

INTEGRATIVE TREATMENT OF UNDESIRABLE BEHAVIOR IN CHILDREN WITH LEARNING DIFFICULTIES

LJILJANA IGRIC • ANAMARIJA ŽIC • BRANKO NIKOLIĆ

received: May '98.

accepted: January '99.

Very often children with learning difficulties show undesirable forms of behavior, which means any of the forms of behavior considered by the society to be striking and unacceptable, or in other words, those which disturb or hinder the process of education and rehabilitation. The objective of this research was to examine the possibilities of applying integrative therapy in the treatment of mental disorders and undesirable behavior in children with learning disabilities.

The sample consists of 13 children with learning disabilities, aged 7 to 11. In this research, the term *learning disabilities* covers children whose problems in academical skills are primarily caused by the low cognitive abilities. The IQ range, measured by Wisc, is scaled from IQ 54 to IQ 84. The AAMD adaptive behavior scale (Part II) was applied (Nihira, Foster, Shellhaas and Leland, 1974; Croatian adaptation: Irgić, Fulgosi-Masnjak, 1991).

The results show that children involved in the integrative group therapy, after the experimental period, have shown statistically significant decreases in the frequency of undesirable forms of behavior. The change in the behavior of children, as perceived by the parents, suggests that the decrease has been influenced mostly by the decrease in psychological disturbances which are related to withdrawal and/or violent and destructive behavior. According to the teachers assessment, the decrease is noticeable in those forms of undesirable behavior which hinder classroom work.

INTRODUCTION

Social behavior in persons with mental retardation

A great number of researchers stress the importance of social behavior of persons with mental retardation (Guralnick, 1984; Hogg and Mittler, 1983; Greenspan and Granfield, 1992; Stančić, V. 1985; Mavrin-Cavor, 1988; Irgić 1991). Their interest in this field is based on the fact that social relations can improve or deteriorate adjustment, as well as personal and intellectual development. Successful socialization and adaptation can alleviate the impact of deficiencies in the intellectual area.

Study on the etiology of undesirable behavior, emotional difficulties, and mental disorders in persons with mental retardation has so far concentrated on organic and biological etiology, neglecting to a certain degree environmental influences. Specific

deficits in social deduction and intelligence in children with mental retardation lead to a lack of adequate opportunities for learning as well as their insufficient exposure to learning through certain experiences or social imitations; their limited resources then cause them to be exposed to a series of stressful experiences, which in turn cause emotional difficulties and undesirable forms of behavior (Chess, 1970; Greenspan, 1979; Stephens, 1974; Eaton and Menolascino, 1982; according to Russell and Forness, 1985).

Lj. Irgić, PhD is a professor and A. Žic, MA is a research fellow at the Department of Mental Retardation, Faculty of Special Education and Rehabilitation, University of Zagreb. B. Nikolić, PhD is an assistant professor at the Department of Diagnostics and Rehabilitative Technology, Faculty of Special Education and Rehabilitation, University of Zagreb

In the last few years the attention has been paid to the evaluation of different therapeutic approaches in working with persons with mental retardation (Došen, 1983; Menolascino and Stark, 1984), including Gestalt therapy. In their work with 186 persons with mental retardation, aged between 1 and 75 years, Besems and van Vught (1988 and 1989) applied a modified form of Gestalt therapy with an accent on physical contact. Their results show that, after the therapy their behavior has improved in 93.5% of the cases. The observed behaviors included contact, movement and emotional expression as well as auto-aggressive behavior and speech.

A modification of Gestalt therapy also proved successful in a three-month study of hyperactive children with severe mental retardation (Igrić et al., 1990). Significant progress has been observed in the development of confidence and self-perception in these children, as well as in their acquisition of a sense of protection and acceptance.

Integrative therapy

Integrative therapy, a method of treatment for children, adolescents and adults was introduced in the early sixties by prof. H. Petzold. It is based on Gestalt therapy (Perls, 1969; Petzold, 1973), Moreno's psychodrama, and the Hungarian school of psychoanalysis, represented by Ferenczi, Balint and Iljine and attempts to combine different theoretical concepts and different therapeutical procedures. Integrative therapy can be viewed either as a common superstructure of the original Gestalt therapy, active psychoanalysis, psychodrama, therapy through movement, either as a novel method encompassing Gestalt therapy. (Petzold, 1988).

The Anthropological basis of integrative therapy stresses the totality of a person as the subject of the body, the mind and the soul within a social and ecological environment to which it is inseparably tied. A person is a living system marked by an

identity, based on which the person enters the relationships with other systems, experiencing its own personality and individuality through interaction with its environment. Petzold (1988) stresses the close relationship between a person and his/her environment and points out that the disturbance in the environment will always "disturb back" and destroy the biological organism and the sensitive body-subject (Leib-Subject), deforming its internal structure. Every influence either caused by the interaction of various systems in the environment, or among the connected elements within the same system, results in complex consequences as numerous as the existing links (Petzold, 1988).

The main role in integrative therapy method is given to creativity and games, which makes this approach especially suitable for the treatment of children. With the aid of different media (dolls, movement, music), accompanied by the support and encouragement techniques, past experiences are being activated and re-experienced. Group work helps children experience of their undiscovered potentials in expression, in their feelings and in their actions, encouraged by the feelings of safety, trust, and belonging to the group. This enables children to achieve a better contact with themselves and other people in their home and school environments. The starting point of Integrative therapy is the development of trust toward the therapist and the group. Such an atmosphere enables children to express their emotions, which form the basis of behavior. Through recognizing and expressing fears, anger, hate, guilt, sorrow, joy, and other emotions, the child relieves the strain and comes out of his/her loneliness. The use of games, rhythmic movement, dancing, drawing, painting, modeling, and talking stimulates the child to create a new picture of him/herself, a picture containing a more positive attitude to his/her own body, feelings, wishes and thoughts - a picture showing his/her acceptance of him/herself as a whole.

Objective and hypotheses

The objective of this study was to examine the possibilities of applying integrative therapy in the treatment of mental disorders and undesirable behavior in children with learning disabilities. In the study undesirable forms of behavior are defined as all the forms of behavior seen by the environment as striking and unacceptable, or, in other words, those which disturb or hinder the process of education and rehabilitation.

In keeping with the aims of this work, the following hypothesis was put forth:

H1: The application of integrative group therapy will cause a statistically significant decrease in the frequency of undesirable forms of behavior in children with disabilities.

METHODS

Sample

The sample included 13 children (9 boys and 4 girls) with learning disabilities, aged 7 to 11. The range of intellectual abilities, measured by Wisc, is scaled from IQ 54 to IQ 84. All the examinees lived with their own families and attended either regular or special schools in Zagreb. 7 children had parents with lower educational background, 5 children had parents with a secondary-school education, and only 1 child had parents with a college education.

Another criterion for choosing the examinees was the existence of those forms of undesirable behavior which are related to emotional difficulties in children.

Procedure

The Integrative therapy was applied with the main aim of stimulating the maturation process during the experimental period (lasting one school year). The sample was divided into three groups (by chronological age). Each group had 33 sessions, once a week, each lasting 90 minutes. Therapeutical work was conducted by the sociotherapists educated at the Fritz Perls Institute in Düsseldorf, Germany.

The experimental data were obtained through interviews with the parents and direct assessment provided by their teachers. The examination was carried out before and after experimental period (i.e. after 10 months).

Measuring instrument

The non-intellectual aspect of social competence was measured by means of the AAMD adaptive behavior scale (Part II), which measures unadaptive behavior in relation to behavior disorders and personality. It includes 14 areas: violent and destructive behavior, antisocial behavior, rebellious behavior, untrustworthy behavior, withdrawal, stereotyped behavior and odd mannerisms, inappropriate interpersonal manners, unacceptable vocal habits, unacceptable or eccentric habits, self-abusive behavior, hyperactive tendencies, sexually aberrant behavior, psychological disturbances, and the use of medications (Nihira, Foster, Shellhaas and Leland, 1974).

The revised scale from 1975 was translated into Croatian. It was adapted and standardized. Finally, the measuring characteristics of the Croatian scale were established (Igrić, Fulgosi-Masnjak, 1991).

Data processing method

In order to establish the significance of the difference in frequency of the forms of undesirable behavior between the initial and final stages, we applied the analysis of the change of one sample described by a set of quantitative variables - the component model. (Nikolić, 1991).

Data processing model

To estimate the effects of the treatment carried out between the initial and final stage, the changes in the first main component of the matrix of result differences between the two transitive stages were analysed.

Let X_1 be the result matrix of examinees described by a set of quantitative variables at the initial stage and let X_2 be the result matrix of examinees described by a set of quantitative variables at the final stage.

The X matrix, obtained as

$$X = X_2 - X_1,$$

represents the matrix of those result changes or result differences of the examinees which occurred during the treatment for all the variables.

According to the componential analysis method (Hotelling, 1933), the first main component of the difference matrix X which represents the change component, is extracted.

The obtained characteristic value L_2 represents the variation of the change component. The hypothesis for the arithmetic mean of the results can be tested on the change component K

$$H_0 : K = 0$$

against the alternative hypothesis

$$H_1 : K$$

where K is the expected value of the first main change component.

The function $F = K^2 / L_2 (n)$

has the Cnedecor's distribution with $DF_1=L$ and $DF_2=n-1$ degrees of freedom, where n represents the number of examinees. The structure of the change component (function) - i.e., the discriminative coefficients - are obtained as the characteristic vectors of the X matrix. However, the correlation coefficients between the variables and the components of changes can be very useful for a better understanding of the affects of the treatment.

Of course, the problem of the analysis of quantitative changes under the model of differences can also be solved by the use of

the canonical discriminative analysis (Rao, 1965; Morrison, 1967; Nikolić, 1991).

RESULTS AND DISCUSSION

The presence of undesirable forms of behavior was measured with the AAMD adaptive behavior scale, Part II. The parents of the children involved in group work based on the principles of Integrative therapy estimated that after the experimental period, there had been a statistically significant decrease - at the level of 2.2% - in the frequency of undesirable forms of behavior among the children. It can be seen in Table 1 ($F=6.5484$, $DF_1=1$, $DF_2=13$).

The analysis of the change in frequency of undesirable forms of behavior based on parents' assessment (Table 2) shows that the Psychological disturbances variable has the highest statistically significant correlation with the function (.9971), a significant discriminative coefficient (.9788), and a considerably increased arithmetic mean value (-7.1538). A statistically significant correlation with the function of change is also present in other two variables: Withdrawal (-.6868) and Violent and destructive behavior (.5848).

According to this, the decrease in the frequency of undesirable forms of behavior, after the experimental period, has been determined mostly by the decrease in psychological disturbances, which are related to withdrawal and / or violent and destructive behavior.

Observing these three variables as a complex determining the function of decrease in undesirable behavior, it can be concluded that psychological disturbances have not only decreased but that their

Table 1. Analysis of changes in the frequency of undesirable behavior measured with the AAMD scale, Part II, according to parents' assessment (component model)

Group	Arithmetic mean	Variance	DF 1	DF 2	F	P
E	-9.3917	175.104	1	13	6.5484	.02267

Key

DF 1 degrees of freedom

DF 2 degrees of freedom

F

Fisher's test

P

level of significance

Table 2. Results of the analysis of changes in frequency for on each variable of undesirable behavior measured with the AAMD scale, Part II, according to parents' assessment (component model)

Variables	R	D	M
Violent and Destructive Behavior	.5858	.0748	-6.4615
Antisocial Behavior	.4162	.1273	-7.6923
Rebellious Behavior	.2912	.0844	-7.6154
Untrustworthy Behavior	.3750	.0394	-2.3846
Withdrawal	-.6868	-.0455	-3.0000
Stereotyped Behavior and Odd Mannerisms	.0943	.0028	-2.0000
Inappropriate Interpersonal Manners	.0201	.0004	-1.0769
Unacceptable Vocal Habits	.4033	.0566	-2.3077
Unacceptable or Eccentric Habits	-.1168	-.0086	-4.2308
Self-abusive Behavior	.2470	.0050	-1.0769
Hyperactive Tendencies	.4507	.0777	-2.8462
Sexually Aberrant Behavior	.0000	.0000	-4.0000
Psychological Disturbances	.9971	.9788	-7.1538
Use of Medication	.0000	.0000	-1.0000

Key:

R correlations between the variables and the function of change

D discriminative coefficient

M arithmetic means of the result differences

manifestations - withdrawal and violent and destructive behavior - have also been diminished.

The decrease in undesirable forms of behavior expressed as the decrease in psychological disturbances which are connected with withdrawal and violent and destructive behavior was one of the aims of the group work involving children with learning disabilities. Special attention was paid to the child's creation of a positive picture of himself, building up his self-confidence, becoming aware of his own value, discovering his own richness in experiencing the world outside and that within him, and discovering different reactions to events. Efforts were made to understand the background of the child's undesirable behavior, that is to say, which emotional deficits, disturbances, traumas, conflicts and defense mechanisms caused such behavior. Group-work was aimed at re-experiencing the event, which triggered off an undesirable reaction with the intention of opening up the possibility of going through that same event once again and

integrating it. After having resolved certain conflicts, these children have reached a higher level of emotional stability. The ego, which was now strengthened, found it easier to cope with frustrations and it responded to criticism in a much better way, which was reflected in the decrease in psychological disturbances. Realizing their own value and experiencing their environment with a higher degree of consciousness, the children became less withdrawal and shy, and they took a more active part in the activities of the social groups they belonged to (family, class, peers in the neighborhood).

It was supposed that the aggressive behavior, as described by the Violent and Destructive Behavior variable, occurred as the inappropriate reaction of a child trying to win the love and attention he needed. During the group-work the children learned new strategies of defense, of dealing with and solving problems. They were also given the attention of the group which provided them with new emotional experiences. As a result, the function of threats, violent

temper and the damages of property (subvariables of the Violent and destructive behavior variable) was gradually diminished.

After the experimental period the teacher of the children involved in the integrative therapy group estimated that undesirable forms of behavior showed the statistically significant decrease, at the level of 0.07 % (Table 3) with $F=24.205$ and $DF1=1$, $DF2=11$.

The analysis of the changes in frequency of undesirable behavior (Table 4) shows that the Rebellious Behavior variable has the highest correlation with the function of change (.9495). Its discriminative coefficient is rather high (.4603) and there is an increase in the arithmetic means value (-8.0). The decrease in undesirable behavior was also caused by lower frequency of the Violent and Destructive Behavior variable which has a statistically significant correlation with the function of change (.8856), a significant correlation coefficient (.5239), and considerably increased arithmetic means of the results (-4.0909).

According to the teachers' assessment, the following variables also have a statistically significant correlation with the function of decrease in undesirable behavior: Antisocial Behavior (.8088), Psychological Disturbances (.6238), Untrustworthy Behavior (.7086), Self-Abusive Behavior (.6950), Unacceptable or Eccentric Habits (.6357), Sexually Aberrant Behavior (.6238) and Inappropriate Interpersonal Manners (.5839).

It can be concluded that teachers best noticed the decrease in those forms of undesirable behavior which hindered classroom work. After the experimental period, teachers noticed that the children listened to them, that they did not fight or

disturb other pupils' work, and that there was a decrease in psychological disturbances. The function of decrease in undesirable behavior is determined by the variables of behavior directed towards the environment, which indicate the degree of socially adapted and acceptable behavior.

According to teachers' assessment, the extracted function of decrease in undesirable behavior can be explained by the psychological process of the development of self-confidence, which was one of the aims of the group work. A child who is more satisfied with him/herself finds it easier to accept the norms of school behavior, and, among other things, he does not oppose so vigorously the authority - the teacher. Having gained attention in the small group, he has no need to draw the attention of the class to himself and to disturb classroom work. The child's positive relationship, established both with the leader and the group, represents a positive experience on the basis of which he accepts school authority more easily.

During the group work, special attention was paid to a suitable way of expressing unhappiness, anger, and rage. The children had an opportunity to release their accumulated tension caused by anger and unhappiness. Their emotions were accepted with tolerance and understanding; in other words, anger and rage were not forbidden in the group as is usually the case at school or in the society where such impulses are expected to be suppressed. Besides, new experiences of contact with other group-members had an impact on the acquisition of social skills, which are deficient in children with learning disabilities (Guralnick, 1990). This also contributed to a decrease in their antisocial behavior.

Table 3. Analysis of the change in frequency of undesirable behavior measured with the AAMD scale, Part II, according to teachers' assessment (component model)

Group	Arithmetic mean	Variance	DF 1	DF 2	F	P
E	-14.4697	95.149	1	11	24.2051	.00070

Key

DF 1 degrees of freedom

DF 2 degrees of freedom

F

Fisher's test

P

level of significance

Table 4. Results of the analysis of changes in frequency for each of the variables of undesirable behavior measured with the AAMD scale, Part II, according to teachers' assessment (component model)

Variables	R	D	M
Violent and Destructive Behavior	.8856	.5239	-4.0909
Antisocial Behavior	.8088	.5154	-8.2727
Rebellious Behavior	.9495	.4603	-8.0000
Untrustworthy Behavior	.7086	.0850	-2.5455
Withdrawal	.1622	.0890	-1.8182
Stereotyped Behavior and Odd Mannerisms	.2101	.0384	-1.3636
Inappropriate Interpersonal Manners	.5839	.1063	-0.5455
Unacceptable Vocal Habits	.4600	.1010	-1.0909
Unacceptable or Eccentric Habits	.6357	.3119	-3.0000
Self-abusive Behavior	.6950	.0204	-0.9091
Hyperactive Tendencies	.2956	.0633	-1.0000
Sexually Aberrant Behavior	.6238	.0427	-4.0909
Psychological Disturbances	.7435	.3257	-7.9091
Use of Medication	.3800	.0111	-1.0909

It follows from the above that the H1 hypothesis, which states that there will be a statistically significant decrease in the frequency of undesirable behavior in children with learning disabilities, can be accepted.

CONCLUSION

The assessment of the behavior of children, provided by parents and teachers, with the aid of the AAMD scale, Part II, has shown positive changes in children in both social environments. The change in the behavior of these children, as perceived by the parents suggests that there might be a better basis for a more sound parent-child relationship. The decrease in undesirable behavior that hinders classroom work is likely to help the

development of more positive teacher-student relationship.

The direction and structure of these changes favor the acceptance the hypothesis that the integrative therapy has contributed to the decrease in the frequency of undesirable forms of behavior. It must, however, be noted that this evaluation has been conducted on a rather small sample, and its results have not been compared to an appropriate control group. It can be concluded that integrative therapy presents a good lead, but there is certainly a need for a more thorough evaluation of its effects on the social competence of school children with learning disabilities, on their mental health and on the quality of their relationships with the environment.

LITERATURE

- Besems, T., van Vugt, G.: Gestalttherapie mit geistig behinderten Menschen, Gestige behinderung, 1988, Teil 1, 1-24
 Besems, T., van Vugt, G.: Gestalttherapie mit geistig behinderten Menschen, Gestige behinderung, 1989, Teil 2, 1-24
 Chazan, M.: Integration of students with emotional and behavioral difficulties, European Journal of Special Needs Education, 1993, vol. 8, 3, 269-287
 Došen, A.: Noviji pristup psihijatrijskoj dijagnostici kod mentalno retardirane djece, Pregled problema mentalno retardiranih, 1984, 20, 1-2, 16-18
 Foster-Gaitskell, D. i Pratt, Ch.: Comparison of parent and teacher ratings of adaptive behavior of children with mental retardation, American Journal of Mental Retardation, 1989, 94, 2, 177-181

- Greenspan, Stephen & Granfileld, James M.: Reconsidering the construct of mental retardation: Implications of a model of social competence, *American Journal on Mental Retardation*, 1992, vol. 96, 4, 442-453
- Guralnick, Michael J.: Social Competence and Early Intervention, *Journal of Early Intervention*, 1990, 14, 1, 3-14
- Guralnick, M.J. & Weinhouse, E.: Peer-Related Social Interactions of developmentally Delayed Young Children: Development and Characteristics, *Developmental Psychology*, 1984, vol.20, 5, 815-827
- Hogg, J. & Mittler, P.J.: Aspects of Competence in Mentally Handicapped People, U: *Advances in Mental Handicap Research*, Volume 2, Ed. by Hogg, J. & P.J. Mittler, John Wiley & Sons Ltd, 1983
- Igrić Lj.: Adaptivno ponašanje učenika s mentalnom retardacijom u relaciji s nekim prediktorima, *Defektologija*, 1990., 26, 2, 163-177
- Igrić, Lj., Šikić, N., Burušić, D.: Effects of Gestalt Therapy and drug therapy in hyperactive severely mentally retarded children, U: Došen, A., Van Gennep, A., Zwanikken, G.J. (Eds.): *Treatment of Mental Illness and Behaviour Disorder in Mentally Retarded. Proceedings of the International Congress, May 3rd & 4th, 1990, Amsterdam, Logan Publications, 1990, 339-351*
- Igrić, Lj.: Struktura nepoželjnih oblika ponašanja u osoba s mentalnom retardacijom, *Defektologija*, 1991, vol. 29, 2, 51-61
- Igrić, Lj., Fulgosi-Masnjak, R.: *AAMD Skala adaptivnog ponašanja, Priručnik. Sveučilište u Zagrebu, Fakultet za defektologiju, Zagreb, 1991.*
- Mavrin-Cavor, Lj.: Neki socijalizacijski efekti integracije djece usporenog kognitivnog razvoja, *Defektologija*, 1988, 24, 1, str. 81-93
- Nikolić, B.: Modeli za analizu promjene nastalih uključivanjem kompjutera u transformacijske procese kod osoba s teškoćama socijalne integracije. *Defektologija*, 1991, 28, 1, 77-89.
- Petzold, G.H.: *Integrative Bewegungs- und Leibtherapie: Ein ganzheitlicher Weg leibbezogener Psychotherapie (Integrative Therapic Schriften zu Theorie, Methodik und Praxis Bd.1/1); Junfermann-Verlag, Paderborn, 1988.*
- Russell, A.T. & Forness, S. R.: Behavioral Disturbance in Mentally Retarded Children in TMR and EMR Classrooms, *American Journal of Mental Deficiency*, 1985, vol. 89, 4, 338-344
- Siperstein, Garry N.: Social competence: an important construct in mental retardation, *American Journal on Mental Retardation*, 96, 4, 1992, iii - vi
- Siperstein, G.N., Bak, J.J. and P. O'Keefe: Relationship Between Children's attitudes Toward and Their Social Acceptance of Mentally Retarded Peers, *American Journal on Mental Retardation*, 1988, 93, 1, 24-27
- Stančić, V: Razvoj stavova i vrijednosti u djece usporenog kognitivnog razvoja, *Defektologija*, 1985, 21, 2, str. 1-22