THE EFFECT OF AFFECTION ON ENGLISH LANGUAGE LEARNING OF CHILDREN WITH INTELLECTUAL DISABILITY BASED ON TOTAL PHYSICAL RESPONSE METHOD OF LANGUAGE TEACHING

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ABSTRACT

Teaching English as a foreign language to mentally retarded persons is much more complicated than normal EFL learners, and it requires specific techniques and methods. Giving affection by the teacher is assumed to be an effective way to overcome limitations caused by intellectual disability. This study aimed to evaluate the effect of teaching with affection on English learning of children with intellectual disability. The participants in this study are 18 males and females with mild retardation between 6 to 14 years old. Before the random division of the two groups and conducting the pre-test, the Goodenough Psychological Test was conducted to evaluate the mental age of the participants. Also the standard Test of Language Development (TOLD) was used for assessing their native language development. The results of these two tests showed that all of them were mildly disabled and their native language development was the same, then they were randomly divided into two groups. After the pretest and checking the homogeneity of the control and the experimental groups, there was a treatment. The treatment comprised in teaching a list of 13 English imperative forms. The words in the target sentences were chosen based on the TPR method of language teaching, however only the experimental group were exposed to affection. After analyzing the data it was proved that giving affection to mentally retarded learners of English language in the age of Childhood (up to 14 years) triples the outcome of the instruction. This indicates not only the feasibility of learning a foreign language to them, but also the importance of teacher's positive behavior during the instruction.

Key words: Intellectual disability, Affection.

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Contribution/ Originality

This study is one of very few studies that investigate an effective way for teaching a foreign language to children with intellectual disability. It uses new estimation methodology that giving extra affection to children with intellectual disability can be used to facilitate learning a foreign language.

1. INTRODUCTION

Knowing a second language is, no doubt, a high priority in this century. Not being able to speak languages other than mother tongue could be considered a form of illiteracy (Rondal, 2000). However learning a second language is
not a simple task. There are major explanations for why students experience difficulties in language classes. Having negative attitude, low motivation, high anxiety, or even brain function can be considered as the most important reasons (Banks, 2008). The situation is exacerbated when it comes to teaching a second language to the persons with intellectual disability. It is crystal clear that they suffer from several mental impairments, one of which is language deficiency. According to the American Association on Mental Deficiency, "Mental retardation refers to sub average general intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior." (Heber, 1959)

Although many studies have been done in order to examine the learning ability of mentally retarded persons in general, and how well they could learn their mother tongue, not much have been done to investigate the effective ways of teaching them a second language.

Many researches support the notion that native language abilities weigh significantly in a student’s potential to learn a second language; however there are many positive reports on successful foreign language learning by individuals with intellectual disability despite their difficulties in first language acquisition.

In his article on bilingualism in mental retardation, Rondal (2000) reports cases with Down syndrome who had deaf parents, and they could develop certain level of both English and sign language. He also states that children with intellectual disability who were raised with bilingual parents can develop a certain degree of bilingualism. With observing many disabled children who were able to speak and comprehend more than one language, he concluded that learning foreign language seems to be within the capacity of children with intellectual disability.

It seems that a child's foreign language communicative ability, even if a child is mildly mentally disabled, can be provoked by using a professional approach to teaching and learning (Krapez, 2010). The research data conducted by Krapez (2010) suggested that these children are capable of achieving certain foreign language skills. But it is teachers' foreign language competence and their pedagogical approach which both play a decisive role in the process of foreign language acquisition.

Lynch (1978) stated that children with intellectual disability work best when they are rewarded, and encouragement can enhance their learning. This study aims to investigate the assumption that giving exaggerated affection and care to learners with intellectual disability, can direct their attention, and motivate them at a time. Moreover it can increase their self-confidence and enhance learning.

The method of teaching chosen for this study is Total Physical Response (TPR) introduced by Asher in 1990, based on the theory that memory is enhanced through association with physical movement. It has been known that people with intellectual disability has more difficulty with memory storage (McDade and Adler, 1980). Moreover, people with intellectual disability have difficulty in using abstract language. These learners function well in classes that use visual cues like TPR (Banks, 2008). Besides in this method the focus is on oral language which seems sufficient with the needs of these learners, because (1) a good portion of the information which they will acquire throughout their lives will be by spoken, rather than written communication, and (2) the impressions they make on society in general and on their employers and fellow workers in particular, apart from their dress and general appearance, will largely depend on their ability to converse with others and to follow oral directions effectively (Department of Education Minnesota Public School St. Paul, 1966) Although there are many debates and researches in the scope of language teaching, it seems that not much has been done related to teaching language to people with intellectual disability. People with intellectual disability live in families which might immigrate to English language countries. Besides learning a language can be a positive activity in their lives which can improve their life style. It seems that affection and caring have a great role in the process of learning of these people.

1.1. Research Question, Hypothesis

The research question and the null hypothesis are as follows:
Research question: Does teaching with affection have any effects on English learning of children with intellectual disability?
Null hypothesis: Teaching with affection does not have any effects on English learning of children with intellectual disability

1.2. Definition of Key Term

- **Intellectual**: appealing to or engaging the intellect (Dorland, 2012).
- **Disability**: Impairment of function to below the maximal level, either physically or mentally (Dorland, 2012).
- **Affection**: the feeling of liking or loving somebody or something very much and caring about them (Hornby et al., 1974).
- **Intelligence Quotient (IQ)**: A numerical expression of intellectual capacity obtained by multiplying the mental age of the subject, ascertained by testing, by 100 and dividing by his or her chronologic age intellect (Dorland, 2012).
- **Total Physical Response (TPR)**: developed by Asher (1969) the TPR is an approach for teaching vocabulary that appeal to learners’ kinesthetic-sensory system. First, the teacher introduces new vocabulary words and establishes their meaning through corresponding actions and gestures. Research evidence attests to the effectiveness of TPR for learning and retaining vocabulary (Examinations, 2009).

2. REVIEW OF RELATED LITERATURE

2.1. Intellectual Disability

According to the American Association on Mental Deficiency, "Mental retardation refers to sub average general intellectual functioning which originates during the developmental period and is associated with impairment in adaptive behavior. (Mental retardation: definition, classification, and system supports, 2002)"

There are 4 different types of intellectual disability, reflecting the degree of intellectual impairment. An IQ of 49 to 70 indicates mild retardation. An IQ of 35 to 49 indicates moderate retardation. An IQ of 20 to 34 indicates severe retardation, and an IQ below 20 indicates profound retardation (Kaplan and Sadock, 1998). The use of IQ scores is to promote a three-tier system of classification whereby children with intellectual disability were either educable, trainable or uneducable (Biasini et al., 1999). However Conners et al. (2003) present an argument in favor of teaching to individuals with intellectual disability, when they report that the improved post-assessment scores across twenty students were seemingly unrelated to IQ score. This effectively undermines the anachronistic view that individuals with moderate retardation are somehow only ‘trainable’, whereas those with a milder retardation are ‘educable’. It seems that more quantitative research studies are needed to determine the certainty of the subject.

There are different factors which can cause intellectual disability; these factors include genetic conditions, prenatal exposure to infections and toxins, prenatal trauma, acquired conditions, and socio cultural factors. In about three fourths of people with severe mental retardation, the cause is known, whereas the cause is apparent in only half of those with mild mental retardation. Kaplan and Sadock (1998) People with intellectual disability traveled through a strange path during the ages. From being abandoned, killed, or exploited during ancient Greek and Roman time, to being viewed as the infant of God after the emergence of Christianity and a tendency beginning in the early 1960s to envision the retarded as “angels unaware.” Systematic attempts to teach and habilitate the intellectual disabled began in the early nineteenth century. Binet (1949) the father of intelligence testing whose contributions to educational methods for the mentally retarded were notable maintained that our first duty was not to teach them the idea that seemed to us most useful to them, but that, first of all, they must learn to learn. During the 1950s Special educational
provisions expanded with a growing concern for the young student, the adolescent and vocational training (Tylenda et al., 1987).

2.2. Intellectual Disability and Education

It is generally agreed upon in every society that all children have a right to equal educational opportunity. However, there are incredible changes in the scope of teaching children with intellectual disability, there are still unkind comments such as ‘Why would you want to teach children who cannot learn?’ (Heward, 2003). Whereas there is evidence learners with mild retardation have ability to develop foreign language competence (Krapez, 2010).

Early efforts to educate people with intellectual disability within the institutions were limited. Basic “habit training” (Trent, 1995) focused on teaching the students obedience and punctuality. A little later there was a shift toward more functional curriculum such as basic money recognition (Trent, 1995). During the first half of the twentieth century there were progressive changes in perspective as emphasis on education for all children suffering from intellectual disability (Pocock, n.d).

2.3. Intellectual Disability and Learning a Second Language

Learning a second language is indeed an enriching and rewarding experience (Schwarz, 1997). All types of learners can be successful in language classes, given the right stimuli and assessments. There is general agreement among special educators that the broad objectives of education are the same for the retarded as for other children. The primary differences lie in the means by which these objectives are realized and the degree to which they are attained (DEMPSSP, 1966).

Learning a foreign language like English can give an essence of being a part of the mainstream to a person with intellectual disability. It reduces the feeling of being regarded as different by others, by teaching the skills required to perform independently in the community, the differences between people with disabilities and their peers would be minimized, however there has not been much explored in this scope to date.

There have been positive and negative reports on language learning by people with intellectual disability. Cummins (1979) theorized that bilingualism could only be achieved on the basis of adequately developed first language skills, based on Cummins’ early research, Ganschow et al. (1998) proposed the “Linguistic Coding Differences Hypothesis” (LCDH), which said that skills in a student’s native language provide the foundation for foreign language learning. They have conducted a series of studies which showed that a student’s foreign language learning success is generally commensurate with his or her native language achievement skills (Ganschow et al., 1998). Downey and Synder (2001) cautions that students who exhibit severe deficits in vocabulary, syntax, and memory, in addition to phonological processing problems will probably not be successful in foreign language learning. Dufva and Voeten (1999) found that one way to promote foreign language learning is to diagnose native language deficiencies early. Kennedy (2006) found evidence to support a transfer hypothesis, which is a student’s native language reading comprehension, has a strong effect on his/her reading comprehension in foreign language.

Although many researches support the notion that native language abilities weigh significantly in a student’s potential to learn a second language, there are many positive reports on successful foreign language learning by individuals with intellectual disability despite their difficulties in first language acquisition.

In his article on bilingualism in mental retardation, Rondal (2000) reports cases with Down syndrome who had deaf parents, and they could develop certain level of both English and sign language. He also states that children with intellectual disability who were raised with bilingual parents can develop a certain degree of bilingualism. With observing many disabled children who were able to speak and comprehend more than one language, he concluded that learning foreign language seems to be within the capacity of children with intellectual disability.
There were also reports on individuals with intellectual disability who had exceptional linguistic skills; Vallar and Papagno (1993) have documented the case of an Italian Down syndrome girl who exhibited good acquisition of Italian (her mother tongue) and to a lesser degree of English and French vocabulary and expressive morpho-syntax. According to Vallar & Papagno’s reports, she was able to hold a conversation with an English speaker, also on the phone, and to follow an English TV program or movie.

Another striking case with mild retardation was reported by O'Connor and Hermelin (1991) and subsequently Smith and Tsimpli (1995). He was diagnosed with hydrocephaly and an IQ of 67. His skills in English were considered to be within the normal range, including an ability to detect morpho-syntactic violations. Amazingly, he showed a good ability in translating in English from 13 languages (encompassing several families of languages): French, German, Spanish, Danish, Dutch, Finnish, Russian, Greek, Hindi, Norwegian, Polish, Portuguese, and Welsh. According to neurological reports, his motor coordination was severely impaired, amounting to apraxia. He was also reported to have a minor speech defect. He had early evidence of reading ability (having more to do with the forms than the contents). His interest in foreign languages began around 6-7 years of age. His lexical ability for the languages he had been most exposed to was impressive. Analyzing his languages ability one can derive the following hierarchy: lexicon — inflexional morphology — syntax. His greatest strengths lied in learning new words in a foreign language and in pulling out morphological paradigms to deal with inflexional variants of those words. Syntax was often much less appropriate. He made syntactic errors in translating sentences and paragraphs. In particular, he showed transfer from English to his subsequent languages in all aspects of syntax. He resisted word orders that are incompatible with the English dominant SVO pattern (subject-verb-object).

2.4. The Importance of Method of Instruction

It seems that a child’s foreign language communicative ability, even if a child is mildly mentally disabled, can be provoked by using a professional approach to teaching and learning (Krapez, 2010). The research data conducted by Krapez (2010) suggest that these children are capable of achieving certain foreign language skills. But it is teachers’ foreign language competence and their pedagogical approach which both play a decisive role in the process of foreign language acquisition.

Children and adults with mental retardation have the same needs as those without such disabilities but in addition may have additional needs. There is convincing evidence that people with mental retardation have higher rates of mental health problems than the general population (Holland, 2001). Furthermore marked differences, particularly in the Level of language development, give rise to considerable variations in the way in which individuals with mental retardation are able to describe their thoughts and feelings and therefore the way in which emotional distress and/or major psychiatric illness presents (Holland, 2001).

2.5. Lowering Affective Filter with Exaggerated Affection

Foreign language learning by a learner suffering from intellectual disability can be an unbelievably stressful and humiliating experience (Schwarz, 1997). Teachers of these individuals have a responsibility to change this phenomenon by making the content accessible, understandable, and relevant (Banks, 2008). Krashen (1981) established a theory of second language acquisition composed by five main hypotheses. The fifth hypothesis is related to the affective filter presented when we acquire a second language. The Affective Filter Hypothesis deals with how affective factors relate to second language acquisition. The filter controls how much input the learner comes into contact with, and how much input is converted into intake. It is “affective” because the factors, which determine its strength, have to do with the learner’s motivation, self-confidence, or anxiety state. Learners with high motivation and self-confidence and with low anxiety have low filters and so obtain and let in plenty of input. Learners with low motivation, little self-confidence, and high anxiety have high filters and so receive little input and allow even less in.
He states students with motivation, self-esteem, and low levels of anxiety are much more likely to be successful in their process of acquiring a second language. Krashen (1981) divided motivation into two categories, intrinsic and extrinsic; depending on where it comes from. Intrinsic motivation that comes from the learner is crucial for the development of a second language because if you do not feel motivated for doing something you are not going to do that. The extrinsic motivation that comes from external factors appears as a result the desire of getting a reward or avoiding a punishment.

The affective relationship between someone who is in charge of another has a positive impact in his/her social and personal development. In this case the relationship would be between the teacher in charge of the class and the student (Essays, 2013). American humanism psychologist Rogers (2003) believes that people’s cognitive activities are often accompanied by certain affective variables. When affective variables are held back and even killed, people’s potential of self-creation cannot be developed and realized. The result of a study which was conducted by Lei (2007) clearly shows that EFL teachers influence students’ affection. All of the students in the survey hold that their EFL teachers do really influence their English language learning, including their interests in the language, motivation, and attitude towards the language, etc. Certain characteristics of teachers can be strong predictors of students’ affect. As EFL professionals, instructors have an obligation not only to respond to learners’ linguistic needs, but also to their affective needs to produce more successful language learners. Teachers’ positive influence on students’ affects may enhance students’ language proficiency. An excellent teacher should be warm-hearted, humorous, fair, diligent, and conscientious, etc. Teachers with excellent personality have invisible force to impel students to make progress. Teachers’ personality concretely embodies in their speeches and behaviors (Lei, 2007). In another study, Ouyang and Wu (2010) state the functions of affective variables from five aspects. Affective variables can help students strengthen the memory of learning content; affective variables can help students stimulate their motivation for learning; affective variables can push students be actively involved in learning; affective variables can regulate students’ learning activities; and affective variables can improve students’ acceptance ability.

Some studies for instance Zhou and He (2005) point out that in the interview teachers are aware of the importance of affective variables in language classroom, but in reality they seldom use affections in class or even don’t exactly know what to do. Expressions of warmth and affection occur as teachers and other caregivers protect, guide, communicate, teach, and play with children. They help set the tone for all of these interactions, can reassure and comfort children, and may help them to relax. Teachers who are warm and affectionate show children that they like them, enjoy being with them, are having fun with them, and are pleased with their efforts and accomplishments (Twardosz, 2005)

Lynch (1978) stated that children with intellectual disability work best when they are rewarded and encouragement can enhance their learning. Teachers’ styles of expressing affection are certainly influenced by their backgrounds, beliefs, and feelings. Some people think about affection primarily in terms of holding, hugging, or stroking. While touch is a very important means of communicating positive feelings to children, warmth and affection also can be conveyed through facial expressions, laughter, voice tone; words of endearment, encouragement, and a wide range of physical contact such as a brief tickle, leaning against, a quick pat on the head, or a special handshake (Twardosz, 2005). This study aims to investigate the assumption that giving exaggerated affection and care to learners with intellectual disability, can direct their attention, and motivate them at a time. Moreover it can increase their self-confidence and enhance learning.

The method of teaching chosen for this study is Total Physical Response (TPR) introduced by Asher (1969). Responding physically to commands is based on the theory that memory is enhanced through association with physical movement. It has been known that people with intellectual disability has more difficulty with memory storage (McDade and Adler, 1980) memory retrieval (Dodd, 1975) and verbal encoding and decoding (Bilovsky and Share, 1965). Moreover people with intellectual disability have difficulty with using abstract language. These learners
function well in classes that use visual cues like TPR (Banks, 2008). Besides in this method the focus is on oral language which seems sufficient with the needs of these learners, because (1) a good portion of the information which they will acquire throughout their lives will be by spoken, rather than written communication, and (2) the impressions they make on society in general and on their employers and fellow workers in particular, apart from their dress and general appearance, will largely depend on their ability to converse with others and to follow oral directions effectively (DEMPSSP, 1966)

3. METHOD AND PROCEDURES

3.1. Method

Because of the non-random selection of participants this research is quasi experimental. The data is gathered in quantitative form.

3.2. Participants

This research was conducted in an educational centre for children with intellectual disability. The centre is located in west Tehran, Iran. The participants were 18 males and females between 6 to 14 years old, who were mildly retarded. They were not physically disabled expect from one who was visually impaired to some extent. Their intelligence quotient was lower than 70.

3.3. Instruments

The treatment contained a list of 13 imperatives. The words were chosen based on TPR method of language teaching. All of the words were concrete existing in the setting like teacher, board, marker, etc.

The other instrument which seemed necessitous was a psychological test called Goodenough. This standard test could evaluate the mental age of participants. This test needed expert analysis and interpretation.

Another instrument which was utilized during the study was a standard test for assessing language development. The test is called TOLD. This test needed to be done by a language therapist. The participant could be diagnosed by their exact language impairment.

3.4. Procedure

There are different scales to measure individual’s IQ, for instance Stanford-Binet Intelligence scale or Wechsler Intelligence scale, which both are standardized test. The participants in this research were individuals who were diagnosed by intellectual disability based on one of these standardized tests. Recent research indicates that the I.Q. may change over a period of time as a result of the kinds of educational experiences which children are given. Thus, test results which are not up to date could be quite misleading. Although the IQ results of participants of this research were available, the researcher used a simple formula to avoid any inobservance. The formula is defined as the ratio of mental age (MA) to chronological age (CA) multiple by 100.

\[ IQ = \frac{MA}{CA} \times 100 \]

There are different methods to estimate the mental age, one of which is Goodenough test. The individual has been asked to draw a person. The expert can assess the drawing by a checklist. Every detail has a score, for example the position of the nose, existing of fingers, details such as shirt buttons, etc. Then the score which is obtained should be set in a scale and the mental age can be concluded. For instance the score of 11 shows that the subject is 4 and a half mentally. Then the IQ can be obtained easily using the formula. In this research a psychologist observed and confirmed all the steps. Fortunately all the 18 participants were mildly disabled.

The individuals with intellectual disability might have some deficits in their native language development. One of the most reliable, practical, research-based tests to evaluate language development is TOLD. This test has 9
subtests. The results of these subtests can be combined to form composite score for language development (TOLD-P: 4). the following list is the list of subtests of TOLD.

1. Picture vocabulary: measures a child’s understanding of the meaning of spoken words.
2. Relational vocabulary: measures a child’s understanding of the relationship between to spoken stimulus words.
3. Oral vocabulary: measures a child’s ability to give oral definitions to common words that are spoken by the examiner.
4. Syntactic understanding: measures a child’s ability to comprehend the meaning of sentences.
5. Sentence imitation: measures a child’s ability to imitate sentences.
6. Morphological completion: measures a child’s ability to recognize, understand, and use common morphological forms.
7. Word discrimination: measures a child’s ability to recognize the difference in significant speech sounds.
8. Word analysis: measures a child’s ability to segment words into smaller phonemic units.
9. Word articulation: measures a child’s ability to utter important speech sounds.

According to the data taken from these subtests, the language therapist can evaluate the language development of the participants with their exact language impairment. After this stage all 18 participants of this research have been diagnosed with weak language development by a language therapist.

The pretest included all the imperative verbs, the number of correct, incorrect and no responses were collected.

The treatment was 12 sessions, each session about thirty minutes. It took 4 weeks with 3 sessions every week for each group. Participants in the control group, one by one, were exposed repeatedly to the list of items. The instructor used body language and facial expression.

In regard to repetition of each item and teaching one to one, the same was done to the experimental group. However the participants in the experimental group were exposed to affection. Affection literally means the feeling of liking or loving somebody or something very much and caring about them (Hornby et al., 1974) . In this research, affection was showing exaggerated encouragement including clapping or smiling repeatedly, physical contacts including hugging and kissing. The mistakes or inabilities of the participants were ignored each and every time. After 12 sessions of treatment a post test was conducted. The posttest contained the exact same items of the pretest to observe the effects of different treatment.

To eliminate the effect of short term memory, the post test was conducted one week after the last session of treatment. The participants of each group were assessed one by one in the same setting where the treatment had been done. The number of correct, incorrect and no responses were collected. Later the data were analyzed with SPSS software using independent T test.

4. DATA ANALYSIS AND DISCUSSIONS

4.1. Data Analysis

After checking the homogeneity of participants in terms of their IQ as well as their ability in learning language, the Test of Language development (TOLD), a pretest was taken from them in order to evaluate their proficiency level and background knowledge in the second language. The content of the test covered all vocabulary items which were supposed to be instructed. The results are as shown in table 4.1.:

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>pre1</td>
<td>9</td>
<td>1.3333</td>
<td>1.22474</td>
<td>.40825</td>
</tr>
<tr>
<td>experimental group</td>
<td>9</td>
<td>1.4444</td>
<td>1.33335</td>
<td>.44444</td>
</tr>
<tr>
<td>control group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The P value and the mean differences between the scores of the two groups are as shown in table 4.1.2.

Table 4.1.2. The Results of the Independent Samples T-Test of the Pre-test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Pre1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.000</td>
<td>1.000</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>.184</td>
<td>15.886</td>
</tr>
</tbody>
</table>

As it seen in Table 4.1.2., the mean difference between the scores of two groups is 0.111 which is not considerably high. The P value as shown Table 2, is 0.856 which is significantly higher than 0.05. This implies that the different between the two groups in terms of English knowledge of the participants is not significant. Therefore both groups are considered to be homogeneous.

Tables 4.1.3 and 4.1.4. Compare the outcomes of the two groups after treatment, based on the results of the posttest.

Table 4.1.3. The Descriptive Statistics of the Post-test

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>experimental group</td>
<td>9</td>
<td>8.777</td>
<td>2.108</td>
<td>.702</td>
</tr>
<tr>
<td>control group</td>
<td>9</td>
<td>3.333</td>
<td>2.291</td>
<td>.763</td>
</tr>
</tbody>
</table>

Table 4.1.4. The Results of the Independent Samples T-Test of the Post-test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>post1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.010</td>
<td>.921</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>5.246</td>
<td>15.890</td>
</tr>
</tbody>
</table>

The mean score of the experimental group as its shown in table 4.1.3 is 8.777 which is almost three times higher than the mean scores of the control group. The P value shown in table 4.1.4 is 0.000 which is lower than 0.05. This means that the difference between two groups is significant, and implies the fact that the growth of the scores of the experimental group is due to their more effective method of instruction.

In order to compare the performances of each group before and after the treatment to make sure whether the treatment has been significantly effective, a paired samples t-test was conducted on the results obtained from each group on the two tests (i.e. pre- and post-tests). The results are shown in Table 4.1.5.
Table 4.1.5. The results of the Paired Samples T-tests for Each Group

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1</td>
<td>controlpre-controlpost</td>
<td>-1.555</td>
<td>2.242</td>
<td>.747</td>
<td>-3.279</td>
<td>.168</td>
<td>-2.081</td>
<td>8</td>
<td>.071</td>
</tr>
<tr>
<td></td>
<td>experiperi</td>
<td>-7.444</td>
<td>2.455</td>
<td>.818</td>
<td>-9.331</td>
<td>-5.557</td>
<td>-9.097</td>
<td>8</td>
<td>.000</td>
</tr>
</tbody>
</table>

As it is indicated in the first row of table 4.1.5, the P value for the paired samples t-test of the control group is 0.071 which is higher than 0.05. This means that, for the control group, no significant progress is observed after the treatment. Albeit, as one can tell from the mean difference, in the control group also there has been a slight progress in the performance of the participants; the statistical test has not recognized this progress as significant though (the P value is 0.07 which is quite close to the significance level, i.e. 0.05). However, the P value in the second row, i.e. the one of the experimental group, is 0.00 which is lower than the significance level (P<0.05); this shows that the participants in the experimental group have significantly progressed in terms of learning the English imperative forms taught during the treatment. This significant progress could be attributed to the effect of the independent variable which was affection. Therefore, the null hypothesis of the present study, i.e. “teaching with affection does not have any effects on learning English by children with intellectual disability”, is rejected.

4.2. Discussions

As it was shown in tables 4.1.3 as well as 4.1.4, the mean scores of the experimental group in post test grew three times, whereas the growth in the mean scores of the control group was insignificant. Considering the homogeneity of the participants in both groups in terms of their mental abilities as well as their English background knowledge, it could be concluded that this different functioning of the two groups refers to the methods of teaching. The control group was instructed only on a simple traditional method, so the gain of the group was not much considerable. However, the experimental group was exposed to affection during the treatment, they received exaggerated care, all the positive responses were encouraged and all the negative responses were ignored. As a result, the participants of the experimental group learned much more effectively than the control group learners who were deprived of the advantages of affection.

It should not be neglected that there was a great concentration on comprehension in order to make sure the possibility of conditioning is highly unlikely. For instance there was a deliberate attempt to try verbs with different nouns each and every time during treatment and post test. These rearrangements can assure that the correct respond to a command was not based on conditioning, but there was a comprehension that allows discretion.

The accounts for such a tremendous effect of this method on the outcome of instruction could be that it has to do with “lowering affective filters”. The fifth hypothesis of Krashen (1981) is related to the affective filter presented when we acquire a second language. The filter controls how much input the learner comes into contact with, and how much input is converted into intake. It is “affective” because the factors, which determine its strength, have to do with the learner’s motivation, self-confidence, or anxiety state. Learners with high motivation and self-confidence and with low anxiety have low filters and so obtain and let in plenty of input. Learners with low motivation, little self-confidence, and high anxiety have high filters and receive little input and allow even less in.

Children and adults with mental retardation have the same needs as those without such disabilities, but in addition may have additional needs. Foreign language learning by a learner suffering from intellectual disability can be an unbelievably stressful and humiliating experience (Schwarz, 1997). Consequently lowering the affective filter is...
of utmost importance, when it comes to teaching a second language to mentally retarded learners. Bearing in mind the fact that these learners have difficulty in perception and appreciation of more sophisticated rewards, giving exaggerated affection could serve as one of the most straightforward and effective way of lowering their affective filters. This is what Lynch (1978) concluded that children with intellectual disability work best when they are rewarded ad encouragement can enhance their learning.

5. CONCLUSION

Despite many negative attitudes and remarks, this study proved in the first step that even persons with intellectual disability have the potential to learn English as a foreign language to some extents, given appropriate condition and gaining appropriate methods. It also revealed giving affection to mentally retarded learners of English language in the age of Childhood (up to 14 years) increases the outcome of the instruction. This in fact emphasizes the vitality of teacher's positive behavior during the instruction, particularly when dealing with the learners with a low level of mental age.

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