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Occupational Therapy Based Interventions: For Supporting Physically Disabled Students who are Bullied.

Authors: *Prerna Panchal, Nazia Ali
Jamia Hamdard University, Dept. of Rehabilitation, Mehrauli - Badarpur Rd, near Batra Hospital, Hamdard Nagar, New Delhi, Delhi 110062

ABSTRACT

Bullying is considered as a serious problem and is the most frequently observed antisocial behavior among adolescents and children. The purpose of this study was to determine effectiveness of occupational therapy based interventions for supporting physically disabled students who are bullied .

Method- This was a Pretest-Posttest, Experimental, Prospective, Single centre study in which 30 participants were selected from an inclusive school in Delhi, India . Children with disability were recruited with Age of 11 to 16 years, Regular school going children (both boys and girls) who were willing to participate and able to follow study instructions (The average or normal, range of IQ of 90 to110 examination) also, who have higher score in Multidimensional Peer VictimizationScale were included in the study.

Results - Bullying was assessed among children using the Multidimensional peer victimization scale. Children were re-assessed after the implementation of intervention and Data thus collected was statistically analyzed. The pre-and post-test scores provide evidence that there is decrease in scores of Multi-dimensional peer victimization scale .

Keywords- *Bullying, Antisocial Behavior, Inclusive School, Physically Disabled*

1] INTRODUCTION

Bullying is considered as a serious problem and is the most frequently observed antisocial behavior among adolescents and children. The classical definition of bullying was first proposed by Olweus as "intentional and repeated acts that occur through physical, verbal, and relational forms in situations where a power differential is present." [1]

Therefore, due to the differences in power between the bully and victim, bullying is likely to occur.

In such situations the victim is not able to defend himself against bullying behavior which can be direct, including face-to-face confrontation; such as hitting, damaging, kicking, and other types of physical harm; and indirect involving a third party such as social exclusion, spreading rumors, and other types of psychological harms or even online which is referred to as cyber bullying. [1]

Children who are bullied experience poor mental and physical health, more symptoms of anxiety, depression; feeling sad, being lonely; vomiting; sleep disturbance; nightmares; frequent illnesses. As a result there is increased students' absenteeism from school. (Jaana, 2000) Victims of bullying blame themselves for being bullied which in turn develops a negative self-perception that affects their ability to concentrate on school work, and become potential to have lower grades and perform poorly. [2]

Research suggests that children and adolescents bully others because they failed to cope with the demands of a normal social environment or are motivated by establishing their status in a social network. Children and youth who bully others are considered to have low on social skills, being high on psychopathology, possessing assets and competencies that the peer group values. [3]

According to a nationwide survey by Janet Njelesani et al., school OTs should be concerned about bullying against students with physical disabilities as one of their domain of practice; which they are not able to . It was found that lack of knowledge and evidence in the occupational therapy field is a primary barrier. There is a need for this profession to advocate involvement in school bullying for entry-level programs and continuing education. [4]

In the past, researchers have studied the effect of various bullying prevention school programs and counseling to deal with bullying, but the intervention program in this study includes use of occupational therapy in order to reduce bullying as well as support students who are bullied. The current and potential role that occupational therapists play in bullying is not known; this study aimed to address this gap in knowledge by examining the effectiveness of occupational therapy based support program among children aged between 11-16 years, who are bullied in inclusive school, and also assess various forms of bullying most common among girls and boys in inclusive school [5]

2] METHODS

This was a Pretest-Posttest, Experimental, Prospective, Single centre study in which
30 participants were selected from an inclusive school in Delhi, India . Children with disability

were recruited with inclusion criteria as follows:

Children with Age of 11 to 16 years , regular school going children (both boys and girls) who were willing to participate , able to follow study instructions (The average or normal, range of IQ of 90 to 110 examination) Children who had higher score in Multidimensional Peer VictimizationScale.

The study excluded Children who were not able to respond due to speech and hearing impairment and IQ below 90, Children below 11 years and more than 16 years.

2.1] PROCEDURE

Permission was taken from the ethical committee of the Jamia Hamdard University and also from the inclusive school. Written consent was taken from the parents /guardians of selected children**.** Bullying was assessed among children of age 11-16 years using the Multidimensional peer victimization scale. The scale was filled by the investigator at the time of assessment. Thirty students with a higher score range of 28 -32 were selected as peer victims.

It was a pre and post intervention experimental design. Children were re-assessed after the implementation of intervention and Data thus collected was statistically analyzed.

2.2] MEASURES

The primary outcome was the Multidimensional Peer-Victimization Scale. It is a 16-item measure with 4 subscales assessing physical, verbal victimization, social manipulation and property attacks. It is valid for age 11-16 years. Scores on the total scale have range of 0-32. Scale scores are computed by summing item responses. Scores on each of the four subscales have a possible range of 0 to 8. Higher scores reflect more victimization.

The alpha coefficients for the 16-item total score ranged from good to excellent across samples, with the lowest reported as $\alpha = .74$ in Lam, Raine and Lee (2016) and the highest $\alpha = .96$ in Candel and Iacob (2015). For the subscales, alpha coefficients ranged from .60 to .93, again representing good internal consistency reliability); Betts and Spenser (2017) Concurrent Validity reported significant positive correlations ranging from $r = .21$ to $r = .62$ between all four MPVS subscale matched in intervention.

2.3] DATA ANALYSIS

The Microsoft excel 2010 data sheet was used to make master chart. All statistical tests were

performed using Statistical Package for Social Sciences (SPSS) version 21. Paired t-test for pre-post experiment, was used to determine significant difference in bullying behavior of children whowere provided intervention in school. Percentage, Mean and Standard Deviation of the prior and after intervention were also calculated.

The statistical analysis, a P value equal to or less than .05 (Pd" .05) was accepted as significant where as P value equal to or less than 0.01 (Pd" .01) was accepted as highly significant.

3] INTERVENTION

The Occupational therapy treatment was given in six small groups of school children .Each group had five children who met for 45 minutes six times per week for eight weeks

.The model posits that children can learn few strategies to deal with bullying and the related mental and physical impact caused by incidence of bullying .

The intervention was divided into two sessions on alternate days.

Session 1- Focuses on support seeking strategies, positive behavioral interventions and supports, self- regulation and to develop empathy among peers.

Session 2- Focuses on Identifying emotions, grounding techniques, deep breathing and Assertive strategies.

For rest of the time teachers implemented fixed prompts, reinforcements, class room rules, discussions about harmful effects of bullying , withdrawing privileges , instructive activities as designed by the therapist.

SESSION – I

1. POSITIVE BEHAVIORAL INTERVENTIONS AND SUPPORTS

These strategies were designed for school-wide implementation to reduce incidents of bullying. Students were taught a three-step response to problems behavior to prevent the reinforcement of bullying and to extinguish it. These are –Stop: Teach students the school-wide "stop signal" (verbal and physical action) forproblem behavior, and practice when and how to use it appropriately.

- Walk: Teach students to "walk away" when the problem behavior continues after the stop signal. Walking away removes the reinforcement for problem behavior.

- Talk: Teach students to "talk" to an adult if the problem behavior continues after using stop and walk.

2 SUPPORT SEEKING STRATEGIES

Support-seeking strategies involved telling someone else about the victimization in hopes of garnering support -a) Told a Friend b) Told an Adult at School c) Told an Adult at Home.

3. ANGER MANAGEMENT / SELF REGULATION

The child was given a picture of a thermometer with anger ratings of annoyed, frustrated, angry, furious, and rage. Each child was asked to recall situations when they had experienced anger and to rate on the thermometer (on a scale of 1 to 5) whether the situation had made them mad; if so, how mad and perform reverse counting for the same.

When children concentrate on counting, they don't react immediately to the anger. Children can slowly count to ten on their fingers, from one to 19 (forward), from ten to one (backwards), or backwards by fives starting at 100 as is age appropriate

ACTIVITIES TO DEVELOP EMPATHY AMONG PEERS

A) Activity: "Guess Who"

This activity aims to improve the accuracy of perceiving one's and others' emotions.

Students were asked to work in groups to identify the emotions shown in specific pictures and to collect pictures, landscapes, news, articles, etc. representing emotions that we previously assigned to every group.

B) Activity: "Emotional Party"

This activity aims to improve effective emotional communication and understanding of emotional processes. For this activity, the therapist displays a great amount of emotional vocabulary according to seven emotional families including happiness, sadness, fear, anger, disgust and shame. Students must match every emotional word according to its meaning into the appropriate emotional family

SESSION –II

4. IDENTIFYING EMOTIONS

The Zones of Regulation were created by Leah Kuypers; it's another great tool to help kids learn self-regulation skills. This framework is designed to help kids notice what they are thinking and feeling, how their thoughts and feelings affect their behavior and learn to self-regulate. The zones are designed to look like traffic signs/signals that can be seen on the road.

Blue is a rest area sign,

Green is like a green light,

Yellow is like a yield sign,

Red is like a stop sign.

The goal is to be in the green zone. Throughout the day, the child move zones. It may be moved frequently.

5. GROUNDING TECHNIQUES

This technique helps the child to stay connected to the present situation through exploration of five senses. This is a calming technique that can help the child get through tough or stressful situations.

Take a deep belly breath to begin.

STEPS ARE-

- 5 - LOOK: Look around for 5 things that you can see, and say them out loud.
  For example, you could say, I see the computer, I see the cup, I see the picture frame.
- 4 - FEEL: Pay attention to your body and think of 4 things that you can feel, and say them out loud.
  For example, you could say, I feel my feet warm in my socks, I feel the hair on the back of my neck, or I feel the pillow I am sitting on.
- 3 - LISTEN: Listen for 3 sounds.
  For example, It could be the sound of traffic outside, the sound of typing or the sound of

your tummy rumbling. Say the three things out loud.

- 2 - SMELL: Say two things you can smell. If you're allowed to, it's okay to move to another spot and sniff something. If you can't smell anything at the moment or you can't move, then name your 2 favorite smells.
- 1 - TASTE: Say one thing you can taste. It may be the toothpaste from brushing your teeth, or a mint from after lunch. If you can't taste anything, then say your favorite thing to taste. Take another deep belly breath to end.

6. DEEP BREATHING USING SHAPES

- Triangle breathing
- Square breathing
- Star Breathing
- Lazy Breathing

7. ASSERTIVE STRATEGIES

Assertive responses included non-aggressive efforts to directly address the perpetrator .
Students' assertive coping responses includes
- told them to stop and told the person how I felt.
- Use of Humor- Made a Joke About It

ACTIVITIES FOR TEACHERS

1. **Withdraw Privileges** - Teachers can withdraw privileges like reducing the Recess time, play ground time.
    - Provide Instructive Activities- Helping in cafeteria of school.
    - Writing an apology letter.
    - Drawing a picture of what it feels like to be bullied.

The Goal is to teach bullies to turn their negative power into leaderships.

2. **Lead classroom discussions about harmful effects of bullying**

    - Create a bully locator map – using a school map the teachers must identify the hotspot areas where bullying can occur which must include playground, canteen,

restrooms, corridors.

- Pro social peers in playground and classroom – training few classmates on how to deal with bullying, and how to help someone who is bullied, to seek for help, telling an adult .

Classroom Rules

- Teachers should give clear directions about teasing, no name calling, no exclusion

- Teachers can buddy child with another child to prevent bullying in classroom and places where teachers are not present.

3. **Involve them in helping act or act of caring**

    - Ask the child to write a plan of what they should do the next time bullying occurs.

4. A Bullying Training Hand booklet describing various ways to cope with bullying for teachers, students, bystanders was distributed to students and teachers.

4] RESULT

Results showed that out of 30 students the percentage of Boys who were bullied was 57% and of girls was 43% whereas, the frequency of bullying among boys was 17 and for girls it was 13, which indicates that incidence and frequency of bullying was more among Boys as compared to Girls.

Table 1. Represents the Mean age ,standard deviation ,minimum and maximum age of children. Results show that Mean Age is 14.50, maximum age of bullying is 16 years and minimum age of bullying is 13 years.

Table 2. Shows the comparison between Pre-test and Post -test results of Multidimensional Peer Victimization Scale a mean and standard deviation 26.33 ± 2.591, whereas Post test results shows a mean and standard deviation of 10.43 ± 6.495. The results are significant at <0.001.

Table 3 - Compares results of types of Bullying . Pre and Post test results are (6.63) Physical Victimization, (6.17) Verbal victimization, (7.03) Social Manipulation and (6.50) Attacks on property. The results are significant at p value <0.001. The highest form of bullying is Social manipulation and Physical victimizations.

4.1] DISCUSSION

This study contributes to our understanding of bullying victimization among adolescents by examining the prevalence, gender and school grade differences of specific forms of victimization . Importantly, the present study extends the literature with the examination of four forms of discriminatory victimization, which are currently part of a smaller literature compared to research on more traditional bullying victimization types. Whereas numerous studies previously have examined bullying victimization within a narrower framework, the breadth of the present study allows researchers to compare experiences across several bullying domains.

The study investigated the effect of occupational therapy based interventions for reducing bullying among children in inclusive school. A sample of thirty students with physical disabilities who were bullied in inclusive school were provided occupational therapy based interventions. The results showed that occupational therapy interventions were highly significant ($p<0.01$). There were reduced incidents of bullying.

While students with disabilities are legally placed in their least restrictive environments, research on victimization among students with disabilities suggests that disability status is a predictor for increased victimization.[6]

According to a review by Rose et al.(2012) suggests that students with disabilities are victimized more often. Students with higher incidence disabilities experience less victimization than students with more severe cognitive or physical disabilities. Those in special classes or segregated schools appear to be victimized more often than students with and without disabilities in inclusive settings.[6]

The current study analyzed various forms of bullying using Multidimensional Peer victimization scale among boys and girls .It was investigated that incidents of bullying was higher among boys (57%) as compared to girls (43%) corresponding to previous study that indicated similar results

(Chan & Wong ,2019) a study to explore gender differences in mean levels of traditional school bullying that were physical and verbal forms of bullying and cyber bullying .Findings indicate male adolescents reported higher levels of bullying perpetration than female adolescents.[7]
This result is supported by Silva et al., (2013) an exploratory and cross-sectional study aimed to identify the prevalence of bullying in a group of students and analyze the data regarding the gender of those involved in the violence. The sample consisted of 387 students between 7 and 14 years old. The gender analysis of victimization and aggression shows that boys and girls are both victims and aggressors, and there are significant differences in involvement in bullying between genders. Boys are victims more often when considering different types of bullying, although significant differences were only found for physical aggression. Bullying is most prevalent among students ranging from 11 to 13 years-old, and less frequent in nursery and secondary school children.[8]

Shelley et al. (2019) provides a similar overview of findings from the past 40 years of research on bullying among school-aged children and youth. Research on definitional and assessment issues in studying bullying and victimization was reviewed, and data on prevalence rates, stability, and forms of bullying behavior were summarized, setting the stage for the five articles that comprise this American Psychologist special issue on bullying and victimization. The findings suggest that Bullying peaks during middle school years which are 12–15 years, and tends to decrease by the end of high school.[9] This study confirms existing research findings that Bullying occurs mainly in the age group of 13-16 years and means age as 14.50.

A cross-sectional study was conducted in urban and rural areas in which a self-completion questionnaire was completed by students in the classroom setting. The Results showed that the mean age of respondents was 13.58 and traditional bullying was high in this age group as 1332 (35.6%) identified as victims, and 341 (9.5%) as perpetrators. [10]

Further the results were analyzed for pre-post difference using Multidimensional Peer Victimization scale which show significant difference in scores after the protocol implementation The study also analyzed that most common type of bullying was social manipulation (tried to get into trouble ,turn friends against the bullied, refused to talk ,made other people not talk ; mean=7.03),and Physical victimization (punched ,kicked, hurt physically beat up the child ;mean =6.63) Similar results were shown by Susanne et al. (2016) who investigated the influence of teacher feedback on the social acceptance of peers with intellectual disabilities and peers without

disabilities. Participants are introduced to 'new' virtual classmates, one student with Down syndrome (DS), and one control student with no obvious disability. The child with DS was less socially accepted than the child without disability. No difference regarding the social acceptance of the students with DS was found between students from inclusive and regular classes. [9]

Disabilities that are overt and observable were determined by the researchers to be categorized as visible. Results from the eleven studies indicated students with disabilities, both visible and non-visible, experienced bullying more than their non-disabled general education peers .Reported forms of bullying included name-calling, teasing, physical attacks, severe verbal bullying, and verbal aggression, threats, taking belongings, imitating, and making fun of the students with disabilities. The students with disabilities also tended to be less popular, have fewer friends, and struggle with loneliness. [11]

This body of evidence suggests that efforts aimed at reducing bullying victimization in childhood and adolescence were strongly supported. In addition, research on explanatory mechanisms involved in the development of mental health problems in bullied youths is needed. The most effective coping strategies in response to bullying victimization across gender and form of bullying included told a friend', told an adult at home., told an adult at school, Support-Seeking Strategies, Assertive Strategies. [12]

Therefore, on the analysis it was found that occupational therapy-based interventions are effective in reducing bullying among physically disabled children in inclusive school.
This study has limitations that need consideration. Sample size of 30 taken in the study was very small. The study should be conducted in larger population so that the subjects of the study can be generalized. More scales can be used to have better understanding of assessment and treatment protocol.

Also, Lack of support from the parents of some students involved as perpetrators compromised the implementation of bullying intervention programs and reduced their commitment to these initiatives. Bullying intervention program needs to be implemented in the entire school, thus requires efforts of the school administration.

REFERENCES

1. Rashmi Shetgiri. Bullying and Victimization Among Children .Adv Pediatr. 2013; 60(1): 33–51.

2. Beran T. Correlates of peer victimization and achievement: An exploratory model. Psychol Sch . 2009;46(4):348–361

3. Vaillancourt T, McDougall P, Hymel S, Sunderani S. Handbook of Bullying in Schools: An International Perspective. Jimerson SR, Swearer SM, Espelage DL, editors. New York: Routledge; 2010b. pp. 211–222. (The relationship between power and bullying behavior).

4. Janet Njelesani, ; Aisha Faulkner, ; Hayden Jeon, OTs' Roles in Addressing Bullying Against Students With Disabilities .American Journal of Occupational Therapy, August 2019, Vol. 73, 7311505147. https://doi.org/10.5014/ajot.2019.73S1-PO5010

5. Mike D'Elia and Dr Rob Brooks., Bullying Prevention: A Survey of School-based Occupational Therapists. Children, Young People and Families Occupational Therapy Journal. 2017

6. Chad A. Rose, Lisa E. Monda-Amaya & Dorothy L. Espelage (2011) Bullying Perpetration and Victimization in Special Education: A Review of the Literature. Remedial Spec. *Educ.* 32(2) .

7. Chan, H. C., & Wong,D. S. W. (2019). Traditional School Bullying and Cyberbullying Perpetration: Examining the Psychosocial Characteristics of Hong Kong Male and Female Adolescents. *Youth Soc*. *51*(1) 3–29

8. Silva, M.A.I., Pereira,B., Mendonça, D., Nunes ,B., & Oliveira, W. A.(2013).The Involvement of Girls and Boys with Bullying: An Analysis of Gender Differences. Int J Environ Res Public Health.10(12), 6820–6831. https://doi.org/10.3390/ijerph10126820

9. Susan Swearer and Shelley Hymel. Bullying and Discrimination in Schools: Exploring Variations Across Student Subgroups. School Psych Rev, 2015,44 (4); 504 –509

10. Jiameng Lia , Aissata Mahamadou Sidibea , Xiaoyun Shena , Therese Hesketha. Incidence, risk factors and psychosomatic symptoms for traditional bullying and cyberbullying in Chinese adolescents. Child. Youth Serv. Rev.2019 :107;104511

11. Carter B.B, & Spencer V. G. (2006) The fear factor: Bullying and students with disabilities . International Journal of Special Education.

12. Nixon, C. L. , Jairam, D., Davis ,S., Linkie , A.C. , Chatters ,S., & Hodge, J. ,(2020) .Effects of Students' Grade Level, Gender, and Form of Bullying Victimization on Coping Strategy Effectiveness. Int. J. Bullying Prev, 2 (2), 190–204. https://doi.org/10.1007/s42380-019-00027-5.

Table 1. Represents the Mean age ,standard deviation ,minimum and maximum age of children .

Descriptive Statistics	**AGE**
Mean	14.50
S.D.	1.253
Number	30
Maximum	16
Minimum	13
Range	3

Table 2. Shows the comparision between Pre-test and Post -test results of Multidimensional PeerVictimization Scale

Paired T Test		
	MPV	
	PRE	**POST**
Mean	26.33	10.43
S.D.	2.591	6.495
Maximum	31	23
Minimum	20	2
Range	11	21
Mean Difference	15.90	
Paired T Test	12.540	
P value	<0.001	
Table Value at 0.05	2.05	
Result	Significant	

Table 3- Compares results of types of Bullying .

Paired T Test								
	PVS		**VVS**		**SM**		**APS**	
	PRE	**POST**	**PRE**	**POST**	**PRE**	**POST**	**PRE**	**POST**
Mean	6.63	3.13	6.17	2.63	7.03	2.23	6.50	2.43
S.D.	1.450	1.961	1.085	1.866	1.159	1.924	1.280	1.870
Paired T Test	9.003		9.871		14.858		8.994	
P value	<0.001		<0.001		<0.001		<0.001	
Table Value at 0.05	2.05		2.05		2.05		2.05	
Result	Significant		Significant		Significant		Significant	