

## MEDICAL DIAGNOSIS AND THERAPEUTIC SERVICES AND PERFORMANCE LEVEL OF SPECIAL CHILDREN

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### ABSTRACT

The study exposed performance level of special children and Medical Diagnosis and Therapeutic Related Services of SPED schools in Isabela province, Northern Philippines such as Medical /Diagnostic and Evaluative services, Audiology services, Psychological services, Occupational Therapy, Physical Therapy and Speech-Language Pathology. Null hypothesis of no significant difference on assessment was tested at 0.05 level of significance. Randomly selected respondents were 19 SPED teachers and 80 parents. SPED teachers and parents of special children from one private and two government SPED institutions were the target groups of the research study. Experts validated the data gathering tool, being translated in local languages. Statistical tools include Percentage, and Weighted Mean. Respondents rated said services as “satisfactorily attained”, denoted by the Overall Composite Means 3.32 and 2.97, respectively. Null hypothesis was rejected on audiology, occupational therapy, psychological, and speech-language pathology; but was accepted on physical therapy, and medical/diagnostic and evaluative services. In contrast, parents’ appraisal signified significance of said related services to functioning of subject children. To benefit from Special Education, recommended is continues availability of improved services based on Individualized Educational Program of each child. School Board should advocate SPED related services for special children for them to benefit from Special Education Program.

**Keywords:** Special Education, Medical Diagnosis, Therapeutic Services.

## INTRODUCTION:

Education is perhaps the most important function of the state. In our present times, it is uncertain that any child is likely to succeed in life if deprived of the chance to education. Such an opportunity is a right that must be made accessible to all in equal terms. The pronouncement of the Rights of the Child by the United Nations General Assembly affirmed that mankind owes to the child the best it has to give. One of the principles has to do with the education of children with special needs runs, *“The child who is physically, mentally, or visually handicapped shall be given the special treatment, education, care required of his particular condition.”* Concerns for the disabled started as charity works of religious and philanthropic citizens with the founding of Insular Schools for the Deaf and the Blind and Special Education (SPED) for the disabled persons.

Special Education in the Philippines offers range of educational programs and services intended to provide for individual needs of exceptional children. It is tailored to cater necessities of children who cannot benefit normally from general education because of disabilities. Types of exceptionalities among special children include Gifted and Talented, Mental Retardation, Autism Spectrum Disorders, Specific Learning Disabilities, Speech and Language Disorders or Communication Disorders, Hearing Impairment, Visual Impairment, Physical Impairments, Severe or Multiple Disabilities (Inciong, et.al, 2007).

Individuals with Disabilities Education Act 2005 (IDEA) is a foremost decree that controls Special Education in United States. It consists of complex system of procedural defense to uphold rights of children and their parents. The said law compels school officials to give written notice and obtain approval of parents before subjecting the child for evaluation, make initial placement, or set off a change in care order. To qualify for said benefit, disabled child must run into three statutory requirements: 1) must be within ages 3 and 21; 2) must have a specifically ascertained disability; and 3) must be in need of special education, or necessitates customized instruction to obtain appropriate public education in least restrictive environment that corresponds to individualized education program.

In SPED, an Individualized Education Program (IEP) is a written account of educational program intended to meet the child’s particularized needs. All children receiving Special Education services must have an IEP for two reasons: 1) to set realistic learning goals for the child; and 2) to affirm related services that school district will grant for the disabled child. For handicapped child to profit from special education programs, related services are required. These are provided by school boards that include transportation, developmental, corrective, recreation including therapy, social work, school nurse, counseling/rehabilitation counseling, orientation and mobility, medical for diagnostic and evaluation purposes and supportive assistance such as speech-language pathology, audiology, interpreting, psychological, and physical and occupational therapy (IDEA, 2005)

Medical services are offered by accredited physician to verify a child’s health related disability which necessitates special education and related services. When use as diagnostic and evaluation purposes, IDEA (2005) make an emphasis that medical assistance is considered “related services”. This is when school personnel request an evaluation by the pediatrician for the child having seizure disorder, visual difficulties or learning disabilities, after his behavior and performance in school declines. If the pediatrician subsequently referred the child to a neurologist or psychiatrist, services of these specialists are necessary for him/her to benefit from special education.

Diagnostic and Evaluative Services do not just mean assessment which may be done as part of the initial evaluations. Such service provides constant monitoring of the student’s condition. SPED program can implement only the screening and informal assessment so that the child can be enrolled in the program as early as possible; referral services are solicited from medical and clinical specialists as soon as possible. It is very necessary that students assumed to have disabilities undergo proper diagnosis and evaluation since this is a part of the Special Education process (IDEA, 2005). Psychiatric examinations are required as related services if use for diagnostic or evaluation purposes. If it is use as therapeutic, courts may assert that it may be categorized as medical exemption. Diagnosis and evaluations with their respective specialists includes 1) Clinical/ School Psychologist, Psychometrician for psychological testing; 2) Medical Doctor and Dentist for general check-up of all children; 3) Ophthalmologist for all children especially those with blindness and low vision; 4) Otologist or Otolaryngologist for all children especially those with hearing loss, deafness, language and speech disorders; 5) Neurologist and Child Psychiatrist for all children with mental retardation, learning disabilities and emotional-behavioral disorders; 6) Speech Therapist for all children with language and speech problem; 7) Physical and Occupational Therapist for all children especially those with physical disabilities; 8) Interpreter for the Deaf who communicates verbal activities to deaf children through speech reading, sign language and gestures; and 9)

Orientation and Mobility Instructor who teaches independent travel techniques to blind children. IDEA requires evaluation of the child before any special education and related services will be provided to that child. The reasons to conduct such evaluation are basic: to find out if the child has disability/ies based on IDEA; to gather information that may serve as bases for the provision of appropriate educational program and related services. (<http://www.parentcenterhub.org/repository/iep-relatedservices/>)

Related services incorporate Audiology, which is the identification of children with hearing impairments. It includes verifying the extent, condition and level of hearing deficiency through the provision of habilitative measures such as auditory exercises, speech reading, hearing assessment, and speech conversation. It may also incorporate creating and administering programs to avoid hearing loss; establishing the child's needs for effective individual or selective group amplification usually administered by audiologists who do the screening, assessment, and identification process.

(<http://www.parentcenterhub.org/repository/iep-relatedservices/#medical>)

Psychological services as a related service area are planned to offer assistants to students who have academic, emotional, or behavioral issues related to their disabilities. These are sometimes directly conducted to students such as evaluating them; or indirectly administered like when consulting with a teacher or a parent in natural settings. Students who may profit from such services are those who have: a) hardship organizing their time; b) concerns with academics; c) inconvenience interacting with teachers, peers, or others in the school; d) poor study skills; e) family issues; f) troubles with bullying. School psychologists are trained in both psychology and education. Besides completing a post-bachelor's degree, school psychologists must hold a state certification or license in the state in which they work in United States. School psychologists work with students, families of students, teachers, administrators, and the community. Crucial roles for school psychologists include assessment, counseling, and consultation; linking student to services both in and out of the school.

(<http://www.vanderbilt.edu/>)

Occupational therapy is enhancing, or rebuilding impaired performance due to illness, injury, or deprivation. Treatment may incorporate processes to increase capacity to execute chore for independence especially when functions are impaired. Therapy also comprises early interventions to prevent further mutilations of one's potentials. Such help is made accessible by a therapist who concentrates upon assessing and treating children with disabilities that impair their daily life functioning. (<http://www.vanderbilt.edu/>)

Physical therapy helps facilitates special education students attain purposive use of gross motor abilities associated with educational necessities. It includes provision of therapeutic interventions, alterations, adjustable equipment and instructional adaptations. This is offered to a child following the referral from a physician, school nurse, teachers, occupational therapists, and other professionals. In the process, Physical Therapist (PT) collaborates with teachers, students and parents, together with the IEP team members in building strategies and adaptations/modifications to help student attains his/her potentialities. Supports are made available to student ages 2 through high school graduation, until IEP team resolves requirement for such service. These are offered in a combination as follows: 1) working directly with student; 2) Collaborating with student's teacher; and 3) Monitoring student engaged in classroom tasks.

(<http://www.parentcenterhub.org/repository/iep-relatedservices/>)

Speech-Language Pathology/Therapy is also a part of the therapeutic support services of special education. It is the identification, diagnosis and appraisal, referral and medical or other professional attention given to children with impairments in speech and language. This support assistance likewise offers habilitation and prevention of communicative troubles; counseling and guidance of parents, children, and teachers as regards speech and language disabilities. It is undertaken by the speech-language pathologists that address the needs of children and youth with communication disabilities such as stuttering and impairments in speech, language, or voice.

([https://doe.sd.gov/oess/documents/SPED\\_RelatedServiceGuidelines.pdf](https://doe.sd.gov/oess/documents/SPED_RelatedServiceGuidelines.pdf))

Embarking on this endeavor brings a lot of fulfillment and realization on the researcher most especially with her desire to uphold the welfare of children with special needs in her own province. As an advocate of Special Education, findings will contribute to the never ending quest to provide appropriate education programs and related services to differently-abled children and youth.

This study assessed the medical diagnosis and therapeutic related services and determined the performance level of subject respondents. It investigated 1) the status of medical/diagnosis and therapeutic related services such as Medical Services/ Diagnosis/And Evaluative Services, Audiology services, Psychological services, Occupational therapy, Physical therapy, and Speech-Language therapy; 2) significant difference in assessment of parent and teacher respondents; 3) level of functional academic performance of children with disabilities; and 4) significant relationship between status of medical diagnosis and therapeutic related services and performance

level of subject respondents.

**METHODOLOGY:**

This study utilized descriptive survey method. To determine the worth of SPED medical diagnosis and therapeutic related services, instruments were constructed based on Chantrill’s Criterion Model (1967) for services assessment. An initial data-gathering instrument was designed to elicit standards for the aspects or criteria of the SPED support services from participants directly involved in special education. Rating scale is designed to yield information that describes participants’ judgment of the worth of services. Related items of the questionnaire are determined, thus reducing them into clusters or factors.

In the assessment of said SPED services, randomly selected respondents that included 19 SPED teachers and parents of children and youth with incapacities were involved. They teach in one private SPED school and two government SPED institutions as targets groups. The researcher sought help of experts in translating the questionnaire from English to local languages to facilitate data gathering. Data collected were analyzed and interpreted using rating scale, percentage, weighted mean, t-test for independent samples, and Chi-square ( $\chi^2$ ) test.

**FINDINGS AND DISCUSSION:**

For Medical Services/Diagnostic and Evaluative Services, overall means of parent and teacher respondents were 3.31 and 3.12, respectively and interpreted as “satisfactorily attained”. In particular, teachers recorded highest weighted mean of 3.52, interpreted as “Very Satisfactorily Attained” on two indicators namely “neurologist and Child Psychiatrist” and “Speech Therapist”. They indicated a “Satisfactorily Attained” rating to the following items: “Otolologist or Otolaryngologist” (WM – 3.22), “Clinical Psychologist, School Psychologist, and Psychometrician for psychological testing” (WM-3.19), “Orientation and Mobility Instructor” (WM-3.09), Ophthalmologist” and “Interpreter” (WM-3.02), “Medical Doctor and Dentist (WM-2.99) and “Physical and Occupational Therapist” (WM-3.57). Parent respondents manifested a “satisfactorily attained” on all indicators. Respondents agreed that these services were adequately provided.

The proper diagnosis and evaluation of students suspected of having disabilities is an important component of special education process. Medical services can be a part of the process. However, Perrin (2002) disclosed that increasing population of children and adolescents having long-term disabilities often are excluded from health services because of worries on dangers and special problems in studying this group. Hence, there were little information on epidemiology and characteristics of children and adolescents; management, establishment, and financing of services for them; best practices/ system of assessing and enhancing care; keeping them safe and protected from medical errors; and vital concerns of long-term clinical management. Advancing health care incorporates enhanced trauma services that intensifies survival rate of children and adolescents but results in about 10 percent of their long-term disabilities. (MacKenzie 2000). Despite better survival possibilities, children and adolescents now confront many latent disabling health conditions that arise at much higher rates like major new epidemics of several conditions, including obesity (Fredriks, van Buuren, Wit, et al. 2000), asthma (Volmer, Osborne, and Buist 1998; Weitzman, Gortmaker, Sobol, et al. 1992), attention deficit hyperactivity disorder (ADHD), type II diabetes (Rosenbloom, Joe, Young, et al. 1999), and depression.

In studies of Hobbs, Perrin, and Ireys (1985), cited by Perrin (2002) regarding organization of care for children with disabilities, findings unfolds some difficulties children with impairments face, which include: 1) inadequate crucial and protective services, 2) obstacle to subspecialty care and specialized therapies, 3) restricted coordination of services, and 4) uneven access to schools and other direct-service providers. These become even more complicated because of different localities and service systems in which children receive care. In United States, various insurance programs, both private and public, finance care for children with handicaps.

Most American children, including those with disabilities, are insured by their parents’ employment benefits. Majority of evidence information and practice guidelines have dealt with comparatively short periods of care or illness, giving less consideration to long-term clinical management. The Institute of Medicine gave a recent report in quality evaluation of continuing care concentrated on nursing homes, emphasizing standards, staffing, and measurement, admitted that there was little information about quality assessment and improvement in other lasting care settings (Institute of Medicine 2001a).

As regards Audiology Services, parent and teacher respondents registered overall means of 3.39 and 3.22, respectively, both interpreted as “satisfactorily attained.” In details, parent and teacher respondents posted the highest rating of 3.50 and 3.32, interpreted as “very satisfactorily attained” and “satisfactorily attained” on item “Determine the child’s need for group or individual amplification, select and fit an appropriate hearing aid. And

evaluate the effectiveness of amplification”. The other indicators registered a “satisfactorily attained” response: “Determine the range, nature, and degree of the hearing loss” ( $WM_{PARENT}=3.37$ ,  $WM_{TEACHER}=3.19$ ), “Make referrals for medical or other professional attention for the habilitation of hearing” ( $WM_{PARENT}=3.37$ ,  $WM_{TEACHER}=3.19$ ), “Provide language habilitation, auditory training, speech reading (lip reading), speech conversation, and other programs” ( $WM_{PARENT}=3.36$ ,  $WM_{TEACHER}=3.19$ ). Results indicate that both groups of respondents agreed audiology services are satisfactorily provided. This is particularly true with regard to determining child’s needs for group and individual amplification.

In relation to Audiology services, Tinnitus among children, according to Kentish, et al (2014) is one concern of medical practitioners in other countries. Tinnitus is a usual childhood encounter where evidence base is insufficient in paediatrics. In hearing appointments with specialists, children are inquired if they hear “noises” in their ears or head. If they do and are upset, more assessment is mandatory since it causes distress. Instead of just relying upon information given by parents alone, it must be the health care professionals to conduct assessment. In some cases of audiological testing, changes in child’s manners do not jive with the diagnosis of the child’s hearing tests just like agitation, and high anxiety levels in sound proofed testing rooms. Parental testimonies include sleeping troubles among children, demanding for sounds from tapes or TV, otherwise will never fall asleep. These children are observed to have listening hardships; usually worry of not being able to hear teacher’s voice; and are told not focusing in class. Studies on prevalence of tinnitus encountered several methodological difficulties such as wide range of children; child’s capability to express tinnitus, belief in parental report, and the meaning of tinnitus. Research suggests that tinnitus is a comparatively common experience in children based on reported prevalence figures, which vary from 12% to 36 in children with normal hearing (Sheyte, 2010; Brunnberg, 2008; and Raz-Koziak, 2011). Moller (2000) believes tinnitus to be comparable with pain in some manners. Incidence of persistent pain among children (Huguet, 2008) is projected to range from 15% to 30% with headache and abdominal discomforts; most common are recurrent pain problem. At present, Mahrer (2012) theorized that paediatric chronic pain interacts with physical, emotional reactions and cognitions. Indeed, audiology services are impetus since it is one of the best means to give thorough assessment and appropriate therapy and care among children with similar needs.

Regarding Psychological Services, respondents documented an overall means of 3.33 and 2.70, correspondingly, interpreted as “satisfactorily attained”. Specifically, parents declared their highest weighted mean of 3.43 on item, “Obtain integrate, and interpret information about a student’s behavior and conditions for learning. Information sources may include observing student and interviews with teachers and parents.” Parents only gave a weighted of 2.65 on same item. Both parent and teacher respondents gave “satisfactorily attained” on following indicators: “Plan and manage programs to provide psychological services, including counseling for students and parents” ( $WM_{PARENT}=3.30$ ,  $WM_{TEACHER}=3.07$ ), and “Administer and interpret psychological and educational tests and other assessment procedures needed to determine if student has a disability” ( $WM_{PARENT}=3.30$ ,  $WM_{TEACHER}=2.65$ ). One indicator received a “moderately attained” rating from teacher respondents, “Consult with school staff and assist in planning and educational program to meet a student’s special needs, as indicated by psychological tests, interviews, and evaluations of behavior” with a mean of 2.45. However, parent respondents indicated on same item a weighted mean of 3.31, interpreted as “satisfactorily attained”. This finding implies that both groups of respondents agreed that selected SPED schools sustain adequate psychological services.

In a similar study, Grady, et al (2011) determined *ease of use of health services* differs among children with developmental disabilities, mental health conditions and physical disorders. Data from 2005 National Survey of Children with Special Health Care Needs were analyzed classifying children with special health care needs into 4 health condition groups: developmental disabilities (DD), mental health conditions (MH), physical disorders (PD) and multiple conditions. Outcome measure was 'difficulty using services'. Based on the findings it was recommended that existing programs for Children with Special Health Care Needs (CSHCN) particularly those with DD and MH should be evaluated as basis to provide them with adequate appropriate services.

In Occupational Therapy area, parent and teacher respondents computed overall means of 3.44 and 3.07, respectively, both interpreted as “satisfactorily attained.” In details, both groups of respondents attested a highest weighted mean of 3.57 interpreted as “very satisfactorily attained” and 3.38, interpreted as “satisfactorily attained”, respectively on item “Improve students’ ability to perform tasks necessary for independent functioning, such as chewing, swallowing, placement of tongue and mouth for speech formation, eye-hand coordination, and manual dexterity”. Same group conferred weighted means of 3.50 and 3.26, correspondingly, interpreted as “Satisfactorily attained” on item “focus on treatment of the small muscles, of face, upper trunk, arms and hands”. Other items noted a “satisfactorily attained” response as gleaned from

following weighted means: “Provide treatment to strengthen and develop fine motor functions” ( $WM_{PARENT}=3.43$ ,  $WM_{TEACHER}=3.17$ ), “Assist in the daily living activities such as eating and dressing” ( $WM_{PARENT}=3.27$ ,  $WM_{TEACHER}=2.90$ ), “Help the child develop school and work skills, such as writing, using scissors, managing books and papers, and sitting effectively in class” ( $WM_{PARENT}=3.49$ ,  $WM_{TEACHER}=3.04$ ), “Provide venue and opportunity for play/leisure skills, such as participating in art or physical education class or playing with children at recess” ( $WM_{PARENT}=3.39$ ,  $WM_{TEACHER}=2.70$ ). Findings imply that selected SPED schools adequately provided such services that helped improved student’s ability to perform tasks necessary for independent functioning.

Physical Therapy service area, registered an overall means of 3.10 and 2.85, respectively, both interpreted as “satisfactorily attained.” This finding conveys respondents’ belief that selected SPED schools satisfactorily offered said amenities. Physical therapy is offered to a child with disability with referral from a physician, school nurses, teachers, occupational therapists, and other professionals. Specifically, parents gave a highest weighted mean of 3.45, interpreted as “satisfactorily attained” response on item, “Provide treatment to increase muscle strength, mobility, and endurance”. Same group bestowed a “satisfactorily attained” response as garnered from weighted means: “Focus on gross motor skills that rely on large muscles of the body involved in physical movement and range of motion” ( $WM=3.02$ ); “Monitor function, fit, and proper use of mobility aids and devices” ( $WM=2.97$ ); “Help to improve student’s posture, gait, and body awareness” ( $WM=2.95$ ). Teacher respondents gave a “satisfactorily attained” response on all indicators except item “Provide treatment to increase muscle strength, mobility, and endurance”, which garnered a “moderately attained” mean rating of 2.44. The indicators that elicited a “satisfactorily attained” rating from same group were as follows: “Monitor function, fit, and proper use of mobility aids and devices” ( $WM=3.07$ ); “Focus on gross motor skills that rely on the large muscles of the body involved in physical movement and range of motion” ( $WM=2.95$ ); and “Help improve student’s posture, gait, and body awareness” ( $WM=2.95$ ).

In the area of Speech-Language Pathology, the overall weighted means of parent and teacher respondents were 3.33 and 2.86, respectively, both interpreted as “satisfactorily attained”. Specifically, parent and teachers confirmed a “satisfactorily attained” response on all indicators as follows: “Provide speech and language services for the habilitation or prevention of communication disorders, including augmentative and alternative communication systems” ( $WM_{PARENT}=3.38$ ,  $WM_{TEACHER}=2.87$ ); “Screen, identify, assess, and diagnose disorders of fluency, language, articulation, voice, and oral-pharyngeal function, and cognitive/communication disorders” ( $WM_{PARENT}=3.36$ ,  $WM_{TEACHER}=3.00$ ); and “Refer student for medical or other professional attention necessary for habilitation of speech or language disorders” ( $WM_{PARENT}=3.24$ ,  $WM_{TEACHER}=2.71$ ). Research outcome suggests that SPED schools adequately provided Speech-Language Pathology services to cater the needs of handicapped children in the probe setting. Speech-Language Pathology is a service provided by Speech-language pathologists to address troubles of children with communication disabilities, such as stuttering and impairments in speech, language, or voice.

Among children with Down syndrome, research and clinical experience (Kumin, 2015) prove that some areas of language are mostly challenging for them such as strengths in vocabulary and pragmatics through social interactive language. Often, they use shorter sentences to communicate because of difficulty with grammar, tenses and word endings. As they mature, however, they often acquire a rich and varied vocabulary while yearning to converse and interact with others. A speech-language pathologist (SLP) arrange for evaluation and therapy for the speech and language impediments of children with Down syndrome.

In United States, specialized centers of excellence (University Centers for Excellence in Developmental Disabilities Education, Research, and Services) offer a multidisciplinary team approach as regards diagnosis and therapy to many children with developmental disabilities. From family and community perspectives, these units provide longitudinal care aside from diagnosis and evaluation based on a standard that acknowledges the compound aspects of a child's care. A multidisciplinary team denotes significant repercussions for children having other forms of impairments. Many academic health centers with subspecialty programs have physicians, nurses, social workers, nutritionists, and other therapists collaborating together. (Soucie, Nuss, Evatt, et al. 2000)

Hack, et al (2015) necessitates information on school-age functioning and special health care needs of extremely low-birth-weight (ELBW, <1000 g) children’s medical and educational plan services. Examination involves neurosensory, developmental, and medical conditions associated with functional constraints and special health care needs of Extremely Low-Birth Weight (ELBW) children compared with normal-birth-weight (NBW) term-born children (controls). In Cleveland, Ohio, a follow-up study was conducted at age 8 years of a cohort of 219 ELBW children (92%), and 176 NBW controls of similar socio-demographic status. Outcome

measures include Parent questionnaire identifying children with chronic conditions of 12 months or more, classifying specific medical diagnoses, and developmental disabilities based on children's examination. Children who were ELBW had a significantly greater need for services above routine that incorporate frequent visit to the physician for severe condition, nursing care/medical procedures, occupational and physical therapy, special school arrangement or individualized education program. Findings highlight remarkable expenditures of care to cope with medical, educational, and other service needs of ELBW children. Said provisions are extremely pertinent for continuing long-term care of ELBW children who survive as a result of neonatal intensive care.

There were significant differences in the assessment of SPED related services by the parent and teacher respondents in terms of audiology services, occupational therapy, psychological services, and speech-language pathology.

Computed t value of 3.6247 with 8 degrees of freedom at .05 significance level denotes Audiology service. As regards occupational therapy, corresponding computed t value of 3.6706 was greater than its critical value of 2.228 with 10 degrees of freedom. The computed t value in comparing assessment of teachers and parents on status of psychological services was 4.6945 and this is above the critical value of 2.447 with 6 degrees of freedom. With reference to speech-language pathology, computed t value was 4.984 and this is greater than the critical value of 2.776 with 4 degrees of freedom.

Based on above findings, the null hypothesis of no significant difference in assessment of teachers and parents on audiology services, occupational therapy, psychological services, and speech-language pathology was rejected. Parent respondents were more satisfied than teacher respondents as regards status of implementation of the above-mentioned SPED underpinnings in the research locale.

As to physical therapy, the corresponding computed t values was 1.4229 was lesser than its critical value of 2.447 with 6 degrees of freedom. As regards medical services/diagnostic and evaluative services, computed t value was 1.8129 and this is lesser than the critical value of 2.120 with 16 degrees of freedom. Hence, null hypothesis of no significant difference in teachers and parents' assessment on physical therapy and medical services / diagnostic and evaluative services was accepted. Congruence on respondents' perceptions was noted that schools adequately provided same support services.

While positive appraisal of parents and teachers on medical diagnostic and therapeutic intervention services were exposed in the research locale, Ojha Seema S. (2014) undertook a study to find out sensitivity of visually disabled learners regarding audio books as support learning materials. Prior to conduct of said study, initial findings were as follows: 1) Braille books is the only instructional material among learners in upper primary stage; aside from Braille books, secondary and higher secondary stage students have audio books, 2) Besides erroneous spelling and wrong pagination, most students find problem in grasping Braille books since these do not clarify visuals or previous basis of passages which must give them the idea of the source material or textbooks; 3) Generally, students told that they do not receive any help aside from their parents' initiative to arrange with either tutor or elder siblings to read them the lesson; and 4) Respondents welcome the idea of bringing in audio and books at the upper primary stage, suggesting that description of visuals in books needs inclusion. Some organizations like National Council of Educational Research and Training (NCERT), already converted textbooks into audio for higher classes and Braille are available for all classes. Results include following perceptions of visually impaired as regards audio books: 1) Their learning in school improved, 2) They became more independent and provided more chances to study as they wish, 3) Students may listen repeatedly to their recorded lesson giving them more juncture to comprehend given topics on their speed, without restrictions and annoyances; and 4) Students with low visions reported that they no longer need magnifying glasses that may exhaust their eyes.

On Functional Academic Skills/Academic Skills, parent and teacher respondents recorded an overall means of 3.30 and 3.20, respectively interpreted as "great extent". This indicates a high level of performance among subject respondents in said skills area. It was noted that students were most skilled in shaping up to five sides, measuring size and distance, and applying concepts of colors, shapes, size, weight, and distance in everyday living.

Respondents registered same overall mean of 3.41 in Social Adaptability / Social Skills deduced as "great extent". Result displays a high level of children's functioning in specified skills, which are highly manifested in their ability to verbally express their emotions. Other social adaptability/social skills include initiating and ending conversations appropriately; and noticing and responding to non-verbal body language.

As regards Self-help Skills, parent and teacher respondents recorded overall means of 3.40 and 3.36, respectively, both inferred as "great extent". Finding confirms a high degree of self-help skills functioning

among focus respondents as evident in their ability to follow table manners and remove/wear clothes with minimum assistance. Self-help skills cover feeding that encompasses requesting/selecting food verbally/through gestures and following table manners; dressing/undressing which involves removing/wearing clothes with minimum assistance and removing/wearing clothes independently.

Parents and teachers confirmed overall means of 3.37 and 3.32 respectively, concluded as “great extent” on Pre-vocational Skills. This suggests a superior rank of working among children in relation to the above-mentioned skills area. Noted were high functioning in using kitchen tools independently, finishing tasks in a given time, and taking work orders properly. Pre-vocational skills consist of hand use; manipulation using fingers skillfully and properly; bilateral skills using strings and beads; tool use like kitchen tools; and work Attitudes.

As to vocational skills, respondents documented an overall means of 3.46 and 3.26, respectively, both presumed as “great extent”. Decision implies an elevated level of execution of special learners in line with vocational skills. Respondents observed that subject learners with special needs most efficiently do said skills such as identifying own clothes and wiping windows. Vocational Skills deal general cleaning and sanitation; carpet, rug, and upholstery shampooing; window washing; ground maintenance and gardening; fast food and etc.

On Community Integration, overall assessment of the parent and teacher respondents computed overall means of 3.44 and 3.35, respectively, equally presumed as “great extent”. This signifies learner’s high level of execution of community integration skills, which they highly demonstrated in cleaning the whole house appropriately and systematically without prodding; identifying, arranging, and segregating and ironing own clothes; and identifying utensils/materials to be used for eating.

Regarding Independent Skills area, respondents documented overall means equal to 3.49 and 3.47, respectively, which are concluded as “great extent”. Result shows subject respondents’ high level of execution of independent skills, which they proficiently demonstrated in the following competence: locating and finding oneself in certain areas in school and areas upon instruction and identifying self in the community. Independent Skills includes travel skills at home, in school, community; and observing traffic rules and regulations.

The overall composite means computed from the assessment of the parent and teacher respondents of the level of performance of subject respondents were 3.41 and 3.34, respectively, both taken as “great extent”.

Parent respondents’ assessment observed a significant relationship between provisional status of SPED related services and the performance level of special learners. This finding was denoted by the computed  $X^2$  value equal to 14.4277, which was above the critical value of 9.49 with 4 degrees of freedom at .05 significance level. Findings show no significant relationship between provision of Medical Diagnosis and Therapeutic Intervention related services and level of performance of the subject respondents as assessed by parent respondents. Parent believed that the more adequate and satisfactory are the condition of said related services, the higher will likely be the performance of subject respondents in the different skill areas.

On the other hand, considering the assessment of teacher respondents, no significant relationship was found between Medical Diagnosis and Therapeutic benefits and functioning level of subject respondents. Result was evidenced by the computed  $X^2$  value equal to 1.6255 which was below the critical value of 9.49 with 4 degree of freedom at .05 significance level. Outcome still proves no significant relationship between status of specified SPED related services and level of performance of students with skills incapacities based on teacher respondents’ perception. This infers teachers’ belief that provision of related services did not significantly influence learning abilities of exceptional children.

Based from the interviews with parent and teacher respondents, the needs of learners with developmental disabilities were met to a great extent through the following: a) exposing students to the different useful skills, b) providing a realistic and comprehensive Individualized Educational Program (IEP) and c) cooperation of all concerns in the development of learners which include the parents, teachers, therapists and other service providers.

**CONCLUSIONS AND RECOMMENDATIONS:**

Based on the findings of the study, the following conclusions were arrived at with the corresponding recommendations:

1. The three selected SPED schools in Isabela, Northern Philippines satisfactorily provide SPED Medical Diagnosis and Therapeutic related services to learners with special needs according to parent and teacher respondents. Availability of SPED support services need continues improvement to cater to the fast changing times and more challenges that special child faces based on his/her Individualized Educational Program (IEP). Bring to the attention of School Board or government officials concerned the necessity to provide the SPED related services for special children to benefit from Special Education Program and activities.

2. There is a significant difference in the assessment of parent and teacher respondents regarding effectiveness of SPED medical and therapeutic related services in selected SPED schools in Isabela, Philippines. Parents and teachers of special children should be keenly aware of SPED Medical diagnosis and therapeutic related services suited to each special child and make recommendations for the provision of such services. Special Education teachers should continue further studies related to Special Education not only to upgrade themselves about current trends in SPED but also to build their credibility as SPED teachers.
3. Provision of SPED Medical diagnosis and therapeutic related services is Extensive, therefore SPED schools in Isabela, Northern Philippines must advertise said services of their school to convince other parents whose special children did not yet receive or experience Special Education and services. Strengthen the practices of using SPED facilities, compliance, coordination and making accessible needed SPED related services.

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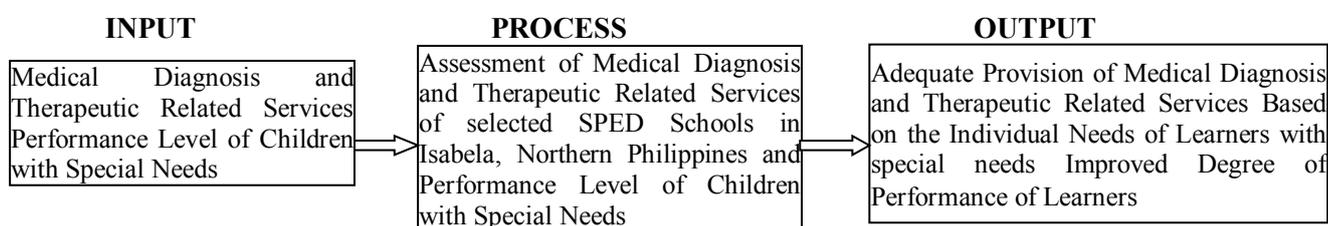


Figure 1: Research Paradigm

Table 1: Status of SPED Medical Diagnosis and Therapeutic Related Services of Special Education Schools Assessed by Parents and SPED Teachers

Related services	Parents			Teachers		
	AWM	Rank	DR	AWM	Rank	DR
1. Medical Services/ Diagnosis/And Evaluative Services	3.31	4	SA	3.12	2	SA
2. Audiology Services	3.39	2	SA	3.22	1	SA
3. Psychological Services	3.33	3.5	SA	2.70	6	SA
4. Occupational therapy	3.44	1	SA	3.07	3	SA
5. Physical Therapy	3.10	5	SA	2.85	5	SA
6. Speech-Language Pathology	3.33	3.5	SA	2.86	4	SA
<b>Overall Composite Mean</b>	<b>3.32</b>		<b>SA</b>	<b>2.97</b>		<b>SA</b>

AWM-Overall Weighted Mean

DR – Descriptive Responses

SA – Satisfactorily Attained

VSA – Very Satisfactorily Attained

Table 2: Significant Difference in Assessment of Teachers and Parents on SPED Medical Diagnosis and Therapeutic Related Services

Related Services	Degrees of freedom (df)	Computed t-value	Critical Value	Decision/ Interpretation
1. Medical Services/ Diagnosis/and Evaluative Services	16	1.8129	2.120	Not Significant HO: Accepted
2. Audiology Services	8	3.6247	2.306	Significant HO: Rejected
3. Psychological Services	6	4.6945	2.447	Significant HO: Rejected
4. Occupational therapy	10	3.6706	2.228	Significant HO: Rejected
5. Physical Therapy	6	1.4229	2.447	Not Significant HO: Accepted
6. Speech-Language Pathology	4	4.984	2.776	Significant HO: Rejected

Tested at .05 level of significance

Table 3: Performance Level of Subject Respondents

Indicators	Parents			Teachers		
	AWM	Rank	D.R.	AWM	Rank	D.R.
1. Functional Academic Skills/Academic Skills	3.30	7	Great Extent	3.20	7	Great Extent
2. Social Adaptability/Social Skills	3.41	4	Great Extent	3.41	2	Great Extent
3. Self-help Skills	3.40	5	Great Extent	3.36	3	Great Extent
4. Pre-Vocational Skills	3.37	6	Great Extent	3.32	5	Great Extent
5. Vocational Skills	3.46	2	Great Extent	3.27	6	Great Extent
6. Community Integration Skills	3.44	3	Great Extent	3.35	4	Great Extent
7. Independent Skills	3.49	1	Great Extent	3.47	1	Great Extent
<b>OVERALL COMPOSITE MEAN</b>	<b>3.41</b>		<b>Great Extent</b>	<b>3.34</b>		<b>Great Extent</b>

Table 4: Significant Relationship between Provision of Medical Diagnosis and Therapeutic Related Services and Performance Level of Disabled Children

Respondents	Degrees of freedom	Computed Value	Critical Value	Interpretation/Decision
Parents	4	14.4277	9.49	Significant HO: Rejected
Teachers	4	1.6255	9.49	Significant HO: Rejected

Tested at .05 level of significance

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