

A STUDY OF SELF-SUFFICIENCY IN STUDENTS WITH MENTAL RETARDATION IN REGARD TO THE EDUCATION OF LIFE SKILLS TEXTBOOKS

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Abstract

The objective of this research is to study self-sufficiency in the students with mental retardation (MR) with regard to the teaching of life skills textbooks. This is a survey research and teachers of students with MR who were operative in the academic year of 2012-2013 form the survey population. 46 teachers who taught to 256 students (114 girls and 142 boys) were chosen as sample subjects. The tool used in this research was a researcher-made questionnaire approved by the country's experts of exceptional education and the textbook's editorial board. Data has been analyzed using variance analysis tests and independent *t*-tests. Results show that total self-sufficiency skill increases by age and is relatively higher in boys. Health and safety skill increases as well and is higher in boys. Also, self-care and management skill decreases in spite of the increase in age and training.

Keywords: self-sufficiency, life skills, students with mental retardation

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Introduction

Independence is an important prospect in the education of mentally retarded individuals. The objective of the educational programs for independent life is to provide for the individuals with mental retardation, and disabled people in general, the chance of having an independent life in the society via the independent life training (*Behrad, 2005*). In fact, the purpose is to prepare them for the social life and to make them learn essential skills for an independent life, or with the least reliance possible (*Arsalan et al, 2007-Breager et al, 2009*). One of the necessities of the educational programs for the students with special needs is to give them a chance to flourish their abilities for their own support and at the same time prevent them from the frustration of not being able to excel, as others, in their own affairs (*Gilbride 2000*). Thus it can be stated that designing and administering an appropriate and functional education program for the students with MR is a crucial measure to prevent mentally retarded individuals of being a burden to their families and society (*Hemmati Alamdarlu, 2013*).

In Iran, due to an increase in environmental pollutions, intermarriages and cultural concerns, too, which leads couples to keep silent about any instances of disability in the family, the number of children suffering from mental retardation is rising.

Sokhandan (2001), in his research, proved that teaching social skills has significantly reduced the behavioral and emotional problems in primary school students. *Esmaili (2001)* showed that the average score of self-esteem was higher in the students who had passed life skills course than those who had not. In their research, *Shahrami and Mottaqiani*, showed that reaching social and economical independence would not be probable by mere speculative education, particularly the one presented in different stages of education for the exceptional in Iran; rather, practical and skill-oriented education is required to meet the needs of a disabled person as a member of society. *Behrad (2004)* reached the result that although holding vocational classes for different grades is a right move, but the books' contents need more efficiency in order to enhance the everyday-life skills of people with mental retardation. *Harrel et al (2008)* showed that teaching social skills would reduce behavioral problems and, on the other hand, increase social self-efficacy in the students. In a research under the title of "A Survey of Growth and Maturation in Children with Mental Retardation", *Kumar (2009)* found that there exists a meaningful relation between social maturity spectrum and intelligence in the survey subjects. Additionally, it was

found out that with the increase in MR, social maturity decreases and age does not affect social maturity in anyway.

In this light, with regard to the extreme importance and necessity of self-sufficiency for the mentally retarded students and the urgency to identify essential skills in order to formulate a life skill curriculum, and on the other hand, regarding the numerous researches carried out on the subject in the country and abroad, the current research has been planned with the purpose of studying self-sufficiency in mentally retarded students and with regard to teaching of life skills textbooks. Concerning what mentioned so far, the principle question of this research is that whether or not the life skills books lead to self-sufficiency in the students with mental retardation. Therefore, the questions of this research are defined this way: 1- How is self-sufficiency in mentally retarded male/female students with regard to teaching of life skills books? 2- How is self-sufficiency among the mentally retarded high school students of first to third grades? “Self-sufficiency” in this research means the acquisition of everyday life skills which generally fall into three categories of “cooking”, “self care and cleaning” and “health and safety”. By “teaching life skills”, this study means the learning of what has been taught of life skills textbooks by the teachers to the students during the three years of vocational high school. Also, by “mentally retarded”, this research refers to a student who has been verified as educable and is studying in a school for the exceptional students. Educationally, the students with mental retardation are classified into three categories of custodial, trainable and educable, of which the ministry of education is responsible for the education of educable mentally retarded students with an IQ of 50 to 70.

As it can be observed, to obtain a more general outlook and to specialize the textbooks and training chapters among male and female students and also to reconsider the training chapters of the different grades, a survey of the efficacy of the education these students receive at school, and a comparison of this efficacy between male and female students is a necessity.

Methodology

This study is a basic research and of survey and poll methodology. Statistic population of this survey is all the teachers of vocational high schools under the administration of the Organization of Exceptional Education in the city of Tehran who were teaching to the mentally retarded male and female students during the 2012-2013 academic year. By cluster sampling, 46 of these

teachers were chosen as survey samples, of whom 19 taught the first grade, 17 the second, and 10 the third grade, and the number of students taught by these teachers was 256 of whom 114 were girls and 142 boys. The respondents answered to three researcher-made questionnaires designed for the three grades respectively. The three questionnaires contained 20 questions each, composed in relation to the content of life skills books, including three domains of “self-sufficiency in shopping and cooking”, “self-care and cleaning” and “health and safety” in Likert scale with three levels (from 0-2) and approved by the associated experts. The questions had been designed according to the life skills textbooks of the second and the third grades. The measured content validity of the questionnaire by Cronbach’s alpha in the first, second and third grades was 73%, 67%, and 78% respectively; conveying the correlation of the researcher-made questionnaire with the content of textbooks printed by the Organization of Exceptional Education of Iran. The external validity was also approved by experts and the board for the edition of life skills textbooks in the department of vocational training of the Organization of Exceptional Education of Iran. At the outset, 6 zones out of all the zones of Tehran under the Exceptional Education were randomly chosen and one education center was selected from of each zone. A session was held for the teachers and the questionnaires were distributed and handed out according to the number of students. The questionnaires completed by the teachers were collected from the corresponding centers, classified according to the grades of study, and their data was assessed and analyzed.

Results

In order to find answers for the questions laid down by this research, the extracted data from the questionnaires was subjected to descriptive and inferential analysis. The results of the descriptive survey of total self-efficiency skills, based on gender and grades, show that among all the grades there is scant difference between girls and boys, and total self-sufficiency enjoys relative increase in the third grade with regard to the two previous grades, and is a little higher in boys.

Table 1: descriptive indexes of scores in total self-sufficiency skills by gender and categorized based on vocational high school grades

Standard deviation	Average	Gender	Variables
10/62	26/4412	Girl	Class I
13/83	22/8605	Son	
9/75	23/83	Girl	Class II
10/23	26/57	Son	
8/02	28/59	Girl	Class III
6/98	32/69	Son	

In order to answer the first question of this research on “how self-sufficiency is in male and female students with MR with regard to the teaching of life skills textbooks?” independent *t*-test was conducted.

Table 2: results of independent *t*-test for the comparison of mentally retarded boys and girls in each of the three skills of self-sufficiency and total skills scores

Significance Level	Degrees of freedom	t	Standard error of difference	Difference Average	Significant level	F Levine	Their skills and independence
.758	254	-.309	.452	-.139	.612	.258	Cooking
.234	254	-1.192	.584	-.696	.825	.049	Care
.001	254	3.316	.804	2.666	.088	1.155	Safety
.168	254	1.382	1.32411	1.83000	.247	1.347	General skills

Regarding the lack of significance in Leven’s test and the homogeneity of variances assumption, *t*-test was carried out. The independent *t*-tests for cooking, care, safety, and total skills were (*t*-test, $t=-0.309$, $p=0.758$), (*t*-test, $t=3.316$, $p=0.001$), (*t*-test, $t=3.316$, $p=0.001$) respectively. Apparently, the only significant difference between boys and girls is in the safety skill.

In order to answer the second question on how self-sufficiency is among the mentally retarded students of first to third grades of high school, a multivariate (two variables) analysis of variance test procedure was conducted.

Table 3: multivariate analysis of variance test results by gender and grades

Sig.	F	Mean square	df	Sum of squares	Skills	Source of change
0.003	5.799	71.493		142.987	Cooking	
0.000	32.14	554.29		1108.593	Cleaning	
	8	7			care	
0.000	246.6	3093.9	2	6187.898	Health	Class
	11	49			Safety	
		743.84			General	
0.001	7.259	6		1487.692	skills	
0.988	0.000	.003		.003	Cooking	
0.976	0.001	0.015		0.015	Cleaning	
					care	
0.070	3.303	41.444	1	41.444	Health	Gender
					Safety	
0.514	0.427	43.715		43.715	General	
					skills	
0.142	1.964	24.216		48.432	Cooking	
0.118	2.154	37.136		74.272	Cleaning	
					care	
0.001	7.000	87.823	2	175.646	Health	Gender- Class
					Safety	
0.063	2.801	287.07	1	574.141	General	
		1			skills	
		12.328		3081.985	Cooking	
		17.242		4310.507	Cleaning	
					care	
		12.546	250	3136.462	Health	Error
		102.47		25618.098	Safety	
					General	
			2		skills	
				18891.000	Cooking	
					Cleaning	
			256	27767.000	care	
				34434.000	Health	Total
					Safety	
				211342.000	General	
					skills	

Tukey's Post hoc test was used to further investigate the results.

Table 4: Tukey's Post hoc test results for cooking in male/female students with MR

Significance Level	Standard error	Difference Average	class	class
.19	-.534	-14.6	2	1
9240.	5610.	21	3	
190.0	5340.	1.46	1	2
50.00	5280.	1.67	3	
9250.	5610.	210.	1	3
50.00	5280.	67.1	2	

First, the “total self-sufficiency” scores in the two genders by the grades were studied. The multivariate analysis of variance test showed that the *F*-test with degree of freedom of 2 and level of significance of 0.001 was significant only for the grade means and there is no significant difference in the means of gender and their interaction. Further on, the Tukey’s test results showed a significant difference in the total self-sufficiency between the first two grades and the third grade, i.e. in spite of the difference between the three skills and their respective increase and decrease in the three grades, the total skill has improved during the later years.

Regarding the results of multivariate analysis of variance test it can be inferred that the difference between the groups for the “cooking” skill can be observed only in grades and not the means of “gender” and the interaction of the two variables of “gender*grade” is not significant. The Tukey’s Post hoc test was conducted to investigate this difference in more details (table 4). The results of this test relay that the cooking skill in the grades “first with second” and “third with second” is significantly different, or in other words, the first and third grades are different from the second grade.

The multivariate analysis of variance results for the comparison of “self-care and cleaning” skills in the two categories of gender by the grades was assessed and amount of $F=32.148$ and $df=2$ and $P \leq 0.0005$ for the level of significance in the variable of grade showed that self-care and cleaning skill is different for the three grades. Also, the result of Tukey’s test made it known that self-care and cleaning skills have significant difference in the first and second grades with the third grade, i.e. in spite of increase in age and training, their scores have lessened.

The same process was performed for “health and safety” skill. The results of multivariate analysis of variance in comparing “health and safety” in the two categories of gender by grade show that the *F*-test for the grade was equal to 246.611 with the degree of freedom of 2 at level α and 0.005 as level of significance is significant but there is no significant difference for the

means of gender and their interaction. It means that the students with MR have performed differently in various grades in the health and safety skill. To shed more light on the results, the Tukey's Post hoc test was carried out and the data showed that health and safety skill had significant difference in all the three grades, i.e. there was a change in each grade in respect to the previous one.

Debate and Conclusion

As mentioned before, education of children with MR is a fundamental element to help them acquire independence, of which teaching life skills is of extreme importance. The results of this study show that self-sufficiency in the students with MR is different in the corresponding three grades of high school and that their total skill has increased. *Gilbert (1996)* reported similar results and emphasized the effect of life skills education on different aspects of mental health and its betterment (*qtd. In Qal'eh-Asadi et al, 2007*). Also, these results relay that health and safety skills increase in higher grades, which is in line with Bandura & Adams studies (2002). They showed that self-efficiency is an important and prerequisite factor of behavior change, including changes in healthy behaviors. On the other hand, in spite of the increase in age and learning, there is a reduction of health and safety skills in these students, the cause of which might be the inadequacy of education in these categories. As a matter of fact, in addition to make the content of education more functional, the method of education must become functional as well. In other words, education must enable the individuals suffering from MR. The purpose is to provide an educational program for the mentally retarded students that not only would meet their current needs but also tackle their probable demands in the future. In fact, attention must be focused on devising an education program in such a way that leads to resourceful employment, self-efficacy and an enhanced independence of mentally retarded students in their life.

The surveys conducted on vocational skills courses in Iran show that materializing the objective of enabling the students with MR has not been approved in reality, and the level of educable mentally retarded graduates' of the essential enabling features confirms the absence or insufficiency of this possession (*Behrad, 2004*). Since applying the content of education to an independent life milieu is one of the most important difficulties for the mentally retarded students, it is recommended to prioritize those educational programs which are more functional and apply readily to the life conditions outside the schools, meet the current needs and reduce external problems and also develop potential capabilities. On the other hand, it seems that to

specialize the education according to gender, i.e. to male and female students with MR, would be effective. Also, since parents are in constant and direct contact with their children, it is recommended to survey the parents alongside the teachers for a more detailed assessment of these children.

Resources

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