DOCUMENT RESUME

ED 179 056 EC 122 053

AUTHOR Milgram, Roberta M.
TITLE Gifted Children in Israel: Theory, Practice, and Research.
PUB DATE Aug 79
NOTE 14p.; Paper presented at the Annual Conference of the International Council of Psychologists (37th, Princeton, NJ, August 30-31, 1979).

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Creativity; Disadvantaged Youth; *Educational Programs; Elementary Secondary Education; Enrichment; *Foreign Countries; *Gifted; Special Classes; Special Schools; Summer Programs
IDENTIFIERS *Israel

ABSTRACT

Informal and formal programing for gifted children in grades 4 through 12 in Israel are described. After school and summer enrichment programs, special classes and special schools for the gifted are discussed; and a number of programs for gifted children from disadvantaged backgrounds are presented. The author reports on her own research studies on giftedness and creativity. (Author/SBH)

GIFTED CHILDREN IN ISRAEL: THEORY, PRACTICE, AND RESEARCH

Roberta M. Milgram

Tel-Aviv University

School of Education

For presentation at the 37th Annual Conference of the International Council of Psychologists, August 30-31, 1979 Educational Testing Service Princeton, New Jersey

SUMMARY FOR PAPER "GIFTED CHILDREN IN ISRAEL: THEORY PRACTICE, AND RESEARCH" - presented by Roberta M. Milgram at the 1979 conference of the International Council of Psychologists.

Informal and formal programming for gifted children in grades 4-12 in Israel were described. After school and summer enrichment programs, special classes and special schools for the gifted were discussed and a number of programs for gifted children from disadvantaged backgrounds were presented. The author reported on a number of her own research studies on giftedness and creativity conducted in Israel.

GIFTED CHILDREN IN ISRAEL: THEORY, PRACTICE, AND RESEARCH

Roberta M. Milgram
Tel-Aviv University
School of Education

There are many people in Israel who share the well documented prejudices against gifted children and oppose special education for them. There are, however, many others who view the intellectually gifted as one of Israel's most important natural resources to be identified and nurtured as one would precious stones or oil. As a result of the intensive efforts of these advocates, there exists in Israel today a large number of formal and informal programs of special education for the gifted, Moreover, research on giftedness has been supported by the Israeli universities and by the Israel Ministry of Education. In today's presentation I will briefly describe some educational programs and some of my own research on gifted and creative children.

Israel has a well developed network of enrichment programming, i.e., extracurricular groups which meet after school or during vacations to provide instruction and activities for gifted children in subject matter areas ranging from mathematics and computer science to music and sculpture. All programs for the gifted are coordinated and funded in part by a department in the Ministry of Education created in 1973 expressly for this purpose. Programs are provided for children in grades 4-12 and even for younger children in some instances.

Programs for 4-8 are conducted by the Haaretz Museum and Bar Ilan University in Tel-Aviv, the Technion in Haifa, and by several local municipalities around the country. Admission to these programs is generally on the basis of group and/or individuals testing, with minimum IQ level of 140 used as the cut off point. Other psychometric instruments such as personality tests or measures of creativity are sometimes included in the battery, but rarely used for selection purposes. Children from disadvantaged backgrounds are routinely accepted if they approximate the requirements. The manner in which the children are referred varies in the different programs. For example, at the Technion, school principals and teachers refer candidates to the program; in Tel-Aviv, parents may turn directly to the Haaretz Museum; and in the municipality of Holon, the school psychologists conduct the selection process using information from their files.

For high school age children (grades 9-12) enrichment activities are offered at Tel-Aviv University, at the Technion, and at the Weizmann Institute of Science in Rehoboth. Although the offerings include some courses in the realm of the humanities, heavy emphasis is placed on scientific subjects and mathematics. Many of the above mentioned programs continue during the summer either in the same format or as day or resident camps.

I would like to call special attention to two programs, one in Jerusalem and one in Holon. The Jerusalem program is unique in Israel because the groups are organized as clubs by age level rather than as classes

by subject matter areas. The major goal of the program is to provide the opportunity for social interaction among gifted children from different neighborhoods. In Holon special efforts are made to identify potential giftedness among the disadvantaged and to conduct enrichment groups in the schools which they attend.

In the early 1970's the Ministry of Education authorized the establishment of a special school for the gifted in Tel-Aviv and of several special classes in Haifa. The initial phase of the selection process consisted of group-testing all first graders in Tel-Aviv and Haifa. Later phases included further group and individual testing and interviewing the children and their parents. In Tel-Aviv the school for gifted children is a "school within a school". It shares many facilities with the school for nongifted children and the same principal administers both schools but there is little or no contact between the gifted and nongifted children or between the teachers of both groups, In Haifa the format is one of special classes within a school, i.e., classes which are part of the school in every way, except that the pupils are all gifted.

Two special school programs for older gifted pupils in Israel merit special consideration. The first is the Boyer School in Jerusalem and the second a special project of the Israeli Defense Force. For over a decade the Boyer school has provided special education for gifted children and adolescents from disadvantaged backgrounds in a residential setting

especially created for that purpose. The students at the Boyer School are relatively gifted, i.e., outstanding in their peer groups, but not always gifted in terms of IQ scores. Many positive results have bee reported for this program including high levels of academic and vocational achievement. Complete follow-up data on the Boyer School experience are available in a new book by Professor Moshe Smilansky of Tel-Aviv University, who initiated the program and conducted it over the years.

The second program is much newer and is in its initial phase this summer. From among all of Israel's high school seniors a very small number of scientifically gifted and creative young men were selected and offered the opportunity to participate in an accelerated academic program leading to a B. Sc. in two years. A special school and curriculum has been prepared for these students and their courses will be taught by university staff. The young men will be in the army during the period of intensive education and training and will serve in the army as scientific researchers for several years after that.

I turn now to research on giftedness. If one examines Psychological Abstracts or even the program of the 1979 APA meetings, the paucity of research on giftedness is immediately evident. It is, therefore, interesting to note that a substantial number of studies on giftedness and creativity conducted in Israel have appeared in the research literature over the last decade.

Among those who have contributed to the literature on giftedness are Perlberg and Evyatar, both of the Technion in Haifa, Goor at Hebrew University, and especially Shouval, Ziv, and Smilansky at Tel-Aviv University. I will today present the research with which I am most familiar, i.e., my own. Since I must be brief I have provided bibliographic references for the studies mentioned at the end of this paper.

In the area of giftedness, I conducted a number of studies on the personal-social characteristics of gifted and nongifted children, i.e., self-concept, general anxiety and test anxiety, locus of control, and sex-role identity and found evidence of superior adjustment in the gifted children - a finding similar to that reported in the research literature. Of special interest were comparisons of gifted children above 125 IQ varying in level of creative thinking. Among these gifted children increments of intelligence were not associated with better scores on indices of personal-social adjustment, while increments of creative thinking were.

The social adjustment of gifted children studying in homogeneous classes in a special school was compared with that of their equally gifted peers who had been accepted for the special school but chose instead to remain in heterogeneous classes in their neighborhood school. Attendance in a special school did not result either in better adjustment or in the

social isolation or unusual difficulties in adjustment which are sometimes thought to be associated with homogeneous educational settings.

The opinions of gifted and nongifted elementary school children were compared on what kind of teacher these children prefer. The major finding was that all children regardless of age or intelligence level, place a very high value on intelligent behavior by their teachers. Although they highly regard creativity and positive personal-social characteristics in their teachers, they value most of all teachers who demonstrate mastery of the material and conduct the class in a logical and orderly manner.

In studying the creative process in gifted and nongifted children and adolescents, I have examined a number of theoretical formulations derived from the work of Guilford, Mednick, Wallach and Kogan and have devoted special attention to the validity of tests of ideational fluency as predictors of creative behavior.

I developed a method of scoring ideational production for quality instead of merely for unusualness and demonstrated the relationship of quantity and quality of response in creative thinking (ideational production), in creative problem-solving in laboratory type situations, and in real-world talented accomplishments such as art, music, mathematics, science, etc.

Our data provided empirical validation for the order effect hypothesized by Mednick, i.e., that frequent, conventional responses occur earlier in the response sequence of creative thinking and highly original later, and

extended the Mednick hypothesis by demonstrating the order effect for high quality responses in particular, and not merely for statistically unusual responses regardless of quality. Moreover, we found the order effect not to be a general phenomenon as he assumed, but rather to be developmental in nature, appearing only after age 12, except in highly creative children where it obtains earlier between age 9 and 12.

Studies of the validity of ideational fluency were conducted with children and adolescents. In these studies the correlations between creativity test scores and two criterion measures were examined. One criterion consisted of self-reports on a wide variety of socially valued areas of creative activity and the other of performance - type laboratory tasks of creative problem-solving. Ideational fluency was found to be related to both criterion measures at every age level thus indicating that it may be regarded as a necessary, albeit not sufficient component of the creative process.

Attention was also devoted to the developmental aspects of creative thinking, an area largely neglected by other investigators. A linear age trend was found in the development of creative thinking with no evidence of the discontinuities reported by Torrance and other investigators.

In my current research I am examining the quantity and quality of creative thinking and creative problem-solving from a developmental perspective in children varying in age (Grades 2-5-8), intellectual ability (gifted-nongifted)

and social class (middle-lower). This research will clarify the extent to which creative thinking may be enhanced by verbal reinforcements. The validity of incentive-produced change is being examined by comparing the relationship of quality to quantity and the proportion of quality to quantity in creative thinking in baseline and verbal reinforcement conditions. The data of this study will further clarify developmental trends in creative thinking and the role of ideational fluency as a predictor of creative problem-solving.

Let me conclude by saying that I see theory building as a top priority need in the field of giftedness today. There is, to the best of my knowledge, no theoretical model which offers a comprehensive explanation for the phenomenon of giftedness. The only exception and certainly a step in the right direction is the work of David Feldman at Tufts who utilized a Piagetian framework in constructing a theoretical model for both giftedness and creativity. While acknowledging the singular contribution of Terman's empirical work, his descriptive-empirical approach provided the model for researchers who followed him and probably impeded theoretical progress in the field. We must go beyond simple description of the phenomenon, no matter how systematic or thorough it is and search for explanatory concepts.

The complex problems facing Israel and the world today require the efforts of people who can think in a manner which is systematic and logical as well as imaginative and innovative. Israel's major natural resource is her people in general and her talented people in particular, we cannot

afford the luxury of neglecting our gifted children. Only if we fulfull the creed, "To each according to his need," will we receive, "From each according to his ability."

It is in the self interest of the many to identify and to nurture the abilities of the few. The realization of the full potential of the abilities of highly intelligent and highly creative children is of immeasurable value both to these children and to the society in which they live.

Reference List

Milgram, R.M. Perception of teacher behavior in gifted and nongifted children. Journal of Educational Psychology, 1979, 1, 125-128.

Milgram, R. M., & Arad, R. The role of creative thinking in creative problem-solving in college students. Paper presented at annual meeting of the American Psychological Association, New York City, 1979.

Milgram, N.A. & Milgram R.M., Dimensions of locus of control on children. Psychological Reports, 1975, 37, 523-538.

Milgram, R.M. & Feingold, S. Concrete and verbal reinforcement in creative thinking in disadvantaged children. Perceptual and Motor Skills, 1977, 45, 675-678.

Milgram, R.M. & Milgram, N.A. Creative thinking and creative performance in Israeli children. Journal of Educational Psychology, 1976, 68, 255-259.

Milgram, R.M. & Milgram, N.A. Group versus individual administration in the measurement of creative thinking in gifted and nongifted children. Child Development, 1976, 47, 563-565.

Milgram. R.M. & Milgram, N.A. Personality characteristics of gifted Israeli children. Journal of Genetic Psychology, 1976, 129, 185-194.

Milgram, R. M. & Milgram, N.A. Self-concept as a function of intelligence and creativity in gifted Israeli children, Psychology in The Schools, 1976, 13, 91-96.

Milgram, R.M. & Rabkin, L. A developmental test of Mednick's hierarchies of original thinking. Developmental Psychology. In Press.

Milgram, R. M. & Yanir, I. Social adjustment in gifted children in regular and special schools, Unpublished manuscript, Tel-Aviv University, 1978.

Milgram, R. M., Yitzhak, V., & Milgram, N.A. Creative activity and sex role identity in elementary school children. Perceptual and Motor Skills, 1977, 45, 371-376.

Milgram, R. M., Milgram, N.A., Rosenbloom, G., &Rabkin, L. Quantity and quality of creative thinking in children and adolescents. Child Development, 1968, 49, 385-388.