Neurodevelopmental disorders, a study case in the the students of system engineering of the TECNM Campus, Instituto Tecnologico de Mexicali

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**ABSTRACT**

The objective of this quantitative research is to measure the impact on in the students of the computer systems engineering career of the Institute Tecnológico de Mexicali with 430 enrolled students and make a diagnosis, based on the results of a survey applied to 22 students.

**Keywords:** neurodevelopmental disorders, TECNM, systems engineering.

**1 INTRODUCTION**

Neurodevelopmental disorders, a case study in systems engineering students at the TECNM Campus, Mexicali Technological Institute. The objective of this quantitative research is to measure the impact in situ and quantify and describe it.

Neurodevelopmental disorders include
- Attention deficit hyperactivity disorder (ADHD)
- Coordination development disorder.
- Tic disorders such as Tourette's disorder.
- Intellectual disability
- Autism spectrum disorder
2 METHODOLOGY

The first step that we followed when writing this investigation, was to explain the research design and the conception of the research idea after the research problem. Later, we defined the research objectives, formulation of research questions; In addition, and following the methodology, we explain the type of methodology to follow according to the proposed objectives.

Then we will focus on the specific description of our study population, indicating the main factors by which it has been delimited, also including the statistical formula used to determine the sample.

Once entering the survey, we will show the main variables that we have included in the research and the measures used to convert them into operations.

On the other hand, we dedicate a section to the analysis of the measurement scales, so that we characterize the different dimensions of competitiveness according to the model used, based on a factor analysis, as well as verify the reliability and validity of the previous ones. scale of measurement with which we obtained the information, which we use, to finish we will review the hypotheses and analyze the results obtained to finally write the conclusion.

\[
n = 71 \quad N = 430 \quad Z\alpha = 1.96 \quad p = .16 \\
430 (3.8416) (0.5) (0.5) \\
n = \frac{---------------------------------------------}{(40395-1)(0.0025)+(3.8416)(0.16)(0.16)} = 22
\]

3 SURVEY

1. have you detected any student from the Computer Systems Engineering program at the Mexicali Technological Institute, who has a disorder such as
   -Attention deficit hyperactivity disorder (ADHD)
2. have you detected any student from the Computer Systems Engineering program at the Mexicali Technological Institute, who has a disorder such as
   -Coordination development disorder.
3. have you detected any student from the Computer Systems Engineering program at the Mexicali Technological Institute, who has a disorder such as
   -Tic disorders such as Tourette's disorder.
4. have you detected any student from the Computer Systems Engineering program at the Mexicali Technological Institute, who has a disorder such as
   -Intellectual disability
5. have you detected any student from the Computer Systems Engineering program at the
Mexicali Technological Institute, who has a disorder such as
-Autism spectrum disorder
6. The professors of the Computer Systems Engineering career at the Mexicali Technological Institute are prepared to serve students with Neurodevelopmental disorders.
7. The laboratory staff of the Computer Systems Engineering career at the Mexicali Technological Institute are prepared to serve students with Neurodevelopmental disorders.
8. The different services such as cafeteria, school services, English, residences, social service, dual education of the Computer Systems Engineering career of the Mexicali Technological Institute, are prepared to serve students with Neurodevelopmental disorders

With the following multiple choice answers:
- Strongly Disagree
- Disagree
- I slightly disagree
- A little agreement
- Agree
- Totally agree

4 CONCLUSION

Based on the responses to the survey we found that very few students were detected with attention deficit, and no students with development of motor coordination have been detected, nor have students with tourette syndrome been detected, but students with intellectual disability, some students have also been detected with the autistic spectrum, it has been detected that teachers are not well prepared to care for students with these diseases, nor are laboratory staff prepared to care for these cases, the different services provided by the IT of Mexicali is also not well prepared to serve these students, so we conclude that there is an area of opportunity for the IT of Mexicali in this type of problem.
Source: Esta es la representacion grafica de las respuestas
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