



**AREES**  
UNIVERSITY

**Issue (5), No. (5), April - 2014**

**INTERNATIONAL JOURNAL OF  
PSYCHO-EDUCATIONAL SCIENCES**

**ISSN: 2325-775X ©2013**

# International Journal of Psycho-Educational Sciences

## Issue (5), No. (5), April – 2014

ISSN: 2325-775X © 2013

Impact Factor : 1.87

### ABOUT THE JOURNAL

**International Journal of Psycho-Educational Sciences (IJPES)** is published jointly by THE AREES UNIVERSITY, the USA ([www.arees.org](http://www.arees.org)). Three issues are published triennially, in April, September, and December.

We accept manuscripts of original, primary research (theoretical and empirical papers) as well as practical applications (reflections, professional experiences, technological innovations, teaching materials, assessment and intervention materials). The selection and review process follows international standards of equality, anonymity and quality. Referees are reputed within their academic or professional setting, and come from many countries around the world.

### OBJECTIVES

The main objectives of the Journal are:

- To initiate, conduct, and support research in all fields of knowledge;
- To assemble all who are interested in these fields for an exchange of ideas and experiences;
- To disseminate research findings;
- To provide a database for members and researchers.

### ADVISORY BOARD

Prof. Dr. Adel Abdullah, Mohamed (Egypt)

Prof. Dr. Fathi Abdull Hamid (Egypt)

Prof. Dr. Morhaf, A. (Syria)

### COLLABORATORS

Dr. Asharaf Mohammed A. Sherit (Egypt)

Dr. Ali Abd Rab Elnabi Hanfi (Egypt)

Dr. Fares, M. (Algeria)

Dr. Salah, M. Jordan)

Dr. Gamil, Sh. (Syria)

Dr. Addullwahab, S. (Algeria)

Dr. Mohammed, Kh. (Syria)

Dr. AbdullAziz, H. (Algeria)

Dr. Fathi Abdullhamid, A. (Egypt)

Dr. Nabil, K. (Syria)

Dr. Nabil, M. (Jordan)

Dr. Helal, D. (Lebanon)

Dr. Raquel FIDALGO (Spain)

Dr. Sally M. REIS (USA)

Dr. Paul BELL (USA)

Dr. Seth PARSONS (USA)

Dr. Svjetlana KOLIĆ-VEHOVEC (Croatia)

Dr. Anneke VRUGT (The Netherlands)

Dr. Stella VÁZQUEZ (Argentina)

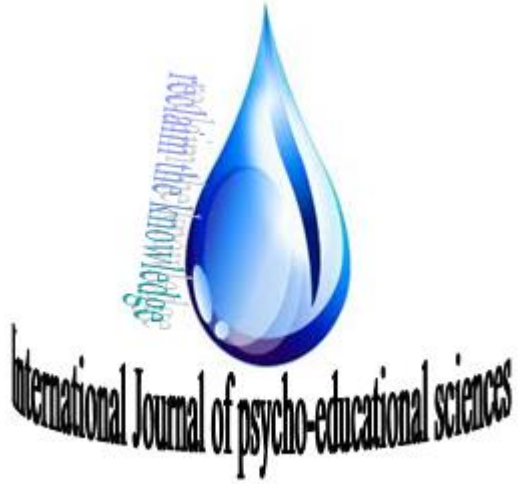
Dr. Annemie DESOETE, (Belgium)

Dr. Kerim GÜNDOĞDU (Turkey)

**Editor –In-Chief :** *Samer Kantakji, PhD.,*

**Editor:** *Mourad Ali Eissa, PhD.*

<b>Article title &amp; Author(s)</b>	<b>Pages</b>
<b>An Experimental Study on Academic Procrastination: Effects of Weekly Homework</b> Bilge Uzun Özer & Halim Sarıcaoğlu	<b>1-7</b>
<b>Effectiveness Of Social Information Processing Skills Training Using Making Choices Program On Promoting Social Competence of Primary School Children With Aggressive Behavior</b> Mahfouz Abdul Satar Abo El Fadl	<b>8-15</b>
<b>Evaluation of English Curriculum in 9th Grade of Secondary Schools Through Teachers' Views</b> Canay Karcı & Adil Türkoğlu	<b>16- 28</b>
<b>Effectiveness of Differentiated Instruction on Achievement in Mathematics of Middle School Students with learning disabilities</b> Hesham Habib Al Huseini, Rasha Mohammed Abdullah	<b>29- 34</b>
<b>Integrated Education Receiving Students during Socialization According to Teacher Opinions</b> Durmuş KILIÇ, Aytaç ŞAHİN, Şükrü ADA & Yavuz SÖKMEN	<b>35- 43</b>
<b>Effects of Metacognition Instruction on Self Efficacy of Primary School Children with Learning Disabilities</b> Amaal Ahmed Mostafa	<b>44- 50</b>
<b>The Effectiveness of a Phonological Awareness Training Intervention on Phonological Working Memory of Children with Intellectual Disabilities</b> Al Said Abdul Khalik	<b>51-56</b>



# **An Experimental Study on Academic Procrastination: Effects of Weekly Homework**

**Bilge UZUN ÖZER<sup>1</sup> & Halim SARICAOĞLU<sup>2</sup>**

---

<sup>1</sup> Assist. Prof. Dr. Cumhuriyet University, Turkey

<sup>2</sup> Specialist, Muğla Sıtkı Koçman University, Turkey

## Abstract

*The present study aimed at comparing the students' procrastination and self-regulatory scores after obtaining some strategies possibly improve the self-regulatory behaviours. The strategies included weekly course assignments, reflector writings and presentations on various topics. The subjects were 141 students enrolled in Educational Sciences department in a public university in Turkey during the second term of the 2012 -2013 academic year. Results of the analyses showed that the strategies used did not influence on students' procrastination but self-regulatory behaviours.*

**Key words:** Academic procrastination, self-regulation

## Introduction

One hundred and twenty years ago, William James recognized the psychological cost of procrastination (Klassen, et al., 2008). Since then, contemporary psychologists have increasingly been tracing procrastination (Steel, 2007) by conducting various research studies. Nevertheless, there is “much has yet to be learned about the causes of procrastination” (Steel, 2007, p.65). Even though procrastination has been increasing especially among university students, the empirical and theoretical foundations of procrastination research are less well established than those of other construct (Klassen et al., 2008). Therefore, procrastination remains “one of the least understood human miseries” (Ferrari, 1994, p. 673).

Procrastination is one of the common barriers increasing in the academic domain. A substantial body of literature demonstrates that it is prevalent at high levels in academic setting (Harriot & Ferrari, 1996), with some estimates as high as 95% (Ellis & Knaus, 1977; Steel, 2007). Although there is not published comparison study on the prevalence of procrastination across countries yet (Uzun Ozer, et al., under review), studies have shown that all the students from various countries and cultures report to engage in procrastination in various degrees (McCown & Roberts, 1994; Solomon & Rothblum, 1984; Uzun Ozer, Demir, Ferrari, 2009).

Most of the existing literature has concentrated on the negative side of procrastination in academic setting, suggesting that it has an injurious effect on performance such as poor grades and course withdrawal (Keller, 1968; Semb et al., 1979; Tan et al., 2008). Ferrari and Tice (2000), for instance, have depicted on procrastination as a form of self-handicapping or it might be engaged in to protect the threatened self-esteem (Ferrari, 1991). Hence, particularly the university population frequently seeks help from counselors and they complain about how badly this habit makes them feel (Schowuenburg, Lay, Pychyl, & Ferrari, 2004) and might bring lower level of life satisfaction. Sigall, Kruglanski, and Fyock, (2000) suggested procrastinators to be optimistic wishful thinkers. In this regard, students delay boring tasks due to their preference of another activity such as socializing with friends. When procrastinating, they don't report unhappy feelings because they would be engaged in relatively enjoyable and pleasant activities (König & Kleninmann, 2004; Pychyl et al., 2000). In this instance, procrastination can be seen as a self-regulation problem (Ferrari, 2001). Accordingly, numerous studies have shown in procrastinators to have self-regulation failure, compared to non-procrastinators (e.g., Blunt & Pychyl, 2005; Uzun Ozer, et al, 2014).

Wadkins (1999) believe that procrastination problem must be overcome if one expects to achieve any level of success. In this line, investigating the causes and consequences of procrastination has attracted the interest of many researchers, which led to the development of several models to understand the nature and at least reduce the level of procrastination (Dietz, Hofer, & Fries, 2007; Eun Hee, 2009; Seo, 2008). Some of the findings reviewed

procrastination related to self-regulation might be decreased when students were asked to perform regular specific tasks by deadline. In this way, in a number of studies the date of submitted term paper (Tice & Baumeister, 1997), the date of the questionnaire returned to the experimenter (Lay, 1986) the timing of quiz completion (Moon & Illingworth, 2005) or the timing of laboratory task initiation and completion (Senecal et al., 1997) have recorded to help procrastinators reduce putting the tasks off. In their group counselling study, Uzun, Demir, & Ferrari (2013) applied homework assignments and taking diary of procrastination strategies based on Ellis's (Elis & Knaus, 1977) rational emotive behavioural approach. Consequently, researchers (Ferrari & Tice, 2000; Van Eerde, 2003; Wolters, 2003) argued that self-regulation is one of the strongest behavioral predictor of procrastination. In this respect, students' self-regulation and self-control tendencies became important variables to assess behavioral procrastination (Ariely & Wertenbroch, 2002; Howell et al., 2006; Klassen, Krawchuk, & Rajani, 2008). In this respect, we aimed to control procrastination in academic setting experimentally. Through the present study we investigated the effectiveness of the method used during the academic semester in reducing academic procrastination. We expected developing self-regulatory behaviour might help to decrease students' procrastination levels.

## Method

### *Study Group*

A total of 114 first year undergraduate students (67 female and 47 male) participated in the study. The average age of the participants was 19.63 ( $SD = 1.1$ ) ranging from 17 to 22. The students participated in the study in the beginning and the end of the spring semester. In order to ensure the pre-test post-test design, a matched sample was utilized. In this respect, some of the cases in the pre-test were eliminated from the analysis since they didn't participate in the post-test.

### *Data Collection Instruments*

The Turkish versions of Tuckman Procrastination Scale and Self Control Schedule were utilized to collect data.

*Tuckman procrastination scale* (TPS; Tuckman, 1991) assesses college students' procrastination tendencies. TPS consists of unidimensional 16 items on a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). It is reliable ( $\alpha = .89$ ; Tuckman, 2007) and valid ( $r = -.47$  with General Self-Efficacy Scale;  $r = -.54$ ; Tuckman, 1991 with behavioral measure of homework completion) scale. In the Turkish adaptation study Uzun Özer, Sackes, and Tuckman, (2014) found the scale reliable and valid ( $\alpha = .90$ ;  $r = .22$  with self-efficacy and  $r = .23$  with self-esteem).

*Self Control Schedule* (SCS; Rosenbaum, 1980) was used assess students' tendencies to exert self-control methods to resolve behavioral problems. The scale consists of 36 items on a 6-point scale (-3 very uncharacteristic of me; +3 very characteristic of me). In the Rosenbaum's study, an alpha coefficient was computed on six different samples ranged from .78 to .86, indicating a high internal consistency among items. The SCS's evidence for validity was provided by correlations with Croskey's Measure of Communication Apprehension ( $r = -.37$ ; Rosenbaum, 1980). The Turkish adaptation study Siva (1991) found Cronbach alpha reliability to be .79 and validity coefficient to be -.29 between the SCS and Rotter's Locus of Control Scale.

### *Design and Procedure*

The design of the study was a pre-test post-test experimental design. After obtaining permission from the Human Ethical Committee, first grade of psychological counseling students were invited to take part in an experimental study. The aim of the research was briefly explain to students to prevent object bias treat of the validity. In the first week of the semester students were administered to the scales by the second author. During the semester, the students were given to deadline for completing various tasks including course assignments, reflections and presentations. They were informed about the low grades scoring for each day of procrastination. All the students participated in the study by completing tasks on time had ten course assignments. Six of the students pulled out from the study since they did not completed the work.

## Results

A series of the t-test analyses were performed to compare the pre-test and post-test scores of the students' academic procrastination and self-regulation scores. Within the condition of the study, the results of the t-test yielded statistical significance on self-regulation scores beyond the .05 levels. The t-test analysis yielded that there was no significant difference on the students' pre-test and post-test scores on academic procrastination. However, results demonstrated a significant difference on students' self-regulation scores ( $F_{1,121} = 4.32, p < .05$ ), suggesting that pre-test scores ( $M = 116.9; SD = 15.2$ ) were higher than post-test scores ( $M = 118.2; SD = 20.9$ ).

## Discussion

The present study aimed at comparing the students' procrastination and self-regulatory scores after obtaining some strategies possibly improve the self-regulatory behaviours. The strategies included weekly course assignments, reflector writings and presentations on various topics. Results of the analyses showed that the strategies used did not influence on students' procrastination but self-regulatory behaviours.

In line with previous studies (Dewitte & Schouwenburg, 2002), students who had problems in regulating their behaviour reported a higher level of procrastination. In the academic arena, self-regulation involves being able to persistently pursue one's long-term study goals in spite of the presence of temptations (e.g., desire for social activities). Schonwenburg (2004) argued that working to achieve one's study goals in an environment with competing temptation does not only require willpower, but also regulation of numerous study-related processes such as the ability to concentrate and persist at the task. In this respect, overall the results of the study concluded that the method used is effective for self-regulation instead of directly reducing procrastination levels. The findings confirmed the literature that procrastination is a personality characteristic. The procrastination habit can be effectively decreased by using self-regulatory programs.

A list of recommendations might be given focusing on extending the generalizability of this study, improving the effectiveness of the procedure and the method used. The present study explored the effect of a method used during the semester for improving self-regulation and decreasing procrastination in a group sample of university students enrolled in department of educational sciences at a major state funded university. Therefore, the present study has the potential to generate preliminary information for understanding the student procrastination. Hence the results of the present study may provide valuable cues for both university counselors and researcher to develop programs through self-regulation that may reduce the negative effects of procrastination. On the other hand, there are some limitations should be

highlighted regarding the sample and the method utilized for the study. Convenient sampling should be the first limitation for the present study. Random sampling method used for the further studies with more demographically diverse population would no doubt to strengthen the findings of the study. The second and the most important limitation is the lack of control group and follow-up testing for the present study. Therefore, it would strongly recommend for the further studies to compare the result with the sample in the control group and third testing after weeks later for the follow up.

## References

- Ariely, D., & Wertenbroch, K. (2002). Procrastination, deadlines, and performance: Self-control by precommitment. *Psychological Science, 13*(3), 219-224.
- Blunt, A., & Pychyl, T. A. (2005). Project systems of procrastinators: A personal project-analytic and action control perspective. *Personality and Individual Differences, 38*(8), 1771-1780.
- Dewitte, S., & Schouwenburg, H. (2002). Procrastination, temptations, and incentives: The struggle between the present and the future in procrastination and the punctual. *European Journal of personality, 16*, 469-489.
- Dietz, F., Hofer, M., & Fries, S. (2007). Individual values, learning routines and academic procrastination. *British Journal of Educational Psychology, 77*(4), 893-906.
- Ellis, A., & Knaus, W. (1977). *Overcoming procrastination*. NY: Signet.
- Eun Hee, S. E. O. (2009). The relationship of procrastination with a mastery goal versus an avoidance goal. *Social Behavior & Personality: An International Journal, 37*(7), 911-919.
- Ferrari, J. R. (1991). Self-handicapping by procrastinators: Protecting self-esteem, social-esteem, or both? *Journal of Research in Personality, 25*(3), 245-261.
- Ferrari, J. R. (1994). Dysfunctional procrastination and Its relationship with self-esteem, interpersonal dependency, and self-defeating behaviors. *Personality and Individual Differences, 17*(5), 673-679.
- Ferrari, J. R. (2001). Procrastination and attention: Factor analysis of attention deficit, boredomness, intelligence, self-esteem, and task delay frequencies. *Journal of Social Behavior & Personality, 16*, 185-196.
- Ferrari, J. R., & Tice, D. M. (2000). Procrastination as a self-handicap for men and women: A task-avoidance strategy in a laboratory setting. *Journal of Research in Personality, 34*(1), 73-83.
- Keller, F. S. (1968). "Good-Bye teacher..." *Journal of Applied Behavior, 1*, 79-89.
- Harriot, J., & Ferrari, J. R. (1996). Prevalence of procrastination among sample of adults. *Psychological Reports, 78*, 611-616.
- Howell, A. J., Watson, D. C., Powell, R. A., & Buro, K. (2006). Academic procrastination: The pattern and correlates of behavioural postponement. *Personality and Individual Differences, 40*(8), 1519-1530.



- Klassen, R. M., Krawchuk, L. L., & Rajani, S. (2008). Academic procrastination of undergraduates: Low self-efficacy to self-regulate predicts higher levels of procrastination. *Contemporary Educational Psychology*, 33(4), 915-931.
- König, C. J., & Kleninmann, M. (2004). Business before pleasure: No strategy for procrastinators? *Personality and Individual Differences*, 37, 1045-1057.
- Lay, C. H. (1986). At least my research article on procrastination. *Journal of Research in Personality*, 20, 474-495.
- McCown, W., & Roberts, R. (1994). A studies of academic and work-related dysfunctioning relevant to college version of an indirect measure of impulsive behavior. *Integra Technical Paper*, 94-28, Randor, PA: Integra Inc.
- Moon, S. M., & Illingworth, A. J. (2005). Exploring the dynamic nature of procrastination: A latent growth curve analysis of academic procrastination. *Personality and Individual Differences*, 38(2), 297-309.
- Pychyl, T. A., Lee, J. M., Thibodeau, R., & Blunt, A. (2000). Five days of emotion: An experience sampling study of undergraduate student procrastination. *Journal of Social Behavior & Personality*, 15(5), 239-254.
- Rosenbaum, M. (1980). A schedule for assessing self-control behaviors: Preliminary findings. *Behavior Therapy*, 11(1), 109-121.
- Schouwenburg, H. C. (2004). Procrastination in academic settings: general introduction. In C. H. C. Schouwenburg, T. A. P. Lay & J. R. Ferrari (Eds.), *Counseling the procrastinator in academic settings* (pp. 3-17). Washington DC: American Psychological Association.
- Schowuenburg, H. C., Lay, C. H., Pychyl, T. A., & Ferrari, J. R. (2004). *Counseling the procrastinator in academic settings*. Washington, DC: American Psychological Association.
- Semb, G., Glick, D. M., & Spencer, R. E. (1979). Student withdrawals and delayed work patterns in self-paced psychology courses. *Teaching of Psychology*, 6(1), 23-25.
- Senecal, C., Lavoie, K., & Koestner, R. (1997). Trait and situational factors in procrastination: An interactional model. *Journal of Social Behavior & Personality*, 12(4), 889-903.
- Seo, E. H. (2008). Self-efficacy as a mediator in the relationship between self-oriented perfectionism and academic procrastination. *Social Behavior & Personality: An International Journal*, 36(6), 753-764.
- Sigall, H., Kruglanski, A., & Fyock, J. (2000). Wishful thinking and procrastination. *Journal of Social Behavior and Personality*, 15(5), 283-296.
- Siva, A. (1991). *İnfertilede stresle başetme, öğrenilmiş güçlülük ve depresyonun incelenmesi [Examining stress coping, learned resourcefulness, and depression in infertility]*. Unpublished Doctoral Dissertation, Hacettepe University, Ankara.
- Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination: Frequency and cognitive-behavioral correlates. *Journal of Counseling Psychology*, 31(4), 503-509.
- Steel, P. (2007). The nature of procrastination: A meta-analytic and theoretical review of quintessential self-regulatory failure. *Psychological Bulletin*, 133(1), 65-94.

- Tice, D. M., & Baumeister, R. F. (1997). Longitudinal study of procrastination, performance, stress, and health: The cost and benefits of dawdling. *Psychological Science*, 8(6), 454-458.
- Tuckman, B. W. (1991). The development and concurrent validity of the procrastination scale. *Educational & Psychological Measurement*, 51(2), 473.
- Tuckman, B. W. (2007). The effect of motivational scaffolding on procrastinators' distance learning outcomes. *Computers & Education*, 49(2), 414-422.
- Uzun Özer, B., Demir, A., & Ferrari, J. R. (2009). Exploring academic procrastination among Turkish students: Possible gender differences in prevalence and reasons. *Journal of Social Psychology*, 149(2), 241-257.
- Uzun Özer, B., Demir, A., & Ferrari, J. R. (2013). Reducing of academic procrastination through a group treatment program: A Pilot Study. *Journal of Rational Emotive-Cognitive Behavioural*, 165. DOI: 10.1007/s10942-013-0165-0
- Uzun Özer, B., O'Callaghan, J., Bokszczanin, A., Ederer, E., & Essau, C. A. (2014). Dynamic interplay of depression, perfectionism, and self-regulation on procrastination. *British Journal of Guidance and Counselling*. Doi: 10.1080/03069885.2014.896454
- Uzun Ozer, B., O'Callaghan, J., Buyukgoze-Kavas, A., Bokszczanin, A., Elfriede, E., & Essau, C. A. (under review). A cross-cultural study of procrastination: Comparing academic, decisional, and arousal styles. *Journal of Cross-Cultural Research*.
- Uzun Özer, B., Saçkes, M., & Tuckman, W. B. (2014). *Psychometric Properties of the Tuckman Procrastination Scale in a Turkish Sample*. Psychological Reports: Measurement & Statistics. 113(3), 874-884, Doi: 10.2466/03.20.PR0.113x28z7.
- Tan, C. X., Ang, R. P., Klassen, R. M., Lay See, Y., Wong, I. Y. F., Huan, V. S., et al. (2008). Correlates of academic procrastination and students' grade goals. *Current Psychology*, 27(2), 135-144.
- Van Eerde, W. (2003). Procrastination at work and time management training. *The Journal of Psychology*, 137(5), 421-434.
- Wadkins, T. (1999). *The relation between self-reported procrastination and behavioral procrastination*. Unpublished Doctoral Dissertation, University of Nebraska, Nebraska.
- Wolters, C. A. (2003). Understanding procrastination from a self-regulated learning perspective. *Journal of Educational Psychology*, 95(1), 179-187.



International Journal of psycho-educational sciences

# **Effectiveness Of Social Information Processing Skills Training Using Making Choices Program On Promoting Social Competence of Primary School Children With Aggressive Behavior**

Mahfouz Abdul Satar Abo El Fadl , PhD<sup>\*</sup>

---

<sup>\*</sup> Associate Prof of Mental Health, Dean College of Education , Hurghada , Egypt

## Abstract

*The purpose of the current study was to explore the effectiveness of social information processing skills training using making choices program on promoting social competence of primary school children with aggressive behavior . 60 students in grade five who had been identified as having aggressive behavior and were experiencing social problems were chosen .The sample was randomly divided into two groups; experimental (n= 30 boys) and control (30 boys, ). The Aggression Questionnaire, and Social Competency Rating Form were used . ANCOVA and Repeated Measures Analyses were employed for data analysis. Results from this study indicated the effectiveness of the program employed in improving social competency of the students in the experimental group.*

**Keywords.** social information processing model, social competence, children with aggressive behavior .

## Introduction

Research suggests that early conduct problems and peer relations may contribute uniquely to long-term social adjustment (Dodge et al., 2003; S. E. Nelson & Dishion, 2004). More important, acceptance by peers buffers the effects of aggressive behavior, whereas rejection appears to exacerbate it (Dodge et al., 2003; Prinstein & La Greca, 2004). Social competence helps children “select and engage in social behaviors sensitively and appropriately in different situations” (Bierman, 2004, p. 79). These skills appear to be strongly related to developmental outcomes (Lengua, 2003; Maughan & Cicchetti, 2002; Schwartz & Proctor, 2000; Zins, Weissberg, Wang, & Walberg, 2004).

The social information processing (SIP) model proposed by Crick and Dodge (1994) has been used repeatedly for studying the cognitive processes associated with aggressive behaviors in children. This model aims to breaks down social information processing into empirically testable components that include six steps: encoding of cues, interpretation of cues, clarification of goals, response access, response decision, and behavioral enactment. The cyclical nature of the model enables the various components to influence each other, although the steps are thought to occur in sequence. Each step of the model is influenced by social schemas stored in the child’s memory. These schemas comprise an organized knowledge set that is called upon to help the individual respond in a new situation.

Research has consistently documented that socially maladjusted children, specifically aggressive children, differ from their socially adjusted peers in all stages of the SIP cycle (see Crick & Dodge, 1994). Aggressive children encode fewer cues in the environment and rely on their internal schemas to guide their interpretations of the situation (without considering the available information) more often than their non-aggressive peers (Dodge & Tomlin, 1987). When interpreting the cues, aggressive children make more hostile intent attributions in ambiguous social situations than non-aggressive children (Crick & Dodge, 1994; Orobio de Castro et al. 2002).Whereas socially adjusted children pursue relationship-enhancing goals, socially maladjusted children report more antisocial goals, such as revenge (Erdley & Asher, 1996). Lastly, aggressive children are more likely to access more aggressive responses to ambiguous social situations than their non-aggressive peers, as well as enact more aggressive responses (Quiggle, 1992). Besides endorsing more aggressive responses, aggressive children also believe their responses will produce more favorable outcomes and they are more confident in ability to carry out an aggressive response than non-aggressive children (Erdley & Asher, 1996).

The current investigation is grounded in the strong theoretical foundation of the social information processing model proposed by Dodge and his colleagues (e.g., Crick & Dodge, 1994; Dodge, 1986). The model posits that individuals progress through a series of stepwise mental mechanisms that are activated in response to external social cues and deactivated on individuals' behavioral response. According to this model (see Fig. 1), four mental steps take place before individuals enact a behavioral response to social cues: (1) encoding of social cues, (2) interpretation of the cue, (3) generation of a behavioral response, and (4) evaluation of the response (Dodge & Price, 1994). In Steps 1 and 2, individuals selectively focus on particular social cues and, based on these cues, interpret the context of the situation (e.g., the intent of the other interactant). In Steps 3 and 4, individuals access possible responses from previous experiences stored in long-term memory, evaluate these responses, and then select one to enact (Crick & Dodge, 1994). In this loop-like process, each step affects, and is affected by, a database for social behavior. This database includes the memory storage of past situations, acquired social rules, social schemes, and knowledge of appropriate and inappropriate social behaviors.

### **The Making Choices Program**

The Making Choices (MC) Program is a universal school-based intervention that attempts to minimize social-cognitive and emotional antecedents of aggression and strengthen children's skills for positive peer relations. Although initially designed for use with the third grade (Fraser et al., 2000), the curriculum has been adapted for preschool children and pre-adolescents. The program has been implemented by intervention specialists as well as by teachers and has been delivered to small, mixed groups and whole classrooms.

Results from four pilot studies suggest that Making Choices is effective in strengthening promotive factors associated with peer acceptance and reducing aggression (Fraser, Day, Galinsky, Hodges, & Smokowski, 2004a; Fraser, Galinsky, Smokowski, Day, Terzian, Rose, & Guo, 2004b; Nash, Fraser, Galinsky, & Cooper, 2003; Smokowski, Fraser, Day, Galinsky, & Bacallao, 2004). The first pilot study tested the first three units of Making Choices in a middle school in central North Carolina (Nash et al., 2003). As a part of routine school administration, the sixth-grade cohort was divided into two "schools within schools," with one-half of students (n=70) receiving Making Choices and the other half receiving instruction as usual (n=95). The sample was predominantly female (59%) and European American (69%), and a large proportion (47%) was academically gifted. To estimate program effects, paired-sample t tests and hierarchical linear models (HLMs) were used. This study detected effects on encoding and goal clarification for the overall sample, however, no significant effects on SLA skills were found for aggressive-rejected and non-aggressive rejected students. The weak impact on behavioral improvement was attributed to three factors: a) variation in the implementation of the program; b) teachers delivered only one half of the curriculum; and c) negative peer-group influences. Another reason for weak effects may have been the low statistical power of the study. Effects were estimated with multilevel models despite the fact that the Level 2 equation contained only 5 subjects (i.e., the number of homerooms).

Children with social problems also have difficulty generating behavioral solutions to interpersonal problems (Evans & Short, 1991; Guerra & Slaby, 1989; Khalifa, 2014). Although they can choose an appropriate first solution, when the first solution is ineffective, these children seem to have difficulty coming up with alternative solutions.

Although numerous of studies have examined the effectiveness social information processing in other children, little is known about the effect on social competence of children with Aggressive behavior.

So, the present study seeks to explore the effectiveness social information processing skills training using making choices program on promoting social competence of primary school children with aggressive behavior. It addresses the following questions:

- 1- Are there statistically significant differences in post-test scores mean between control and experimental groups on Social Competency Rating Form?
- 2- If the program is effective, is this effect still evident a month later?

## Method

### Participants

60 students in grades five who had been identified as having aggressive behavior and were experiencing social problems were chosen. The sample was randomly divided into two groups; experimental (n= 30 boys) and control (n= 30 boys). They two groups were matched on age, IQ, and Social Competency. Table 1. shows means, standard deviations, t-value, and significance level for experimental and control groups on age (by month), IQ, and Social Competency (pre-test).

Table 1. means, standard deviations, t-value, and significance level for experimental and control groups on age (by month), IQ, and Social Competency (pre-test).

Variable	Group	N	M	SD	T	Sig.
Age	Experimental	30	132.24	1.92	-.121	Not sig.
	Control	30	132.41	2.01		
IQ	Experimental	30	118.34	2.45	-.221	Not sig.
	Control	30	118.89	2.24		
Social Competency	Experimental	30	25.83	4.09	-.621	Not sig.
	Control	30	24.80	3.52		

Table 1. shows that all t-values did not reach significance level. This indicated that the two groups did not differ in age, IQ, and Social Competency (pre-test).

### Measures

*The Aggression Questionnaire by Buss and Perry (1992)* contains 29 items that are measured on a Likert Scale ranging from one being non-characteristic to five being very characteristic. The questionnaire is comprised of four distinct subscales: Physical Aggression, Verbal Aggression, Anger, and Hostility. Buss and Perry's Aggression Questionnaire offers modest but adequate evidence for construct validity. In this study the terms "low level" and "high level" of self-reported aggression were based on each participants' score on the Aggression Questionnaire. The survey looks at how aggressive the respondent is as a child.

*Social Competency Rating Form. (Gottfredson et al., 2002)*. The revised scale consists of 29 items, with 12 negatively worded items and 17 positively worded items. Sample items include: Hits, kicks at, or jumps on other children; If provoked by peers, shows self-control;

Solves problems with peers through compromise or discussion; and Expresses concern for others. It has three subscales ; namely Social Skills , social behaviour and impulsivity .All items are answered on a 4-point Likert-type scale, with a 1 indicating “Almost Never”, 2 indicating “Sometimes”, 3 indicating “Often”, and 4 indicating “Very Often.”.

*Procedure*

Written permission was obtained from Hurghada Edara in order to conduct the application in schools. Schools were visited in order to inform parents and teachers about the study. Parents of all children were interviewed and provided permission for their children to be included in the study. The Aggression Questionnaire ,and Social Competency Rating Form were completed. The Social Information Processing program (The Making Choices Program) was applied to children. The application lasted approximately 25 min .

*Design and Analysis*

The effects of implementing the program on students' social competency were assessed using a repeated-measures design, pre- post- and follow up testing.

**Results**

Table 2. shows data on ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in Social Competency Rating Form. The table shows that the (F) value was (131.099) and it was significant value at the level (0.01).

*Table 2. ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in Social Competency Rating Form*

Source	Type sum of squares	111 df	Mean square	F	Sig.
PRE GROUP	17.004	1	17.004		
GROUP	30055.895	1	30055.895	131.099	0.01
ERROR	13062.867	57	229.261		
TOTAL	43369.933	59			

Table 3. shows T. test results for the differences in post- test mean scores between experimental and control groups in Social Competency Rating Form. The table shows that (t) vale was (11.586). This value is significant at the level (0.01) in the favor of experimental group .

*Table 3. T- test results for the differences in post- test mean scores between experimental and control groups in Social Competency Rating Form*

Variable	Group	N	Mean	St Deviation	T	Sig
Social Competency	Experimental	30	83.83	1.64	11.586	0.01
	Control	30	38.90	8.17		

The table also shows that there are differences in post- test mean scores between experimental and control groups in Social Competency in the favor of experimental group . Table 4. shows data on repeated measures analysis for Social Competency Rating Form. The table shows that there are statistical differences between measures (pre- post- follow up) at the level (0.01).

*Table 4 . Repeated measures analysis for Social Competency Rating Form.*

Source	Type III sum of squares	df	Mean square	F	Sig.
Between groups	50200.200	1	50200.200	590.551	0.01
Error 1	4930.333	58	85.006		
Between Measures	25297.003	2	12648.517	123.776	0.01
Measures x Groups	25515.700	2	12757.850	124.846	0.01
Error 2	11853.	116	102.189		

Table 5. shows data on Scheffe test for multi-comparisons in Social Competency Rating Form. The table shows that there are statistical differences between pre and post measures in favor of post test , and between pre and Follow-up measures in favor of follow up test , but no statistical differences between post and Follow –up test .

*Table 5. Scheffe test for multi- comparisons in Social Competency Rating Form*

Measure	Pre M= 25.83	Post M= 83.83	Follow -up M= 85.13
Pre	--	--	--
Post	44.633*	--	--
Follow-up	45.933*	1.300	--

## **Discussion**

The main objective of the present study was to explore whether there were differences in post – test scores mean between control and experimental groups on social competency. The study also examined If the program was effective, if this effect was still evident a month later .

It was hypothesized that there would be statistically significant differences in post–test scores mean between control and experimental groups on Social Competency Rating Form in favor of the experimental group, and the effect of the program would still be evident a month later.

The results of this study as revealed in tables 3 and 5 show that the program was effective in improving social competency of students in experimental group, compared to the control group whose individuals did not receive training based on the information processing model.

Subject-related studies (Lemerise & Arsenio, 2000; Parke et al., 1989) put forth that social information processing models are effective on the emotions of children, cognitive processes, and responding to social situations. It is thought that children, who can control their emotions, have a better level of social skills and social interaction. Social goals are closely related to the social information process. In other words, children who develop relationships are not aggressive and have social goals developed using more positive strategies. These children are liked and accepted more by their peers, and are able to establish healthier relationships (Crick & Dodge, 1994; Rose & Asher, 1999). The fundamental purpose of social relations is correctly interpreting social situations, and reacting to these situations accordingly (Crick & Dodge, 1994). .

As illustrated, the study results are in line with the results obtained in previous studies. Children who are competent at all stages of social information processing display more prosocial behaviours towards their peers. These children enter their peer group easier, and



develop a more cold-blooded attitude towards peer provocation. They can also respond to peer and teacher expectation, and respond accordingly to success and failure. These children are considered to be more socially competent at every stage of social information processing in comparison to inadequate peers. Social competence is an effective factor on interpersonal relationships, school readiness, and school adjustment of young children (Ladd, 2005).

### **Limitations and Further Study**

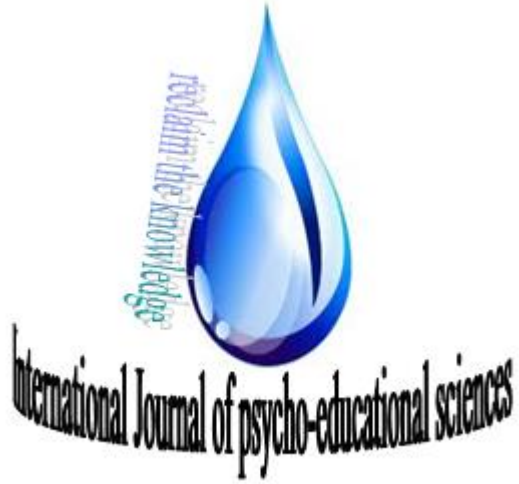
One limitation of the current study stems from the fact that the scope of the study is limited to the data collected from children with aggressive behavior. Hence, further research with larger and more demographically diverse populations with random selection would strengthen the findings of the study.

Second, it may be that the length of the intervention was not sufficient to see change large enough to be measured. Sheridan et al. (1996) suggested that the training used in that study (10 weeks long) possibly was too short to produce long-range effects. The present study also used brief training (5 weeks), as is often the case with interventions in the school setting.

### **References**

- Bierman, K. L. (2004). *Peer rejection: Developmental processes and intervention strategies*. New York: Guilford Press.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, *115*, 74–101.
- Dodge, K. A. (1986). A social information-processing model of social competence in children. In M. Perlmutter, *Cognitive Perspectives on Children's Social and Behavioral Development: The Minnesota Symposia on Child Psychology* (pp. 77-125). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Dodge, K. A., Lansford, J. E., Burks, V. S., Bates, J. E., Pettit, G. S., Fontaine, R., et al. (2003). Peer rejection and social information-processing factors in the development of aggressive behavior problems in children. *Child Development*, *74*, 374-393.
- Dodge, K.A. & Price, J.M. (1994). On the relation between social information processing and socially competent behavior in early school-aged children. *Child Development*, *65*, 1385-1397.
- Dodge, K.A., & Tomlin, A. (1987). Utilization of self-schemas as a mechanism of interpretational bias in aggressive children. *Social Cognition*, *5*, 280-300.
- Erdley, C. A., & Asher, S. R. (1996). Children's social goals and self-efficacy perceptions as influences on their responses to ambiguous provocation. *Child Development*, *67*, 1329-1344.
- Evans, S. W., & Short, E. J. (1991). A qualitative and serial analysis of social problem solving in aggressive boys. *Journal of Abnormal Child Psychology*, *19*, 331-340.
- Fraser, M. W., Nash, J. K., Galinsky, M. J., & Darwin, K. M. (2000). *Making Choices: Social problem-solving skills for children*. Washington, DC: NASW Press.
- Fraser, M. W., Day, S. H., Galinsky, M. J., Hodges, V. G., & Smokowski, P. R. (2004). Conduct problems and peer rejection in childhood: A randomized trial of the Making Choices and Strong Families programs. *Research on Social Work Practice*, *14*, 313–324.
- Fraser, M. W., Rose, R. A., Terzian, M. A., & Guo, S. (2004, October). Propensity Score Matching using STATA/PSMATCH2. Paper presented to the Applied Statistics Working Group at the University of North Carolina at Chapel Hill, Chapel Hill, NC.

- Guerra, N. G. & Slaby, R. G. (1989). Evaluative factors in social problem solving by aggressive boys. *Journal of Abnormal Child Psychology*, 17, 277-289.
- Gottfredson, G. D., Jones, E. M., Gore, T. W. (2002). Implementation and evaluation of a cognitive-behavioral intervention to prevent problem behavior in a disorganized school. *Prevention Science*, 3, 43-56.
- Khalifa, Walid (2014) The effectiveness of a training program based on Dodge's Social Information Processing Model on social competence of children with ADHD. *International Journal of Psycho-Educational Sciences* ,2, 141-153 .
- Ladd, G.W. (2005). *Children's peer relations and social competence: A century of progress*. New Haven, CT: Yale University Press.
- Lemerise, E.A., & Arsenio, W.F. (2000). An integrated model of emotion process and cognition in social information processing. *Child Development*, 71, 107–118.
- Lengua, L. J. (2003). Associations among emotionality, self-regulation, adjustment problems, and positive adjustment in middle childhood. *Journal of Applied Developmental Psychology*, 24, 595–618.
- Maughan, A., & Cicchetti, D. (2002). Impact of child maltreatment and interadult violence on children's emotion regulation abilities and socioemotional adjustment. *Child Development*, 73, 1525–1542.
- Nash, J. K., Fraser, M. W., Galinsky, M., & Kupper, L. (2003). Early development and pilottesting of a problem-solving skills-training program for children. *Research on Social Work Practice*, 13, 432 – 450.
- Orobio de Castro, B., Merk, W., Koops, W., Veerman, J. W., & Bosch, J. D. (2005). Emotions in social information processing and their relations with reactive and proactive aggression in referred aggressive boys. *Journal of Clinical Child and Adolescent Psychology*, 34, 105–116.
- Parke, R. D., MacDonald, K. B., Burks, V. M., Carson, J., Bhavnagri, N., Barth, J. M., & Beitel, A. (1989). Family and peer systems: In search of the linkages. In K. Kreppner & M. Lerner (Eds.), *Family systems of lifespan development* (pp. 65–92). Hillsdale: NJ: Earlbaum
- Prinstein, M. J., & La Greca, A. M. (2004). Childhood peer rejection and aggression as predictors of adolescent girls' externalizing and health risk behaviors: A 6-year longitudinal study. *Journal of Consulting and Clinical Psychology*, 72, 103-112.
- Quiggle, N. L., Garber, J., Panak, W. F., & Dodge, K. A. (1992). Social information processing in aggressive and depressed children. *Child Development*, 63, 1305-1320.
- Rose, A.J., & Asher, S.R. (1999). Children's goals and strategies in response to conflicts within a friendship. *Developmental Psychology*, 35, 69–79.
- Schwartz, D., & Proctor, L. J. (2000). Community violence exposure and children's social adjustment in the school peer group: The mediating roles of emotion regulation and social cognition. *Journal of Consulting and Clinical Psychology*, 68, 670–683.
- Smokowski, P. R., Fraser, M. W., Day, S. H., Galinsky, M. J., & Bacallao, M. L. (2004). School-based skills training to prevent aggressive behavior and peer rejection in childhood: Evaluating the *Making Choices* program. *The Journal of Primary Prevention*, 25, 233-251
- Zins, J. E., Weissberg, R. P., Wang, M. C., & Walberg, H. J. (Eds.). (2004). *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College.



# Evaluation of English Curriculum in 9th Grade of Secondary Schools through Teachers' Views

Canay KARCI<sup>3</sup>, Adil TÜRKOĞLU<sup>4</sup>

---

<sup>3</sup> Instructor, Adnan Menderes University, Turkey

<sup>4</sup> Prof. Dr., Adnan Menderes University, Turkey

## **Abstract**

*The main purpose of this research was to evaluate secondary school 9th grade English Curriculum according to teachers' views in terms of objectives, content, teaching-learning process and evaluation and to develop recommendations covering these aspects. The sample population of this research consists of 119 teachers and for quantitative population and 12 teachers were selected for qualitative data. Results were analyzed and evaluated in SPSS statics program, accordingly, some recommendations were made. Approach of the curriculum needs to be improved through the help of consultants. Assessment sources on four skills should be prepared. The content of the programme should be revised along with the other dimensions. Teachers should be encouraged to implement the suggested methods and techniques in the classrooms. Also, the course book should be revised and the use of materials suggested for teaching English should be encouraged. As for the assessment dimension, teachers can be participated in the inservice training programmes.*

**Key Words.** *Curriculum Evaluation, English Course, Secondary School 9th Grade, Teachers' Views*

## **Introduction**

Foreign language that symbolizes the source of modern knowledge is the basis of modernization and civilization. Nowadays, not only one language is essential to learn but more than one foreign language. It's commonly known that foreign language is growing in importance due to the interrelationship among the countries, cultures and economies (Zengin, 1997).

Today's man needs to learn at least a foreign language in order to communicate with other people in foreign countries and understand and evaluate the documents in other countries for information (Ceyhan, 2007). In determining what foreign languages to be taught depends on some organisations like UN and NATO. English was determined as official language by these organisations (Er, 2006). Though there are many languages on Earth, English is the most common language in the world. This results from linguistic heritage of the U.K. and the U.S.'s becoming a superpower in the world, economically and politically according to Crystal (1997). So, English is the glory among other languages (White, 1988). English as a language has become "lingua franca" in the world not only thanks to politics and economy but also dominance over the media.

Foundation of Turkish Republic started an understanding that science and modern values are the bases of civilisation. Learning a foreign language is essential in order to do research, follow the improvement in science and join scientific activities in other countries (Şahbaz ve Çınar, 2008).

In Turkey, learning a foreign language depends on the relationship between Turkey and that country. After Second World War, English as a foreign language started to gain power in Turkey (Demircan,1988). Thus, French began losing its power in Turkey (Demirel, 2010). That's why Turkey has been a member of organisations such as UN and NATO (Büyükduman, 2001; Mirici, 2001).

English is the dominant foreign language in Turkey nowadays. Because young people are asked to know at least a foreign language while looking for a job. This foreign language is mostly English (Mirici, 2001). Good education depends on learning

at least a foreign language. Thus, the need of qualified staff is continueing (Türkoğlu, 1988). Learning a foreign language is a must whatever the students ages are.

In the future, how many languages we know will be stated in European Language Portfolio (Demirel, 2010). Due to the changes in foreign languages to be learnt, curricula should keep up with the necessities and expectations of time. Because developments in science and technology needs qualified human power (Tan, 2007). Implementation of Foreign Language Curricula in Secondary Schools is new. Evaluation of new curricula is very important thinking that after implementing curricula, it is decided how effective they are. Moreover, it is stated that evaluation of curricula must be ongoing in order to get efficiency (Demirel, 2006). Thus, in imlementing curricula, there may be troubles in the elements of curriculum such as objectives, content, teaching- learning process and evaluation. So, they should be determined and corrected according to the results of researches (Demirel, 2006). One of the pioneers of curriculum evaluation, Tyler stated that whatever the level is, curricula should be planned and evaluated continously.

Desired success cannot be reached although English is taught for nine years (Er, 2006). According to a study (2008) the main problem is caused by the inconsistency between objectives and implementations. Another problem is foreign language is not meaningful for the students. The most important thing is to make English course meaningful for the students. In order to make it happen, curricula should be evaluated. There are two ways to gather information for evaluation of curricula: 1) Interviews with teachers should be done; 2) Students should be tested at the end of the term. Teachers are the implementers of curricula, so their views are curicial (Ornstein and Hunkins, 1988).

Since 2010-2011 academic year, there has been a decrease in the hours of English course in 9th grades. English classes in a week are 3 hours in 9th grades. There was a four hour drop in English classes (Magazine of Bulletins, 2010).

It is known that there are many studies on evaluating primary school English curricula in terms of the views of teachers, students, parents and inspectors. However, there are few researches done on evaluating 9th grade English curriculum after the new curriculum started to implement in 2010-2011 academic year and four years of education was passed. In this research secondary school 9th grade English Curriculum was evaluated in terms of objectives, content, teaching- learning process and evaluation.

## **Method**

### *Sample and Study Group*

This research was evaluated according to teachers' views working in secondary school 9th grade. 53 secondary schools were selected for quantitative sample. The number of teachers are 191 in Aydın. As a sample, 137 teachers were chosen randomly and 119 teachers handed in questionnaires. 12 teachers were selected by sampling objectively for qualitative data. In this research, teachers working in secondary school 9th grade were chosen as a study group.

## *Data Collection Tools*

*9th Grade Secondary School English Teachers' Views Survey:* A survey was conducted in this study to gather data from the 9th grade secondary school teachers of English. In research, data have been obtained from the semi-constructed English teacher's interview form. As a result, a draft questionnaire was prepared. 2 Instructors working in Adnan Menderes University Faculty of Education Educational Sciences Department and 1 Instructor working in Celal Bayar University Faculty of Education Educational Sciences Department were consulted for expert view. According to critics of experts, the survey was reorganised and 54 teachers were applied this survey.

The survey included fourty six questions, and there were five options in each term. For the options in the terms, five grading types were structured as answer options as follows: “ 5 as totally agree, 4 as mostly agree, 3 as partially agree, 2 as slightly agree and 1 as totally disagree”.

Terms from the first to the tenth, aim to find the degree of agreement by teachers to objectives of the curriculum. The terms from the eleventh to the twenty fourth are directed to learn the degree of agreement by teachers in terms of content of the curriculum. Terms from the twenty fifth to thirty sixth were asked to learn about the teaching- learning process of the curriculum and terms from the thirty seventh to the fourty sixth were for assessment of the curriculum.

*9th Grade Secondary School English Teachers' Views Interview:* Interview was used for qualitative data. Developing interview questions, 2 English teachers were made semi-structured interviews. Based on these interviews, final interview questions were asked in 2010-2011 academic year.

The main purpose of this research was to evaluate secondary school 9th grade English Curriculum according to teachers' views in terms of objectives, content, teaching- learning process and evaluation. According to this general purpose, the subgoals below were determined:

- 1) How do English teachers evaluate 9th grade English curriculum in terms of;
  - objectives,
  - content,
  - teaching- learning process,
  - evaluation?
- 2) Do teachers' views on English curriculum differ according to school types?

## *Data Analysis*

Results were analyzed and evaluated in SPSS Windows 17.0 statics program. For quantitative data's analysis frequency and percentage were calculated and chi-square test was done in order to calculate whether data's undergone a significant change according to the types of schools. The level of significance was taken as .05 for the statistical analyses that were conducted in the research. As for the qualitative data, interviews were recorded by paper and pencil. The interviews were transferred to the computer, and content analysis was done. As a result, the reflections of the student relating to the process provided the researchers with main themes. Means in each of the themes set forth and this sense units through units inferences are made on the base of the theoretical explanation.

## Findings

### Findings Related to Objectives

The Chi-square Test was conducted in order to test whether there was a significant relationship between school types, and its results are given in Table 1.

**Table 1.** Percentage and Chi-Square Results Regarding School Types

School type		Totally agree %	Mostly agree %	Partially agree %	Slightly agree %	Totally disagree %	$\bar{X}$	$X^2$
1. The objectives of the curriculum are suitable for student development	Anatolia	1,8	19,3	43,9	28,1	7,0	2,72	.48
	General	3,3	13,1	44,3	13,1	3,3		
	All high schools	2,5	16,0	44,5	25,2	11,8		
2. English course hours are enough to gain the objectives of the curriculum.	Anatolia	0	5,3	3,5	10,5	80,7	1,44	*
	General	4,9	1,6	6,6	16,4	70,5		
	All high schools	2,5	3,4	5,0	13,4	75,6		
3. The objectives of the curriculum are able to meet the needs of students in terms of using a foreign language.	Anatolia	0	12,3	33,3	26,3	28,1	2,34	*
	General	3,3	4,9	39,3	32,8	19,7		
	All high schools	1,7	8,4	36,9	29,4	23,5		

The objectives of the curriculum are stated partially suitable for student development, partially meaningful, partially gained and partially complementary. There is no significant difference between Anatolian and General School teachers' views related to "The objectives of the curriculum are suitable for student development". The objectives of the curriculum can be stated that linguistic structure and writing principles were given importance.

School type		% Totally agree	Mostly agree %	Partially agree %	Slightly agree %	Totally disagree %	$\bar{X}$	$X^2$
4. Mental objectives are enough	Anatolia	0	7	47,4	28,1	17,5	2,57	.19
	General	4,9	11,5	41,0	34,4	8,2		
	All high schools	2,5	9,2	44,5	31,1	12,6		
5. Affective objectives are enough.	Anatolia	0	3,5	36,8	43,9	15,8	2,39	*
	General	3,3	8,2	41,0	31,1	16,4		
	All high schools	1,7	5,9	39,5	37,0	16,0		
6. Psychomotor objectives are enough.	Anatolia	0	8,8	28,1	28,1	35,1	2,20	*
	General	1,6	8,2	32,8	32,8	24,6		
	All high schools	0,8	8,4	30,3	31,1	29,4		
7. Listening skills can be gained.	Anatolia	0	25,9	36,2	32,8	5,2	2,63	*
	General	0	9,8	34,4	47,5	8,2		
	All high schools	0	17,6	35,3	40,3	6,7		
8. Speaking skills can be gained.	Anatolia	0	5,2	43,1	34,5	17,2	2,07	*
	General	0	0	11,5	55,7	32,8		
	All high schools	0	2,5	26,9	45,4	25,2		
9. Reading skills can be gained.	Anatolia	1,7	17,2	60,3	15,5	5,2	2,58	*
	General	0	3,3	27,9	59,0	9,8		
	All high schools	0,8	10,1	43,7	37,8	7,6		
10. Writing skills can be gained.	Anatolia	0	8,6	32,8	48,3	10,3	2,08	*
	General	0	0	8,2	62,3	29,5		
	All high schools	0	4,2	20,2	55,5	20,2		

Many teachers don't agree on the term "English course hours are enough to gain the objectives of the curriculum." 80, 7% of Anatolia High School teachers totally disagree on this term while 70, 5% of General High School teachers totally disagree.

Most teachers are seen that they partially agree on the term "The objectives of the curriculum are able to meet the needs of students in terms of using a foreign language." Findings on whether mental objectives are enough do not show significant difference ( $p=0.19>0.05$ ).



When findings on affective objectives are analysed, Anatolia High School teachers and General High School teachers partially agree on this term.

Looking at findings on psychomotor objectives, it is seen that Anatolia High School teachers disagree while General High School teachers partially agree on this term.

Anatolia High School teachers and General High School teachers' answers are respectively partially agree and totally disagree on the terms "Writing skills can be gained.", "Speaking skills can be gained." and "Reading skills can be gained."

### *Findings Related to Content*

Teachers partially agree on the terms "Content was chosen from everyday life.", "Content was listed from simple to complex.", "Content was listed from concrete to abstract.", "Content was organised as prerequisite has to be taken into consideration." (Table 2).

Teachers agree slightly on the terms "Content mostly reflect the culture of foreign language.", "Content meets the needs of Turkish students.", "Content provides a funny and relax content.", "Content is essential in all terms.", "Objectives can be gained through this content.", "Content attracts the attention of the students.", "There are enough exercises."

**Table 2.** *Percentage and Chi-Square Results Regarding School Types*

School type		% Totally agree	% Mostly agree	% Partially agree	% Slightly agree	% Totally disagree	$\bar{X}$	$X^2$
1. Content was chosen from everyday life.	Anatolia	1,8	25,0	51,8	14,3	7,1	2,95	*
	General	3,3	18,0	47,5	29,5	1,6		
	All high schools	2,5	21,0	50,4	21,8	4,2		
2. Content was listed from simple to complex.	Anatolia	5,4	32,1	32,1	23,2	7,1	2,88	*
	General	4,9	16,4	34,4	36,1	8,2		
	All high schools	5,0	23,5	34,5	29,4	7,6		
3. Content was listed from concrete to abstract.	Anatolia	5,4	28,6	30,4	23,2	12,5	2,69	.05**
	General	3,3	14,8	49,2	23,0	9,8		
	All high schools	4,2	21,0	41,2	22,7	10,9		

School type		% Totally agree	% Mostly agree	% Partially agree	% Slightly agree	% Totally disagree	$\bar{X}$	$\chi^2$
<b>4.</b> Content was organised as prerequisite has to be taken into consideration.	Anatolia	1,8	33,9	26,8	23,2	14,3	2,69	.05**
	General	1,6	11,5	44,3	24,6	18,0		
	All high schools	1,7	21,8	37	23,5	16,0		
<b>5.</b> Content mostly reflect the culture of foreign language.	Anatolia	1,8	7,1	32,1	39,3	19,6	2,47	.54
	General	6,6	13,1	31,1	32,8	16,4		
	All high schools	4,2	10,1	31,1	37,0	17,6		
<b>6.</b> Content meets the needs of Turkish students.	Anatolia	0	12,5	39,3	26,8	21,4	2,40	.25
	General	0	11,5	29,5	22,7	14,8		
	All high schools	0	11,8	33,6	44,3	17,6		
<b>7.</b> Content provides a funny and relax content.	Anatolia	1,8	10,7	28,6	30,4	28,6	2,17	*
	General	1,6	4,9	23,0	42,6	27,9		
	All high schools	1,7	7,6	25,2	37,8	27,2		
<b>8.</b> Content is essential in all terms.	Anatolia	1,8	10,7	32,1	33,9	21,4	2,32	*
	General	3,3	3,3	32,8	39,3	21,3		
	All high schools	2,6	6,7	31,9	37,8	21,0		
<b>9.</b> Objectives can be gained through this content.	Anatolia	1,8	10,7	26,8	26,8	33,9	2,22	*
	General	1,6	1,6	37,7	37,7	21,3		
	All high schools	1,7	5,9	31,9	33,6	26,9		
<b>10.</b> There are enough exercises.	Anatolia	0	7,4	32,1	37,5	23,2	2,29	*
	General	1,6	3,9	36,1	32,8	24,6		
	All high schools	0,8	5,9	33,6	36,2	23,5		
<b>11.</b> Content attracts the attention of the students.	Anatolia	0	12,5	17,9	32,1	37,5	2,24	*
	General	1,6	1,6	23,0	52,5	21,3		
	All high schools	0,8	5,0	40,3	42,9	10,9		

### *Findings Related to Teaching-Learning Process*

As seen in the Table 3 , teachers partially agree on the term “Methods and techniques suggested in English curriculum are able to realise objectives”.

**Table 3.** *Percentage and Chi-Square Results Regarding School Types*

School type		Totally agree %	Mostly agree %	Partially agree %	Slightly agree %	Totally disagree %	$\bar{X}$	$\chi^2$
1. In the curriculum, there are enough sample activities for teachers.	Anatolia	0	1,8	35,7	48,2	14,3	2,41	*
	General	1,6	9,8	42,6	34,4	11,5		
	All high schools	0,8	5,9	39,3	41	12,6		
2. Teaching-learning process is stated in detail.	Anatolia	0	8,2	33,9	53,6	8,9	2,35	*
	General	0	3,6	37,7	39,3	14,8		
	All high schools	0	5,9	35,3	46,2	11,8		
3. Teaching-learning process is consistent with content.	Anatolia	0	7,1	48,2	37,5	7,1	2,55	*
	General	3,3	6,6	41,0	41,0	8,2		
	All high schools	1,7	6,7	44,4	38,7	7,6		
4. Methods and techniques are able to realise objectives.	Anatolia	1,8	8,9	39,3	32,1	17,9	2,47	*
	General	3,3	4,9	44,3	32,8	14,8		
	high schools	2,5	6,7	41,9	31,9	16,0		
5. Methods and techniques are suitable for the level of students.	Anatolia	1,8	21,	32,1	28,6	16,1	2,33	.02**
	General	1,6	6,6	19,7	39,3	32,8		
	high schools	1,7	13,4	25,2	35,3	24,4		
6. Methods and techniques are good guide for teachers.	Anatolia	1,8	5,4	30,4	41,1	21,4	2,36	*
	General	3,3	8,2	34,4	41,0	13,1		
	high schools	2,5	6,7	31,9	41	16,8		
7. Methods and techniques are suitable for content.	Anatolia	1,8	7,1	33,9	35,7	21,4	2,44	*
	General	3,3	9,8	37,7	37,7	11,5		
	high schools	2,5	8,4	35,3	36,8	16,0		
8. Visual and audial aids can be found easily in school.	Anatolia	5,4	25,0	32,1	25,0	12,5	2,43	003**
	General	1,6	8,2	18,0	37,7	34,4		
	high schools	3,4	16,2	24,8	31,6	23,5		
9. Subjects can be completed on time.	Anatolia	0	0	7,1	12,5	80,4	1,33	*
	General	0	0	8,2	23,0	68,9		
	high schools	0	0	7,6	17,6	74,8		
10. Teaching-learning process helps students join the classes actively	Anatolia	0	7,1	25,0	35,7	32,1	1,84	*
	General	0	0	8,2	49,2	42,6		
	high schools	0	2,5	16,0	45,4	36,1		
11. Teaching-learning process enables different activities to apply at the same time in class.	Anatolia	0	7,1	25,0	35,7	32,1	1,85	*
	General	0	0	8,2	49,2	42,6		
	high schools	0	3,4	16,2	42,7	37,6		

Teachers mostly agree slightly on the terms “In the curriculum, there are enough sample activities for teachers.”, “Teaching- learning process is stated in detail.”, “Teaching-learning process is consistent with content.”, “Methods and techniques suggested in English curriculum are suitable for the level of students.”, “Methods and techniques suggested in English curriculum make the students love English.”, “Methods and techniques suggested in English curriculum are good guide for teachers.”, “Methods and techniques suggested in English curriculum are suitable for content.”, “Teaching-learning process helps students join the classes actively.”, “Teaching-learning process enables different activities to apply at the same time in class.” Anatolia High School teachers and General High School teachers’ answers are respectively partially agree and agree slightly on the terms “Visual and audial aids suggested in the curriculum can be found easily in school.”, “Teaching-learning process enables students to work collaboratively in class.” Teachers state that they apply demonstration, question- answer, pair and group work, individual study as methods and techniques in classes. They use pictures, board, computer, projector as aids in classes.

### Findings Related to Assessment

**Table 4.** Percentage and Chi-Square Results Regarding School Types

School type		% Totally agree	% Mostly agree	% Partially agree	% Slightly agree	% Totally disagree	$\bar{X}$	$X^2$
1. Assessment is stated in the curriculum in detail.	Anatolia	0	7,1	58,9	23,2	10,7	2,61	.22
	General	0	13,1	42,6	36,1	8,2		
	high schools	0	10,1	51,3	29,4	9,2		
2. There are enough sample assessment techniques.	Anatolia	1,8	7,1	33,9	46,4	10,7	2,41	*
	General	0	8,2	42,6	31,1	18,0		
	high schools	0,8	7,6	37,8	39,5	14,3		
3. Assessment is consistent with objectives.	Anatolia	5,4	14,3	42,9	28,6	8,9	2,69	*
	General	4,9	3,3	45,9	39,3	6,6		
	high schools	5	8,4	45,4	33,6	7,6		
4. Assessment is consistent with content.	Anatolia	5,4	19,6	39,3	26,8	8,9	2,74	*
	General	1,6	8,2	47,5	37,7	4,9		
	high schools	3,4	13,4	44,6	31,9	6,7		
5. In the curriculum, there are enough sample assessment aids for teachers.	Anatolia	0	17,9	42,9	19,6	19,6	2,56	005**
	General	0	8,2	42,6	44,3	4,9		
	high schools	0	12,6	42,7	31,9	11,8		
6. Assessment enables students to make self-assessment.	Anatolia	7,1	5,4	37,5	23,2	26,8	2,32	*
	General	1,6	4,9	29,5	42,6	21,3		
	high schools	4,2	5,0	32,8	32,8	23,5		
7. Assessment shows whether students gain all the objectives.	Anatolia	3,6	10,7	37,5	41,1	7,1	2,47	*
	General	1,6	4,9	36,1	41,0	16,4		
	high schools	2,5	7,6	36,1	42,0	11,8		
8. Assessment results	Anatolia	3,6	17,9	32,1	33,9	12,5	2,55	.08

give information about what problems the curriculum has.	General	1,6	3,3	47,5	34,4	13,1		
	high schools	2,5	10,1	41,2	33,6	12,6		
<b>9.</b> Assessment is not only based on in-class activities but also on out of class activities.	Anatolia	1,8	10,7	35,7	35,7	16,1	2,43	*
	General	1,6	6,6	34,4	45,9	11,5		
	high schools	1,7	8,4	34,5	42,0	13,4		
<b>10.</b> Assessment is mostly based on grammar.	Anatolia	14,3	30,4	35,7	17,9	1,8	3,31	.83
	General	16,4	21,3	37,7	21,3	3,3		
	All high schools	15,1	25,2	37,8	19,3	2,5		

Most teachers partially agree on the terms “Assessment is stated in the curriculum in detail.”, “Assessment is consistent with objectives.”, “Assessment is consistent with content.”, “Assessment results give information about what problems the curriculum has.”, “Assessment is mostly based on grammar.”

Anatolia High School teachers and General High School teachers’ answers are respectively partially agree and agree slightly on the terms “In the curriculum, there are enough sample assessment techniques for teachers.”, “In the curriculum, there are enough sample assessment aids for teachers.”, “Assessment enables students to make self- assessment.”

Most teachers agree a little on the terms “Assessment shows whether students gain all the objectives.”, “Assessment is not only based on in-class activities but also on out of class activities.”

Teachers state that they use short answer, fill in the blanks, multiple choice, oral and observation as assessment techniques.

## Results

- \* Teachers have problems applying communicative approach during classes.
- \* Curriculum is based on developing four skills but teachers’ views are negative about gaining objectives.
- \* Limited time is stated as another problem so that teachers can not apply all activities in the curriculum.
- \* Teachers state that they go on grammar- based teaching in classes.
- \* About content, subjects are too much. They don’t attract the attention of students.
- \* Looking at methods and techniques used, teachers do not use each suggested method and technique.
- \* Materials are not sufficient and main sources used in classes are book and board. Book is not suitable for the level of students and should be changed. Moreover, teachers state that they do not use course book handed out by National Ministry of Education.
- \* Teachers explain that assessment is mostly based on grammar, not four skills. Assessment covers the written tests.

\* Another problem of teaching-learning process is not being able to apply assessment techniques such as peer and self assessment. These assessment techniques are not suitable to mark students as teachers tell. Teachers think that performance assessment is a waste of time and paper. Thus, they assign project work and term homework instead.

\* Another problem is that crowded classes prevent suggested methods and techniques to implement by the teachers.

\* Teachers desire preparation class to be again.

## **Recommendations**

### *Recommendations for Implementation*

1. 9th Grade Secondary School English Curriculum should be revised and made up.
2. New materials of listening and speaking should be developed. For listening skill, CDs and videos should be used and native speakers should talk on them.
3. Projector and smart board using should be more common as well as course book and board.
4. Class hours should be increased or subjects and objectives of the curriculum should be decreased.
5. Assessment sources should be provided for teachers.
6. In order to make up for assessment knowledge, teachers should be organised in-service training programmes.
7. A guide to knowing about communicative approach and how to implement it in classes should be prepared.
8. Content selection should be suitable for the level of students.
9. Teachers should be urged to apply the methods and techniques suggested in the curriculum.

### *Recommendations for Future Research*

1. The research is on evaluating 9th Grade Secondary School English Curriculum. Future researches can be done on evaluating 10th, 11th or 12th Secondary School English Curriculum.
2. This research was evaluated according to teachers' views working in secondary school 9th grade in 2010-2011 academic year. In the future research, students', parents' and inspectors' views can be taken into consideration.
3. The sample of the research is the English teachers in the centre and towns of Aydin. Future researches can cover the views of English teachers in other cities of Turkey.

## **References**

- Banks, T. (2008). *Foreign Language Learning Difficulties and Teaching Strategies*, MA Thesis, School of Education Dominican University of California San Rafael, CA.

- Büyükduman, F.İ. (2001). *Views of English Teachers Working in Primary School On Primary School English Curriculum*, Unprinted Master Thesis, Yıldız Teknik University, İstanbul.
- Ceyhan, E. (2007). *Foreign Language Teaching Technology*, İstanbul: MORPA Kültür Yay.
- Crystal, D. (1997). *English as a global language*, Cambridge University Press: Cambridge.
- Demircan, Ö. (1988). *Foreign Language Teaching from past to today in Turkey*, İstanbul: Remzi Kitapevi.
- Demirel, Ö. (2006). *Curriculum Development from Theory to Practice (10. Ed.)*, Ankara: Pegem Yayıncılık.
- Demirel, Ö. (2010). *Foreign Language Teaching: Language Passport, Language Biography, Language Portfolio (5.Edition)*, Ankara: Pegem Yayıncılık.
- Er, K.O. (2006). Evaluation of English Curricula in 4th and 5th Grade Primary Schools, PhD Thesis, Ankara University, Ankara.
- Magazine of Bulletins, August 2010, number:2635, volume: 73.
- Mirici, İ.H. (2001). *Teaching Foreign Language to Young Learners: A Sample of 4th and 5th Grades*, Ankara: Gazi Kitabevi.
- Ornstein, A.C. and Hunkins, F.P. (1988). *Curriculum: Foundations, Principles, and Issues*, United States of America:Englewood Cliffs.
- Şahbaz, N.M. and Çınar, İ. (2008). *Education Anticipated by Philosophy of Turkish Republic: Result Report*, Congress of Education, İnönü University: Malatya.
- Tan, Ş., Kayabaşı, Y. and Erdoğan, A. (2002). *Planning and Evaluating Instruction*, Ankara:Anı yay.
- Türkoğlu, A. (1988). *Problems Met in Practice in Education High Schools*, Çukurova University Faculty of Education Publication, n. 1: Adana.
- White, R. V. (1988). *The ELT curriculum: design, innovation, and management*, UK: Blackwell Publishing ltd.
- Zengin, D. (1997). German Teacher Education: Objectives and Expectations, *International Symposium*, Ankara: Hacettepe University Publication.



International Journal of psycho-educational sciences

## **Effectiveness of Differentiated Instruction on Achievement in Mathematics of Middle School Students with learning disabilities**

Hesham Habib Al Huseini , PhD<sup>\*</sup> , Rasha Mohammed Abdullah , PhD<sup>\*\*</sup>

---

<sup>\*</sup> Associate Prof. of Educational Psychology, National Center for Evaluation and Examinations

<sup>\*\*</sup> Assistant prof , Agman University , United Emirates



## Abstract

*This study investigated the effect of using differentiated instruction achievement in math in second graders preparatory with learning disabilities. 61 students identified with LD were invited to participate. The sample was randomly divided into two groups; experimental (n= 31; 28 boys and 3 girls) and control (n= 30, 20 boys, 2 girls). ANCOVA and T .test were employed for data analysis. Findings from this study indicated the effectiveness of differentiated instruction on achievement in math in the target students. On the basis of the findings, the study advocated for the effectiveness of using differentiated instruction on achievement in math in learning disabled students.*

**Keywords.** Differentiated instruction, academic achievement, learning disabled.

## Introduction

The concept of *differentiated instruction* is based on the need for general education teachers to differentiate instruction to meet the needs of diverse learners in the general education class; this includes students with learning disabilities as well as a number of other disabilities.

Tomlinson (2001) suggests several main aspects of the learning experience that can be differentiated according to learner differences—content, process, and products. Some discussions of differentiated instruction (e.g., Tomlinson & Jarvis, 2009) also include learning environments as a separate aspect amenable to classroom modifications. A key theoretical underpinning of differentiated instruction is the social learning theory concept of a “zone of proximal development” (ZPD). Vygotsky (1978) described the ZPD as “the distance between the actual developmental level and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (p. 86).

The concept of ZPD implies that each student should be given learning experiences slightly more challenging than what he or she can currently master independently. The student can be led to progressively greater depths of understanding with the assistance of others. These forms of assistance are frequently referred to as “scaffolding” in the educational literature. Several corollaries of the ZPD concept that inform its application to differentiated instruction are:

- Each student will have an individual ZPD, rendering uniform approaches to instruction ineffective.
- Flexible peer learning groups, fairly implemented, can benefit students of different abilities
- Frequent formative assessment is necessary to continually update educators’ evaluations of students’ current understandings.

Research on the effectiveness of differentiated instruction on improving students’ achievement is still emerging. Castle, Deniz, and Tortora (2005) contend that differentiated instruction is necessary to meet the varied needs of all students in the classroom. Their study indicated student achievement improved after experiencing differentiated instruction over several years.

George (2005) supports differentiated instruction linked with public education and the mixed-ability classrooms in today’s schools. The mixed-ability classroom is a reflection of the variety in American society. He goes on to argue that gifted and talented students will not be challenged and will not reach their potential or will become behavior problems due to boredom in the classroom. As students prepare for standardized tests, Tieso (2004) believes

interests, abilities, and strengths are in conflict with a one way approach of teaching. As legislation requires programs for the gifted to be implemented, budget restraints place classroom teachers in a position of meeting the needs of these students in a mixed-ability classroom of students.

Tomlinson, Brimijoin, and Narvaez (2008) report on the experiences of two schools on the differentiated instruction journey. Their book indicates the structure of differentiation in each of the schools and survey results in support of differentiation.

Through her research on differentiated instruction for her dissertation, Bosier (2007) investigated what research studies have been done on the topic of differentiated instruction in math. The purpose of her research was to 1) review the perceptions of differentiated instruction of upper elementary math teachers as an effective and instructional tool, 2) develop a link between mathematic student achievement and teacher commitment of implementing differentiated instruction in the classroom, and 3) determine teacher perceptions of the advantages and disadvantages of differentiated mathematics instruction. This was a mixed methods study. Bosier compared beginning and ending achievement data in the fall and spring and drew conclusions from the teachers' perceptions.

In a review of studies regarding direct instruction, Gujjar (2007) found students receiving direct instruction in a small group setting performed better in reading, math, and social studies than those in whole group arrangements. Because the groupings are flexible and change as needed, ongoing assessment becomes necessary. Pre-assessment can also be in the form of teacher or textbook created assessments, interest inventories, learning style inventories, and other non-academic instruments.

Mourad and Amal's (2013) study investigated the effect of using differentiated instruction by integrating multiple intelligences and learning styles on solving problems , achievement in , and attitudes towards math in six graders with learning disabilities in cooperative groups. A total of 60 students identified with LD were invited to participate. The sample was randomly divided into two groups; experimental ( n= 30 boys )and control ( n= 30 boys). ANCOVA and T .test were employed for data analysis. Findings from this study indicated the effectiveness of differentiated instruction by integrating multiple intelligences and learning styles on solving problems , achievement in , and attitudes towards math in the target students. On the basis of the findings, the study advocated for the effectiveness of using differentiated instruction by integrating multiple intelligences and learning styles on solving problems , achievement in , and attitudes towards math in learning disabled students.

Further research is necessary to build on the vast amount of research into differentiated instruction with learning disabled students. This will allow researchers to determine how differentiated instruction can be best used as an intervention with learning disabled students as there is a dearth of research with this population. In order to address this issue with the lack of research on differentiated instruction with learning disabled students. Thus the present study seeks to give answers to the following question: *Are there differences in post-test scores mean between control and experimental groups on Academic Achievement test?*

## **Method**

### *Participants*

Sixty – one students identified with LD were invited to participate. Each student participant met the following established criteria to be included in the study: (a) a diagnosis of

LD by teacher's references, and learning disabilities screening test (Kamel, 1990) (b) an IQ score on the Mental Abilities Test (Mosa, 1989) between 90 and 114 (c) low scores on Mathematical achievement test (d) absence of any other disabling condition. The sample was randomly divided into two groups; experimental (n= 31; 28 boys and 3 girls) and control (n= 30, 20 boys, 2 girls).

The two groups were matched on age , IQ , achievement and attitude tests .Table 1. shows means, standard deviations ,t- value , and significance level for experimental and control groups on age ( by month) , IQ , Academic achievement test ( pre-test)

*Table 1. Pretest Scores Means , standard deviations ,t- value , and significance level for experimental and control groups on age ( by month) , IQ , and achievement test.*

<b>Variable</b>	<b>Group</b>	<b>N</b>	<b>M</b>	<b>SD</b>	<b>T</b>	<b>Sig.</b>
<b>Age</b>	Experimental	31	145.51	2.42	0.453	-
	Control	30	145.23	2.45		
<b>IQ</b>	Experimental	31	109.19	7.44	-.305	-
	Control	30	109.80	8.05		
<b>Achievement</b>	Experimental	31	12.129	1.14	0.097	-
	Control	30	12.100	1.18		

Table 1. shows that al t- values did not reach significance level . This indicated that the two groups did not differ in age , IQ , and achievement test ( pre-test) .

#### *Measure*

*Academic Achievement Test.* The end-of- year examination results of the participants in math standardized and marked by the teachers , and provided the summative evaluation scores for the analysis. Hence, scores in the math served as the measures of students' achievement.

#### *Procedure*

All the sixty-one students in two preparatory completed Academic Achievement Test, which assesses students' Mathematical academic Achievement. Additionally , the end-of-year examination results of the participants in math standardized and marked by the teachers ,and provided the summative evaluation scores for the analysis. Hence, scores in the math served as the measures of students' achievement. Thus data was reported for the students who completed the study .

The teacher was provided with a notebook that contained detailed directions for implementing all activities and lessons. Students received 3 training sessions a week, lasting between 40 and 45 min .Instruction took place in the regular classroom in order to naturalize the situation.

For 42% of the sessions, the researcher also assessed treatment integrity by recording the presence or absence of each component. Session integrity was computed by dividing the number of lesson components taught by the total number of components and multiplying the quantity by 100. Average session integrity scores were computed for each participant.

#### *Design and Analysis*

The effects of implementing the differentiated instruction on students' academic achievement in math was assessed using pre- post testing.

## Results

### *Mathematics Achievement*

Table 2. shows data on ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in Mathematics Achievement. The table shows that the (F) value was (416.92 ) and it was significant value at the level (0.01).

*Table 2. ANCOVA analysis for the differences in post- test mean scores between experimental and control groups in Mathematics Achievement*

Source	Type III sum of squares	df	Mean square	F	Sig.
Pre	3.894	1	3.894		
Group	6327.64	1	6327.64	416.92	0.01
Error		58			
Total	880.27	60	880.27		
	7208.85				

Table 3. shows T. test results for the differences in post- test mean scores between experimental and control groups in Mathematics Achievement. The table shows that (t) vale was (20.54). This value is significant at the level (0.01) in the favor of experimental group. The table also shows that there are differences in post- test mean scores between experimental and control groups in Mathematics Achievement in the favor of experimental group.

*Table 3. T. test results for the differences in post- test mean scores between experimental and control groups in Mathematics Achievement*

Group	N	Mean	Std. deviation	T	Sig.
Experimental	31	35.97	2.58		0.01
Control	30	15.59	4.85	20.54	

## Discussion

The main objective of the present study was to explore the effects of differentiated instruction by integrating multiple intelligences and learning styles on solving problems , achievement in, and attitudes towards math in six graders with learning disabilities in cooperative groups.

The results of this study as revealed in table 3 shows that the differentiated instruction that integrated multiple intelligences and learning styles was effective in improving achievement in math of students in experimental group, compared to the control group whose individuals were left to be taught in a traditional way.

Differentiated instruction is a promising approach for supporting the diverse needs of all students for it consistently had positively affected student achievement. The conclusions of this study encourage the use of differentiated instruction because it is of substantial benefit to students who may be struggling in the classroom and is responsible teaching in that it acknowledges not only the strengths and differences among learners, but also the increasing diversity in the modern classroom. Differentiated instruction is an effective method of teaching mathematics for it gives students hands-on learning and more opportunities to communicate with their classmates as compared to conventional instructional approach.

## Recommendations

Based on the findings and conclusions made in this study, it is recommended that use of differentiated instruction be adopted for mathematics instruction. Evaluation of education goals of mathematics and a massive restructuring of the curriculum should be done to incorporate the use of differentiated instruction approach on various topics. This is due to the positive influence exerted on the students' achievement in mathematics when differentiated instruction approach was used. Mathematics curriculum developers should include differentiated instruction approach in the teaching of mathematics during the training of mathematics teachers that is teacher education institutions should develop and provide pre-service and in-service programs that use differentiated instruction. Training sessions and professional development for differentiated instruction that require concerted response from all stakeholders including school principals, teachers and school authorities should be done.

## References

- Bosier, C.S. (2007). The effects of teacher perception of differentiated mathematical instruction on student achievement. Ph. D. dissertation, Capella University, United States—Minnesota. Retrieved April 5, 2008, from ProQuest Digital Dissertations database. (Publication No. AAT 3284053).
- Castle, S., Deniz, C. B., & Tortora, M. (2005). Flexible grouping and student learning in a high-needs school. *Education and Urban Society*, 37(139), 139-150.
- George, P. S. (2005). A rationale for differentiating instruction in the regular classroom. *Theory into Practice* 44(3), 185-193.
- Gujjar, A. A., (2007). Direct instruction and appropriate intervention for children with learning problems. *The Turkish Online Journal of Educational Technology*, 6(2), Article 3.
- Mosa, F.( 1989). *Mental abilities test*. Al Nahda Al Masrya.
- Mourad Ali Eissa & Amaal Ahmed Mostafa(2013). The effects of differentiated instruction by integrating multiple intelligences and learning styles on solving problems, achievement in, and attitudes towards math in six graders with learning disabilities in cooperative groups. *International Journal of Psycho-Educational Sciences* ,3, 32- 44
- Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). Alexandria, VA: ASCD.
- Tomlinson, C. A., & Jarvis, J. M. (2009). Differentiation: Making curriculum work for all students through responsive planning and instruction. In J. S. Renzulli, E. J. Gubbins, K. S. McMillen, R. D. Eckert, & C. A. Little, (Eds.). *Systems & models for developing programs for the gifted & talented* (2nd ed., pp. 599-628). Mansfield Center, CT: Creative Learning Press.
- Tomlinson, C. A., Brimijoin, K., & Narvaez, L (2008). *The differentiated school: Making revolutionary changes in teaching and learning*. Alexandria, VA: Association for Supervision and Curriculum Development, Chapter 6.
- Vygotsky, L., (1978). Interaction between learning and development. *Mind and Society*. Cambridge, MA: Harvard University Press, (79-91).



International Journal of psycho-educational sciences

## Integrated Education Receiving Students during Socialization According to Teacher Opinions

Durmuş KILIÇ<sup>5</sup>, Aytaç ŞAHİN<sup>6</sup>, Şükrü ADA<sup>7</sup>, Yavuz SÖKMEN<sup>8</sup>

---

<sup>5</sup> Assoc. Dr. Atatürk University, Turkey

<sup>6</sup> Classroom Teacher, Provincial Directorate of National Education, Turkey,

<sup>7</sup> Assoc. Prof. Dr. Atatürk University, Turkey

<sup>8</sup> Res. Assist., Atatürk University, Turkey

## **Abstract**

*In this research, examining of primary education classroom teachers' integrated students' socialization levels in terms of several variables is being targeted. Research population and sampling are comprised of 102 first-grade teachers from 26 primary schools of Erzurum Provincial Directorate of National Education in Turkey between 2009-2010 school years. As a tool to collect data, "Integrated Education Survey" was used. This survey was used by Battal (2007) and its reliability and validity was confirmed. According to the variables in the statistical analyses, t-test was used to find out whether there was a difference between two groups in terms of socialization levels of integrated students and one way ANOVA was used to find out whether there was a difference between socialization levels of three or more integrated student groups. According to the research results, it is found out that there were major differences between socialization levels of integrated students according to their class teachers' faculty of graduation*

**Key words:** Integration, Integrated Education, Special Education, Classroom Teacher.

## **Introduction**

Education is a process of change and development, helping the individual to build up social skills. In this process, developing social skills is needed to ensure that some students benefit the most of academic education. Self sufficiency in social skills, peer and teacher acceptance, success in after school/professional life and independent continuation of life is increasingly related with integration (Zirpoli ve Melloy, 1997).

Should the literature be examined, a variety of definitions are available for integrated education. Integration is the practice where children with special needs are placed in normal education classes (Osborne ve Dimattia, 1994). Integration is an educational outcome of normalisation principle which was first put forward in Scandinavian countries in 1970's and spread to Europe and America later on, with the ideal of "providing everyone with equal educational opportunities" (Diler, 1998, Sucuoğlu, 2006 ).

The approach of the school to integration is in parallel of its personnel's beliefs since negative attitudes have the tendency to reduce the potential of integration (Elliott ve McKenney, 1998). The classroom teacher, under every class circumstance is a strong mediator especially in the integration of children with special needs to classes where normally developing children are present, in terms of social climate and behaviour of the class (Walker ve Lamon, 1987).

Every child is different from the other physically, consciously and emotionally. However, in children among whom there are major differences, general education proves to be insufficient and special educational services are needed. (Eripek, Özyürek ve Özsoy, 1996).

Individuals who are in need of special education also need to be included in the educational environment, socialize as normal class students and determine their status in the society. Integrated education environment is such that it aims enabling disabled children to become self sufficient without being separated from the society, by interaction among peers. (Jenkinson, 1997, Gottlieb ve Leyser, 1996; Kuz, 2001; Kayaoğlu, 1999; Lewis ve Doorlag, 1999).

Many researchers share the view that teachers lack knowledge on how the attitude regarding integration and, education and support services provided to individuals with special needs should be (Barton, 1992; Batu, 1997; Diken, 1998; Familia-Garcia, 2001; Mağden ve Avcı, 1999; Metin ve Güleç, 1998; Sargin, 2002). Despite the availability of some researches

regarding classroom teachers on this issue (Akçamete ve Kargın, 1994), it was not possible to find researches focusing on in-service and pre-service information provided to branch teachers regarding integration.

In this research, identification of problems faced by integrated education receiving students during their socialization process is being targeted according to teachers' opinion. In the research, answers were sought for the following questions.

1. Is there any difference between class teachers' seniorities and integrated students' socialization levels?
2. Is there any difference between class teachers' sexual differences and integrated students' socialization levels?
3. Is there any difference between class teachers' faculty of graduation and integrated students' socialization levels?
4. Is there any difference between class teachers' attending class and integrated students' socialization levels?
5. Is there any difference between class teachers' in-service trainings and integrated students' socialization levels?

## **Method**

### *Method of Research*

This research is a general screening type descriptive study which is aimed at determining the socialization levels of primary school integrated students. General screening models are, in a multi member population, screening arrangements made on the entire population or a group, example or sample extracted from the population with the purpose of reaching a general conclusion on the population (Karasar, 2006).

### *Population and Sampling*

Research population comprises first-grade classroom teachers from primary schools of Erzurum Provincial Directorate of National Education in Turkey between 2009-2010 school years. A total of 102 class teachers from 26 schools, one of which is private, located within the boundaries of Erzurum Province, Central Palandöken and Çat Towns constitute the sampling of this research.

### *Data Collection methods and analyses*

In the development of data collection tools used in this research the master thesis "Evaluation of the Abilities of Classroom Teachers and Branch Teachers on integrated Education" by Battal (2007) was made use of. The reliability and validity of the survey was verified by experts and hereby "Integrated Education Survey" was developed and used. In the analyses of the collected data, variables of classroom teachers' seniorities, education levels, gender, attended classes and in-service training were used.

Initially, frequencies and percentage distributions of teachers who took part in the survey are given according to variables. Afterwards, for each variable, arithmetic average and standard deviation are given for determining socialization levels of integrated students. According to the variables, t-test was used to find out whether there was a meaningful difference between two groups of integrated students in terms of socialization levels and one way ANOVA was used to find out whether there was a meaningful difference between three



or more groups of integrated student in terms of socialization levels. In the event where a meaningful difference was noticed, LSD test among Post Hoc tests was conducted. In testing the hypothesis, the lowest level of significance is accepted as 0.05

## Findings

**Table 1.** Arithmetic Average and Standard Deviation for Integrated Students' Socialization Levels, in Terms of Classroom Teachers' Seniorities.

Seniority	X	N	Ss
1-5 years	3.41	29	0.65
6-10 years	3.16	26	0.64
11-15 years	3.37	19	0.80
16-20 years	3.57	18	0.84
21 and over	2.89	10	0.68
Sum	3.32	102	0.73

According to Table 1; 1-5 years senior classroom teachers' integrated students' arithmetic average of socialization levels is ( $X=3,41$ ), 6–10 years senior classroom teachers' ( $X=3,16$ ), 11–15 years senior classroom teachers' ( $X=3,37$ ), 16–20 years senior classroom teachers' ( $X=3,57$ ) and 21 years and more senior classroom teachers' ( $X=2,89$ )

**Table 2.** One way ANOVA Test Results for Integrated Students' Socialization Levels, in Terms of Classroom Teachers' Seniorities.

Variance source	Sum of Squares	Sd	Mean Square	F	p
Intergroup	3.92	4	0.98	1.92	.113
In group	49.50	97	0.51		
Sum	53.41	101			

$p < .05$

In Table 2, it is apparent that there is not a meaningful difference between Integrated Students' Socialization Levels, in Terms of Classroom Teachers' Seniorities ( $p < .113$ ).

**Table 3.** T-test results for Integrated Students' Socialization Levels, in Terms of Classroom Teachers' Gender

Gender	N	X	Ss	t	p
Male	52	3.40	0.74	1.18	.24
Female	50	3.23	0.71		*

In Table 3 it is apparent that there is not a meaningful difference between integrated Students' Socialization Levels, in Terms of Classroom Teachers' Gender ( $t: 1.18$ ,  $p > .05$ ).

**Table 4.** *Arithmetic Average and Standard Deviation Values for Integrated Students' Socialization Levels, in Terms of Classroom Teachers' Faculty of Graduation*

<b>Graduation</b>	<b>X</b>	<b>N</b>	<b>SD</b>
Faculty of Education	3.31	55	.65
4 years college of education	3.59	6	1.02
2 years institute of education	2.59	7	.61
Faculty of Arts and Sciences	3.55	21	.81
Other	3.23	13	.62
Sum	3.32	102	.72

According to Table 4; arithmetic average of integrated students' socialization levels according to faculty of education graduated classroom teachers is ( $X=3,31$ ), four years college of education graduated classroom teachers is ( $X=3,59$ ), two years institute of education graduated classroom teachers is ( $X=2,59$ ), faculty of arts and sciences graduated classroom teachers is ( $X=3,55$ ) and other faculties and schools graduated classroom teachers is ( $X=3,23$ )

**Table 5.** *One way ANONA Test Results for Integrated Students' Socialization Levels, in Terms of Classroom Teachers' Faculty of Graduation*

<b>Source of Variance</b>	<b>Sum of Squares</b>	<b>Sd</b>	<b>Mean Square</b>	<b>F</b>	<b>p</b>
<b>Intergroup</b>	5.53	4	1.33	2.69	.036
<b>In group</b>	48.09	97	0.50		
<b>Sum</b>	53.41	101			

$p < .05$

In table 5 it is apparent that there is a meaningful difference between Integrated Students' Socialization Levels, in Terms of Classroom Teachers' Faculty of Graduation ( $p < .05$ ). In order to find out in which groups the differences emerge, groups were compared in doubles with LSD test. According to results achieved; between 2 years institute of education and faculty of education, 4 years college of education and faculty of arts and sciences there is a meaningful difference in favour of faculty of education, 4 year college of education and faculty of arts and sciences. Meaningful differences between other groups could not be observed. According to these results, it can be concluded that classroom teachers' faculty of graduation is determinant on integrated students' socialization levels.

**Table 6.** *Arithmetic Average and Standard Deviation Values for Integrated Students' Socialization Levels, in Terms of Classroom Teachers' attending classes*

<b>Grades</b>	<b>X</b>	<b>N</b>	<b>Ss</b>
1. Grade	3.13	16	.77
2. Grade	3.32	21	.68
3. Grade	3.24	19	.77
4. Grade	3.49	28	.65
5. Grade	3.27	18	.82
Sum	3.32	102	.73

According to Table 6; arithmetic average of integrated students' socialization levels according to 1. Grade attending classroom teachers is (  $X=3,13$ ), 2. Grade attending classroom teachers is (  $X=3,32$ ), 3. Grade attending classroom teachers is (  $X=3,24$ ), 4. Grade attending classroom teachers is (  $X=3,49$ ) and 5. Grade attending classroom teachers is (  $X=3,27$ )

**Table 7.** *One way ANOVA Test Results for Integrated Students' Socialization Levels, in Terms of Classroom Teachers' Attending Classes*

Source of Variance	Sum of Squares	Sd	Mean Square	F	p
Intergroup	1.56	4	39	.73	.574
In group	51.85	97	54		
Sum	53.41	101			

$p < .05$

In Table 7 it is apparent that there is not a meaningful difference between integrated Students' Socialization Levels, in Terms of Classroom Teachers' attending classes (  $p > .05$  ). According to these results it can be concluded that attending classes of classroom teachers is not determinant on integrated students socializing levels.

**Table 8.** *T-test results for Integrated Students' Socialization Levels, in Terms of Classroom Teachers' in-service training on integration.*

In-Service Training	N	X	Ss	t	p
Received	51	3.38	.77	.86	.40
Not Received	51	3.25	.68		

$p < .05$

In table 8 it is apparent that there is not a meaningful difference between Integrated Students' Socialization Levels, in Terms of Classroom Teachers' in-service received training (t: .86,  $p > .05$ ).

## Discussion and Conclusion

Findings achieved reveal that it is important for classroom teachers to receive pre-service and in-service trainings on integrated education. Findings of this research show similarities with the results achieved of other researches on the same issue (Chow, 1976; Kilgor, 1982; Leyser ve Abrams, 1983). Fulfilment of the needs in the class, establishing and sustaining healthy interactions in the class, acceptance of children with special needs to class, school and even society largely depends on the teacher (Avci, 1998).

It is considered beneficial in terms of their socialization that individuals with special needs receive education with normal class students. When increasing numbers of disabled persons also in Turkey, as in the rest of the world be taken into consideration, integrated education must be efficiently sustained (Şahin, 2010).

It is found out that there isn't a meaningful difference between integrated students' socialization levels and classroom teachers' seniorities ( $p < .113$ ). According to this result, seniorities of classroom teachers taking part in this research, not being effective on integrated students' socialization levels can be explained by insufficient pre-service and in-service training. This is in parallel with the assertion of Kayaoğlu (1999), indicating that teachers' being unequipped on this issue creates negative attitudes and prevents integration programme from succeeding.

In the researches of Larivee and Cook (1979), Bain and Dolbel, (1991) it is revealed that experience, knowledge of integration and in-service training in teachers play an important role in developing positive attitudes. These assertions do not match with the research findings.

It is evident that there is not a meaningful difference between classroom teachers' attending classes and socialization levels. It can also be asserted that results are similar in terms of classroom teachers' attending different grade classes.

It is believed that including of compulsory integration lessons to classroom teacher and branch teacher undergraduate programmes will have a positive influence on teachers' attitudes towards integration and accordingly increase the success of integration. As per the findings of this research, there is a meaningful difference between integrated students' socialization levels in terms of classroom teachers' faculty of graduation. That this difference is in the favour of four year faculty can be explained with classroom teachers' wider knowledge on integration training. According to these findings, the following could be brought forward:

For getting a successful result from integration education, training of classroom teachers and families is important. In-service training implementations concerning integration education can be carried out in a more effective way. Conducting activities that will increase the social acceptance of integration students among normal class students may prove to be useful. The scope of the integration education related courses given in educational institutes should be broadened and more application-oriented studies have to be carried out.

This research was limited with 102 classroom teachers serving in the 2009-2010 school year, within 26 schools under the Provincial Directorate of National Education of Erzurum, Turkey. Due to this reason, evaluating the findings of the research by considering this limitation will be convenient.

## References

- Akcamete, G. & Kargin, T. (1994). Effect of in-service training programs on the teachers' attitudes towards the hearing impaired. *Special Education Magazine*, 1(4), 13–19.
- Avci, N. (1998). Integration and integrated classroom teacher. *Destek*, 1(1), 20–24.
- Bain L.& Dolbel S.(1991)*The Handbook of Stuttering* (5th. Ed.)San Diego: Singular Publishing Group.
- Barton, M. L. (1992). Teachers' opinions on the implementation and effects of mainstreaming.  
Web:<http://www.ericfacility.net/servlet/com.artesiotech.servlet.search.SearchServlet?action=9>. internet.
- Battal, I.(2007). *Evaluation of Classroom and Branch Teachers' Competency on Integration Education*, (Unpublished Postgraduate Thesis), Afyonkarahisar Kocatepe University, Institute of Social Sciences, Afyon.

- Batu, S. (1997). Knowledge and views of primary and secondary education organization teachers concerning the handicapped and integration. Fourth National Congress of Education Sciences, Eskisehir.
- Chow, S. H. L. (1976). Effects of a mediated training course on teachers and students in mainstreaming programs. <http://www.ericfacility.net/servlet/com.artesiotech.servlet.search.SearchServlet?action=9>. Internet.
- Diler, N. (1998). Concept of integration, integration implementations and things to do for effective integration. Eight National Congress of Special Education, Edirne.
- Diken, H. İ. (1998). Comparison of the attitudes of teachers that have and don't have mentally disabled children in their classes, concerning the integration of mentally disabled children. (Unpublished Postgraduate Thesis), Abant İzzet Baysal University, Bolu.
- Elliot, D., & McKenney M. (1998). Four inclusion models that work. *Teaching Exceptional Children*, 30(4).
- Eripek, S., Ozyürek, M. ve Ozsoy, Y. (1996). "*Mentally Retarded Children*" *Introduction to Special Education*. Karatepe Publications, Ankara.
- Familia-Garcia, M. (2001). Special and regular education teacher's attitudes towards inclusive programs in an urban community school. New York City Board of Education. U.S., New York.
- Gottlieb, J. & Leyser, Y. (1996). 'Attitudes of Public School Parents Toward Mainstreaming: Changes Over a Decade', *Journal of Instructional Psychology*, 23(4), 12-28.
- Jenkinson, J.C. (1997). *Mainstreaming or special? Educating students with disabilities*, Routledge Press, London and New York .
- Karasar, N. (2005). *Scientific Research Method*, Nobel Publication Distribution, Ankara.
- Kayaoglu, H. (1999). Effect of Informative Program on the Normal Classroom Teachers' Attitudes towards the Hearing Impaired Children within the Integration Environment, (Unpublished Postgraduate Thesis), Ankara University, Institute of Social Sciences, Ankara.
- Kilgore, A.M. (1982). Implementing educational equity practices in a field-based teacher education. Nebraska: The National Conference of the Association of Teacher Educators.
- Kuz, T. (2001). *Examination of Attitudes towards Integration Education*, T.R. Prime Ministry, Administration for Disabled People Publications /17, Ankara.
- Larrivee, B. & Cook, L. (1979). Mainstreaming: a study of the variables affecting teacher attitude. *The Journal of Special Education*, 13 (3), 315–24.
- Leyser, Y., & Abrams, P.D. (1983). A shift to the positive: An effective programme for changing pre-service teachers' attitudes toward the disabled. *Educational Review*, 35(1) 35–43.
- Lewis B.R. & Doorlag. H.D. (1999). Teaching special students in general education classrooms. New Jersey: Prentice Hall. Inc..
- Mağden, D., & Avcı, N. (1999). Views of teacher candidates concerning integration of handicapped students. The Fourth National Congress of Educational Sciences, Eskisehir.

- Metin, N., & Guleç, H. (1998). Examination of primary school educationists' opinions concerning the programs where handicapped children are integrated with normal children. The Eight National Congress of Special Education, Edirne.
- Osborne, A. G. & Dimattia, P. (1994). "The Least Restrictive Environment Mandate: Legal Implications" *Exceptional Children*, 61, 1:6-14.
- Sahin, A. (2010). Examination of the Problems Experienced in the Process of Socializing by Students Educated Through Integration According to the Teachers' Views, (Unpublished Postgraduate Thesis), Ataturk University, Institute of Social Sciences, Erzurum.
- Sargin, N. (2002). A study on the teacher attitudes towards the mentally handicapped children in nursery classes. Declarations of the Eleventh National Congress of Education. Konya: Education Bookshop Publications.
- Sucuoglu, B. and Kargin T. (2006). *Integration Implementations in Primary Education*, Morpa Culture Publications, Istanbul.
- Zirpoli, T.J. & Melloy, K.J. (1997). *Behavior management: Applications for teachers and parents*, An Imprint of Prentice Hall, Merrill, New Jersey .
- Villa, R.A., Thousand, J.S., Meyers, H. & Nevin, A. (1996) Teacher and administrator perceptions of heterogeneous education. *Exceptional Children*, 63 (1), 29-45.
- Walker, H. & Lamon, W. (1987). Social behavior standards and expectations of Australian and U.S. teacher groups. *Journal of Special Education*, 21, (3), 56-82.



International Journal of psycho-educational sciences

# Effects of Metacognition Instruction on Self Efficacy of Primary School Children with Learning Disabilities

Amaal Ahmed Mostafa ,PhD \*

---

\* Assistant Prof Dr., Beni Suef University, Egypt

## **Abstract**

*This study investigated the effect of using metacognition instruction on self efficacy of primary five students with learning disabilities. 60 students identified with LD participated. The sample was randomly divided into two groups; experimental (n= 30 boys) and control (n= 30 boys). T -test was employed for data analysis. Findings from this study indicated the effectiveness of metacognition instruction on self-efficacy of the target students. On the basis of the findings, the study advocated for the effectiveness of using metacognition instruction on self-efficacy of learning disabled students.*

**Keywords.** Metacognition instruction, self efficacy, learning disabled..

## **Introduction**

Bandura (1997, p. 3) describes self-efficacy as a "major basis of action" and regulation; as beliefs in one's capabilities to organize and execute the course of action required to produce given attainments [which] may entail regulating one's own motivation, thought processes, affective states, and actions, or it may involve changing environmental conditions, depending on what one seeks to manage. It is, as Schwarzer (1997) calls it, a "can-do" - or "I can-do" - cognition. It is a confidence or belief in one's ability, distinct from one's actual abilities.

Self-efficacious students exhibit optimistic thought patterns, focusing on self-aiding (i.e., task relevant, strategic thinking) rather than self-hindering (i.e., personal deficiencies, the impossibilities of the task, adverse consequences) self-talk (Bandura, 1989, 1997). In academic situations they select challenging tasks, set high goals and maintain a commitment to those goals, invest effort in their tasks, persist in the face of difficulty, and recover quickly from setbacks, frustrations, failures and self-doubt (Bandura, 1989, 1997, Schwarzer, 1997). Hackett and Betz (1989) found the due or usefulness of a task to the individual to be positively related to self efficacy. Self efficacy is also positively related to cognitive and self-regulatory strategy use (Boufford-Bouchard, Parent, & Larivee, 1991; Pintrich & Garcia, 1993; Pintrich & De Groot, 1990), and therefore an internal locus of control because individuals see themselves as having control over the situation and act accordingly. It is negatively associated with depression, helplessness, and anxiety (Bandura, 1997). Zimmerman (1989) summarizes the research indicating that high self-efficacy is related to quality learning strategies, the self-monitoring of learning outcomes, effective study skills, and skill acquisition. Research findings have indicated that self-efficacy has a direct positive effect on anxiety (Pajares & Kranzler, 1995; Schwarzer & Jerusalem, 1992) and performance (Jinks & Morgan, 1999; Pajares & Miller, 1991), since students with higher levels of self-efficacy have been found to exhibit lower levels of test anxiety and higher levels of performance than students with lower levels of self-efficacy.

## ***Metacognition and Self-Efficacy***

Meta-cognition is any knowledge or cognitive activity with subject of understanding or adjusting the cognition and divided into meta-cognition knowledge and meta-cognition experience. Meta-cognition knowledge consists of three categories about "self, task and cognitive strategies" (Cetinkaya P & Erkin E, 2003). There are two continues meta-cognition including knowledge about cognition and adjust of knowledge and control on it. Cognition occurs when the person is aware of their cognitive abilities, and the second part of metacognition is a thinking by which the thought will be regulated and monitored (Perfect and



Schwartz, 2004). Meta-cognition components are responsible for two important functions including knowledge related to cognitive topics which make the person aware of his cognition and thinking specification and also adjust cognitive activities. Adjusting the cognition is including three important skills: planning, monitoring and assessment (Mourad Ali , 2010).

A research by Moghtaderi& Khanjani (2012) showed that self efficacy is related to high levels of using cognitive and meta-cognition strategies as well as involvement and sustainability in homework completion. Other researchers(Britner & Pajares, 2006;Zusho et al., 2003) assert that high self-efficacy is associated with greater metacognition, including more efficient use of problem solving strategies and management of working time, expending greater effort, and persisting longer to complete a task, particularly in the face of obstacles and adversity. Furthermore, students with high self-efficacy tend to use metacognitive strategies to generate successful performance outcomes( Braten, et al., 2004, Pintrich & De Groot , 1990).

Mourad Ali Eissa (2010) examined The effect of metacognitive strategy training on the self -regulation of test anxiety and the associated low self-efficacy of high aspiration level- first year secondary school students. 60 students were invited to participate. The sample was randomly divided into two groups; experimental ( n= 30 , 11 boys ,19 girls)and control ( n= 30 , 9 boys and 21 girls ). ANCOVA and Repeated Measures Analyses were employed for data analysis. Findings from this study indicated the effectiveness of the program employed in alleviating test anxiety and increasing self efficacy in the target students.

In a more recent study, Saada Abdul Fatah (2013) explored the effectiveness of metacognitive strategy training on improving academic motivation, academic self- efficacy ,and relieving text Anxiety of preparatory school gifted underachievers. Findings from this study indicated the effectiveness of the program employed in improving academic motivation , alleviating test anxiety and increasing self efficacy in the target students.

Thus the present study seeks to give answers to the following question.

*Are there differences in post-test scores mean between control and experimental groups on Self Efficacy Scale ?*

## **Method**

### *Participants*

Sixty grade five students identified with LD were invited to participate. Each student participant met the following established criteria to be included in the study: (a) a diagnosis of LD by teacher's references, and learning disabilities screening test (Kamel, 1990) (b) an IQ score on the Mental Abilities Test (Mosa, 1989) between 90 and 114 (c) absence of any other disabling condition. The sample was randomly divided into two groups; experimental (n= 30 boys) and control (n= 30boys).

The two groups were matched on age, IQ , achievement and attitude tests .Table 1. shows means, standard deviations ,t- value , and significance level for experimental and control groups on age ( by month) , IQ , Self Efficacy ( pre-test).

Table 1. Pretest Scores Means, standard deviations ,t- value , and significance level for experimental and control groups on age ( by month) , IQ , and Self Efficacy

Variable	Group	N	M	SD	T	Sig.
Age	Experimental	30	132.24	1.96	-.121	-
	Control	30	132.41	2.01		
IQ	Experimental	30	109.19	7.44	-.305	-
	Control	30	109.80	8.05		
Self Efficacy	Experimental	30	39.20	4.87	1.79	-
	Control	30	40.06	3.31		

Table 1. shows that al t- values did not reach significance level . This indicated that the two groups did not differ in age , IQ , and Self Efficacy ( pre-test) .

### Measure

*Self Efficacy Scale.*(Mourad Ali Eissa, 2010) .The Scale was developed for two purposes: one, to provide an intermediate rather than specific measure of self-efficacy, and two, to provide a scale which might provide students' strong or weak self-efficacious characteristics. Reliability coefficients were computed for the full scale (math self-efficacy) and subscales (ability, effort, resiliency). These results were .91 for math self efficacy, .93 for ability, .73 for effort, and .80 For resiliency.

### Procedure

The metacognitive instructional approach of Strategies Program for Effective Learning and Thinking (SPELT) was used in the teaching of two strategies in this study. The metacognitive nature of SPELT is realized in its training techniques. SPELT combines two types of training as identified by Brown and Palincsar ( 1982. as cited by Mourad Ali, 2010). It is an 'Informed Training" (explicit instruction in strategies and their use) and a 'Self-Control Training" (explicit instruction in planning, monitoring and evaluating strategy use) program as opposed to 'Blind Training (students are taught strategies with no explanations as to why, where or when). The program is comprised of three phases (Mourad Ali, 2010). Phase I, Direct Teaching of Strategies, requires the teacher to introduce students to the benefit and use of strategies. Strategies are taught directly to students: students are Med, and reminded and prompted to use strategies. This is teacher-imposed strategy instruction. in Phase II, Maintenance, Evaluation and Generalization of Strategies, students continue to use the strategies, but also evaluate their strategy use and use the strategies in different subjects or settings. Students begin to take a more active role in their learning during this phase. Phase III, Strategy Generation by Students, necessitates complete student involvement in utilizing, monitoring, evaluating and generating strategies. Students progress from being passive to active learners, self-regulating their learning and performance.

Students received 3 training sessions a week, lasting between 40 and 45 min .Instruction took place in the regular classroom in order to naturalize the situation.

### Design and Analysis

The effects of implementing metacognition instruction on self efficacy was assessed using pre- post testing.

## Results

### Self Efficacy

Table 2. shows T. test results for the differences in post- test mean scores between experimental and control groups in self efficacy . The table shows that (t) values for *Ability, effort, resilience and total* were 19.89, 12.59, 9.13, 22,48 respectively. These value were significant at the level (0.01) in the favor of experimental group. The table also shows that there are differences in post- test mean scores between experimental and control groups in self efficacy in the favor of experimental group

*Table 2. T. test results for the differences in post- test mean scores between experimental and control groups in self efficacy*

<i>Subscales</i>	<i>Group</i>	<i>N</i>	<i>Mean</i>	<i>St. Deviation</i>	<i>T</i>	<i>Sig.</i>
<i>Ability</i>	Experimental	30	60.66	2.27	19.89	0.01
	Control	30	23.43	4.44		
<i>Effort</i>	Experimental	30	19.46	2.83	12.59	0.01
	Control	30	12.36	4.13		
<i>Resilience</i>	Experimental	30	3.33	1.07	9.13	0.01
	Control	30	2.02	2.11		
<i>Total</i>	Experimental	30	83.46	2.64	22,48	0.01
	Control	30	44.86	4.76		

## Discussion

The main objective of the present study was to explore the effects of metacognition instruction on self efficacy in fifth graders with learning disabilities. The results of this study as revealed in table 2 show that metacognition instruction was effective in improving self efficacy of students in experimental group, compared to the control group whose individuals were left to be taught in a traditional way.

Metacognition instruction is a promising approach for supporting the diverse needs of all students for it consistently had positively affected student self efficacy. The conclusions of this study encourage the use of metacognition instruction because it is of substantial benefit to students who may be struggling in the classroom and is responsible teaching in that it acknowledges not only the strengths and differences among learners, but also the increasing diversity in the modern classroom.

## Recommendations

Based on the findings and conclusions made in this study, it is recommended that use of metacognition instruction be adopted for students learning. This is due to the positive influence exerted on the students' self efficacy when metacognition instruction approach was used. Training sessions and professional development for metacognition instruction that require concerted response from all stakeholders including school principals, teachers and school authorities should be done.

## References

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist* 44(9), 11 75-1 184.

- Bandura, A. (1997). *Self-Efficacy: The exercise of control*. New York: W.H. Freeman and Company.
- Bouffard-Bouchard, T., Parent, S. & Larivee, S. (1991). Influence of self efficacy on self-regulation and performance among junior and senior high school age students. *International Journal of Behavioral Development*. 11(2), 153-164.
- Braten, I., Samuelstuen, M. S., & Stromso, H. I. (2004). Do students' Self-efficacy Beliefs Moderate the Effects of Performance Goals on Self-Regulatory Strategy Use? *Educational Psychology*, 24, 231-247.
- Britner, S. L., & Pajares, F. (2006). Sources of Science Self-Efficacy Beliefs of Middle School Students. *Journal of Research in Science Teaching*, 43(5), 485.
- Cetinkaya P & Erkin E, (2003). Assessment of metacognition and its Relationship with Reading comprehension. Achievement and Aptitude. *Journal of Education*, 19 (1), 1-11.
- Hackett, G., & Betz, N. E (1989). An exploration of the mathematics self efficacy/mathematics performance correspondence. *Journal for Research in Mathematics Education*. 20(3), 261-273.
- Jinks, J. & Morgan, V. ( 1999). Children's perceived academic self-efficacy: An inventory scale. *Cleaning House*. 72(4),22 4-230.
- Moghtaderi, L. & Khanjani,Z. (2012). The effectiveness of training cognitive /meta-cognition strategy on self-efficacy and ability of mathematical problem-solving for students with dyscalculia. *Jokull journal* , pp. 173-195.
- Mosa, F.( 1989). *Mental abilities test*. Al Nahda Al Masrya.
- Mourad Ali Eissa (2009). The effect of metacognitive strategy training on the self – regulation of test anxiety and the associated low self – efficacy of high aspiration level- first year secondary School students. *The Scaninavian Journal for Human and Applied Sciences* , Vo 1(1), pp. 107-134
- Pajares, F., & Kranzler , J. (1995). Self efficacy beliefs and general mental ability in mathematical problem-solving. *Contemporary Educational Psychology*. 20,426- 443.
- Pajares F. & Miller, M. D. (1994). Role of self-efficacy and self-concept beliefs in mathematical problem solving: A path analysis. *Journal of Educational Psychology*. 86(2), 193-203.
- Perfect, J. T., & Schwartz, B. L. (2004). *Applied metacognition*. Cambridge University.
- Pintrich, P. R, & De Groot, E V. (1990). Motivational and self-regulated Learning components of classroom academic performance. *Journal of Educational Psychology* . 82( 1), 334.
- Pintrich, P. R, & Garda, T. (1993). Individual differences in students' motivation and self-regulated learning. *Journal of Educational Psychology*. 7. 99-107.
- Saada Abdul Fatah(2013). *The Effectiveness of Metacognitive Strategy Training on Improving Academic Motivation, Academic Self – Efficacy ,and Relieving Text Anxiety of Preparatory School Gifted Underachievers*. Master Thesis.
- Schwarzer, R (1997). General perceived self-efficacy in 14 cultures. (Online).
- Schwarzer, R & Jerusalem, M. (1992). Advances in anxiety theory: A cognitive process approach. In K. k Hagivet & B. T. Johnsen (W.) *Advances in test anxiety research: Volume 7* (pp. 2-17). Lisse: Swets & Zeitünger.

Zimmerman, B. J. (1 989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*. 81(3), 329-339.

Zusho, A., Pintrich, P. R., & Coppola, B. (2003). Skill and Will: The Role of Motivation and Cognition in the Learning of College Chemistry. *International Journal of Science Education*, 25, 1081-1094.



International Journal of psycho-educational sciences

# **The Effectiveness of a Phonological Awareness Training Intervention on Phonological Working Memory of Children with Intellectual Disabilities**

Al Said Abdul Khalik ,PhD \*

---

\* Associate prof. of psychology, National Center for Evaluation and Examinations , Egypt

## **Abstract**

*This study investigated the effect of using phonological awareness training intervention on phonological working memory of children with intellectual disabilities. 30 students identified with intellectual disabilities participated. The sample was randomly divided into two groups; experimental (n= 15 boys) and control (n= 15 boys). T -test was employed for data analysis. Findings from this study indicated the effectiveness of phonological awareness training intervention on phonological working memory of the target students. On the basis of the findings, the study advocated for the effectiveness of using phonological awareness training intervention on phonological working memory of children with intellectual disabilities*

**Keywords.** phonological awareness, phonological working memory, intellectual disabilities

## **Introduction**

### *Phonological Awareness*

#### *Definition of Phonological Awareness*

Phonological awareness can be defined as the ability to define and manipulate the sound structure of oral language (Layton & Deeny,2002). Phonological awareness acquisition involves the learning of two things. First, it involves learning that words can be divided into segments of sound smaller than a syllable. Second, it involves learning about individual phonemes themselves (Torgesen, 2000). The awareness of phonological structure of a word helps children to draw connections between the spoken form of a word and its written representation (Gillon, 2004).

#### *Level of Phonological Awareness*

Phonological awareness is a general ability that has multiple dimensions varying in difficulty (Smith, Simmons & Kameenui, 1998). Gillon (2004) describes phonological awareness in terms of three different levels. They are onset-rime awareness, syllable awareness and phoneme awareness.

#### *Onset-rime Awareness*

Adams (1990) describes the rime as the obligatory part of the syllable consisting of its vowel and any consonant sounds that come after it, whereas onset consists of any consonant sounds that precede the vowel. Children are considered to have awareness of onset-rime if they can analyze syllables into onset and rime units in an oddity tasks (Treiman, 1992).

#### *Syllable Awareness*

Adams (1990) defines syllable awareness as the ability to detect the smallest unit of speech that can be produced in isolation. Some linguists suggest that children develop syllable awareness before the development of other phonological skills such as on-set rime and phonemic awareness (Adam, 1990; Tingley, Dore, Parsons, Campbell & Bird 2004; Treiman,1992).

### *Phonemic Awareness*

Gillon (2004) defines phoneme as the smallest unit of sound that influences the meaning of a word. Adams (1990) states that the awareness of phonemes includes the abilities to segment, rearrange, and substitute them one for the other. Many researchers claim that awareness of phonemes is critical for learning an alphabetic writing system (Sawyer & Fox, 1991; Treiman, 1992; Adams, 1990; Cook & Bassetti 2005). In addition, Torgesen (2000) suggests that although phonemic decoding skills should never be considered the end goal of reading, research now shows that, for most children, these skills are a critical step along the way toward effective reading skills. Share & Stanovich (1995) point out that phoneme awareness performance is a strong predictor of long-term reading and spelling success and can predict literacy performance more accurately than variables such as intelligence, vocabulary knowledge, and socioeconomic status.

### *Phonological Awareness Training*

According to Oktay & Aktan (2002), phonological ability is not accompanied by an innate ability, which allows children to manipulate phonological elements intentionally. In addition, Cassady and Smith (2004) suggest that children should be trained to blend bodycodas first, then to progress to more phonologically difficult blending tasks such as onsets and phonemes. Study by Cheung et al. (2001) also suggests the important role of phonological training in reading acquisition. They point out that bilingual children develop phonological awareness earlier, but in the end, monolingual children reach the same level once they receive phonological skill training in reading development. However, Durgunoglu (2002) argues that children can gain insight into phonological skills if they have had exposure in their L1.

### *Phonological Awareness and children with children with intellectual disabilities*

Mental retardation is defined as an intellectual functioning level at or below 70–75 as measured by standardized IQ tests, such as the Wechsler Intelligence Scale for Children—Third Edition (WISC, Wechsler, 1991) or the Stanford Binet Intelligence Scale, Fourth Edition (Thorndike, Hagan, & Sattler, 1986), plus significant limitations in communication, self-care, home living, social, leisure, and health and safety skills; self-direction; functional academics; community involvement; and/or work (Cegelka & Prehm, 1982). Children with mental retardation typically manifest some degree of phonological deficit (Reed, 1994) that may interfere with their realization of the meaning of print (Swank & Catts, 1994).

Little information is reported on the acquisition of phonological awareness in special populations (Mourad Ali, 2013, P.13). In a recent study, Mourad Ali (2013) explored the effectiveness of a phonological awareness training intervention on pre-reading skills of mentally retarded children. A total of 47 children with mental retardation participated in this study. The sample was randomly divided into two groups; experimental (n= 24, 19 boys, 5 girls) and control (n= 23, 20 boys and 3 girls). ANCOVA and Repeated Measures Analyses were employed for data analysis. Findings from this study indicated the effectiveness of the program employed in improving pre-reading skills in the target children.

Thus the present study seeks to give answers to the following question.

*Are there differences in post-test scores mean between control and experimental groups on Phonological Working Memory?*



## Method

### Participants

Children participants selected from two schools for children with children with intellectual disabilities called Al Tarbya AL Fekrya schools. Participants' IQ scores were obtained by the school's administration of either the WISC (Wechsler, 1991). The sample was randomly divided into two groups; experimental (n= 15 boys) and control (n= 15 boys). The two groups were matched on age, IQ ,and Phonological Working Memory Test Scores. Table 1 shows means, standard deviations, t- value, and significance level for experimental and control groups on age (by month), IQ, and Phonological Working Memory ( pre-test)

Table 1. Pretest Scores Means , standard deviations ,t- value , and significance level for experimental and control groups on age ( by month ) and Phonological Working Memory.

Variables	Group	N	M	SD	T	Sig.
Age	Experimental	15	128.5	3.59	-0.29	-
	Control	15	129.0	3.74		
Phonological Working Memory	Experimental	15	6.02	4.23	-0.88	-
	Control	15	6.43	5.48		

Table 1 shows that all t- values did not reach significance level . This indicated that the two groups did not differ in age and Phonological Working Memory ( pre-test) .

### Measure

Children's Test of Nonword Repetition ( Developed by the researcher for this study) . It consists of 22 Nonword .Scores range from zero- 20 . Reliability coefficients were computed for the full scale . Alpha Coefficient was 0.78 .

### Procedure

Participants were selected, then pretest data were collected using the pre- reading skills test. The classroom PA training program was conducted by the second author with the experimental class in one large group for 5 weeks with 20 minute sessions conducted three times a week .A variety of fun, play-based phonological activities were used with the class that incorporated the spectrum of PA skills (e.g., rhyming, sound/syllable matching, sound/syllable isolation, sound/syllable blending, sound/syllable addition or substitution, and sound/syllable segmentation).

The children participated by singing, listening, answering questions, and following directions. The following is a list of the PA activities addressed during training:

1. Sound Matching/Sound Identification
2. Rhyming Activities
3. Sound Addition or Substitution Activities
4. Sound/Syllable Blending Activities
5. Sound/Syllable Segmentation Activities.

The author started with the earlier developing PA skills, such as matching and rhyming, and moved throughout the continuum of PA skills. These activities were rotated from easiest to hardest throughout the 5 week training period. At the end of the study, the

posttest data were collected again using the same measure to determine the effectiveness of the PA training.

### *Design and Analysis*

The effects of implementing phonological awareness training intervention on phonological working memory of children with mental retardation was assessed using pre-post testing.

## **Results**

### *Phonological Working Memory*

Table 2. shows T. test results for the differences in post- test mean scores between experimental and control groups in phonological working memory. The table shows that (t) value 11.67. This value was significant at the level (0.01) in the favor of experimental group. The table also shows that there are differences in post- test mean scores between experimental and control groups in phonological working memory in the favor of experimental group

*Table 2. T. test results for the differences in post- test mean scores between experimental and control groups in phonological working memory*

<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>T</b>	<b>Sig.</b>
Experimental	15	13.50	1.10	11.67	0.01
Control	15	6.43	3.12		

## **Discussion**

The main objective of the present study was to explore the effects of phonological awareness intervention on phonological working memory of children with children with intellectual disabilities.

The results of this study as revealed in table 2 show that phonological awareness intervention was effective in improving phonological working memory of children in experimental group, compared to the control group whose individuals.

The present study comes to try to resolve the conflict. Many researchers are still trying to answer the "chicken and egg" question of which came first. Is PA a prerequisite for learning to read or does PA develop as a consequence of being exposed to reading instruction (Yopp, 1992). A great majority of research conducted supports the idea of PA as a powerful predictor of early reading achievement.

## **References**

- Adams, M. J. (1990). *Beginning to read [electronic resource]: thinking and learning about print* (pp.299-320).Cambridge Mass.: MIT Press.
- Cook, V. & Bassetti, B. (2005). *Second language writing systems (1st ed)*. Clevedon Buffalo: Multilingual Matters.
- Cassady, J. C., & Smith, L. L. (2004). Acquisition of blending skills: Comparisons among body-coda, onset-rime, and phoneme blending tasks. *Reading Psychology, 25(4), 261-*

272. Retrieved May 1, 2006, from *Linguistics and Language Behavior Abstracts* database.
- Durgunoglu, A. Y. (2002). Cross-linguistic transfer in literacy development and implications for language learners. *Annals of Dyslexia*, 52, 189-204. Retrieved May 24, 2006, from *Linguistics and Language Behavior Abstracts* database.
- Gillon, G. T. (2004). *Phonological awareness : from research to practice* (pp.1-60). New York: Guilford Press.
- Layton, L. & Deeny, K (2002). *Sound practice: phonological awareness in the classroom*. London: D. Fulton Publishers.
- Mourad Ali Eissa(2013). The Effectiveness of a Phonological Awareness Training Intervention on Prereading Skills of Children with Mental Retardation. *International Journal of Psycho-Educational Sciences* Issue (3), No. (3), September, PP. 12- 22
- Oktaç, A., & Aktan, E. (2002). A cross-linguistic comparison of phonological awareness and word recognition in Turkish and English. *International Journal of Early Years Education*, 10(1), 37-48. Retrieved May 30, 2006, from *Linguistics and Language Behavior Abstracts* database.
- Sawyer, D. J. & Fox, B. J. (1991). *Phonological awareness in reading: the evolution of current perspectives*. New York : Springer-Verlag.
- Share, D.L., & Stanovich, K.E. (1995). Cognitive processes in early reading development: A model of acquisition and individual differences. *Issues in Education: Contributions from Educational Psychology*, 1,1-57.
- Smith, S. B., Simmons, D. C. & Kameenui, E. J. (1998). Phonological awareness: Research Bases. In Simmons D. C. & Kameenui E. J. (eds.) *What reading research tells us about children with diverse learning needs: bases and basics* (pp. 61-128). Mahwah, N.J.: Erlbaum.
- Tingley, P. A., Dore, K. A., Lopez, A., Parsons, H., Campbell, E., & Kay-Raining Bird, E. et al. (2004). A comparison of phonological awareness skills in early French immersion and English children. *Journal of psycholinguistic research*, 33(3), 263-287. Retrieved April 16, 2006, from *Linguistics and Language Behavior Abstracts* database.
- Torgesen, J. K. (2000). *A basic guide to understanding, assessing, and teaching phonological awareness*. Austin, Tex.: Pro-Ed Mass.
- Treiman, R. (1992). The role of intrasyllabic units in learning to read and spell. In Gough, P. B., Ehri, L. C. , & Treiman, R (Eds.), *Reading acquisition* (pp.65-106). Hillsdale, N.J.: L. Erlbaum Associates.
- Yopp, H.K. (1992). Developing phonemic awareness in young children. *The Reading Teacher*, 45, 696-703.

## SUBMISSION GUIDELINES OF THE JOURNAL

- **General guidelines**

- The IJPES publishes articles in different fields of knowledge. These articles go to the process of blind peer- review.
- Authors are allowed to reprint their articles after being accepted and published in The IJPES, but with reference to the original journal; The IJPES.
- Articles to be published in The IJPES should be original.
- The IJPES can also publish Scientific conferences, Theses Abstracts, and Book Reviews.
- The statements and opinions contained in the articles of The IJPES are solely those of the individual authors and contributors and not of The IJPES. The appearance of advertisements in the Journal is not a warranty, endorsement, or approval of the products or their safety. The IJPES disclaims responsibility for any injury to persons or property resulting from any ideas or products referred to in any article or advertisement.
- Within a period of three months, the author(s) will be notified with the status of his/their article \* acceptance / refusal).
  - **Formatting Requirements**  
All contributors should apply the rules of APA styling
  - **File Formats for Online Submission**
    - Please submit a Microsoft Word (.doc) file

## ORGANIZATION OF THE MANUSCRIPT

- The first page must contain the title of the article; author(s) name(s); all departments and institutions in which the work was done; an abbreviated title for the running head; and the name, e-mail, and address for correspondence.
- **Abstract.** An informative one-paragraph abstract of not more than 200 words must accompany each manuscript. Note that longer abstracts are usually cut off at the end when displayed on Medline.
- **Keywords.** Include three to five words or short phrases, relevant to the article.
- **Footnotes.** Footnotes must appear at the bottom of the page on which they are referenced rather than at the end of the paper.
- **Tables & Figures:** tables and figures should appear in the document near where they are referenced in the text. All tables and figures must fit within 1.5" margins on all sides (top, bottom, left and right) in both portrait and landscape view.
- **Abbreviations.** All abbreviations must be explicitly defined at first usage.
- **Equations:** Mathematical equations should be clearly created and numbered in the text. The number should appear in square brackets, i.e., [ ] to distinguish them from reference numbers.
- **References( Within text).** Within the text of your manuscript, use the author-date method of citation. For instance, "As noted by Smith (1776). When there are two authors, use both last names. For instance, "Edlin and Reichelstein (1996) claim ...". If there are three or more authors give the last name of the first author and

append et al. For instance, a 1987 work by Abel, Baker, and Charley, would be cited as "Abel et al. (1987)." If two or more cited works share the same authors and dates, use "a," "b," and so on to distinguish among them. For instance, "Jones (1994b) provides a more general analysis of the model introduced in Example 3 of Jones (1994a)."

- **References Section.** All lines after the first line of each entry in your reference list should be indented one-half inch from the left margin. Authors' names are inverted (last name first); give the last name and initials for all authors of a particular work if it has three to seven authors. If the work has more than seven authors, list the first six authors and then use ellipses after the sixth author's name. After the ellipses, list the last author's name of the work. Reference list entries should be alphabetized by the last name of the first author of each work. Capitalize all major words in journal titles.

### ADVERTISING WITH THE IJPES

Editing Board of The (IJPES) opens a door for advertising with the Journal starting from the third issue, which was published in September 2013, according to the following:

1. The material advertised should be that of knowledge (e.g. books, journals, conferences, websites, school materials, charities, and institutes ....etc).
2. The advertisement should not include any immoral picture, photo, or word.
3. The material should be legal, with a specific title and position.
4. The material should not be reprinted at the same volume.
5. It is allowed for those who need long period advertising.
6. The advertisement should be previously designed by the owner, or the IJPES staff can do this with agreement.
7. The advertisement language is not limited.
8. The advertisement fee is accessible
9. Things should be disabused with and sent to : Mourad Ali Eissa email: [profmouradali@gmail.com](mailto:profmouradali@gmail.com)

**Editor –In-Chief**

*Samer Kantakji, PhD.,*

**Editor**

*Mourad Ali Eissa, PhD.*

# International Journal of Psycho-Educational Sciences



ISSN: 2325-775X ©2013