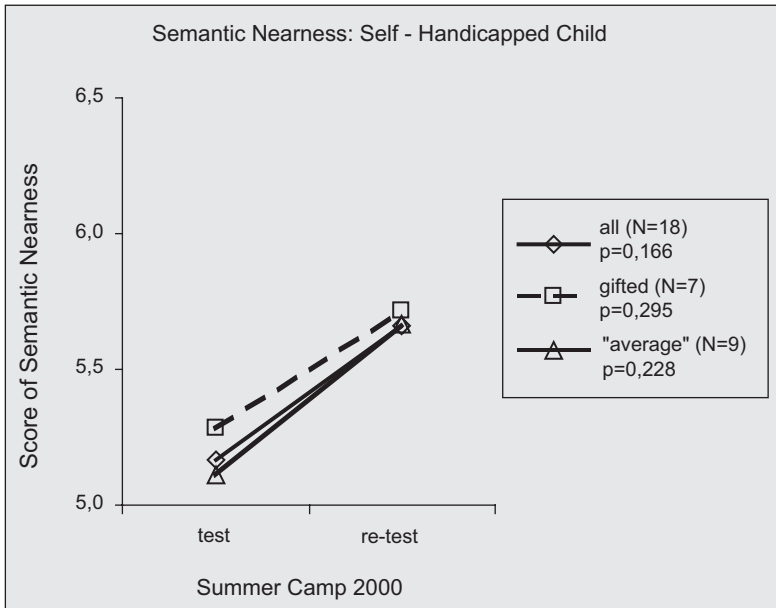
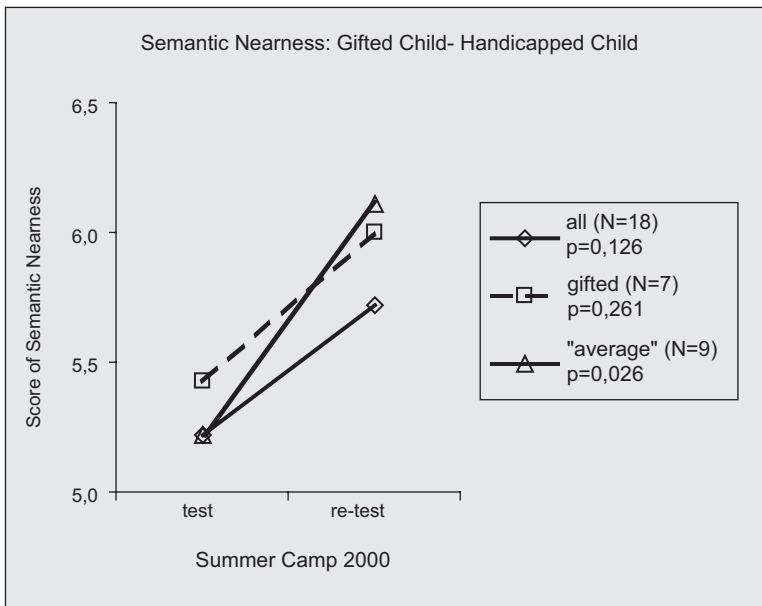


Figure 6:



Cognitive and creative abilities of handicapped children

Three groups of children participated in the summer camp in 2000: gifted children were labeled as “gifted” on the basis of school performances and examinations in psychological-counseling centers. Children with physical disabilities came from the clientele of the Children’s Center of our Institute and from social registration records of a Bratislava’s City part; a condition for their participation was intact intellect. Average children were siblings of one or of the other. *Intellectual abilities* were examined at 23 children at the age of 5-15. Therefore, we used the Orientational Verbal Test by J. Stavěl and the abbreviated version of the nonverbal Domino-test. We did not impose a time limit on the children with cerebral palsy regarding their lower personal time pace.

Comparing the performances of these three groups of children in the above tests, we found surprising results (T. Kováč & Benkovič, 2001b): in the Orientational Verbal Test by J. Stavěl, pupils marked as gifted achieved significantly ($p < 0,01$) the highest IQ (AM=133); weaker were “average” children (AM=113) from which the weakest disabled children did not differ significantly (AM=107). In the Domino nonverbal test (abbreviated version), performances of all children were better than in the verbal test and no statistically significant difference was found between the groups. The best scores were achieved by average (AM=146) and disabled children (AM=140), though with a big variance; they also surpassed the group of the children labeled as gifted (AM=139). So the unambiguous conclusion was that physical handicap does not simultaneously exclude intellectual giftedness.

We received different results when we divided healthy children into the followed groups not according to the fact with which “label” they came to the camp, but according to their present performances in both intelligence tests. So among “gifted” children were found also children we did not consider as such originally, and among “average” children were found those that originally (or in previous camps) appeared as gifted. We did not include into this comparison two disabled children who elaborated the tests but who did not participate in the whole camp stay. Figure 7 shows an average IQ of eight “gifted” children, of ten “average” children, and of five handicapped children obtained in the verbal test. The values are similar to those in the previous comparison (T. Kováč & Benkovič, 2001b), significant is only the difference ($t = 2,309$; $p < 0,03$) between the gifted and disabled. Figure 8 shows performances of the followed groups in the nonverbal Domino-test. The order from the weakest to the lowest group this time is the same as in the nonverbal test; gifted children achieve significantly higher IQ than average children ($t = 4,822$; $p < 0,001$) and children with disabilities ($t = 2,774$; $p < 0,01$).

What can be added to such results? School practice and classical examination of intelligence deem giftedness as something involved with intellectual abilities achieved by learning, dependent on experience, so the ones that R. B. Cattell called crystallized intelligence, and they manifested in our verbal test. Many children who are not special at school can have other exceptionally developed intellectual abilities – the ones that R. B. Cattell named fluid intelligence. Tests for its measurement – Domino belongs to them – can better meet needs of physically handicapped children, because their personal experience is considerably limited by their handicap, so that in the test of crystallized intelligence, they will not produce optimal performances. So our disabled children who should have “intact intellect” were really average in the test dependent on experience, but their performance in the culture fair test (same as performance of “average” children) was in the above-average range. In evaluation of giftedness, both types of tests must be harvested, so that they will not disqualify any children

in advance. Obviously, modern concepts require – in diagnostics of giftedness, in addition to intelligence tests – also the use of several other approaches (Khatena, 1978; Whitemore, 1985; Dočkal & T. Kováč, 1994).

Creativity is an important part of giftedness, but we did not use it in the present research as a criterion for division of children into groups. We measured it with the Urban's Drawing Test. Performances in it (for example, contrary to Torrance's Tests of Divergent Thinking) significantly correlate with age. Since we have been working with very heterogeneous groups and we only had rough scores, using this criterion for identification of gifted children was not possible in the present research. However, we were interested in creativity for other reasons – its development is one of the goals of our camps. How successful development of creativity is, therefore, is one of the criterions of effectiveness of the camp.

The results, presented in figure 9, come from the same 23 children that also solved intelligence tests. The figure shows that concerning the aspect of the camp group as its whole our developing strategy was successful. The growth of rough scores in the retest is highly significant ($t_{\text{pair}} = 2,743$; $p < 0,01$). Unlike with previous experience, when we had better developed creativity of average children (Dočkal & T. Kováč, 1995; Dočkal & Matejčík, 1996), in 2000, we found more significant growth of scores in gifted children ($t_{\text{pair}} = 4,656$; $p < 0,001$), but also in disabled children ($t_{\text{pair}} = 3,586$; $p < 0,02$), than before. These are those groups on which the camp was mostly focused. The differences in gross scores between groups, which are visible in the figure, can not be interpreted as differences on the level of creative abilities. The "average" children from 2000, were all older than the children from both other groups and (similarly as gifted children) the majority of them repeatedly attended the camp. Contrary to this, disabled children belonged to the younger ones and four of them attended the camp for the first time. In addition, the low performances of disabled children were apparently marked by their handicap – paresis that does not permit them to adequately express themselves by drawing. Therefore, at this year's summer camp, other examinations were used for finding out creativity. Unfortunately, results have not yet been elaborated.

On the basis of the experience of hitherto years, we can say that camp programs focused on the development of giftedness positively stimulate social and creative development of participating children and assist in discovering their talents, including talents of handicapped children.

Figure 7:

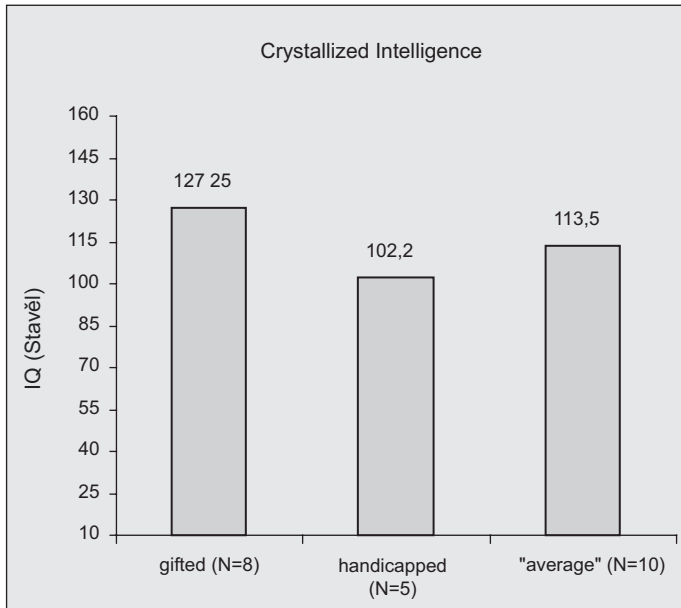


Figure 8:

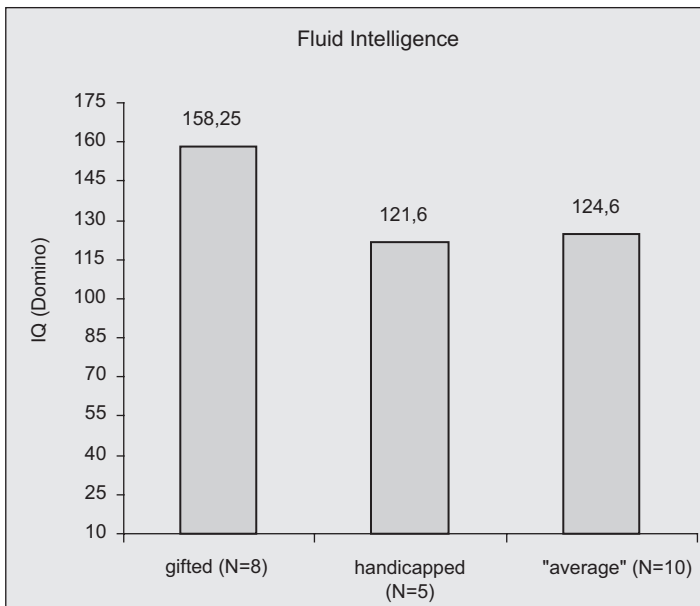
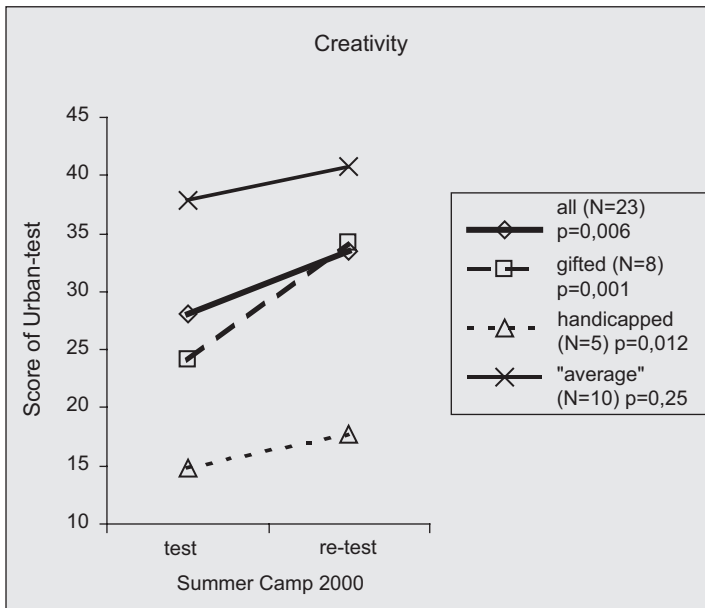


Figure 9:



Coping with problem situations

Finally, one brief note on the follow-up study of *coping strategies* used by children. We kept finding them in a single-shot way in 2000, by the Children’s Coping Strategies Checklist (Ayers et al., 1996) that identifies active coping strategies, support-seeking strategies, distraction strategies, and avoidance strategies. One statistically significant difference ($t = 2,114; p < 0,05$) was found in the following groups: disabled children achieved higher scores in the measure of active coping strategies than “gifted” children that achieved the lowest scores. Disabled children also more often (but without significance) use distraction strategies; average children rather avoid problem-solving (T. Kováč & Benkovič, 2001a). On the basis of this little probe, excessive generalizations can not be drawn, however, the probe suggests that capacities of handicapped children can also comprise the area of effective coping with difficulties.

Conclusion

The issue of exceptionally gifted handicapped children came to experts’ focus in Slovakia in the last decade. Maybe because of this, they focus mostly on children with physical handicap. Practical and research activity in this area is developed by the Research Institute for Child Psychology and Pathopsychology in Bratislava by means of out-patient activity of its Children’s Center and by organizing regular summer integration camps for gifted and

handicapped children and their parents. Our approach to exceptionally gifted handicapped children leads through identification and development of giftedness of all disabled children included in the heterogeneous human society. Here, we can see our contribution to development of the so-called positive psychology (Mareš, 2001) and to quality and sense (meaning) of life (D. Kováč, 2001) of the handicapped.

References

1. Ayers, T. S., Sandler, I. N., West, S. G. & Roosa, M. W.: A Dispositional and Situational Assessment of Children's Coping. *Journal of Personality*, 1996, 4, 923-958.
2. Dočkal, V.: Nadanie telesne postihnutého dieťaťa. *Psychológia a patopsychológia dieťaťa*, 1996, 2, 186-188.
3. Dočkal, V.: Pokus o zisťovanie sociability semiprojektívnou screeningovou metodikou. In: Sarmány Schuller, I., Košč, M., & Jaššová, E. (Eds.): *Človek na počiatku tretieho tisícročia*. Bratislava, SPS 1998, 57-59.
4. Dočkal, V.: Výnimočný talent ťažko viacnásobne postihnutého dieťaťa. *Československá psychologie*, 1999, 4, 358-368.
5. Dočkal, V.: Giftedness, disability and handicap. *Studia Psychologica*, 2001, 2, 131-136.
6. Dočkal, V. & Kováč, T.: Identifizierung und Förderung des Talents in der Schule. In: Oswald, F. & Klement, K. (Hrsg.): *Begabungen Entdecken – Begabte Fördern*. Wien, Jugend und Volk 1994, 207-220.
7. Dočkal, V. & Kováč, T.: The effects of holiday activities on creative performances. In: Jurčová, M. & Zelina, K. (Eds.): *Creativization and its Barriers*. Bratislava, SAP 1995, 79-86.
8. Dočkal, V., Kováč, T. & Páleník, L.: Entfaltung der Begabung und Kreativität in der Ferienlagern. In: Urban, K. K. & Joswig, H. (Hrsg.): *Begabungsförderung in der Schule*. Rodenberg, Klausurverlag 1998, 197-198.
9. Dočkal, V. & Matejčík, M.: Zámerné rozvíjanie detskej tvorivosti: korelácie s anxiétou. *Československá psychologie*, 1996, 1, 1-13.
10. Hellbrügge, Th.: *Von der Idee zur Realität der Entwicklungsrehabilitation – Jahresbericht*. München, Kinderzentrum 1990.
11. Hoyningen-Suess, U.: Eine Sonderklasse für hochbegabte Kinder: Kniefall von der Realität. In: Urban, K. K. & Joswig, H. (Hrsg.): *Begabungsförderung in der Schule*. Rodenberg, Klausurverlag 1998, 173-177.
12. Karnes, B. M., Schwedel, A. M. & Lewis, G. F.: Short-term effects of early programming for the young gifted handicapped child. *Exceptional Children*, 1983, 2, 13-20.
13. Khatena, J.: *The Creatively Gifted Child*. New York, Vantage Press 1978.
14. Kováč, D.: Kvalita života – naliehavé výzva pre vedu nového tisícročia. *Československá psychologie*, 2001, 1, 34 – 44.
15. Kováč, T. & Benkovič, A.: Nadanie, hendikep a zvládanie – rozdiely či súvislosti (?) *Psychológia a patopsychológia dieťaťa*, 2001a, 1, 50-57.
16. Kováč, T. & Benkovič, A.: Stratégie zvládania a tvorivosť v kontexte intelektového nadania a somatického hendikepu. *Psychológia a patopsychológia dieťaťa*, 2001b, 2, in press
17. Kováč, T. & Senka, J.: Zvládanie a tvorivosť. *Psychológia a patopsychológia dieťaťa*, 1995, 1, 98-101.
18. Koubeková, E.: Osobná a sociálna adjustácia telesne hendikepovaných pubescentov. *Psychológia a patopsychológia dieťaťa*, 2000, 1, 23-33.

19. Lindemann, J. E.: *Psychological and Behavioral Aspects of Physical Disability: A Manual for Health Practitioners*. New York, Plenum Press 1981.
20. Mareš, J.: *Pozitivní psychologie: důvod k zamyšlení i výzva*. Československá psychologie, 2001, 2, 97-117.
21. Maršálová, L., Mikšík, O. a kol.: *Metodológia a metódy psychologického výskumu*. Bratislava, SPN 1990.
22. Musil, M.: *Talenty cez palubu?* Bratislava, Smena 1989.
23. Požár, L.: *Psychológia detí a mládeže s poruchami zraku*. Trnava, PdFTU 2000.
24. Špotáková, M. & Zvalová, M.: *Vzdelávanie postihnutých – od segregácie k integrácii*. *Psychológia a patopsychológia dieťaťa*, 1992, 1, 45-60.
25. Urban, K. K. & Jellen, H. G.: *Test zum schöpferischen Denken – zeichnerisch*. Hannover, HEFE Universität Hannover 1993.
26. Webb, J.: *Nurturing social-emotional development of gifted children*. In: Heller, K. A., Mönks, F. J. & Passow, A. H. (Eds.): *International Handbook of Research and Development of Giftedness and Talent*. Oxford – New York – Seoul – Tokyo, Pergamon 1993, 525-538.
27. Whitmore, J.: *New challenges to common identification practices*. In: Freeman, J. (Ed.): *The Psychology of Gifted Children: Perspectives on Development and Education*. Chichester – New York – Brisbane – Toronto – Singapore, Wiley and Sons 1985, 93-113.
28. Willard-Holt, C.: *Academic and personality characteristic of gifted students with cerebral palsy: a multiple case study*. *Exceptional Children*, 1998, 1, 37-50.
29. Yewchuk, C. & Lupart, J. L.: *Gifted handicapped: a desultory duality*. In: Heller, K. A., Mönks, F. J. & Passow, A. H.: *International Handbook of Research and Development of Giftedness and Talent*. Oxford – New York – Seoul – Tokyo, Pergamon 1993, 709-725.

S. Keller & W. F. Velicer (Eds.)

Research on the Transtheoretical Model: Where are we now, where are we going?

Preventing and treating chronic diseases is a major global challenge for health care this century. Motivating patients to improve their health behavior is essential to the long-term success of most interventions in this context. In the past 25 years, the Transtheoretical Model of Behavior Change, developed by Prochaska, DiClemente, Velicer and others, has contributed considerably to our understanding of how individuals change their health behavior. Current results of international work using the Transtheoretical Model were presented by many of the leading experts in this field at a meeting „Research on the Transtheoretical Model: Where are we now, where are we going?“ in Marburg, Germany in August 2004. This book presents the extended abstracts of all meeting contributions. This one-of-a-kind collection provides an overview of current research on model development as well as on intervention evaluation.

Additionally, the book includes addresses from several of the major researchers in this area. The editors hope that this book will stimulate further research and facilitate international networking and collaborations.

2004, 144 pages, ISBN 3-89967-141-4, Price: 20,- Euro

PABST SCIENCE PUBLISHERS

Eichengrund 28, D-49525 Lengerich, Tel. 05484-308, Fax 05484-550,
E-mail: pabst.publishers@t-online.de – Internet: www.pabst-publishers.de