The Effect of Cross-Age Mentoring on Elementary Students Disruptive Behavior

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The purpose of this study was to determine whether a six-week cross-age mentoring program could impact the disruptive behavior of first and second graders (N = 10). The measurement tool was the appropriate learning behavior score, which was based off of items on students’ report cards. This study involved the use of a pretest/posttest design to compare data from the third quarter report card (before the intervention was administered) to data from May of 2015 (after the intervention was complete). The students had significantly higher post-intervention appropriate learning behavior scores (Mean = 11.00, SD = 3.09) than pre-intervention appropriate learning behavior scores (Mean = 9.90, SD = 2.51) [t (9) = 2.91, p = .017]. Implications of the findings are discussed. Research in the area of cross-age mentoring programs should continue given the lack of research in this particular type of mentoring especially in the elementary setting.
CHAPTER I

INTRODUCTION

The problem studied was disruptive behaviors that students exhibit in the classroom and other areas during the school day. Many students lack the social skills that are needed to function properly in the school setting. In this study, peer mentoring was used to see if it has an effect on disruptive behavior and improving students social skills.

Overview

“Recurrent and frequent disruptive behaviors are stressful for teacher (Owens, Holdaway, Zoromski, Evans, Himawan, Girio-Herrera & Murphy, 2012 p. 848). At the researcher's school there were a number of students that displayed disruptive behavior that interrupted the normal flow of classroom instruction, the lunch period, and recess. Teachers were sending students out of the classroom for frequently calling out, talking back, not following directions, and not respecting their classmates. The lunchroom supervisors had problems with students not following the cafeteria rules and not respecting the adults and students. The recess supervisors had to frequently give students a time out for fighting, not sharing, showing poor sportsmanship and not following directions. The principal was seeking a remedy for this problem, therefore the researcher who was the recess supervisor and physical education teacher decided to look for an effective solution.

Mentoring programs can be used as a solution for disruptive students. The mentee is able to gain social skills and academic achievement including better school attendance and feeling more capable in their academic work (Karcher, Davis, & Powell, 2002). Mentoring can also improve students’ attitudes towards teachers, parents and peers
Mentors can serve as a positive role models and give students skills and tools they need to be successful

Statement of Problem

The purpose of this study is to determine the impact of cross-age mentoring on first and second grade students’ disruptive behavior.

Hypothesis

The null hypothesis is that there will be no significant difference in the appropriate learning behavior score of first and second grade students with a history of disruptive behaviors during the quarter preceding the intervention and the appropriate learning behavior score after the six week cross-age mentoring program.

Operational Definitions

Disruptive behavior: Disruptive behavior is defined as behaviors that hinder the teachers’ ability to instruct students, and prevent students from learning. Examples of these behaviors are described in the student learning behaviors score: follows established rules, exercises self-control, works cooperatively with others, listens attentively, and responds appropriately to directions.

Cross-age Mentoring- Cross age mentoring is defined as older students serving as mentors to younger students. Specifically in this study, the mentors are fifth graders and the mentees are first and second graders.

Cross-age Mentoring Program- Cross-age mentoring program is a 6 week program with matched mentors and mentees that involves social skills and character education.

Mentors- Mentors specifically in this study are 5th graders selected based on good school performance and behavior to work with mentees to help them develop better social and
behavioral skills.

Mentee- Mentee are first and second grade students who were nominated by the teacher for having disruptive behaviors based on behaviors displayed in the classroom.
CHAPTER II

REVIEW OF LITERATURE

The purpose of this literature review is to determine what is disruptive behavior, what are the causes of disruptive behavior, and what interventions can be used for disruptive students. This literature review will also discuss the types and benefits of one intervention, peer mentoring programs.

**Disruptive Behavior**

Teacher’s top ten problem behaviors identified in School-Based Interventions for Students with Behavior Problems include talking out, not following directions, not respecting others, not finishing work, fighting, disruptive/acting, arguing, out of seat, tattletale, and interrupting (Bowen, Jenson, & Clark 2004). According to Breitenstein, Hill and Gross (2009) disruptive behavior is defined as aggression, noncompliance, and negative emotion. Esturgo-Deu and Sola-Roca (2010) add that these behaviors “upset the pace of work and obstruct coexistence in the classroom” (P. 830).

**Disruptive Behavior Disorders**

There are three types of disruptive behavior disorders, including oppositional defiant (ODD) disorder, conduct disorder (CD), and disruptive behavior unspecified (DBD) (Breitenstein et al., 2009). ODD is characterized by negative emotion, defiance, and disobedience. These children will refuse to follow the requests of adults, and frequently lose their tempers. In order to be diagnosed with ODD these behaviors must occur more frequently than with other children of similar age, and these behaviors must weaken the function of their home or school (Bowen et al., 2004). CD is different from
ODD because CD is associated with aggressive behaviors that disrupt the rights of others; these behaviors usually put others at risk. Students may originally be diagnosed with ODD, however once their behaviors increase in severity and are directed towards others, the diagnosis changes. In order to be diagnosed with CD the child must show a pattern of breaking rules and causing issues in a variety of settings. (Breitenstein et al., 2009; Bowen et al., 2004). If a child’s behavior shows significant oppositional or conduct behavior but does not meet the standards of ODD and CD he/she is diagnosed as DBD (Bowen et al., 2004).

**Reasons For Disruptive Behavior**

“There are a number of factors inside and outside the child, family, and school environment that have been found to contribute to the development and maintenance of behavior problems in children and adolescents “ (Bowen et al., 2004, p. 30).

**Home and Family life**

According to Williams and Anthony (2013) family togetherness and support can project adolescent well being greater than neighborhood, school, or peer factors. They further suggest that an authoritative style of parenting, which is characterized by high warmth and firm control, is connected with positive youth development (Williams & Anthony 2013). Poor parenting skills escalate disruptive children’s behavior, and contribute to the development of deviant and non-compliant behavior. Other family stressors include marital conflict, maternal depression, and low education levels, poverty, drug and alcohol problems, and physical, emotional, or sexual abuse (Bowen et al., 2004). Family and home life play a major role in contributing to student behavioral issues.
School factors

According to Bowen et al., (2004) “punitive disciplinary strategies, unclear rules, and expectations, and failure to consider individual differences contribute to increasing rates of problematic behaviors” (p.33). These are some of the factors in the school environment that cause disruptive behavior. Baker (1998) also believes that school factors contribute to disruptive behavior, especially violent behavior. Baker explains “Schools group large numbers of similar-aged children and provide relatively little adult supervision, especially during non-structured portions of the school day such as recess and movement between classes. The crowdedness of the classroom and the task-driven nature of the curriculum require children to have adequate self-management skills (such as impulse control, an ability to moderate their activity levels, and to delay gratification). Schools assume that children inherently value academic endeavors and are therefore motivated to participate in learning tasks. At-risk children may not have the skills to negotiate or derive meaning from these activity settings, thus creating psychological distancing from the culture of the school” (p. 30).

The way schools are structured has an effect on students’ behavior, and can contribute to disruptive behavior.

Disabilities and Disorders

Disruptive behavior is the most common cause for students being referred for mental services; these students may be at risk for attention-deficit hyperactivity (ADHD), ODD, or CD (Owens et al., 2012). ADHD is the most frequently diagnosed, and most classrooms have at least one or two students who have been diagnosed with ADHD (Bowen et al., 2004). Bowen et al., (2004) further state that students with ADHD are challenging for teachers because their behavior is often disruptive during instruction, they annoy their classmates, and need constant reminders to follow school rules. Other disorders include Pervasive Developmental Disorder (PDD), Tourette’s disorder (TS), and mood and anxiety disorders. Children with PDD show severe impairments in social
relationships, language and communication skills, and stereotypic behaviors or activities. Bowen et al., describe TS as motor and vocal tics that cause trouble with daily functioning. Mood and anxiety disorders do not always cause behavior problems, however many students do experience depression and anxiety which could contribute to disruptive behavior. Lastly, learning disabilities (LD), which include trouble with reading, writing, spelling mathematics, listening, thinking, or speaking that, could affect school performance, which can cause disruptive behavior (Bowen et al., 2004). There are many disabilities and disorders that contribute to disruptive behavior, many which can be diagnosed.

**Interventions for Disruptive Behavior**

There are many different interventions that educators use with students with disruptive behavior; this section will discuss a few of the effective interventions.

**The Daily Report Card (DRC)**

The DRC is used to modify and monitor clearly defined behaviors; the teacher gives feedback to the student about the targeted behavior, and the parent reviews the DRC with the student daily (Owens et al., 2012). In fact all studies on DRC report major improvement in student behavior (Owens et al., 2012). Teachers like to use DRC because they can be individualized for each student, and keep parents involved in the process.

**Behavior Contracts**

Behavior contracts are another popular interventions used by teachers in the classroom. Behavior contracts is a written agreement between the teacher and student, it explains what reward the student will receive after meeting the specified behavioral goal. These contracts can include a variety of classroom behaviors, and include academic and
social behaviors (Bowen et al., 2004).

Peer Interventions

There are a few interventions that involve a classmate or peer assisting the teacher to help students achieve desired behavioral goals.

“Tootling”

Tootling came from the two words tattling and the expression “tooting your own horn”; it’s when students report their classmate positive behavior instead of their negative behavior by writing that behavior down, and giving it to the teacher (Cihak, Kirk & Book 2009).

Conflict Managers

Conflict managers is a peer mediation program where students are trained to mediate student conflicts. These students are trained with communication skills as well as mediation skills, and are equipped with many solutions that can be used by elementary students. These managers are usually used during lunch and recess. (Bowen et al., 2004).

Recess Partners

Recess partners are used to deter student’s aggressive, non-compliant, and negative social interactions with adults and peers during recess. Students with disruptive behavior are paired with student’s positive behaviors, at the end of recess each student rates their partners behavior with a point card. (Bowen et al., 2004).

Peer Mentoring

There are many types of mentoring, however this section will focus on peer mentoring. There are several types to be defined: cross age mentoring, peer tutoring, peer assisted learning, peer mediation and peer modeling.
Cross-age mentoring (CAMP) is one type of peer mentoring in which older students serve as mentors to younger students. Manning the author of “Young Leaders: Growing through Mentoring” used cross age mentoring as a strategy to develop leadership skills of gifted and talented students by mentoring younger at risk students. She used second grader students as the mentors to help kindergarten students with reading, phonics and social skills. The teacher of the kindergarten students used informal observations, and phonic skills assessment to assess academic growth. Manning’s study focused on the development of leadership skills of the mentor, however she did recognize that other studies could focus on academic and social improvement of the mentee in her conclusion (Manning, 2005). Other types of peer mentoring are peer tutoring and peer assisted learning, which focus is on academics. These are the types of mentoring that are seen in small groups in many elementary and middle school classrooms.

Peer mediation and peer modeling focus on developing social skills. These are the types of programs where students learn (in mentoring situations) conflict resolution, and problem solving skills.

**Varying characteristics of Mentoring Interventions**

Manny (2005) discusses some of the various characteristics of mentoring. Some mentoring programs differ by the setting, and way the mentors and mentees are matched. Mentoring can either be natural or assigned. Natural mentoring relationships develop spontaneously so mentors and mentees are not assigned to one another. Assigned mentoring is when an organization matches mentors and mentees and often provides training for mentors. Mentoring can take place in a school or in a community setting. Community-based mentoring usually focuses on social and cognitive issues. School
based mentoring typically focuses on improving grades, school attendance and behavior (Anastasia, Skinner, & Mudhenk, 2012). These characteristics can be combined to form a successful mentoring program.

**Benefits of Mentoring**

As stated before both mentors and mentees typically experience benefits from being involved in mentoring programs. The authors of “Mentoring with Elementary-Age Students” give examples of how the mentoring process affects both the mentor and mentee. Mentoring helps the development of emotional supports and friendship. There is a bond formed between mentee and mentor, at times this is the only positive relationship some students have. Mentoring can also improves self-esteem and confidence for mentor and mentee. The mentee is gaining knowledge and skills. Both the mentor and mentee can experience an improved social network from their relationship with each other. (Barton-Arwood et al., 2000). This supports the statement that both mentor and mentee benefits from mentoring programs. Also, according to Tierney and Branch (as cited in Karcher et al., 2002) the mentee is able to master social competence and academic achievement including better school attendance and feeling more competent in their academic work in some programs (pg.39). Mentoring can also improve students’ attitudes towards teachers, parents and peers (Barton-Arwood et al., 2000). Mentoring makes a difference for the mentee in many different areas of their life.

**Organization of mentoring programs**

The author of *Youth Mentoring: Program and Mentor Best Practices* explains how crucial organization of a mentoring program is. A good mentoring program will clearly define times when mentoring could and should occur. This will assure that the
mentor and mentee are spending time together. In all mentoring programs the mentor should be appropriately screened. The mentor shouldn’t have any history of criminal or sexual misconduct, for the safety of everyone involved. In addition the mentor and mentee need to be appropriately matched. Mentors and mentees need to be properly trained on their role and duties. This will make certain that everyone can benefit from the program (Anastasia et al., 2012) “Mentoring can be challenging. The mentoring organization has to provide support to both the mentee and mentor if they want the relationship and its benefits to last.

Finally, everyone involved in the program should be committed to its mission and goal, be it academic success, improved social skills, and or behavioral change.

Outcomes of Cross-age Peer Mentoring programs

Cross-age peer mentoring is different than the typical mentoring program, which usually matches children and teens with adults. Karcher (2007) explains that “Cross-age peer mentoring is a unique and somewhat different approach to mentoring than the better-known adult-with-youth mentoring model. In cross-age mentoring programs (CAMPs) the mentor is an older youth, typically high school-aged, who is paired or matched with an elementary or middle school-aged child” (p. 3). There is limited literature on this type of mentoring which is why Karcher (2007) conducted the research in Research in Action-Cross-Age Peer Mentoring. He writes “descriptions and evaluation data on these programs in other contexts are rarely reported in the research literature, it is unknown what the impact of such programs are or how their practice may vary from setting to setting” (p. 3). Karcher does conclude that the benefits of peer mentoring are consistent with findings from adult-with-youth mentoring programs in schools.
Summary

Disruptive behaviors cause problems for everyone in the classroom, both teachers and students. These behaviors usually change the natural environment of the school and home environment. There are many causes for these disruptive behaviors including home and family life, school factors, and disabilities and disorders. There are many interventions that can be used to modify these behaviors including daily report cards, behavior contracts, and peer interventions. Peer interventions include recess partners, conflict managers, and peer mentors. All these interventions can be used to stop disruptive behavior in the classroom.
CHAPTER III

METHODS

This study was conducted in order to examine the impact of cross-age mentoring on students’ disruptive behavior.

Design

This pre-experimental study utilized the pre-post test design that consisted of collecting data on mentee students’ disruptive behavior using the appropriate learning behavior score before the intervention and collecting the same data after the intervention. The independent variable was identified as cross-age mentoring which took place during recess and after school once a week using character education lessons. The dependent variable was the appropriate learning behavior score which was based off of items on students’ report cards. The study was only six weeks; therefore, pre-intervention data was derived from the report card while post-intervention data was collected independently of report card grades.

Participants

The participants in this study were students from a charter school in a mid-size city in the mid-Atlantic region. The mentors were in fifth grade and the mentees were in first and second grade. Participants chosen as mentors were identified by the fifth grade teacher and administrators as positive role models and leaders. Students selected as mentees were identified as “disruptive students” by their classroom teacher or administrators. There were twenty participants in the intervention, ten mentors (5 boys and 5 girls) and ten mentees (5 boys and 5 girls). Fourteen students were African American and six were Caucasian. Data from mentees but not mentors was used in the
study. Among the mentees, six were African American and four were Caucasian.

**Instrument**

The instrument used in this study was the student appropriate learning behavior score which was generated from items that are contained on the quarterly academic report cards. Students were rated by their homeroom teachers in the following areas: for following established rules, exercising self-control, working cooperatively with others, listening attentively, and responding appropriately to directions. The scale is 1-4; 1 represents poor, 2 represents needs improvement, 3 represents satisfactory and 4 represents outstanding. Although the report card also includes other items reflecting student behaviors, only items considered associated with disruptive behavior were included in the student learning behavior score. After the six week intervention, teachers were asked to rate the mentees on the student learning score behaviors using the same rating system. There is no reliability or validity data for the student appropriate learning behavior score. However, teachers were familiar with rating children on these behaviors since they are regular components of report card grades.

**Procedure**

To begin this study, the researcher met with the principal to ask if she could implement a new mentoring program during recess and after school in the fourth quarter. After the meeting it was decided to target 5th graders as the mentors to develop leadership and first and second graders with disruptive behavior as the mentees. Next, the researcher met with the first and second grade teachers to identify students with disruptive behaviors. Then the researcher met with the fifth grade teacher to identify students who could serve as positive role models. Once the list was cleared by the principal, letters
were sent out to parents until the desired goal of ten mentors and ten mentees was met. Male mentors were matched with male mentees, and female mentors were matched with female mentees. Twenty-two letters were sent out, only two original mentees selected opted out of participating in the program. Before the intervention began the researcher choose six topics to focus on during the mentoring sessions which included self-control, obedience, respect, responsibility, attentiveness, and conflict resolution. The resources for the lessons came from character first education (www.CharacterFirstEd.com), which included worksheets, activities, and role play. The researcher met with the mentors first after school for hour and a half training before the intervention; we discussed their role in the mentoring program, and briefly discussed the topics for each after school mentoring session. The mentors where told to check in with their mentee twice a week during recess to insure they were using the techniques and skills used during the mentoring session. They were supposed to encourage them, and provide feedback at the end of recess twice a week using sandwich feedback. Start off saying something the mentee did well, followed by something the mentee could improve on, and ending with positive feedback.

Each week before the after school mentoring session the researcher met with the mentors to discuss the lesson for the week. During the mentoring session thirty minutes was spent focusing on the topic for the week, and the other thirty minutes was spent playing games with their mentor. The session would start as a group with a discussion starter, for an example how do you feel when someone shows disrespect? Both the mentees and mentors could respond during this time. Then a video would be played from the character first website which provided a definition for the value of the day and include a poem and or song for the children to follow along with. Next students would
work with their mentor to complete a handout or activity provided in the character first curriculum. Then everyone would get back in a group to review the value of the day lead by the researcher, or end with a skit or role play performed by the mentors. The session would conclude with game time which include cooperative games as a group lead by the researcher or free-time where the children could choose an activity such as wall ball, four square, basketball, or jump roping. At the end of the six weeks teachers were asked to rate their students on the student learning behavior items just like they would for academic report cards. Teachers were aware that the students had been participating in the cross-age mentoring program. The pre-intervention scores were compared to the post-intervention scores using a non-independent samples t-test.
CHAPTER IV
RESULTS

The purpose of this study was to determine the impact of cross-age mentoring on first and second grade students’ disruptive behavior. This study compared students’ appropriate learning behavior scores from the third quarter report card to the scores earned after the six-week intervention. The students had significantly higher post-intervention appropriate learning behavior scores (Mean = 11.00, SD = 3.09) than pre-intervention appropriate learning behavior scores (Mean = 9.90, SD = 2.51) [t (9) = 2.91, p = .017]. See Table 1. Consequently, the null hypothesis there will be no significant difference in the appropriate learning behavior score of first and second grade students with a history of disruptive behaviors during the quarter preceding the intervention and the appropriate learning behavior score after the six-week cross-age mentoring program was rejected.

Table 1. Means, Standard Deviations, and t-test Results for Pre- and Post-Intervention Appropriate Learning Behavior Scores

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<th>Condition</th>
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<th>SD</th>
<th>t-statistic</th>
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<tr>
<td>Pre-Intervention</td>
<td>9.90</td>
<td>2.51</td>
<td>2.91*</td>
</tr>
<tr>
<td>Post-Intervention</td>
<td>11.00</td>
<td>3.09</td>
<td>.</td>
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N = 10
* Significant at p < .05
CHAPTER V
DISCUSSION

The results of this study rejected the null hypothesis stating that there would be no significant difference in the appropriate learning behavior score of first and second grade students with a history of disruptive behaviors during the quarter preceding the intervention and the appropriate learning behavior score after the six week cross-age mentoring program. Students’ behavior improved after weekly mentoring sessions.

Implications of Results

The results of this study suggest that cross-age mentoring can help reduce elementary students' disruptive behavior and improve appropriate classroom behaviors. This cross-age mentoring program used social skills and character education as the tool to improve disruptive students’ behavior. Students learned about self control, obedience, respect, responsibility, attentiveness, and conflict resolution. The students thoroughly enjoyed the material provided by the character first website which provided worksheets, poems, and videos. Students were able to take the information they learned during the mentoring session and apply it during the school day.

This intervention was very time consuming; however, there were significant improvements in the students’ behavior after the six-week intervention. Administrators should plan to include these types of programs in their budget so they can provide a stipend for teachers who dedicate extra time after school to facilitate cross-age mentoring programs as well as to provide for mentoring and social skills curriculum.

It would be helpful if there were more than one teacher or adult leading the program. This would allow more students to participate as mentors and mentees. The
researcher conducting this study spent a lot of time planning and implementing this intervention; it would have been more efficient with a supportive team.

Theoretical Implications

The results support the opinion of Barton-Arwood et al. (2000) who theorized that the mentoring relationship is beneficial to mentee and mentor by improving their social skills through the relationship. The mentors improved self-confidence and gained leadership skills. They thoroughly enjoyed working with the younger students and looked forward to the after school mentoring sessions. The mentees teachers saw improvement in their behavior in class, and the researcher noticed better behavior from the mentees during recess. The mentees enjoyed having a mentor to play with at recess and after school. They looked forward to spending time with their “buddy”. A positive relationship and bond was formed with all pairs of mentors and mentees.

Comparison to Prior Research

There were not any studies that used cross-age mentoring in the elementary setting using only elementary students as the mentor and mentee. However the findings of the current study are consistent with Noll (1997) in that they demonstrated effective cross age mentoring programs begin with proper mentor training. The mentors in the Noll study were trained in active listening and the activities that would be used during the program, as well as being given a description of their job as a role model. The current study began with training just for the fifth grade mentors where they learned what it means to be a positive role model and their job duties as a mentor for the mentees. There was a discussion about the six-week after school mentoring program as well as the different activities that would take place during the intervention. On a weekly basis,
mentors met with the researcher to discuss the after school session of the week, so mentors could be properly prepared.

**Threats to Validity**

There were a few threats to the validity of this study. An internal validity threat to this study is history; there could have been other events that took place during this study in addition to the intervention that caused a change in behavior. Another internal threat is instrumentation; teachers completed the pre-test scores as a part of the report card process, while the post test scores was not a part of the report card procedures. Teachers may not have taken the post test as seriously as the pre-test. Alternatively, they may have rated differently because they knew the students had been in an intervention and that the ratings were an outcome measure. Statistical regression is another internal threat to validity in this study; students selected for this study had extremely low appropriate learning scores, therefore it is likely they would show some improvement after the intervention. Novelty is another internal threat to validity, the change in the student’s behavior may have occurred because the intervention was exciting, and fun to be a part of.

Sample size is another threat to validity; there were only ten mentees selected because that’s the largest amount the researcher could supervise alone. This small number of participants could reduce statistical power. Selection was another threat to validity of this study; the students were hand-picked by teachers and administrators. Therefore they may not represent the extended population of elementary students with disruptive behavior.
Implications for Future Research

Future studies could examine if different outcome measures would be affected by cross-age mentoring other than items selected on the students’ academic report card. Studies could focus on attendance, academic grades, or self esteem. Cross-age mentoring studies could also focus on the mentors to see specifically how they benefit from serving as a mentor. Future research could focus on the mentors self–worth, or confidence in school.

Future research could also address the limitations of the study, such as having a control group, to insure that outside factors aren’t contributing to improving the mentees behavior. Also, studies can use a different age group of mentors and mentees.

This study should be performed over a longer time period. Cross-age mentoring could potentially be a more effective program if it were ran for an entire school year, with more teachers to participate as facilitators and more students serving as mentors and mentees.

Conclusion

The results of this study reject the null hypothesis stating that there would be no significant difference in the appropriate learning behavior score of first and second grade students with a history of disruptive behaviors during the quarter preceding the intervention and the appropriate learning behavior score after the six week cross-age mentoring program. The students had significantly higher post-intervention appropriate learning behavior scores than pre-intervention appropriate learning behavior scores. The researcher felt that the use of cross-age mentoring was very time consuming but it was worth the time spent. Teachers noticed a change in the behaviors of the mentees, while
the mentors were more confident, and gained valuable leadership skills. This program was beneficial to all participants involved.
Reference


Esturgó-Deu, M., & Sala-Roca, J. (2010). Disruptive behaviour of students in primary


