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Assessment of CNSC Labo Demographic profile and Disability Prevalence Rate

By

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Abstract

Assessing disability prevalence is essential for program development and providing intervention in the community. However, the lack of measures resulted in misaligned programs that can be utilized as the bases for crafting the necessary intervention and framework for the schools and community. Extant literature proved that there are still limited studies on the use of the Washington Group Short set of questions on Disability (WGSQ) in the local context. The present study addresses this concern by providing contextual findings relevant to the student's culture, orientation, and inclusivity. The present study also adopts this measure to assess students' profile and disability prevalence at the Camarines Norte State College-Labo campus. With this, the present study aimed to determine the demographic profile of CNSC Labo in terms of age, gender, civil status and enrolled students in the school curricular programs. Then, an assessment of the disability prevalence rate of CNSC Labo students was employed. Also, the present study provides an Inclusive education Framework that addresses emerging issues on students with functional limitations. This paper employed a Descriptive quantitative research design, specifically Survey or epidemiological research, to characterize the occurrence of behaviors. There are 110 students who participated in the survey. The data was encoded to Statistical Package for Social Science (SPSS) for data analysis. The present study used descriptive and frequency statistics for analysis and data interpretation. Assessing the functional limitations of students can provide the appropriate recommendations for program development for inclusive learners. The results revealed that students in CNSC Labo experience functional concerns such as seeing, hearing, mobility, remembering, self-care and communication. The emerging framework was proposed and can be adopted to assess students' baseline needs and used for planning interventions. This inclusive education framework explains that needs assessment is essential in determining the profile and disability prevalence of the students. Hence, the head of offices and institutions must review the policy and PPAs and monitor the implementation for inclusive education learners. Thus, the integration of inclusive education into the institutional framework will provide sufficient accounts and programs for PWDs, such as Mental health and well-being programs.

Index Terms-Disability prevalence, Demographic profile, Inclusive Education Framework, college students.

I. Introduction

"Children who learn together learn to live together." An excerpt advocated by Save the children (2017) movement and it was coined by various institutions that support the Inclusivity of Education. Across decades, a student with disabilities was segregated and put into different schools because of the nature of their functional limitation that hindered them from accessing education designed with non-disabled students. This traditional approach of isolating disabled

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students from their non-disabled peers puts an emphasis on their disability, which can lead to feelings of insecurity and worry when interacting with non-disabled students (Forlin, 2004). Thus, promoting Inclusive Education is one way to include a student with a disability in the learning environment where children with and without disabilities are taught together as equals. However, the Department of Education reported that only 2% of children with disabilities (CWDs) are currently able to access education. However, it was still evident that PWDs' dropout rates are increasing because of the barriers and factors that hinder them to develop their talents and potential (Leonard Cheshire Disability Philippines Foundation, 2010).

These barriers and factors are still rampant and remain unaddressed because most families with disabled families cannot support sending their family members to

specialized schools that can address this concern (Odongo, 2018). Mirza and Arif (2018) explained that school failures,

such as drop-out rates and academic failure, are due to the student's psychological difficulties and poor academic performance. Therefore, various educational institutions are adhering to the goals of Inclusive Education in addressing these factors and barriers faced by Filipino families and students.

To address this concern, research and program development are crucial in determining the intervention that will aid the Person-with-Disability student in overcoming various setbacks and hindrances that might limit them from performing well in school settings. To capture the prevalence rate, Washington Group Short set of questions on Disability (WGSQ) was also utilized to assess the disability prevalence of the participants. Before the test development, emerging concerns were identified regarding what measures will be used to identify the prevalence of disability among the population.

On the other hand, extant literature proved that there are limited studies on the use of WGSQ in the local context (Olusanya et al., 2022). With the global trend and national advocacy to promote inclusion, the Philippines must widen its understanding of the country's needs and prevalence rate (Marella et al., 2016). Hence, the present study aims to address this concern by providing contextualized findings relevant to the student's culture, orientation, and inclusivity. The present study also adopts this measure to assess the profile and disability prevalence of students at the Camarines Norte State College-Labo campus. This will help to identify the rate and concerns of the students that need to be addressed.

With this, the following research objectives are addressed by this paper:

Determine the demographic profile of CNSC Labo in terms of age, gender, civil status, and enrolled students in the school curricular programs.

Assess the disability prevalence rate of CNSC Labo students.

Provide an Inclusive education Framework that addresses emerging issues on students with functional limitations.

Ii. Literature Review

Assessing disability prevalence is essential for program development and providing

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intervention in the community. However, the lack of measures resulted in the lack of programs that be utilized by the community. In order to understand the measures of disability prevalence, Thompson (2017) argued that disability must be defined so that all countries must have a clear understanding of a disability that they are trying to assess and compare across other cultures and nationalities. According to the UN Convention on the Rights of Persons with Disabilities (UNCRPD) (2006), disability is defined as a long-term physical, mental, intellectual, or sensory impairment which may hamper their holistic cooperation in the community on an equal basis with others. This can be seen in their interaction with various barriers they may face regularly.

Washington Group Short set of questions on Disability (WGSQ) was used to determine the disability prevalence rate of the participants. These would be the initial steps of various researchers before they can begin developing the appropriate program suited to this group of population. Last 2002, the Washington group convened conferences to agree on specific measures to address the lack of tools/measurements. Thus, valid and reliable measures across cultures and populations must be used to identify persons with disabilities at the combined level. These aggravated measurement aims 1) to provide services, including the development of programs and policies for service provision and the evaluation of these programs and services, 2) to monitor the level of functioning1 in the population, and 3) to assess equalization of opportunities (Gilbert, 2010). With this, Washington Group (WG) has agreed that the measurement of disability is associated with a variety of purposes which relate to different dimensions of disability or different conceptual components of disability models. It measures six domains of functioning: sight, hearing, mobility, knowledge/ remembering, self-care, and communication (Washingtongroup-disability.com, 2016).

Hence, existing literature proves that disability prevalence accounted for almost 1% to 15% in every country (Bindawas & Vennu, 2018). Mitra and Sambamoorthi (2014) also support the findings that in 54 countries, 14% of the adult population has a disability. More so, it is also evident that the higher income countries have lower disability prevalence compared to the countries with low income but a higher number of disabilities. Thus, Mitra and Sambamoorthi (2014) associated men with lower prevalence than women. In terms of age, it was found that age is also linked to the increase in the prevalence rate. As the population age, the prevalence rate becomes significantly higher (Thompson (2017).

However, other countries still have no national disability prevalence rate record. Therefore, the Washington Group Short Set of questions was presented in the national and international International Classification of Functioning, Disability, and Health (ICF) because it applies this approach to determine the disability and functioning of an individual. Therefore, the gap in the literature presented that there is limited literature that tackles the prevalence rate in the local school context in reference to the use of the WGSQ.

The present study also aims to present an inclusive education framework that can be used as the bases for programs and interventions for PWD. There are many literatures that present frameworks that can be used to adapt and present the solution to the pressing issues of the PWD Community (Olusanya et al., 2022). For instance, Robayo et al. (2017) presented the framework for the Evaluation of Inclusive Educative Systems by assessing the concepts, policies, structures, and systems and Practices. This framework helps educational institutions to review their programs and vision in addressing the needs of inclusive learners. Subsequently, Blum et al. (2015) provide another framework that tackles about augmenting access for resources and social participation in roles and activities, which are essential goals in realizing the basic goal of inclusive education. Hence, this framework was used to explain the prevalence

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of this study to come up with necessary recommendations and programs anchored on the needs of the students. The present study provided a conceptual framework that can use utilized by various institutions.

Iii. Methodology

Research design

The present study utilized a Descriptive quantitative research design, specifically Survey or epidemiological research, to characterize the occurrence of behaviors. Thus, it utilized google Forms for test administration.

Samples/ Participants

The samples are students currently enrolled in Camarines Norte State College in the school year 2020-2021. The research utilized random sampling to gather the required number of participants. There are 110 students who participated in the survey were aged 18 to 33 years old. The following are the inclusion criteria in choosing the participants: (a) they must be enrolled in CNSC Labo in the school year 2020-2021, and; (b) they must be 18 years old and above.

Instruments and Ethical Considerations

The present study used the Washington Group Short set of questions on Disability (WGSQ) to assess the disability prevalence of the participants. This questionnaire is widely used to determine the prevalence rate of the population. Thus, the present study followed ethical guidelines in securing and protecting the rights of the participants. The present study assured the confidentiality and anonymity of participants' data.

Data Analysis

The data was encoded to Statistical Package for Social Science (SPSS) for data analysis. The present study used descriptive statistics and frequency statistics for analysis and data presentation. Mean, standard deviation, and percentage were used to analyze the data.

Iv. Results And Discussion

This study aims to identify the profile and Disability Prevalence of the students. This section presents the demographic profile and the disability prevalence of the CNSC Labo students.

Table 1. *Age of the Participants*

Age Range	\mathbf{F}	(%)
18-19	47	42.72
20-22	49	44.54
23-25	11	10
26-33	3	2.72
N	110	100

Table 1 above revealed that the majority of the participant's age ranges (M=34.85, SD: 19.55) from 20-22 (44.54%) while the lowest percentage falls into three ranges such as 26-33 (2.72%), 23-25 (10%) and 17-18 (42.72 %). Since the school is a college institution, the participants' age ranges from late adolescence to early adulthood.

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Table 2. *Gender of the participants*

Gender	F	(%)
Male	47	42.72
Female	62	56.36
Other	1	0.09
N	110	100

Table 2 shows the distribution of sex of the respondents (M=1.64, SD=0.48), which makes the majority of the participants are female (64.6%) while male is the lowest percentage (35.4%).

Table 3. Civil Status

Civil Status	F	(%)
Single	109	99.01
Married	1	0.09
${f N}$	110	100

Table 3 shows the distribution of civil status of the respondents, which makes the majority of the participants are single (99.01%) while married has the lowest percentage (0.09%).

Table 4. *Programs of the participants*

Programs	F	(%)
BSES	33	29.2
BSA	21	19.09
BSABE	24	21.81
BAT	33	29.2
N	110	100

Table 4 shows the distribution of respondents' Programs which makes the majority of the participants belong to BSES (29.2 %) and BAT (29.2), while BSABE belongs to 21.81 % and BSA falls to 21.81 %.

Table 5. Disability Prevalence based on Washington Group Short Sets of Questions on Disability (Sight)

Sight	F	(%)
No Disability	74	67.3
Mild Disability	28	25.5
Moderate Disability	6	5.5
Severe Disability	2	1.8
${f N}$	110	100

Table 5 shows the disability prevalence in terms of Sight functioning (M=1.68, SD=0.77). This revealed that there are 25.5 % of the participants have a mild disability in seeing, while 1.8 % have a severe disability. This might have an implication for the visual aid in the presentation in the class instruction. If there are two (2) students with severe disabilities, six (6) moderate disabilities, and 28 mild disabilities, the school administration and professors must consider students with concern in eyesight. Differentiated instruction must be integrated into the syllabus and instructions by considering the visual aid font size and prioritizing the front seat for students with eyesight concerns. This consideration can give the students consideration, particularly those concerned about eyesight.

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Table 6. Disability Prevalence based on Washington Group Short Sets of Questions on Disability (Hearing)

Hearing	F	(%)
No Disability	90	81.8
Mild Disability	16	14.5
Moderate Disability	0	0
Severe Disability	4	3.6
N	110	100

Table 6 shows the disability prevalence in terms of Hearing (M=1.20, SD=0.50). This revealed that there are 14.5% of the participants have a mild disability in hearing, while 3.6% have a moderate disability. The results revealed that 83.3% of the participants had no difficulty hearing. The results revealed that 3.6% have severe disabilities and 14.5% have mild disabilities; this might have a clear implication on the modulation of the teachers when delivering instruction. The teacher should prioritize the students with hearing concerns (Olusanya et al., 2022). Anent to this, assessment of the disability prevalence can provide intervention on hearing functional limitations. The administration can give and provide hearing aid and adjust seat plans and syllabi for inclusivity.

Table 7. Disability Prevalence based on Washington Group Short Sets of Questions on Disability (Mobility)

Mobility	\mathbf{F}	(%)
No Disability	99	90
Mild Disability	9	8.18
Moderate Disability	1	0.9
Severe Disability	1	0.9
N	110	100

Table 7 shows the disability prevalence in terms of functioning in mobility (M=1.79, SD=1.00). This revealed that there are 1.18 % of the participants have a moderate disability in terms of mobility, while 0.09% have a severe disability. The findings suggest considering the accessibility of the place for those participants with concerns about mobility. The results revealed that 90 % of the participants have no difficulty in mobility, suggesting that half of the participants are concerned about mobility.

Table 8. Disability Prevalence based on Washington Group Short Sets of Questions on Disability (Remembering)

Remembering	F	(%)
No Disability	37	33.6
Mild Disability	64	58.18
Moderate Disability	8	7.2
Severe Disability	1	0.9
${f N}$	110	100

Table 8 shows the disability prevalence in terms of their ability to remember (M=1.97, SD=0.78). The results yielded that 58.18 % fall into mild disability in terms of remembering, while 7.2 % have a moderate disability. Remembering is related to the student's mental state. This might be related to the ability of the students to remember even short-term or long-term related memory. Hence, the studies proved that remembering issues might be related to further mental health complications. Thus, referring it to mental health professionals can address the early sign of symptoms (Maulik et al., 2011). If the students' profile accounted for 0.9% severe

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disability, 7.2% on moderate disability, and 58.18% mild disability, it might imply that majority of the respondents have concerns about remembering. Therefore, the present study recommends finding the cause and other factors that accounted for students' large number of disability prevalence. The school administration can suggest and include further programs and interventions to enhance the inclusivity of education.

Table 9. Disability Prevalence based on Washington Group Short Sets of Questions on Disability (Self-Care)

Self-Care	F	(%)
No Disability	91	82.7
Mild Disability	14	12.72
Moderate Disability	4	3.6
Severe Disability	1	0.9
${f N}$	110	100

On the other hand, table 9 shows the disability prevalence in terms of their functioning to care for themselves (M=1.39, SD=0.78). The results yielded that 3.6 % fall into moderate disability while 12.72 % have a mild disability in the self-care domain. Thus, the majority of the participants can able to take care of themselves (82.7%). The results revealed that 0.9 % have a severe disability, 3.6% have moderate disabilities, and 12.72 % have a mild disability related to the student's ability to take care of themselves. Therefore, the school should develop a program related to taking and enhancing students' physical health and hygiene. This program can be integrated into webinars, training, and advocacy campaigns.

Table 10. Disability Prevalence based on Washington Group Short Sets of Questions on Disability (Communication)

Communication	F	(%)
No Disability	69	62.7
Mild Disability	38	34.5
Moderate Disability	2	1.8
Severe Disability	1	0.8
N	110	100

Table 10 shows the disability prevalence in terms of their functioning to communicate (M=1.62, SD=0.91). The results revealed that 34.5 % fall into mild disability and moderate disability, with 1.8 % having a concern with communication. Thus, 0.08 has a severe disability in the communication domain. Thus, the majority of the participants have no disability in communication/ language. However, the results revealed that 0.8% have a severe disability, 1.8% have a moderate disability, and 34.5% have a moderate disability related to communication. This might have clear implications when they communicate in class or with classmates. Thus, apparent consideration should be given to those students with a communication problem.

Table 11. *Do you have any identified disability/ handicap? (Awareness)*

Any Disability?	F	(%)
No	102	92.8
Yes	8	7.2
${f N}$	110	100

Table 11 shows the disability prevalence in terms of their awareness of their functioning (M=1.62, SD=0.91). The results revealed that 92.8 % of participants were unable to identify their perceived disability, while 7.2 % were admitted and aware that they have functional

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limitations. They identified the following disability: nearsightedness, tiredness, color blindness, nearsighted with astigmatism, problems in seeing like nearsighted, and problem in seeing (I cannot go outside without wearing eyeglasses). These perceptions determine the awareness of the students; hence the administrators must treat these concerns

The present study also proposed the Inclusive Education Framework that can be utilized in providing programs for PWDs. This inclusive education framework states that needs assessment is essential in determining the profile and disability prevalence of the students. Hence, the head of offices and institutions must review the policy and PPAs and monitor the implementation for inclusive education learners. Thus, the integration of inclusive education into the institutional framework will provide sufficient accounts and programs for PWDs, such as Mental health and well-being programs.

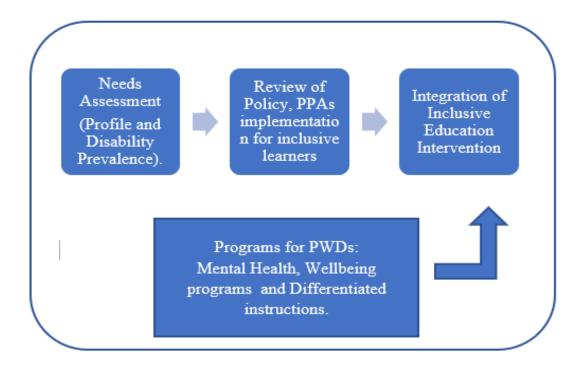


Figure 1. Angeles' Inclusive Education Framework

This framework must be tested and adapted by various researchers to validate the framework in various profiles and cultures to enhance generalizability and reliability. The findings are in consonance with Robayo et al. (2017) that the concepts, policy, structures and systems, and Practice must be integrated into the program. Hence, Blum et al. (2015) highlighted that access to resources and social participation in roles and activities which are essential goals in realizing the basic goal of inclusive education.

V. Conclusions And Recommendations

Programs/ interventions such as student development that promote inclusivity of education must be implemented to help the students with various functional limitations. Psychological interventions such as mental health programs, resilience building, and counseling must be integrated into the program. The collaborative effort and support between faculty, staff, and administration are essential in attaining the programs and goals of inclusive education. Administer the Washington Group Short Sets of Questions on Disability (WGSQ) to the entire population of the CNSC Labo campus to increase the generalizability of the

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findings. Assessing the functional limitations of students can provide the appropriate recommendations for program development for inclusive learners. The emerging framework can be adopted to assess students' baseline needs and used for planning interventions.

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