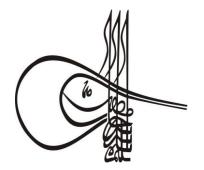
Turkish Studies



International Periodical for the Languages, Literature and History of Turkish or Turkic Volume 12/33, p. 243-260

DOI Number: http://dx.doi.org/10.7827/TurkishStudies.12790

OI Number: http://dx.doi.org/10.7827/TurkishStudies.12790 ISSN: 1308-2140. ANKARA-TURKEY

This article was checked by iThenticate.

A COMPARISON OF THE EFFECTIVENESS OF "READING TOGETHER" AND "ANIMAL ASSISTED READING TOGETHER" INTERVENTIONS ON READING FLUENCY OF A STUDENT WITH EMOTIONAL AND BEHAVIORAL DISORDER

Gül KAHVECİ* - Nergüz BULUT SERİN***

ABSTRACT

Students with emotional/behavioral disorders (EBD) have diverse needs in social and academic skills. They may display repeated behavior problems, like noncompliance, aggression, and disrespect toward authority figures accompanied by poor academic achievement. Cooccurring problem behaviors and reading difficulties create a vicious circle that each item has a negative effect on the other. The current study simply compares the effectiveness of two different reading fluency interventions during oral reading by the single subject alternating treatment design. This case study examined the effectiveness of two reading fluency interventions; "Reading Together" and "Animal Assisted Reading Together" Interventions in a fourth grade student struggling with fluency skills. When compared to baseline, "Animal Assisted Reading Together" intervention increased oral reading fluency by the end of the 7 weeks of intervention. This intervention focuses on creating a context of acceptance in which student can practice his reading skills without fear of making mistakes. The findings of this study have important implications for understanding how reading programs can function for students with EBD and extends the literature on CBC which can be a useful vehicle for promoting a shared responsibility and that applying hybrid interventions can result in acceptable and effective treatment outcomes for a student with both academic and emotional, behavioral problems.

STRUCTURED ABSTRACT

Students with emotional/behavioral disorders (EBD) have diverse needs, resulting in behavior deficits like experiencing poorer outcomes, earning lower grades, and failing to perform on-task behaviors in the

* Assist.Prof. European University of Lefke, Dr. Fazıl Küçük Faculty of Education, Department of Special Education Northern Cyprus, El-mek: gulkahveci@yahoo.com

^{**} Prof.Dr. European University of Lefke, Dr. Fazıl Küçük Faculty of Education, , Department of Guidance and Psychology Northern Cyprus, El-mek: nerguzserin@gmail.com

classroom (Ennis, Jolivette, and Losinski, 2017). Moreover, they tend to be extreme, socially unacceptable and even they may affect school work. These students may pass minimum tests at lower rates, and have more difficulty adjusting to adult life than do students with other disabilities (Frank, Sitlington, & Carson, 1995). Additionally, externalizing behaviors on the other hand may associate with lower achievement scores (Bub, McCartney, & Willett, 2007) and making academic instructions including reading problems more challenging and these behaviors may contain aggressive and disruptive behaviors, disobedience (Maughan, Pickles, Hagell, Rutter, & Yule, 2006), tantrums, and disruptive verbalizations (Ennis, 2015; Mayfield, Golston, Walsh, Reboussin, Sergent, & Hickman, 2005).

More than 6 in 10 children with EBD score in the bottom quartile in reading and they struggle and fall well below the averages in reading (Benner, Nelson, Ralston, & Mooney, 2010; Trout, Nordness, Pierce, & Epstein 2003). Educators have emphasized improving students' reading proficiency in the elementary school years and educators continue to seek information on best practices for instructing and adapting their instruction, making changes designed to meet the highly variable needs of their students. Because the consequences of poor achievement in reading skills in the elementary school years are pervasive, having detrimental effects on future school performance (Cunningham & Stanovich, 1997; Juel, 1988), cognitive capacity (Britton, Holdredge, Westbrook & Curry, 1979; Stanovich, 1986), and motivation to read (Chapman, Tunmer, & Prochnow, 2000). Even reading motivation of elementary students who have a typical development is not yet at a desired level in Turkey (Yıldız, 2013).

According to Basil and Reyes, traditional reading instruction is not suitable for children with various disabilities like EBD. In order to promote reading in such cases, it is necessary to explore new instructional strategies (2003) or new hybrid instructional studies like Canine-Assisted Reading (CAR) and Reading Together. Even though students with EBD exhibit significant academic delays, little research has addressed the effect of academic interventions for these students (Coleman & Vaughn, 2000; Falk & Wehby, 2001). Furthermore, relatively very few studies have addressed the effect of reading interventions for students with EBD specifically (Coleman & Vaughn, 2000).

The present study extends the research on the Reading Together by adding another dimension "Animal Assisted Reading" for a new instructional protocol "Animal Assisted Reading Together". This study examines the compared effects of "Reading Together" and "Animal Assisted Reading Together" interventions on student's reading fluency as measured by words read correctly per minute and a prosody scale.

Method. Children, especially those from disadvantaged groups, often lose reading skills while on summer (Reschly, 2013). For this reason with the "university and school" collaboration all students (N = 35) at one elementary school located in a rural, were invited to participate in a summer reading program.

Participant and Setting. Participant of this study selected from university summer reading program where 35 students invited to the

special center. Participant was purposefully chosen because of his emergent educational and emotional needs. Participant was a 10-year, 5-months old fourth grade student with diagnoses of EBD. He was considered a highly impulsive student who was frequently non-compliant, and off-task.

Experimental Design. In this study, a single-subject alternating treatment design (ATD) were implemented. The independent variables were "Reading Together" and "Animal Assisted Reading Together" interventions. The dependent variables were the reading fluency which was measured as measured by words read correctly per minute. Participant was exposed to the two treatment conditions concurrently in the training of oral reading fluency since ATD allows for a comparison of the relative effects of two experimental conditions on a single subject (Kearns, 1986).

The findings of this study have important implications for understanding how reading programs can function for students with EBD. In conclusion, the present study provides an application of case-based research in practice and extends the literature on CBC which can be a useful vehicle for promoting a shared responsibility and that applying hybrid interventions can result in acceptable and effective treatment outcomes for a student with both academic and emotional, behavioral problems.

Keywords: Fluency, oral reading, Reading Together, Animal Assisted Reading Together, emotional or behavioral disorders

DUYGU DURUM BOZUKLUĞU OLAN ÖĞRENCİDE OKUMA AKICILIĞININ ARTIRILMASINDA BİRLIKTE OKUMA VE HAYVAN DESTEKLİ BİRLİKTE OKUMA MÜDAHALELERİNİN ETKİLİLİKLERININ KARŞILAŞTIRILMASI

ÖZET

Duygu durum bozukluğu olan öğrenciler (DDB) sosyal ve akademik beceriler konusunda farklı gereksinimlere ihtiyaç duyarlar. Uyum sorunları, saldırganlık ve otoriteye saygısızlık gibi tekrarlanan davranış problemlerini zayıf akademik başarı ile birlikte gösterebilirler. Problem davranışlarına eşlik eden okuma güçlükleri gibi akademik sorunlar, bir diğerini olumsuz etkileyen kısır bir daire olusturur. Mevcut calısma iki farklı okuma akıcılık müdahalesinin etkililiğini karsılastırmaktadır. Bu vaka çalışmasında, iki okuma akıcılık müdahalesinin etkililiğini kıyaslayarak ortaya koymak için tek denekli desenlerden dönüşümlü sağaltımlar modelinden yararlanılmıştır. Okuma akıcılığını geliştirme maksadı ile ele alınarak kıyaslanan yaklaşımlar "Birlikte Okuma" ve "Hayvan Destekli Birlikte Okuma" müdahaleleridir. Katılımcı dördüncü sınıfı tamamlamış duygu durum bozukluğuna sahip olan bir öğrencidir. İki yöntem başlama verileri toplandıktan sonra 7 oturum olacak şekilde dönüşümlü şekilde uygulanmış ve sonrasında genelleme oturumlarına verilmiştir. Sonuçlar "Hayvan Destekli Birlikte müdahalesinin yüksek seviyede okuma akıcılığını arttırdığı, prozodi puanını ikiden beşe çıkacak şekilde olumlu etkilediği ve katılımcının okuma ilişkili motivasyonunu arttırdığı belirlenmiştir. Araştırmanın sonuçları DDB ye sahip olan öğrencilerde okuma programlarının nasıl işlev gördüğünü ortaya koyan bir yapıya sahip olup bu yapı içinde yer alan birleştirilmiş davranışsal konsültasyon uygulaması ile de sonuçlar genişletilmiştir. Genişletilmiş sonuçlardan yola çıkarak okuma akıcılığında yararlanılan hibrit uygulamaların kabul edilir, etkili sağaltımlar olabileceği konusunda olumlu veriler hem adakemik ve davranış problemleri açısından hem de duygu durum bağlantılı olarak toplanmıştır.

Anahtar Kelimeler: Akıcılık, sözlü okuma, birlikte okuma, hayvan destekli birlikte okuma, duygusal veya davranışsal bozukluklar

1. Introduction

Students with emotional/behavioral disorders (EBD) have many problems that arise within a behavioral and academic framework therefore they have diverse needs, resulting in behavior deficits like experiencing poorer outcomes, earning lower grades, failing to perform on-task behaviors, and defy rules in the classroom (Ennis, Jolivette, and Losinski, 2017), Moreover, they tend to be extreme, socially unacceptable and even they may affect school work. They may display repeated behavior problems, like noncompliance, aggression, and disrespect toward authority figures accompanied by poor academic achievement (Dunn, Shelnut, Ryan, Katsiyannis, 2017; Lane, Barton-Arwood, Nelson, & Wehby, 2008). These students have adversely affected relationships with teachers, peers, and other school personnel and they may have difficulties in adjusting to adult life because of their disruptive behaviors. They may pass minimum tests at lower rates, (Frank, Sitlington, & Carson, 1995). Additionally, externalizing behaviors on the other hand may associate with lower achievement scores (Bub, McCartney, & Willett, 2007) and making academic instructions including reading problems more challenging and these behaviors may contain aggressive and disruptive behaviors, disobedience (Maughan, Pickles, Hagell, Rutter, & Yule, 2006), tantrums, and disruptive verbalizations (Ennis, 2015; Mayfield, Golston, Walsh, Reboussin, Sergent, & Hickman, 2005; Yıldız & Ceyhan, 2016). Students continue to struggle academically because of the frequency of these behaviors throughout their school careers. Teachers often become frustrated when handling problematic situations and they usually provide less instruction for students who are disruptive, instead of helping them cope and succeed in school and as a result they may Show limitations in their ability to provide academic instruction to their students (Kevin, Kenton & Philip, 2005). Despite the problems related to education of students with EBD, a great number of researches support some functional and promising educational methods (Dunlap & Childs, 1996; Shinn, Walker, & Stoner, 2002). It is quite critical to improve academic competency and to identify effective interventions addressing the academic progress of students with EBD (Mooney, Epstein, Reid, & Nelson, 2003; Nelson, Benner, Lane, & Smith, 2004). Wagner, Kutash, Duchnowski, Epstein, and Sumi (2005) put forward that almost six in every ten children with this disorder score in the bottom quartile in reading skills and they struggle and fall well below the averages in reading classes (Benner, Nelson, Ralston, & Mooney, 2010; Trout, Nordness, Pierce, & Epstein 2003).

Reading Fluency

Educators and researchers work together for improving students' reading proficiency specially in the elementary school years and they continue to seek information on best practices for instructing and adapting their reading instructions, making changes designed to meet the highly variable needs of their students with EBD. Because the consequences of poor achievement in reading

skills in the elementary school years are pervasive, having detrimental effects on future school performance (Cunningham & Stanovich, 1997; Juel, 1988), cognitive capacity (Britton, Holdredge, Westbrook & Curry, 1979; Stanovich, 1986), and motivation to read (Chapman, Tunmer, & Prochnow, 2000). Even reading motivation of elementary students who have a typical development is not yet at a desired level in Turkey (Yıldız, 2013; Yıldız, Ataş, Aktaş, Yekeler, & Dönmez,2015). There are several factors that can cause a decrease in reading motivation.

Some of these factors are related to vicious circles. One vicious circle is a kind of cycling process due to co-occurrence of reading and behavior problems which has a negative effect on the other (Cornwall & Bawden, 1992; Hinshaw, 1992). The other vicious circle is the Matthew effects (rich-get-richer effect). The reverse case is also true where poor-get-poorer, leading to school and academic failure because of the negative feedback cycle of problem behaviors (McGee, Williams, Share, Anderson and Silva, 1986). Such cycles of co-occurrence would complicate intervention efforts and an effective remediating although there are many effective reading fluency strategies.

Oral Reading Fluency (ORF). "Fluency is a well-known dimension of a behavior to measure which can be considered as an indicator of instructional outcomes by combining reading accuracy and speed including reading with proper expression following appropriate punctuations" (Friedland, Gilman, Johnson, and Demeke, 2017). There is vast number of research about effective intervention techniques on reading fluency for students with special needs (Özbek, and Girli, 2017).

Prosody. One of the crucial component of fluency is prosody (Kuhn, Schwanenflugel, & Meisinger, 2010) and the term explains reading with expressiveness which involves appropriate phrasing, pauses, stress, and intonation (Dowhower, 1991).

Some of the effective reading fluency strategies include Neurological Impress Method (NIM) and Repeated Readings. Neurological Impress Method (NIM) is a kind of assisted reading strategy. The teacher and student have a copy of the same text and they sit side by side each. They perform an almost synchronized reading chorally and the teacher should read the text slightly ahead of the student, with appropriate prosody. NIM can provide a model of prosodic oral reading in order to read fluently and accurately (Eldredge, 1990).

In (1979) Samuels introduced a promising instructional fluency protocol called the method of repeated reading (LaBerge and Samuels, 1974). Then a meta-analysis research performed by Therrien (2004) concluded that repeated readings and NIM can be used together to support fluency development. In a reading intervention study, the leading teacher utilized the NIM/Repeated Readings method and observed the student success in reading fluency skill development within 10 week from a late first grade to a third grade reading level (Mohr, Dixon, & Young, 2012).

The combinations of reading interventions like NIM and repeated readings have a great potential because the interventions complement one another. The reason for it is that: during NIM, the teacher provides a great support of the student with word recognition, and prosody and by infusing repeated readings to the NIM the students are given an opportunity for more independent practice. NIM and repeated readings can be combined together as an instructional protocol referred to as Reading Together. According to Basil and Reyes, for students with EBD traditional reading instruction is not very functional. In order to develop fluent reading with the appropriate prosody in such cases, it is necessary to explore new instructional strategies (2003) or new hybrid instructional studies like Canine-Assisted Reading (CAR) and Reading Together.

Canine-assisted Reading Strategies. One form of an animal-assisted intervention is the Canine-assisted reading strategies (Hall, Gee and Mills, 2016). The use of dogs, in educational programs has recently received growing attention Suk-chun Fung. (2017). The canine-assisted

reading strategies are mostly applicable to early childhood and elementary schools (Le Roux, Swartz, and Swart 2014) and focuses on creating a context of acceptance in which children can practice their reading skills without fear of making mistakes. Students with EBD if they are struggling in fluent reading they feel more negatively toward this skill because of the embarrassment or frustration (Mckenna & Kear, 1990). This can make fluent reading perceived as a challenging skill which can be hard to implement effective programs because they want to escape from reading exercises.

For children who are not learning to decode and who are not reading much, every effort must be made both to keep them motivated to read and studies conclude positive impacts of canine-assisted reading strategies on improving reading skills and related school performance (Paradise, 2007). The population for Paradise's study was 136 struggling readers in the first through fifth grades who participated in the CARE to Read program and experimental group demonstrated better reading skills, a more positive attitude toward schoolwork, and a greater willingness to participate in classroom activities, greater success with higher-level thinking skills, and more self-confidence than students in the comparison group. In a study of a canine-assisted reading program (Kirnan, Siminerio, and Wong 2016), the educational instructors reported that the students looked forward to having the canines come into their classroom every week; the visits made the students want to perform well, elicit a calming effect, produces many positive interactions and reduce stress consequently. Interestingly, the presence of a canine in a room may add a sense of normalcy, safety and friendliness (Parish-Plass 2008). It is believed that a canine's presence and relationship can change the tone of a reading session from boring and challenging to interesting, safe and serve as a positive interaction model for children (Fung 2014). This special contact between canine and human can offer a unique form of support to children's learning, physical health, and emotional well-being which has a great importance for students with EBD.

Conjoint Behavioral Consultation. Although students with EBD have both academic and behavioral problems, researchers have focused more intensely to intervention research on behavioral problems than academic problems (Webby, Faulk, Barton-Ardwood, Lane, & Cooley, 2003). According to Wagner (2005), students with EBD were approximately 2.2 grade levels behind in reading. Additionally, students with reading difficulties present both depression and anxiety compared to students with typical reading skills (Carr & Punzo, 2003). One method of addressing the academic problems, like reading fluency, of students with EBD is to implement effective interventions (Mooney et al., 2003). Educators in the field of special education are preferred to prove the effects of their programs and interventions (Yssledyke, Thurlow, & Shriner, 1992) via conjoint consultation processes where (CBC) address the academic, social, or behavioral needs of a student by functioning like a problem solving mechanism to for whom all parties assume some responsibility (Sheridan, 1997). CBC is a family-school- (and university in this research) partnership intervention designed to involve parents and teachers (Sheridan et al., 2017) in a problem-solving process on behalf of a child struggling with externalizing behaviors in the home and school settings (Sheridan & Kratochwill, 2008) with a student who has EBD.

Even though students with EBD exhibit significant academic delays, little research has addressed the effect of academic interventions for these students (Coleman & Vaughn, 2000; Falk & Wehby, 2001). Furthermore, relatively very few studies have addressed the effect of reading interventions for students with EBD specifically (Coleman & Vaughn, 2000).

The present study extends the research on the Reading Together by adding another dimension "Animal-Assisted Reading" for a new instructional protocol "Animal-Assisted Reading Together". This study examines the compared effects of "Animal Assisted Reading Together" and "Reading Together" interventions (two independent variables) on student's reading fluency. Dependent variable data were collected by as "words read correctly per minute" and "prosody scale".

2. Method

Children, especially those from disadvantaged groups, often lose reading skills while on summer (Reschly, 2013). For this reason with the "university and school" collaboration all students (N = 35) at one elementary school located in a rural, were invited to participate in a summer reading program. Summer reading programs, such as those offered in schools or universities can positively influence how much a child reads during the summer (Kim & White, 2011). However, a successful summer literacy program requires more than access to reading materials (Compton-Lilly, Caloia, Quast, & McCann, 2016). For this reason researcher consider the educational levels of the students and their interests when creating reading materials for three different levels and a picture reading material. Moreover, she included nontraditional instructions such as related kinesthetic, exploratory, and artistic activities as Smith, Erwin, and Carter suggested (2014).

2.1. Participant and Setting

Participant of this study selected from university summer reading program where 35 students invited to the special center. The related center is located in the university and designed for children with special needs. Participant was purposefully chosen because of his emergent educational and emotional needs. It was stated in the CBC interviews with the school's principal and an instructional specialist that the participant came from a state-sponsored residence, was adopted by a suitable family, and exhibited both academic and behavior problems. It was revealed that the student has a habit of escaping from the state-sponsored residence and his class in school. Participant was a 10year, 5-months old fourth grade student with diagnoses of EBD. He was considered as a highly impulsive student who was frequently off-task and most of the time non-compliant. Parent and teacher reported high levels of hyperactivity, attention problems, interpersonal conflict, and oppositional behavior that interfered with his learning. His IQ score is 94 and his TRF (The Teacher's Report Form of the Child Behavior Checklist/CBCL-TRF: Achenbach and Rescorla, 2001) profile indicated significant behavioral problems; argues a lot; impulsive, disturbs other students, acts without thinking, not liked much by other students, fails to carry out assigned tasks. His SRSS (The Student Risk Screening Scale (SRSS) is a free access, systematic screener for antisocial behavior that was initially designed for use in elementary schools (Drummond, 1994). "(SRSS) includes seven items: (a) steal; (b) lie, cheat, sneak; (c) behavior problem; (d) peer rejection; (e) low academic achievement; (f) negative attitude; and (g) aggressive behavior. Teachers independently rate on these items using a 4-point Likert-type scale: never = 0, occasionally = 1, sometimes = 2, and frequently = 3". Items are summed to offer a total score, placing students into low- (0-3), moderate-(4–8), or high- (9–21) risk categories) profile indicated high risk with a total score of 19. Participant's mother, two sisters and primary school principal, served as joint consultees.

All intervention processes were performed in the university center for children with special needs.

2.2. Materials

Instructional passages. Fourth-grade reading passages were written specifically. Only expository texts were used. Passages contained approximately 180 words. These passages were used for instruction in the treatment condition. Approximately 25 passages were consructed to provide new reading material. The average passage length was 180 words for the fourth-grade passages (range = 125-260). The passages with high content overlap were created by rewriting the original passages using the majority of words from the original instructional story. The percentage of word overlap was calculated by dividing the number of words that appeared in both passages by the total number of words in the high content overlap passage. The mean word overlap was 87% (range, 83% to 91%).

2.3. Experimental Design

In this study, a single-subject alternating treatment design (ATD) were implemented. The independent variables were "Reading Together" and "Animal Assisted Reading Together" interventions. The dependent variables were the student's reading fluency as measured by words read correctly per minute. Participant was exposed to the two treatment conditions concurrently in the training of oral reading fluency since ATD allows for a comparison of the relative effects of two experimental conditions on a single subject (Kearns, 1986).

2.4. Procedures

Oral reading fluency measurements. Oral reading fluency can be scored as correctly read words per minute (CRW per min). The participant's performance was assessed by words read in a minute correctly minus the number of errors. An error was considered as any mispronunciation of the word or substitutions, additions, omissions, or 3-second pauses or struggles (Akyol, Yıldırım, Ateş, Çetinkaya and Rasinski 2014). To reflect incremental differences or change, oral reading fluency can be counted as words read correctly per minute so that scores reflect small,roughly equal interval units (L. S. Fuchs & Fuchs, 1999), which permits researchers to use oral reading fluency for determining gains or performance slopes which track the development of reading competence within an individual. This reading competence and improvement have been shown to be more sensitive to intra-individual differences (Marston, Fuchs, & Deno, 1985).

Intervention Components. Reward (R): Two practitioners tell the participant that a tangible item like biscuits, candy, stickers or access to a privilege like playing computer games for 10 min. can be available to the participant if he gets good reading fluency results on predetermined individualized performance goal. The performance goal criteria is based on a 5 % increase in correct words per minute, with fewer than 10 errors, derived from the participant's previous performance on the passage. Prior to all the instructions and assessments, the participant prefers one reward to earn for meeting the goal criteria. The reward is delivered after the assessment if the participant met or exceeded the goal criteria.

Listening Passage Preview: One practitioner reads the instructional passage to the participant at a comfortable pace while simultaneously the other practitioner monitors the participant to ensure that he is correctly following along with his finger.

Repeated Readings with Performance Feedback: The practitioners have the participant reread a passage three times and in every time, the practitioners tell the student how fast he read the passage and how many errors were made.

Phrase Drill: As the participant reads the passage the first time, the practitioner underlines the participant's errors. After the participant finishes reading the passage, the practitioner points to and reads the error words slowly and gently to the participant. The participant reads the error words correctly to the practitioner, and then reads the related sentence again. This procedure is repeated for each error word in the passage.

The Tutors

For two weeks for 3-4 hrs. per day intervention requires a one-on-one tutoring, which is a substantial commitment, the recruiters extended invitations to undergraduate students from special education department. Among all undergraduate students two was selected as practitioners according to their early experience of teaching.

The Canine

Before starting reading sessions researcher worked exclusively with the canine as required (Jalongo, Astorino, and Bomboy 2004) so that animal has good manners, adapt easily to unfamiliar circumstances, allows strangers to touch them, be calm during petting, not be afraid of people walking unsteadily, and has good health like being vaccinated, has a negative fecal test every 12 months, and being clean and well groomed. In order to increase participant's motivation and ability to read programs to increase a good mannered dog incorporated into the reading class.

Consultation process

CBC includes the four-stage problem-solving process: problem identification (PI), problem analysis (PA), treatment implementation (TI), and treatment evaluation (TE), (Kratochwill and Bergan, 1990; Sheridan et al., 1996a). Consultation interviews with the family were conducted in the university center for children with special needs for 45 to 60 minutes in length. Interviews with the primary school principal were conducted in principal's office for 15 to 60 minutes in length.

Conjoint problem analysis

During this stage of consultation, participant demonstrated consistently high ratings of target problem behavior (noncompliance and off-task behavior) during fluent reading instructions. Moreover, participant escaped twice from the instruction room in transition times. Following a discussion of intervention strategies with family and primary school principle, the consultant (researcher) recommended inserting a new dimension to ongoing reading fluency instructions. The mutually agreed variety of the intervention was to introduce a dog where participant read the materials to researcher's dog. The rewards for on-task and compliant behavior were considered a break time with the dog as well. Teachers continued to collect observational data during the treatment implementation phases of consultation. The consultant checked data collection of the participant and continued observing two teachers for giving supervision after the intervention immediately and offered performance feedback, and provided encouragement for accurate implementation of the interventions. After the daily sessions, consultant met with mother and two sisters to review the students' behavioral and reading fluency progress. The objective was to provide direct support from the consultant, thereby enhancing treatment integrity (Noell, Gresham & Gansle, 2002).

2.4.1. Baseline

Baseline data is consisting unpracticed initial readings scored as correctly read words per minute. To assess current level of performance, participant read three passages.

2.4.2. Comparison condition

During the comparison phase, two interventions were being compared: "Reading Together" and "Animal Assisted Reading Together" The two tutors implemented the appropriate intervention for the participant and recorded correct responses.

2.4.3. Generalization

Skill generalization in this study is defined as the generalization of fluent reading on texts which was located in participants' Science and Turkish book.

2.5. Treatment acceptability

The consultees' subjective perception of the effectiveness of CBC was determined by asking the questions 'Was consultation an acceptable intervention for the behavior problems and academic behaviors?' and 'Do you offer CBC for other students with the same behavior problems and academic

behaviors?' Participant mother and his two sisters answered both of the questions positively. This suggests that consultees viewed CBC as a highly effective process.

2.6. Consultant effectiveness

The consultant effectiveness (Erchul, 1987) was administered to mother and two sisters following the final consultation interview to assess their perceptions of consultant effectiveness with CBC processes. Mean consultant effectiveness ratings for consultees out of a possible score of 7, the score for parent was 6.90 and sisters were 6.96 and 7 respectively. This indicates a high level of perceived effectiveness and satisfaction with the consultant and the CBC procedures. Parent (mother) and two sisters strongly agreed to items such as 'The consultant offered helpful information', 'The consultant was a good listener', 'Consultant was generally helpful', and 'I would request services from this consultant again'.

2.7. Treatment Integrity

There are several steps are involved when developing a direct observation system (Gresham, 1989; Gresham et al., 2000; Lane et al., 2004) for the treatment integrity. For this reason researcher created a detailed list of the intervention, defined the components of the treatment in observational terms, and finally rated the occurrence and nonoccurrence of each treatment component to calculate the percentage of treatment integrity. The detailed list of intervention includes item like; "have a copy of the text for you and the participant, read a page or paragraph aloud together, read slightly ahead of the student, read with good expression that matches meaning of text, have the participant reread the page/paragraph aloud, continue for 20 minutes and give 15 minutes break for three hrs., complete the intervention log, continue cycle for 6 times in a day".

2.8. Treatment implementation

The agreed-upon intervention plan was delivered to participant during the treatment implementation stage of CBC. Two primary components were involved in the procedure: (1) reading fluency and (2) prosody. For reading fluency "Reading Together" and "Canine Assisted Reading Together" interventions were used interchangeably.

Independent measures-Overview of Reading Together and Canine Assisted Reading Together Interventions

Reading Together is a kind of hybrid of the NIM and repeated readings procedures. The teacher and student read aloud together, each with a copy of the text with a different page design. The responsible teacher reads slightly ahead of the student with appropriate prosody. After reading a page together the student then rereads the section aloud once independently. The student and teacher continue this process for approximately 20 minutes. Although the main focus was on reading fluency, the tutor and students typically engaged in a short conversation about the content of the text after the tutoring was complete. Finally, the teacher took approximately 5 minutes to complete an intervention log that recorded the time spent on the intervention (always 20 minutes study and followed with 15 min. break time), and any notes to the researcher.

The Reading Together strategy is divided into three steps according to the reading material level. Step 1 (24 sessions in 4 days) the participant experiences a number of short, pleasant, reading material with reading-related activities under the supervision of the two tutors. At first they are relatively easy and short, but gradually they become more challenging. There is comprehension questions at the end of each reading passage used during this phase of the program but collected data were excluded from this research as main goal was concentrated on reading fluency. In step 2 (18 sessions in 3 days) the two tutors and participant read advance level researcher generated expository

reading materials, then the participant re-reads the text, and then answers comprehension questions orally. Than in the seventh day of strategy implementation, the tutor stops the reading at a point, and the participant is asked kindly to read the text by himself where the tutors stops reading without getting any help. In stage 3 (12 sessions) the tutor and participant read participant's school books. During the Reading Together strategy intervention participant play football in the break time. However, in the Canine Assisted Reading Together intervention tutors let participant read his reading materials to the canine and play with him during 15min breaks.

Dependent Measures

The dependent measures were the number of words read correctly per minute on the worksheets. A word was scored as correct if no substitutions, insertions, omissions, misplaced emphasis, or repeatedly reading occurred. Additional measures for fluent reading considered and a careful prosody data collection was performed for the related items; not paying attention to accent and tone while reading, making unnecessary pauses, making unnecessary turns, losing the place once read, reading without paying attention to punctuation marks, not reading with an audible tone of voice and not concentrating on the text. Related data were collected before and after the interventions were ended. For the off-task behavior in fluent reading skill acquisition, data collection was performed by observing not participant but tutors. "Look at here.", "Concentrate here", "Follow the rules" like statements of the two tutors were counted during %90 of all sessions. Participant's samples of passage-reading were recorded to an audiocassette recorder.

3. Results and Discussion

Two different interventions were applied daily for 2 hours and for 2 weeks. The student read 22, 23, 22 words a minute before the instruction and the average passage length was 180 words. Instruction sessions were performed upon one of the 25 passages with three repetitions and final readings were done with a similar text which has a high content overlap with a single reading were performed and the last three consecutive data were shown, as a generalization phase with a text material from participant's science and Turkish school books, on the graph. Reading fluency data were 45, 48, 50, 45, 60, 64, and 72 words read correctly per minute for the Canine Assisted Reading Together with 51, 58, 59 correct words per minute for the generalization phase and 20, 12, 12, 9, and 6 for the Reading Together Intervention. Reading Together intervention was terminated according to the intervention data because of the decreased efficiency.

In the practice at home, similar reading materials were used. Home-based practices were conducted with mother and two sisters. Since the student did not read at home, the starting date was recorded as 0 by the family. The following data are taken at home after the application; 25, 35, 38, 20, 31, 42 and 35, 44, 55 for the generalization phase. The comprehension questions related to the text were determined to increase in the university settings (from 3/5 to 5/5 and in the home environment from 3/5 to 4/5). It has been determined that the prosodic scale increases from 2 to 5 where the highest score on the scale is 6. Moreover, off-task behavior is almost none for the Canine Assisted Reading Together intervention.

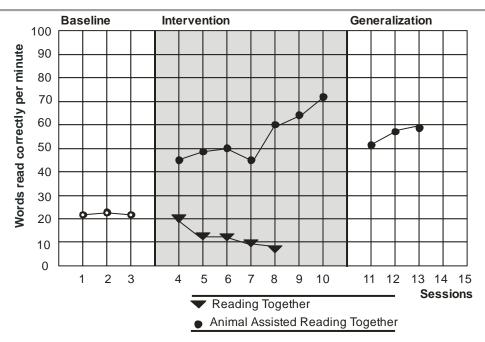


FIGURE 1. "Reading Together" and "Animal (canine) Assisted Reading Together" intervention data across phases.

4.1.Implications for Research and Practice

"Animal Assisted Reading Together" intervention offers the most promise for studying reading fluency effectively for students with EBD. In order to accomplish effective reading fluency intervention animal assisted reading dimension can be added to the intervention for accelerating participant motivation and learning.

Understanding how reading programs can function for students with EBD can be considered as a valuable finding of this study. The typical developmental implication of oral reading fluency involves greatest development in the primary grades, with a negatively accelerating data through the intermediate grades (Fuchs, Fuchs, Hamlett, Walz, & Germann, 1993) so that reading fluency interventions can take place as early as possible in primary school years. Like in the case of "Animal Assisted Reading Together" intervention positive experiences in primary school play a critical role in student's learning (Sheridan, Clarke, & Christenson, 2014) and may prevent the long-term impact of behavior problems like escape behavior from reading as an example for off-task behavior (Dishion & Patterson, 2006).

Academic competence perception may play an important role in shaping achievement outcomes for primary school students, is a finding that is correlated with the literature. Once student is confident of his ability to succeed, he becomes more engaged and learns more. On the other hand, participant is not likely to attempt educational tasks when he feels he cannot succeed. And participant is not likely to feel that he can succeed unless he has previously experienced success, along with the support needed to achieve that success. These findings suggest that as early as the primary schools and teachers begin to build students' confidence in their ability to do well, the better off students will be. Because students' notions of their capacity to be successful are so important that, school contexts should be designed in ways that support feelings of success. This study found that among two reading fluency interventions "Animal Assisted Reading Together" is the most promising one for the participant probably he may feel safe and relaxed during reading exercise without hearing any

judgmental statements — were key to enhancing the development of perceived competence. Animals which students see as supportive can create a learning atmosphere in which students feel confident and respect themselves about their ability to succeed. In the case of family involvement inconsistent and harsh parenting practices are linked to cascading consequences for children, including conduct problems, social failure, and violence in adolescence (Dodge, Greenberg, & Malone, 2008) whereas warm and consistent parenting strategies are related to higher academic performance (Downer & Pianta, 2006) and fewer behavior problems (Hill, Bush, &Roosa, 2003). Parental involvement in this research has a positive impact on student's summer reading development and this finding is consistent with the literature (Rivera & Lavan, 2012; Sandberg Patton & Reschly, 2013). A parent component in a summer literacy program can be useful for letting parents to learn new strategies and activities to use at home to support their children's reading fluency development (Fiore & Roman, 2010).

As a result, well-timed relationship focused interventions that are designed to address behavioral concerns early, strengthen parenting and teaching practices, and create consistent environments across home, school and institutions of higher education which are linked to the improvements in academic skills and reductions in children's disruptive, externalizing behaviors. Knoche, points the importance of relationship focused interventions for creating consistent environments where academic and behavioral improvements can nourish (Knoche et al., 2012). According to Paula, and Steuart both parents and teachers should prefer a conjoint consultation model (1999). The model provides a guidance within which support educators can bridge the research-to-practice gap and deliver high quality reading methods within consultation services with a shared responsibility in real world settings.

In conclusion, the present study provides an application of case-based alternating treatment research in practice and extends the literature on CBC which can be a useful implementation for promoting a co-work and that applying hybrid methods can result in effective and acceptable treatment outcomes for a student with both academic and emotional, behavioral problems. As part of an academic success of students with EBD, special education teacher training strategies should focus on assisting them to become proactive, collaborative and creative teachers for designing supportive environments with high but achievable standards.

4.2. Limitations and Future Research

Case studies can be a limitation because findings may not be generalized and in future studies, the relationships can be investigated which can emerge between constructs like collaborative teacher-to-student and animal-to-student interactions. In addition just like animal assisted therapies teachers may use programs for cooping aggressive behaviors. Such promising programs like these help teachers, move away from their reactive approach to children's social-emotional well-being to a proactive approach. Treating students well and maintaining their well-being may lead them to feel more confident about themselves and as a consequence they may become more engaged, and finally they may learn more. But a positive initial experience may not be enough, as the influences fade from one year to the next. In a future study, researchers can engage parents in reading fluency strategy workshops prior to the start of summer. During these workshops, parents can be provided a variety of reading materials with hands craft activities to support their children where reading can be much more fun. Students will need high-quality instructions in order to be successful in the long term throughout their school careers.

REFERENCES

- Achenbach, T.M. & Rescorla, L.A. (2001) Manual for the ASEBA School-Age Form & Profiles. Burlington, VT: University of Vermont, Research Center for Children, Youth, and Families.
- Akyol, H., Yıldırım, K., Ateş, S., Çetinkaya, Ç., & Rasinski, T. V. (2014). Okumayı Değerlendirme: Öğretmenler İçin Kolay ve Pratik Bir Yol. Pegem Akademi Yayıncılık.
- Basil, C., & Reyes, S. (2003). Acquisition of literacy skills by children with severe disability. Child Language Teaching and Therapy, 19, 27-48.
- Benner, G. J., Nelson, R. J., Ralston, N., & Mooney, P. (2010). A metaanalysis of the effects of reading instruction on the reading skills of students with or at risk of behavioral disorders. Behavioral Disorders, 35(2), 86–102.
- Bub, K. L., McCartney, K., & Willett, J. B. (2007). Behavior problem trajectories and first-grade cognitive ability and achievement skills: A latent growth curve analysis. Journal of Educational Psychology, 99, 653–670.
- Britton, B. K., Holdredge, T. S., Westbrook, R. D., Curry, C. (1979). Using cognitive capacity in reading text. Perceptual & Motor Skills, 48, 395–400.
- Carr, S. C., & Punzo, R. P. (2003). The effects of self-monitoring of academic accuracy and productivity on the performance of students with behavioral disorders. Behavioral Disorders, 18, 241-250.
- Chapman, J. W., Tunmer, William E., & Prochnow, J. E. (2000). Early reading-related skills and performance, reading self-concept, and the development of academic self-concept: A longitudinal study. Journal of Educational Psychology, 92, 703-708.
- Compton-Lilly, C., Caloia, R., Quast, E., & McCann, K. (2016). A closer look at a summer reading program: Listening to students and parents. The Reading Teacher, 70(1), 59–67.
- Cornwall, A., & Bawden, H. (1992). Reading disabilities and aggression: A critical review. *Journal of Learning Disabilities*, 25, 281 288.
- Cunningham, A. E., & Stanovich, K. E. (1997). Early reading acquisition and its relation to reading experience and ability 10 years later. *Developmental Psychology*, 33, 934-945.
- Dishion, T. J., & Patterson, G. R. (2006). The development and ecology of antisocial behavior in children and adolescents. In D. Cicchetti, & D. Cohen (Eds.), Developmental psychopathology, Vol 3: Risk, disorder, and adaptation (pp. 503–541) (2nd ed.). Hoboken, NJ: John Wiley & Sons, Inc.
- Dodge, K. A., Greenberg, M. T., & Malone, P. S. (2008). Testing an idealized dynamic cascade model of the development of serious violence in adolescence. Child Development, 79, 1907-1927.
- Dowhower, S. L. (1991). Speaking of prosody: Fluency's unattended bed fellow. Theory Into Practice, 30, 158-164.
- Downer, J. T., & Pianta, R. C. (2006). Academic and cognitive functioning in first grade: Associations with earlier home and child care predictors and with concurrent home and classroom experiences. School Psychology Review, 35, 11-30.

- Dunlap, G., & Childs, K. E. (1996). Intervention research in EBD: An analysis of studies from 1980-1993. *Behavioral Disorders*, 21, 125–136.
- Dunn, M. E., Shelnut, J., Ryan, J. B., Katsiyannis, A. (2017). A Systematic Review of Peer-Mediated Interventions on the Academic Achievement of Students with Emotional/ Behavioral Disorders. Education And Treatment Of Children, 40(4), 497–524.
- Ennis, R.P., Jolivette, K., and Losinski, M. (2017). The Effects of Writing Choice Prompt on the Written Narratives of Students With Emotional and Behavioral Disorders: A Case Study of an Abandoned Single-Case Design. Behavioral Disorders, 42(4) 185–195.
- Ennis, R. P. (2015). Simultaneously addressing academic and behavioral needs of students with and at-risk for E/BD using self-regulated strategy development. Beyond Behavior, 24, 3–9.
- Erchul, W.P. (1987) 'A Relational Communication Analysis of Control in School Consultation', *School Psychology Review* 4: 621–32.
- Eldredge, J. L. (1990). Increasing reading performance of poor readers in the third grade by using a group assisted strategy. Journal of Educational Research, 84, 69–77.
- Frank, A. R., Sitlington, P. L., & Carson, R. R. (1995). Young adults with behavioral disorders: A comparison with peers with mild disabilities. Journal of Emotional and Behavioral Disorders, 3, 156–164.
- Friedland, A., Gilman, M., Johnson, M., Demeke, A. (2017). Does Reading-While-Listening Enhance Students' Reading Fluency? Preliminary Results from School Experiments in Rural Uganda. Journal of Education and Practice, 8(7), 82-95.
- Fuchs, L. S., & Fuchs, D. (1999). Monitoring student progress toward the development of reading competence: A review of three forms of classroom-based assessment. School Psychology Review, 28,659–671.
- Fuchs, L. S., Fuchs, D., Hamlett, C. L., Walz, L., & Germann, G. (1993). Formative evaluation of academic progress: How much growth should we expect? School Psychology Review, 22, 27–48.
- Fung, S. C. 2014. "Effect of Animal-Assisted Play Therapy on Facilitating Social Behaviour for Children with Autism: A Preliminary Comparison Study." Human-Animal Interaction Bulletin 2 (2): 40–59
- Gresham, F. M. (1989). Assessment of treatment integrity in school consultation and prereferral intervention. School Psychology Review, 18, 37–50.
- Gresham, F., MacMillan, D. L., Beebe-Frankenberger, M. B., & Bocian, K. M. (2000). Treatment integrity in learning disabilities intervention research: Do we really know how treatments are implemented? Learning Disabilities Research and Practice, 15, 198–205.
- Hill, N. E., Bush, K. R., & Roosa, M. W. (2003). Parenting and family socialization strategies and children's mental health: Low-income Mexican American and Euro-American mothers and children. Child Development, 74, 189-204.
- Hinshaw, S. P. (1992). Externalizing behavior problems and academic underachievement in childhood and adolescence: Causal relationships and underlying mechanisms. *Psychological Bulletin*, 111, 127 155.

- Jalongo, M. R., T. Astorino, and N. Bomboy. 2004. "Canine Visitors: The Influence of Therapy Dogs on Young Children's Learning and Well-Being in Classrooms and Hospitals." Early Childhood Education Journal 32 (1): 9–16.
- Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. Journal of Educational Psychology, 80, 437–447.
- Kearns, K. (1986). Flexibility of single-subject experimental designs. Part II: Design selection and arrangement of experimental phases. Journal of Speech and Hearing Disorders, 51, 204–213.
- Kevin, S.S., Kenton, D.R., & Philip, L. G. (2005). Teachers of Students With Emotional and Behavioral Disorders Reported Professional Development Needs: Differences Between Fully Licensed and Emergency-Licensed Teachers. *Preventing School Failure*, 49: 2, 41-46.
- Kim, J. S., &White, T. G. (2011). Solving the problem of summer reading loss. Phi Delta Kappan, 92(7), 64–67.
- Kuhn, M. R., Schwanenflugel, P. J., & Meisinger, E. B. (2010). Aligning theory and assessment of reading fluency: Automaticity, prosody and definitions of fluency. Reading Research Quarterly, 45, 232-253. http://dx.doi.org/10.1598/RRQ.45.2.4
- LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. Cognitive Psychology, 6, 293–323.
- Lane, K. L., Barton-Arwood, S. M., Nelson, J. R., & Wehby, J. (2008). Academic performance of students with emotional and behavioral disorders served in a self-contained setting. Journal of Behavioral Education, 17, 43–62.
- Lane, K. L., Bocian, K. M., MacMillan, D. L., & Gresham, F. M. (2004). Treatment integrity: An essential—but often forgotten—component of school-based interventions. Preventing School Failure, 48(3), 36-43.
- Marston, D., Fuchs, L. S., & Deno, S. L. (1985). Measuring pupil progress: A comparison of standardized achievement tests and curriculum-related measures. Diagnostique, 11(2), 77-90.
- Mayfield, E., Goldston, D. B., Walsh, A. K., Reboussin, B. A., Sergent S., & Hickman, E. (2005). Severity of emotional and behavioral problems among poor and typical readers. Journal of Abnormal Child Psychology, 33(2), 205-217.
- Maughan, B., Pickles, A., Hagell, A., Rutter, M., & Yule, W. (2006). Reading problems and antisocial behavior. Developmental trends in comorbidity. Journal of Child Psychology and Psychiatry and Allied Disciplines, 37(4), 405-418.
- McGee R, Williams S, Share DL, Anderson J, Silva PA. (1986) The relationship between specific reading retardation, general reading backwardness and behavioral problems in a large sample of Dunedin boys: A longitudinal study from five to eleven years. Journal of Child Psychology and Psychiatry, 27:597–610.
- Mohr, K. A. J., Dixon, K., & Young, C. J. (2012). Effective and efficient: Maximizing literacy assessment and instruction. In E. T. Ortlieb & E. H. Cheek, Jr. (Eds.). *Literacy research, practice, and evaluation: Vol. 1. Using informative assessments for effective literacy practices* (pp. 293–324). Bingley, UK: Emerald Group.

- Moilanen, K. L., Shaw, D. S., & Maxwell, K. L. (2010). Developmental cascades: externalizing, internalizing, and academic competence from middle childhood to early adolescence. Development and Psychopathology, 22, 635-653.
- Mooney, P., Epstein, M., Reid, R., & Nelson, R. (2003). Status of and trends in academic intervention research for students with emotional disturbances, Remedial and Special Education, 24, 273-287.
- Nelson, R., Benner, G., Lane, K., & Smith, B. (2004). Academic achievement of K-12 students with emotional and behavioral disorders, Exceptional Children, 71, 59-73.
- Noell, G. H., Gresham, F. M., & Gansle, K. A. (2002). Does treatment integrity matter? A preliminary investigation of instructional implementation and mathematics performance. Journal of Behavioral Education, 11, 51–67.
- Özbek, A.B. and Girli, A. (2017). The Effectiveness of a Tablet Computer-aided Intervention Program for Improving Reading Fluency. Universal Journal of Educational Research, 5(5): 757-764. http://www.hrpub.org DOI: 10.13189/ujer.2017.050508
- Paula, F., & Steuart, W. T. (1999). A comparison of parent and teacher acceptability ratings of behavioral and conjoint behavioral consultation. School Psychology Review, 28:4, 672-684.
- Parish-Plass. 2008. "Animal-Assisted Therapy with Children Suffering from Insecure Attachment due to Abuse and Neglect: A Method to Lower the Risk of Intergenerational Transmission of Abuse?" Clinical Child Psychology and Psychiatry 13 (1): 7–30.
- Rivera, L., & Lavan, N. (2012). Family literacy practices and parental involvement of Latin American immigrant mothers. Journal of Latinos and Education, 11, 247–259.
- Sandberg Patton, K. L., & Reschly, A. L. (2013). Using curriculum-based measurement to examine summer learning loss. Psychology in the Schools, 50(7), 738–753.
- Sheridan, S.N. (1997) 'Conceptual and Empirical Bases of Conjoint BehavioralConsultation, School Psychology Quarterly 12:119-33.
- Sheridan, S. M., Clarke, B. L., & Christenson, S. L. (2014). Best practices in promoting family engagement in education. In P. L. Harrison, & A. Thomas (Eds.), Best practices in school psychology: Systems-level services (pp. 439–453). Bethesda, MD: National Association of School Psychologists.
- Sheridan, S. M., & Kratochwill, T. R. (2008). Conjoint behavioral consultation: Promoting family–school connections and interventions. New York, NY: Springer.
- Sheridan, S. M., Witte, A. L., Holmes, s. R., Wuc, C., Bhatia, S. A. (2017). The efficacy of conjoint behavioral consultation in the home setting: Outcomes and mechanisms in rural communities. Journal of School Psychology, 62, 81-101.
- Shinn, M. (1998). Advanced application of curriculum-based measurement. New York, NY: Guilford Press.
- Shinn, M. R., Walker, H. M., & Stoner, G. (Eds.). (2002). *Interventions for academic and behavior problems II: Preventive and remedial approaches*. Bethesda, MD: National Association of School Psychologists.
- Smith, N. L., Erwin, K. D., & Carter, T. S. (2014). Supporting reading skills development: The approach of one summer reading program. The Florida Reading Journal, 50(1), 6–12.

- Stanovich, K.E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360-407.
- Trout, A. L., Nordness, P. D., Pierce, C. D., & Epstein, M. (2003). Research on the academic status of children with EBD: A review of the literature from 1961–2000. Journal of Emotional and Behavioral Disorders, 11(4), 198–211.
- Wagner, M. M. (2005). Outcomes for youths with serious emotional disturbance in secondary school and early adulthood. Future of Children, 5(2), 90-112.
- Wagner, M.M., Kutash, K., Duchnowski, A., Epstein, M., & Sumi, C. (2005). The children and youth we serve: A national picture of the characteristics of students with emotional disturbances receiving special education. Journal of Emotional and Behavioral Disorders, 12(2), 79-96.
- Weeks, M., Ploubidis, G. B., Cairney, J., Wild, T. C., Naicker, K., & Colman, I. (2016). Developmental pathways linking childhood and adolescent internalizing, externalizing, academic competence, and adolescent depression. *Journal of Adolescence*, 51, 30-40.
- Wehby, J. H., Falk, K. B., Barton-Atwood, S., Lane, K. L., & Cooley, C. (2003). The impact of comprehensive reading instruction on the academic and social behavior of students with emotional and behavioral disorders. Journal of Emotional and Behavioral Disorders, 11, 225.
- Yıldız, M. (2013). A Study on the Reading Motivation of Elementary 3 rd , 4 th , and 5 thGrade Students. Eğitim ve Bilim, 38 (168), 260-271.
- Yıldız, M., Ataş, M., Aktaş, N., Yekeler, A. D., & Dönmez, T. (2015). Çocuklar Ne Yazıyor? Okul Öncesi Dönemde Yazı Algısının Gelişimi.Turkish Studies International Periodical for the Languages, Literature and History of Turkish or Turkic, Volume 10/3 Winter p. 455-476, ISSN: 1308-2140, www.turkishstudies.net, DOI Number: http://dx.doi.org/10.7827/TurkishStudies.7884.
- Yıldız, M. & Ceyhan, S. (2016). "İlkokul 4. Sınıf Öğrencilerinin Okuma ve Yazma Kaygılarının Çeşitli Değişkenler Açısından İncelenmesi / The investigation of 4th grade primary school students' reading and writing anxieties in terms of various variables", TURKISH STUDIES -International Periodical for the Languages, Literature and History of Turkish or Turkic-, ISSN: 1308-2140, (Prof. Dr. Hayati Akyol Armağanı), Volume 11/2 Winter 2016, ANKARA/TURKEY, www.turkishstudies.net, DOI Number: http://dx.doi.org/10.7827/TurkishStudies.9370, p. 1301-1316.
- Ysseldyke, J., Thurlow, M., & Shriner, J. (1992). Outcomes are for special educators too. Teaching Exceptional Children, 25(1), 36-50.