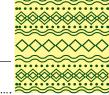


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Teaching Practices for Children with Autism (CWA) at Baguio SPED Center

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Abstract

With the increasing number of children with Autism (CWA) in the Philippines, this study looked at the teaching practices in a multi-awarded Special Education Center. It documented the CWAs' challenging behaviors, practices applied by SPED teachers in dealing with the challenging behaviors, and the effectiveness of such practices using mixed method of research. Findings show that the challenging behaviors of CWAs are aggressiveness, defiance, hyperactivity, motor deficiencies, self-stimulatory, speech deficiencies, and tantrums. The practices applied by the SPED teachers include Behavior Modification Techniques (BMTs), classroom set-ups, and schedule modifications. The study concludes that CWAs display certain types of challenging behavior different from each other. Most of these challenging behaviors occur very often that SPED teachers have to apply various practices repeatedly. However, applying a particular practice should be based upon the cause of the behavior, the CWA's reaction, and the perceived effectiveness of the practice. This study recommends that using a certain practice for a particular type of challenging behavior, as documented in this study, be considered by other SPED Centers and regular school teachers handling inclusive education classes. Further, it recommends incorporating these practices and their appropriate application in in-service and continuing education training curriculums.

KEYWORDS

Children with Autism Challenging Behaviors Behavior Modification Techniques Classroom Set-up Schedule Modification

Introduction

The number of children with autism (CWA) in the Philippines is increasing over the years. Lambatin (2018) noted that the number of people with autism in the Philippines has almost doubled in the past six years, and the number is still rising. It is estimated that the cases of autism in the country rose from 500,000 in 2008 to one million people in 2019. Unsurprisingly, autism is becoming one of the common conditions

or cases of Children with Special Learning Needs (CSLN) found in many SPED schools in the Philippines.

Autism is described by the American Psychiatric Association or APA (2013) as a complex neurodevelopment disorder manifested by the extremely different characteristics of affected learners from each other. Albeit there are strong and consistent commonalities, especially in social deficits, there is no single behavior that

is always typical of any of the autistic spectrum disorder and no behavior that would automatically exclude an individual child from a diagnosis of autism (Cross & Donovan, 2002). CWA's diverse characteristics include the occurrence of behaviors that can be frustrating and difficult to deal on the part of teachers. Fortunately, the different behaviors being observed among CWA are also providing opportunities for educators, administrators, researchers, and other concerned stakeholders to continuously devise, develop, or modify approaches to make them more effective and relevant.

This study aimed to document the appropriate processes in managing CWA. Specifically, it focused on identifying challenging behaviors usually displayed by CWA, the practices applied by teachers in handling CWA, and the level of effectiveness of the practices applied. To achieve the said objectives, this research was conducted in Baguio SPED center located at Military Cut Off, Baguio City. Baguio SPED center is one among the schools in the country that have pioneered the handling of classes composed of CWA. The center was recognized as an Outstanding SPED Center in 2011 and as the 2013 Outstanding SPED Center in national conferences. In addition, two of its teachers were given due recognition by the Department of Education (DepEd) for their exemplary performance as SPED teachers. This institution's aforementioned achievements alongside its long years of experience in accommodating children with diverse conditions were the reasons for choosing the school as the place for this study.

Moreover, inclusive education, which aims to accommodate children with special learning needs (CSLN) in regular schools, is being advocated and implemented by the DepEd. The department considers inclusive education as a tool to guarantee the right of children to receive appropriate education after it was confirmed that the country has only served 2% of the targeted 2.2 million children with disabilities without access to education (Inciong & Quijano, 2013). In relation to this, the most recent basic education curriculum adapted through Republic Act No. 10533, otherwise known as the Enhanced Basic Education Curriculum, emphasized inclusive education. Section 8 of the statute specifically highlighted the Programs for Learners with Disabilities. There is doubt however, whether the program would be effectively implemented in all schools considering the limited background, knowledge, and skills of many teachers in inclusive education. As Muega (2016) found, many school teachers are not quite certain whether the conceptual basis for their practice is sufficient to meet the standards of high-level inclusion. It might be worth recommending the provision of trainings to teachers in relation to inclusive education, especially on the practices that are proven effective. This research's output may be considered supplemental resource in planning contents of inclusive education training since the different practices in handling CWA can also be applied to children with other conditions. In one lecture, a prominent professor said that many teaching approaches being utilized for CSLN were adopted from those that were proven to be effective in teaching CWA. She also concluded that autism is the heart of special education (M. Domalanta, SPED class lecture, April 10, 2013).

Methodology

The researcher employed a mixed method of research consisting of observations, interviews, and questionnaires to gather data. Actual observations were conducted twice a week for at least half a semester in three sections or clusters composed of CWA. Each class is composed of 4-5 pupils with varying cases and degrees of autism. The researcher in this study mainly served as observer since the goal of the study is to document the teaching practices of the SPED teachers. There were several instances, however, that the researcher, as suggested by the school principal and with the consent of the CWA teachers, acted as shadow teacher. In order to obtain additional information and clarification on the practices observed, three SPED teachers and the school principal were formally interviewed using an interview guide containing open-ended questions.

The qualitative information given by the CWA teachers interviewed were used as guide in developing the questionnaires that were accomplished by nine other SPED teacher -respondents from the center. The questionnaire included questions on how often challenging behaviors are displayed by the CWA, how often various practices are applied and how effective



were the practices. A four-point likert scale was used for all the three sets of questions while weighted means was utilized to analyze the data from the questionnaires.

As class observations were being conducted, the researcher managed to ask related questions to the SPED teachers. All those valuable statements given by the teachers in the formal interviews and their responses to the questions asked in casual settings, were utilized in explaining the reasons or causes of challenging behaviors in this research.

Results and Discussion

Challenging Behaviors Frequently Displayed by the CWA

There are different classification of challenging behaviors displayed by CWA as expressed by several authors like Dizon et al. (2000), Coie and Dodge (1998), Kaiser and Rasminsky (2007), and Swiezy (1999), let alone the diagnostic criteria of Autism Spectrum Disorder contained in DSM-5 of the American Psychiatric Association or APA (2013). Based on the aforementioned authors' classifications, the identified challenging behaviors of the CWA in this study are summarized in Table 1 from aggressiveness,

defiant attitudes, hyperactivity, motor skill deficiencies, self-stimulatory, speech deficiencies, to tantrums.

Under aggressive behaviors are; frequent grabbing of items, often hitting, sometimes spitting, and at times biting. As confirmed by the SPED teachers, one of the CWA does such an act of grabbing when he is hungry or fascinated by an object. On the other hand, hitting, suddenly punching, or pulling the person nearby is done when the CWA is annoyed or frustrated. The aggressiveness through spitting happens when a CWA just spit at someone whom he dislikes. Another CWA has the habit of biting the hand of anyone who attempts to physically lead or guide him to perform a task. The occurrence of different aggressive behaviors from the CWA concurs with the conclusions of Coie and Dodge (1998) and Kaiser and Rasminsky (2007) that aggressive acts of children can either be direct or indirect. Direct aggression can be exemplified by hitting, biting, and spitting, while indirect is manifested through acts of destroying objects. The display of aggressive behavior due to said frustration also validates Swiezy (1999) statement that CWA tend to respond with aggression with tantrums or "non-compliant" behavior as a way of communicating a frustration or a need.

Defiant attitudes cover two specific characteristics, such as disobedience and non-compliance. Disobedience is shown by the CWA,

Table 1					
Challenging	 Behaviors	Observed	among	the	CWA

Challenging Behaviors	Weighted Means	Descriptive Rating
Aggressive Behaviors	2.75	Often Displayed
Defiant Behaviors	2.75	Often Displayed
Hyperactivity Behaviors	2.5	Often Displayed
Motor Skills Deficiencies	3.18	Often Displayed
Speech Deficiency	3.08	Often Displayed
Self-stimulatory Behaviors	2.68	Often Displayed
Tantrums	1.75	Sometimes Displayed

Legend: 3.25 - 4.00 Very Often Displayed 2.50 - 3.24 Often Displayed 1.75 - 2.49 Sometimes Displayed 1.00 - 1.74 Rarely displayed



who repeatedly violates rules or routines in the classroom. It was observed that this CWA refuses to sit, to stop talking, to quit from moving, or to fix things after using. On the other hand, noncompliance happens when a CWA often fails to accomplish a particular task. As noticed, some CWA start doing the assigned tasks but often do not complete within the allocated time. One CWA even insists on doing other activities like playing computer games instead of her present task. Worst, she yells at the teacher as she clamors for another activity. It was further noticed that some CWA display disobedience because they cannot express their feelings, they dislike the activity, or they seek attention. Meanwhile, non-compliance with the CWA is due to a lack of confidence and interest in an activity. The defiant attitudes of the CWA are comparable to conduct disorder such as defiance and non-compliance toward the teacher, school, and classroom rules according to Morgan and Jenson (1988). Relative to this, Legaspi (2009) revealed that refusing to obey rules or listens to authorities is third among 14 typical disruptive behaviors of children with special needs. Children with special needs shift excessively from one activity to another and refuse to cooperate or participate. The APA (2013) confirmed the same when it stated that a child with defiant behavior often disobeys or refuses to comply with requests from authority figures or with rules.

Hyperactivity is usually displayed by a male CWA who keeps on standing, running, jumping around or at someone and even disrupting classmates by suddenly moving desks. Another boy often climbs on cabinets, tables, and windows. One girl with CWA talks alone excessively, yells and/or often laughs with unknown reasons, while another girl is fond of opening and pulling anything she sees, such as cabinets, bags of classmates or teachers, and other items in the classroom. The CWA's ways of showing hyper activeness do not differ much on the hyperactivity symptoms mentioned by Stöppler (2014), such as difficulty concentrating or focusing on a task, excessive talking, or difficulty remaining quiet in school. The finding on CWA's hyperactiveness also affirms the truthfulness of Goodman's (2015) statement that almost 30 percent of young children with autism show signs of Attention Deficit Hyperactivity Disorder (ADHD).

Motor skill deficiencies were observed among

four boys with autism. The first cannot grasp items available in the classroom like pens, crayons, brooms, etc. This boy is around 12 years old but still in the early stage of physical development considering the characteristics of Filipino children, according to Andin (1988). The other boy has the habit of tiptoeing or toe walking. Meanwhile, the third one used to walk or stand with an imbalance distribution of weight to the feet, resulting in his improper posture. It was also inferred that said imbalance of weight distribution and improper posture, let alone his being overweight, are the reasons he complains of body pains. Finally, a simple motor tic is shown by another CWA who habitually wiggles his head for about seven seconds. Fortunately, the motor tic does not disrupt him on his tasks. These motor skill deficiencies observed from the CWA corroborate the beliefs of Burns (2012) and MacDonald's et al. (2014) that CWA are below average in motor skills and are nearly a year behind their typical peers in fine motor skills. The simple tic displayed by one CWA proved that stereotypic movements might be a presenting symptom of autism spectrum disorder (APA, 2013). Nonetheless, since tics are common in childhood but transient in most cases, stereotypic movement is diagnosed only when there is self-injury or when the behavior is sufficiently severe to become a focus of movement (Diamante et al., 2007).

Other CWA's self-stimulatory behaviors are putting inedible items in their mouths, spitting and playing with saliva, tapping of fingers or knuckles with stationary objects, rocking, inserting index finger on their ears, and frequent clapping of hands. It was apparent that the concerned CWA often do most of these actions for pleasure. For instance, one of the CWA seems to enjoy spitting on his hand then wipes the saliva all over his head. Another CWA often puts inedible items in his mouth because of curiosity and attraction to the objects. Similarly, rocking and tapping of fingers and knuckles with objects as well as clapping hands seem to help the CWA escape boredom. For another CWA, his hypersensitivity to sounds leads him to keep on inserting his fingers in his ears. The stimulatory behaviors seen among the CWA support the theory of Herbert and Weintraub's (2013) that sensory stimulation is a triggering factor for the CWA to display challenging behaviors. Due to some dysfunctional system in the brain or its periphery, the body craves stimulation that the



CWA engages in behavior that excites or arouses the nervous system.

Speech deficiencies as challenging behavior are manifested differently by each CWA. For instance, one CWA keeps on echoing every word or phrase spoken by anyone who attempts to communicate with him. There were times that this CWA even imitates the gesture of the person talking to him. Another CWA refuses to speak but instead keeps on humming or saying a word repeatedly without looking at the person talking to her. The imitation of spoken words and gestures pertains to echolalia and echopraxia, respectively, based on the standard definitions seen from dictionaries and those cited by APA (2013).These speech deficiences displayed often by the CWA are similar with the common characteristics of people with autism mentioned by Legg (2018). Humming a set of three or four notes over and over in particular falls under the forms of self-stimulation or stimming displayed by CWA. According to Legg (2018), the CWA's self-talking and refusal to speak could be attributed to their strange lack of interest in social interactions. A peculiar characteristics of CWA is severe affect isolation (SAI). This can be noticed when the child shows a profound lack of interest when someone attempts to cuddle him or her. Morgan and Jensen (1988) added that the said characteristics of the CWA are manifestations of their emotional impairment. The identified speech deficiency behaviors of the CWA further corroborates Klin's and Volkmar (1997) statement that individuals with Autism are characterized by pervasive and usually severe impairment of reciprocal, social interaction and skills coupled with communication deviance. Finally, the deficiencies in speech among some CWA found in this study can be classified under the diagnostic criteria for Autism as provided by APA (2013). The criteria includes persistent deficits in social communication and social interaction among others.

Tantrums are typically displayed by some CWA through head beatings, excessive crying, and throwing things. Extreme crying of the CWA is sometimes accompanied by screaming and kicking while lying-down and/or indiscriminate throwing of things. Fortunately, these behaviors were not frequently observed among the CWA. One CWA displays such head hitting behavior only when he is in pain, or experiencing some stressors. The

manifestations of tantrums found in this study illustrate Webster's (2015) definition of tantrums, which is an uncontrolled expression of childish anger or angry outburst distress. Hunter (2013) said that while tantrums may appear as if the child is trying to hurt him or herself, it is usually the child's way of trying to relieve self from stress. On the other hand, Dizon et al. (2000) explained that the inability to communicate what they need, reactive or under reactive senses, a sudden change to routine or surroundings, unable to understand the point of view of someone else, and having an underlying medical issue might cause excessive crying among CWA. Further, many demonstrates self-injurious behaviors in response to a need for communication, frustration, raised endorphin levels, and many other reasons (Bright Tot Inc., 2014).

Practices Applied in Handling CWA

Practices refer to the application of Behavioral Modification Techniques, classroom set up, and schedule modifications by the Baguio SPED Center teachers in handling CWA.

Behavioral Modification Techniques (BMTs)

The BMTs that were identified as frequently applied by the SPED teachers are verbal and physical prompts, modeling, channeling, fading, and ignoring (Table 2). Verbal and physical prompts are used to prevent undesirable behavior by saying prohibitive expressions or holding down the CWA's hands for around 30 seconds. As an illustration, a CWA who displays stimulatory behaviors is restrained by the teacher by saying "stop," "no," or "don't do that" while physically suppressing the CWA to move. The same prompts are also used by the teachers to persuade the CWA to do a particular task or maintain a desirable behavior. For instance, the CWA who exhibit hyperactivity behaviors is made to keep still by command expressions like "sit down," "get down," "stop running," "no shouting," etc. while physically leading the child to do what the teacher says. For the CWA who keeps talking, laughing, or yelling, some teachers place their hands on the child's mouth to stop the excessive verbal acts. Subsequently, the teachers hold the CWA's hand and direct him or her to do a more productive activity. It was also observed that the teachers recurrently give them verbal praises or sometimes



Table	2				
BMTs	Applied	bу	the	SPED	Teachers

Behavior Modification Techniques	Weighted Means	Descriptive Rating
Verbal and physical prompt	3.06	Often
Channeling	3	Often
Modeling	3	Often
Fading	2.67	Often
Positive Reinforcement	2.5	Often
Ignoring	2.5	Often
Premack Principle	2	Sometimes
Use of paraphernalia aids	2	Sometimes
Shaping	2	Sometimes
Positive punishment	1.75	Sometimes

Legend:	3.25 - 4.00	Very Often Used
	2.50 - 3.24	Often Used
	1.75 - 2.49	Sometimes Used
	1.00 - 1.74	Rarely Used

material rewards in order for the CWA to do or maintain good behavior.

The use of verbal and physical prompts is illustrated by Cook and Tankersley's (2013) as verbal cues, gestures, full or partial physical assistance combined with channeling and/or modeling to let a student know how or when to perform a particular task. The authors also supported the frequent use of prompts as they explained that a teacher who wants a student to cease from wandering the classroom could give verbal direction to sit down. If the student responds by sitting down, the teacher delivers reinforcement by stating, "thank you for finding your seat." At any time the student does not respond by sitting, the teachers deliver a correction procedure like physically guiding the student to sit. Webster (2015) said that the CWA who may have ADHD needs prompting to stay on and complete tasks. He added that physical prompts work well with young students on the autism spectrum and for older autistic students with unfamiliar tasks. The procedure applied by the teachers of Baguio SPED center as far as prompts are concerned is a demonstration of Swiezy's (1999) discourse that verbal prompts are done through giving the child a clear instruction to do or stop and act and wait for five seconds.

Gestural prompts follow verbal prompts as the teacher models to the child the exact response desired. When gestural prompts do not work as well, physical prompts such as taking and child's directing the hand while giving instructions repeatedly is applied. Meanwhile, the utterance of verbal praise is an imperative component of verbal prompt for increasing positive response. Cook and Tankersley (2013) explained that the response of a child to a teacher's request would likely occur again in the future if praise contingent is applied, whereas, if they do not receive enough positive attention for their good behaviors, they will often resort to behavior that results in negative forms of attention. Diamante et al. (2007) also support the application of prompts as he encouraged the giving of verbal cues, using precise language, repeating or rephrasing of instructions in teaching learners with autism.

Channeling is implemented by the SPED teachers when their CWA pupil prefers to do another activity instead of the one pre-planned. There was a situation when the teacher prepared a coloring activity for one of the CWA. The child however, suddenly grabbed a magazine to browse. In applying channeling, the teacher immediately prepared a worksheet for the child to draw, write,



or copy what he sees in the magazine. Whatever the child accomplished was already considered as his output for the class period. Another instance was when the SPED teacher took the child's hyper activeness as an opportunity to play the ball with him. The playing of ball redirected the hyperactivity of the CWA, and at the same time, it was perceived as instrumental in the development of gross and fine motor skills. Another teacher demonstrated channeling when she convinced the child to join her in a picking game. The teacher joyfully uttered expressions like "let's play" while verbally and physically prompting the child to pick the scattered items in the classroom. Upon seeing one CWA who was viewing herself in the mirror, the same teacher took the opportunity to teach grooming by saying "let's fix your hair" while directing the child's hand in fixing her own hair. The flexibility of giving task based on the CWA's interest as exemplified by the SPED teachers' is comparable with Mather and Goldstein (2001) multi-step process in managing behavior, to wit: defining the problem behavior, designing away to change the behavior, identifying an effective reinforcer, and applying the reinforcer consistently to shapte or modify the behavior.

Modeling as a form of BMT is applied by the SPED teachers to control sudden grabbing behavior by coaching the CWA on how to borrow something from classmates properly. The teacher models to the child how to say the appropriate words in borrowing and asking. Even for the CWA who can hardly talk or express himself thus display some sort of disobedience, the teacher often models the simple but appropriate words or phrases that the child can gradually imitate with the hope that he can eventually gain the confidence to speak. Noticeably, the teacher reinforces her modeling technique by verbally praising the CWA every moment that the latter vocalizes the words being modeled. Another means of applying modeling is by playing selected television programs where the CWA, who keeps on uttering nonsense words or the non-verbal one, may imitate correct pronunciation of words. There were times that physical exercise is utilized to help the CWA control his aggressive behavior. The teacher models some very simple exercises as she says, "hands on lap," "hands on desk," and "hands on head," while the CWA follows and eventually stops doing an undesirable act. According to one of the SPED teachers, the advantage of modeling is that it eventually leads the CWA to do certain tasks alone. This explains why Webster (2015) considered modeling as useful in leading the children towards independence, where they may no longer be prompted to stop undesirable behavior.

Fading is subsequently applied by the teachers when they noticed that the other BMTs at work may no longer be necessary to prevent the CWA's challenging behavior. The SPED teacher handling the CWA, who has the attitude of spitting at someone he dislikes, revealed that he initially gave positive punishment. After some time, the teacher just pretended to physically punish the child every time the latter attempts to spit. As the child stops, the teacher will not also continue the punishment. The same strategy was done until such time that the undesirable act is reduced if not eliminated. The subsequent use of fading after applying BMTs like prompts, modeling and channeling substantiated Azrin and Powers (1975) finding as cited by Morgan and (1988)that employing interventions, which will eventually cascade to merely warnings and reminders decreases a disruptive behavior.

Sometimes, positive reinforcement is done after the application of some BMTs. It was noticed from several instances that when a CWA is verbally prompted to speak, the child utters a little sound or word. The teacher applies positive reinforcement by giving high five, offering praise, or handing material reward or token. In fact, the use of positive reinforcement relates to Swiezy's (1999) statement that when the child has done something that teachers want to encourage, it is important that the child sees a tangible reward.

Ignoring is frequently done by the SPED teachers when specific behavior is not so disruptive and can still be tolerated. There were times that teachers ignore the challenging behaviors being displayed so that they can observe or study what triggers such behavior, and eventually determine the appropriate interventions. According to one SPED teacher, she intends to ignore the CWA's refusal to speak at first because it is a way of giving enough space for the child to establish a mood before he will be encouraged to vocalize his speech. Other SPED teachers believe that ignoring a certain speech deficiency will not only prevent the CWA to do tantrums but will also give him or her time for



mental processing. Ignoring was further applied by the SPED teachers for simple tic displayed by one CWA. It is well known that tics cannot be resolved over time. Fortunately, simple tics usually do not affect the learning process thus, display of it is usually ignored by the teachers. The ignoring of undesirable acts of children according, to Durand et al. (1990) as cited by Kaiser and Rasminsky (2007), the National Institutes of Neurological Disorders and Stroke [NINDS] (2014), and Swiezy (1999), will show to the child that such behavior will not serve the function it used to. In other words, it will no longer get him what he wants. When the CWA is allowed to continue the undesired act to a certain point until he is tired or bored, it leads to the discontinuation of the act. Besides, there are behaviors that are ignorable since they are not harmful to the child and to others or others' belongings. Ignoring other behaviors like hyperactivity is also supported by the Raising Children Network (2015) when it claimed that while children should be rewarded with lots of attention when they are behaving well, teachers may opt not to pay any attention when minor problem behavior occurs.

Included under the BMTs that are sometimes applied by the SPED teachers are premack principle, the use of paraphernalia aids, shaping, and positive punishment. Premack principle is implemented by the teacher telling the CWA to finish a particular task so that he or she can do a more favorable activity. For the CWA, who typically displays non-compliance, the teacher makes a prior agreement that the former will be allowed to play his favorite computer game after finishing his assigned task. Paraphernalia aids are limited to clay manipulation, playing of ball, and putting weights on child's feet to address some motor skill deficiency issues. The provision of clay and ball is useful in improving CWA's fine motor skills as they manipulate or play with the items. The SPED teachers even had the opportunity to teach the concept of shapes by orally directing the CWA to make simple figures while holding the clay. Similarly, the teacher plays ball with the CWA to encourage him to hold objects to develop fine motor skills. The placing of foot weights on feet to prevent lifting of heels while walking was intended for the CWA who does tiptoeing or toe walking. Shaping, on the other hand, is applied for the CWA who scatters things. The SPED teacher said that once the CWA complies with the request for him to fix scattered

compliance attitude is immediately reinforced through verbal praises. The teacher noticed that the mere use of the expressions like "very good" seems to be appreciated by the CWA. Finally, positive punishment is especially applied for the CWA's biting and spitting acts. One SPED teacher explained that this type of BMT is applied through over-stimulation such, as pushing the fingers or hand of the CWA further into his mouth when he displays his biting habit. The SPED teachers disclosed that there are teachers, not necessarily from Baguio SPED Center, who sprinkle water to the face of CWA who habitually spits at other people. The teacher explained that sprinkling water to the CWA might make him realize that spitting at someone is very annoying. She also cited other forms of positive punishment like time out and putting substance to inedible items. Timeout is applied by segregating a CWA who is fond of hitting others in a secluded room or area until he calms down. Implementing such a technique prevents the CWA from hurting his classmates. The substance being referred to by the SPED teachers is usually hot pepper, which is spread onto inedible items that CWA likes to put in their mouth. This strategy discourages the children from developing the habit of putting any item in their mouth as they feel the burning sensation caused by the hot pepper.

Although the BMTs like premack principle, use of paraphernalia aids, shaping, and positive punishment were not seen as frequently applied compared to the BMTs earlier mentioned, their application is also supported by several advocates. Webster (2015) implied that the use of a premack principle helps learners succeed, eliminate problem behavior and build a positive relationship with the teachers. This is especially so if agreements will focus on the learner's good behavior rather than on the problems. As to the SPED teachers' use of paraphernalia to address motor skill deficiencies, Diamante et al. (2007) concluded that the use of objects that the CWA can grasp and manipulate is highly recommendable as part of motor skills program. For the application of shaping, Mather and Goldstein (2001) said that this BMT is useful for behaviors that are not routinely exhibited. Hernandez (2015), on his part, claimed that shaping is often an effective method to use for children on the autism spectrum. It is an applied behavior analysis used as a reinforcement in encouraging students to increase favorable behaviors. As to positive punishment, there are instances that this may be beneficial depending



on how it is applied, as disclosed by one of the SPED teachers. The teacher explained that positive punishment is justifiable when used as a tool in immediately suppressing CWA's rude behaviors. Spitting and hitting, for example, are challenging behaviors that need immediate control otherwise, the acts of the CWA may cause trouble if there will be people affected who do not know anything about autism. The application of this BMT is supported by Dizon's (2006) declaration that positive punishment results in decreased behavior frequency or even stopping the behavior altogether due to an unpleasant Likewise, Cherry (2018) cited in her paper famous what the American psychologist B.F. Skinner noted that positive punishment is effective in some situations although its use must be weighed against any potential negative effects.

Classroom Set-up

Classroom set-up involves applying visual schedules, the use of horseshoe shaped tables, the assignment of cabinet space for each pupil, and installing improvised basketball rings on walls of the classrooms. All of these modifications are employed very often at Baguio SPED Center, as indicated in Table 3. Other classroom set-ups sometimes applied in the said school are the restriction of space and cushioning the CWA's physical space.

Visual schedules refer to installing picture clues on the walls, furniture, and other items found in the classrooms. It also includes the labeling of cabinet spaces and trash bins that will all serve as a guide for the CWA in putting things in the right place. Visual schedules are applied very often because it helps in preventing the child from scattering objects. The picture clues installed on the walls are used by the SPED teacher to show the awkward picture of a crying personto the CWA who excessively cries. The teacher may say, "You don't look good when you cry" or "You look exactly like this person, so stop crying."

The second type of classroom set-up, which is the provision of horse-shoe-shaped table in the classroom, minimizes the movement of the CWA who is hyperactive. The table is a specially designed desk with a U-shaped top and sides. The use of this table hinders the CWA from standing and roaming around the classroom. Meantime, the assigning of personal cabinet space for each CWA directs them to put their things in the proper place. Seeing their names with their picture on the cabinet encourages them to put their things in their own cabinet space. The installation of improvised basketball rings motivates the CWA to play basketball. Playing basketball redirects the CWA's hyper-activity and may even help hone their fine motor skills.

The first four methods of classroom setups mentioned earlier appear to be applied very often because, as observed and confirmed by the SPED teachers, these are almost permanent structures in the classroom. The restriction of space and cushioning of the CWA's space

Table 3		
Classroom Set-up		
Set-up	Weighted Means	Descriptive Rating
Visual Schedules	4.00	Very Often
Installing of Horse-shoe shaped Table	4.00	Very Often
Assigning cabinet space for each pupil	4.00	Very Often
Installing of improvised basketball rings on walls	4.00	Very Often
Restriction of Space	2.00	Sometimes
Cushioning the CWA's physical space	2.00	Sometimes

Legend: 3.25-4.00 Very Often Applied 2.50-3.24 Often Applied 1.75-2.49 Sometimes Applied 1.00-1.74 Not Applied



are not necessarily done regularly. The restriction of space is intended for the child who is fond of scattering things, while the cushioning of space is aimed to physically protect the child who does head banging. Both acts of the two children are displayed only for some time. The application of classroom set-ups may clarify Hume's (2007) statement that CWA thrives on visual schedules for reasons of communication, knowledge, comprehension, time, sequence, anxiety reduction, and knowing what to do next. It further explains the same author's conclusion that specific visual supports that are not in place result in a feeling of being lost or anxious on the part of CWA.

Renata (2014) emphasized that classrooms can be set up to assist CWA with the types of challenges they face and create an optimum learning environment. For instance, assigning a horse-shoe-shaped table to CWA is very useful in controlling their frequent unnecessary movements. Meanwhile, installing basketball rings in the classroom may divert hyperactive behavior into a more productive activity. Indeed, immediate surroundings have an enormous impact on children that can help prevent challenging behavior (Kaiser & Rasminsky, 2007).

Assigning personal cabinet space for the CWA jibes with the characteristic of "insistence of sameness" of the CWA. Each CWA's need for predictability and structure in the classroom is unique in that the environment must be tailored to the needs of the specific child (Swiezy, 1999). Restricting space to control the hyperactivity behaviors is encouraged by Renata (2014) when she said that clear physical and visual boundaries would minimize the tendency of the CWA to move randomly. These boundaries may even serve as

visual guides that will frequently remind CWA of appropriate personal space and area throughout the room. Lastly, cushioning the CWA's physical space protects the children, especially those who do head bangings (Renata, 2014).

Schedule Modifications

The schedule modification techniques, which the Baguio SPED Center teachers apply very often are: limiting the number of CWA per class/ cluster, shortening class periods, making a fixed activity routine, provision of snack time, and implementing a free floor time (Table 4). Limiting the number of CWA per class/cluster was done by dividing the total number of CWA enrollees into 15 sections or clusters. Each cluster is limited to four or five children. To accommodate all the CWA, classes for each cluster are scheduled two or three days a week with a three-hour duration per session. Hence, some CWA are assigned in the morning sessions, while others in the afternoon sessions. This method of limiting the number of CWA in a class or cluster helps manage hyperactivity behaviors and tantrums. Likewise, classes are shortened to address the short attention span, and the learning endurance difficiency of the CWA.

The preparation of a fixed activity routine is employed for the CWA who have defiant attitudes and display hyperactivity. The fixed routine helps the CWA determine ahead the task that they are supposed to accomplish. Moreover, hyperactivity behaviors can be controlled if the CWA is occupied with a variety of productive tasks.

Table 4		
Schedule Modifications		
Modifications	Weighted Means	Descriptive Rating
Limiting the number of pupils per class	4.00	Very Often
Shortened class periods	4.00	Very Often
Fixed activity routine	4.00	Very Often
Provision of snack time	4.00	Very Often
Free floor time	3.25	Very Often

Legend: 3.25 - 4.00 Very Often Applied 2.50 - 3.24 Often Applied 1.75 - 2.49 Sometimes Applied 1.00 - 1.74 Not Applied



The SPED teachers provide free floor time to the misbehaving CWA as another form of schedule-modification scheme. This free floor time allows the CWA to do the things likes to do. Teachers implement this very often since it is a way to build a better mood for the CWA. The SPED teachers observed that if a CWA is in good emotional condition, it becomes easier for him/ her to do other tasks when told to do so. This free floor time is often provided at the beginning of a period to set a better mood for the child. It is also during the free floor time, that social skills of the CWA are developed since they are free to mingle with their classmates. Finally, the provision of snack time is necessary since many CWA easily get tired and hungry.

All the schedule modifications herein identified are regular practices applied yearly in the Center. They are thus described as methods applied "very often." The implementation of rules and fix routines by the teacher keep the classroom running in a well-ordered way thus, considered as a good classroom management 2016). Indeed a fixed routine is suited for the CWA's characteristic of finding his or her own method of imposing structure and maintaining consistency that when some form of structure or routine is disrupted, the world becomes confusing and overwhelming (Bright Tot Inc., 2014).

The allocation of free floor time, especially at the beginning of the class, is beneficial because it is the time for the teachers to teach flexibility and encourage cooperation (Diamante et al., 2007). Despite some contradictions, like the notion of others that CWA have difficulties during free play time to interact socially with their classmates, Iovannone (2003) insisted that naturally occurring social activities are mostly observed during free floor time.

The interaction among children, even among those with autism, may actually develop a bond among them. There are some instances when children can adopt behaviors from peers faster. In an earlier study by Strayhorn and Strain (1986), teachers' reinforcement worked only 12% of the time while when peers paid attention, the children responded positively 53% of the time. This finding shows that being part of an ordinary community enables children to develop a bond to conventional social life – a factor that protects

them from behaving aggressively (Guera, 1997 as cited by Kaiser & Rasminsky, 2007). Finally, snack time is necessary for preventing behavior outbursts of CWA that can be triggered by hunger (Herbert & Weintraub, 2012).

Effectiveness of the Practices

As can be inferred from the perceptions of the Baguio SPED center teachers during interviews and from the questionnaires they accomplished, the BMTs they consider very effective are verbal and physical prompts (Table 5). The effective BMTs are channeling, ignoring, modeling, fading, and positive reinforcement, while those they consider as moderately effective are time out, positive punishment, putting weights on the ankles, clay manipulation, playing ball, shaping, and premack principle.

The perception that use of verbal prompts and physical prompts are very effective could be attributed to the fact that these BMTs can be applied instantaneously. Compared to other techniques, prompts require neither much preparation nor materials. This high level of effectiveness of the two BMTs corroborates Sinakay (2012) findings that verbal or social praise, verbal reprimand, and direct instruction are often applied and thus perceived by teachers to be effective.

The SPED teachers labeled some BMTs as effective as they are applied. One SPED teacher mentioned that these BMTs are comfortable to use because there is no need to use additional resources or to observe some precautionary measures. Most of these BMTs are similar with Easy-to-Implement Behavior Strategies for Children with Autism as identified by pplied Behavioral Analysis [ABAP] (2020) such as the following: set expectations and give rewards for good behavior (positive reinforcement), give the child a sense of control with choices (removal of BMT or fading), model ideal behavior through effective body language (Modeling), redirect bad behavior by changing their focus (channeling). The other BMTs are applied in moderate frequentness as the teachers view their level of effectiveness as moderate. Besides, these BMTs need to be applied by the teachers with caution to avoid probable negative impact. Martinelle (2020) discussed some dangers in using such BMTs like time outs, which



Table 5		
Effectiveness of BMTs		
BMTs Applied	Over All Weighted Means	Level of Effectiveness
Verbal & Physical prompts	3.54	Very Effective
Channeling	2.92	Effective
Ignoring	2.75	Effective
Modeling	2.58	Effective
Fading	2.60	Effective
Positive reinforcement	2.50	Effective
Timeout	2.00	Moderately Effective
Positive punishment	2.00	Moderately Effective
Putting weights	2.00	Moderately Effective
Clay manipulation	2.00	Moderately Effective
Playing ball	2.00	Moderately Effective
Shaping	1.75	Moderately Effective

1.75

Legend:	3.25 - 4.00	Very Effective
	2.50 - 3.24	Effective
	1.75 - 2.49	Moderately Effective
	1.00 - 1.74	Sometimes Effective

Premack principle

can be isolating and cause children to feel abandoned in their emotional crisis. The effect of time outs may just lead to more power struggles instead of the children learning to regulate their emotions. Likewise, positive punishment can cause children to develop fears or other maladaptive habits or feelings, cause anger or rebelliousness, and may only resort to suppression of the behavior instead of true "extinction" of the behavior (Ackerman, 2020). For the other BMTs that are not often applied, they are said to be applicable only for particular challenging behaviors or in a specific situation. To illustrate, the placing of weights on feet is done to restrain one CWA from toe walking; clay manipulation is implemented to improve the grasping ability of another CWA. Shaping, according to Mather and Goldstein (2001), can only be utilized as the appropriate target behavior or its equivalent occurs.

The above findings imply that a certain BMT's level of effectiveness varies depending on the kind and frequentness of challenging behavior being

dealt with. Further, the effectiveness of BMTs may be influenced by other factors such as immediacy, the magnitude of the reinforcement, and individual differences (Miltenberger, 2008). The moderate effectiveness of several BMTs as perceived by the SPED teachers in this study supports the finding of Celino and Laruan (2008) that the secondary teachers of Baguio city perceived similar BMTs as moderately effective discipline approach and the conclusion of Legaspi (2009) that the level of effectiveness of the BMTs usually employed by SPED teachers is slightly effective. It further corroborates the result of the study of Algabis (2012) where similar BMTs employed by teachers as remedial measures in minimizing behavioral problem in the class were proven to be moderately effective.

Moderately Effective

As the identified BMTs in this study appear to be moderately effective to very effective when applied, it is now clear that any practice in handling CWA can be effective if there is strength and frequency of a child's response. This child's response to certain BMT can now be included to



the factors to determine the effectiveness of BMTs according to Scarboro and Forehand (1975) as cited by Mather and Goldstein (2001) such as the rules governing the intervention, the characteristics of the learning area, the duration of BMT, and the ability to quickly evaluate the effectiveness of BMTs.

Effectiveness of Classroom Set-up

The majority of the classroom set-up considered in this study were very effective in dealing with challenging behaviors. These were visual schedules, installing horse-shoe-shaped tables, assigning cabinet space for each pupil, and mounting small basketball rings on walls (Tables 6). The restriction of space and cushioning the space for the CWA were noted as moderately effective practices. The "very effective" level of most of the classroom set-up can be due to their being permanent structures in the classrooms, and are therefore found in classrooms all year round. On the other hand, the two classroom set-up identified to be moderately effective may not necessarily be installed throughout the school year. Sometimes it is applied as the need arises. Further, the application of a particular classroom set-up, particularly cushioning space, depends on the availability of materials.

The findings shown in Table 6 imply that children with autism often rely on structures; hence, as said by Diamante et al. (2007), visual schedules, time tables, and calendars are effective means in guiding CWA, particularly during

transitions. Other effective components of classroom set-up, according to Diamante et al. (2007), are setting up a personal workspace for the learner, naming of personal items, and visual lists of things in the learner's work area. It now appears that the control of behaviors through classroom set-up is more effective than trying to obliterate the challenging behavior. The effectiveness of the classroom set-ups is further vouched by Iovannone (2003) as cited by Cook and Tankersley (2013) when he identified comprehensible and structured environments and individualized support and services as among the components of effective educational practices to the physical set-up of classroom.

Effectiveness of Schedule Modifications

Table 7 presents the identified schedule modifications such as, minimizing the number of pupils per class/cluster, shortening of class periods, making a fix activity routine, provision of free floor time, and provision of snack time. All these practices were perceived to be very effective in addressing challenging behaviors of CWA.

The finding is not surprising since there is a limited number of children in every cluster and hence deemed to be manageable. The shortening of class duration is beneficial because children normally do not possess a long-attention span. The allocation of floor time and snack time break the monotony of school work, giving more opportunity for the children to renew

Table 6		
Effectiveness of Classroom Set-up		
Set-up	Weighted Means	Level of Effectiveness
Visual Schedules	4	Very Effective
Installing of Horse-shoe shaped table	4	Very Effective
Assigning cabinet space for each pupil	4	Very Effective
Mounting small basketball rings	4	Very Effective
Restriction of Space	2	Moderately Effective
Cushioning the CWA's physical space	2	Moderately Effective

Legend: 3.25 - 4.00 Very Effective 2.50 - 3.24 Effective 1.75 - 2.49 Moderately Effective 1.00 - 1.74 Sometimes Effective



Table 7		
Effectiveness	of Modifying	Schedule

Modifications	Weighted Means	Level of Effectiveness
Minimizing the number of pupils per class/cluster	4.00	Very Effective
Shortening of class periods	4.00	Very Effective
Making a fix activity routine	4.00	Very Effective
Provision of free floor time	3.25	Very Effective
Provision of snack time	4.00	Very Effective

Legend:	3.25 - 4.00	Very Effective
	2.50 - 3.24	Effective
	1.75 - 2.49	Moderately Effective
	1.00 - 1.74	Sometimes Effective

interests and focus. Also, the provision of a fixed activity routine is important for a CWA because their condition dictates them to rely on rituals (Total spectrum, 2018). This may further prove that modifying the environment and scheduling of activities, if possible, are effective (Diamante et al., 2014). The clustering of CWA classes is an ideal way of modifying schedules where CWA are better attended by teachers. Morgan and Jenson (1988) have earlier stressed the effectiveness of grouping students into smaller units in producing the highest levels of response. Swiezy (1999) added that incorporating a routine into the environment encourages appropriate responses and increases the chance of success while decreasing frustration and resulting in appropriate behaviors. The NINDS (2001) as cited by Kaiser & Rasminsky, 2007) further stated that consistency through routine brings a sense of comfort and a feeling that everyday things are unchanged.

It can now be inferred from the findings that the various means, procedures, and remedies applied by the Baguio SPED Center teachers through Behavior Modification Techniques (BMTs), classroom set-ups, and schedule modifications worked effectively. Wherefore, said applications are considered by this study as worthy-to-adopt practices.

Conclusions

Each CWA displays a particular type of challenging behavior differently from each other. Most of these challenging behaviors occur very often that SPED teachers have to apply various practices repeatedly. Apart from the frequent occurrence of challenging behaviors, however, the type and frequentness of using practices depend upon the cause of the behavior, the children's reaction, and the perceived effectiveness of such practices. Normally, the practices which are proven to be effective are applied very often. It can be inferred from this research that the best practices in handling CWA are those that were tested through times. The practices applied often or very often by the Baguio SPED teachers are considered best practices because they were subjected to repeated application and evaluation by different educators.

Recommendations

The documented means of applying BMTs for a particular type of challenging behavior in this study are highly recommended to be considered not only by other SPED teachers but teachers from the regular schools who are tasked to handle inclusive classes. To appreciate more the relevance of the CWA teaching practices



determined in this research, the conduct of similar studies in other SPED centers in the country and in regular schools that have been accommodating students with special learning needs students is also recommended. However, the best way for the different practices to work depends on teachers' competencies in using them. Therefore, the inclusion of the identified practices and their appropriate means of application as part of in-service training or continuing education of teachers, para teachers, or prospective teachers is strongly recommended. Further, trainings must include actual exposure to learners with autism or other special needs where said best practices are being used.

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