Self-concept of Mexican students with and without learning disorders.

ABSTRACT

This study aims to find whether there are differences in the self-concept of Mexican students with Learning Disorder and those without Learning Disorder using a secondary dataset. (Roca-Stappung et al., 2017) The study has recorded responses from 70 students. The participants consist of elementary school Mexican male and female students Piers-Harris Self-Concept scale used to measure self-concept of students. The students with learning disorders were medically diagnosed and the rest were considered students without learning disorders. Students with learning disorders had a negative sense of self-concept about 41% on average compared to those without learning disorders. Sub-scale analysis shows that students with learning disorders have a low sense of both academic and general self-concept. There is not much difference in the academic self-concept of students with learning disorders as compared to those of students without learning disorders. Hence the academic self-concept of students with learning disorders is not a major contributor to the overall negative self-concept of Mexican students with learning disorders. The general self-concept of students with learning disorders is much lower than those of students without learning disorders. This suggests that the general self-concept of students is a major factor contributing to the negative sense of self-concept of Mexican students with LD.

INTRODUCTION

This paper discusses the self-concept of students with and without learning disorders using the Piers-Harris Self-Concept scale. However, the differences in the self-concept of students with Learning Disorder and those without Learning Disorder can be compared using a variety of methods using tools like the Self-Description Questionnaire.

Learning Disorder

Examination of various definitions of learning disorder reveals some convergence around the idea that learning disorder is a difficulty that hinders a person from efficiently performing regular academic tasks like reading, writing, mathematics etc. learning disabilities in children result in challenges in specific areas of academic functioning (Kavale & Forness, 2000). Another article defines learning disorder (LD) as disorders that affect academic performance or the efficiency of daily tasks. (Pavlou & Gkampeta, 2011). These definitions are similar in the sense that they identify LD as a challenge in performing simple academic tasks; however, Pavlou & Gkampeta (2011) have identified LD as hindrance in academic performance and daily tasks. So, the definition given by Pavlou & Gkampeta (2011) will be used in this study.

STATE OF KNOWLEDGE

Several studies have been conducted to examine whether there is a difference in self-concept of students with Learning Disorder and without Learning Disorders (LD).(Al Zyoudi, 2010 ; Bear et al., 2002 ; Gans, et al., 2003 ; Zeleke, 2004 ;Núñez et al., 2005 ; Tabassam & Grainger, 2002; Yailagh et al., 2014) Most studies have been done only in specific geographic locations like USA , Australia , Israel , Jordan etc. Numerous studies found that a difference in self-concept among students with LD and without LD (Al Zyoudi, 2010 ; Bear et al., 2002 ; Gans, et al., 2003 ; Núñez et al., 2005 ;

Tabassam & Grainger, 2002).Some studies analyzed the individual subscales of the self-concept scale (Al Zyoudi, 2010 ; Bear et al., 2002 ; Núñez et al., 2005 ; Tabassam & Grainger, 2002). ; upon subscale analysis the results produced are inconsistent. For example, some studies show that students with learning disorders have a lower academic self-concept but show no difference in the general/global self-concept subscale (Al Zyoudi, 2010; Bear et al., 2002; Tabassam & Grainger, 2002). However, according to Núñez et al. (2005) students with LD have a low sense of both academic self-concept and general/global self-concept. This suggests that even though most studies point to a low self-concept of students with LD and those without LD, the individual subscale scores of the self-concept scales differ. Students with LD have a negative sense of self-concept as compared to their peers without LD however, there are slight inconsistencies in results of the sub-scale analysis of the self-concept scale. The difference in demographic locations may have affected these sub-scale inconsistencies.

RESEARCH GAP AND QUESTION

These studies have examined whether there is a difference in self-concept between students with and without Learning Disorders (LD) only in specific demographic locations. However, there are not enough studies about the difference in self-concept between students with and without LD in Mexico. So, expanding knowledge in this area is necessary. This study aims to answer the following question.

Is there a difference in self-concept between students with learning disorders and their normal achieving peers in Mexico?

METHODOLOGY

Data set descriptions

The dataset is about the relationship between self-concept and learning disorders in Mexican children and the major components of this data set are Self-concept indicator (Piers-Harris Self-Concept Scale), Academic indicator (Neuropsychological Scale) and Intelligence Quotient (IQ). Seventy children from various elementary schools in Querétaro, Mexico were participants in the study. The Infant Neuropsychological Scale (ENI) and Piers-Harris Self-Concept Scale were assessed using a questionnaire. The results are in percentiles where LD group students had percentiles lower than 10 in at least one subscale of ENI and less than 16 in another subscale. This dataset was retrieved from figashare.com and there is no published research on this dataset.

Sample

The age of 70 students from elementary schools in Mexico ranged from eight to eleven years, out of these children thirty-four were female students. Forty-five children belonged to the Learning Disorder (LD) group and twenty-five children belonged to the Good Academic Achievement group (GAA). This study refers to GAA as students without Learning Disorders (non-LD).
There is not enough data to indicate the severity of learning disorders in these students.

Variables

There are three variables: Intelligence Quotient (IQ), Infant Neuropsychological Scale (ENI) [includes: Reading, Writing, Arithmetic] and Self Concept Piers-Harris Scale [Behaviour, Intellectual, Physical, Anxiety, Popularity, Happiness-Satisfaction]. This study will use the Self Concept Piers-Harris Scale [Behaviour, Intellectual, Physical, Anxiety, Popularity, Happiness-Satisfaction]. The six self-concept scales are represented as a percentile rank for each student with Learning Disorder (LD) and students without Learning Disorders (non-LD). The Self Concept Piers-Harris Scale variable is an ordinal data type. The percentile of each subscale ranges from 1-99. Students with or without LD are nominal variables.

TABLE 1

Research Variables	Type	Range
Self Concept Piers-Harris Scale	Ordinal	1 to 99 %
Status of Learning (LD or non-LD)	Nominal	N/A

Data set - Processing, Screening, and Cleansing Procedures

The variable is of ordinal data type and will not be changed. The intelligence quotient (IQ) and the Infant Neuropsychological Scale (ENI) [includes Reading, Writing, Arithmetic] will be removed as the study is regarding self-concept in children with learning disorders. This way study will only focus on the self-concept Piers-Harris Scale and its results.

Data Analysis

The data set will be analyzed using three bar charts comparing self-concept, the general-self-concept and academic self-concept of students belonging to the Learning Disorder (LD) group and students belonging to the non-learning disorder group, respectively. An average of 6 self-concept sub-scales were used to produce the overall self-concept of each student (LD & non-LD). The average of two sub-scales i.e., general-self-concept and academic self-concept was used to visualize the sub-scale bar charts.

RESULTS

Fig 1.0 shows the self-concept and 2 of its sub-scales (general & academic) of Mexican Students. The horizontal axis shows the self-concept, general self-concept, and academic self-concept of Mexican students. The vertical axis indicates each of these self-concepts of students measured in percentile. The color of the charts indicates whether the student does not have a learning disorder(non-LD) [Blue] or has learning disorder (LD)[orange]. As seen in this figure, the average self-concept of students without LD is 55.64% and for non-LD students it is 41.41%.
The average general self-concept of students without LD is 66.80% and for non-LD students it is 41.56%. The average academic self-concept of students without LD is 42.00% and for non-LD students it is 32.22%.

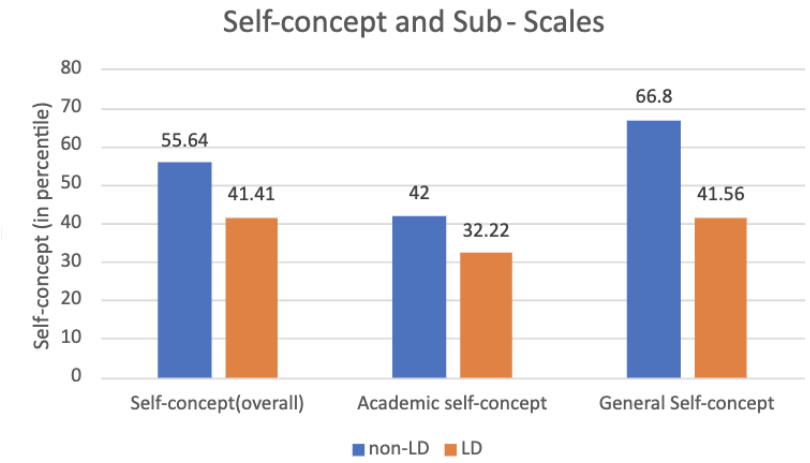

Fig 1.0

DISCUSSION

This study found that there is a difference in self-concept of students with and without Learning Disorders as seen in Fig 1.0. This study has compared the self-concept of Mexican students with and without learning disorders using the Pier-Harris self-concept scale. Sub-scale analysis has been done to find that there is a difference in the general self-concept and academic self-concept of Mexican students with and without learning disorders.

Fig 1.0 indicates that students with Learning Disorders have a lower sense of self-concept as compared to students without Learning Disorders. This echoes past studies on self-concept of students with and without learning disorders (Al Zyoudi, 2010; Bear et al., 2002; Gans, et al., 2003; Zeleke, 2004 ;Núñez et al., 2005; Tabassam & Grainger, 2002).

Upon subscale analysis It was found that students with Learning Disorders have a lower sense of general self-concept as compared to those without Learning Disorders. These results are like the study by Núñez et al. (2005), however, these results are contrasting with several previous studies Al Zyoudi, 2010; Bear et al., 2002; Tabassam & Grainger, 2002), Which shows no difference in the general self-concept of students with and without Learning Disorders.

Fig 1.0 suggests that students with Learning Disorders have a lower sense of academic self-concept as compared to those without Learning Disorders. This result aligns with several previous studies (Al Zyoudi, 2010; Bear et al., 2002; Zeleke, 2004 ;Núñez et al., 2005; Tabassam & Grainger, 2002). Analysing fig 1.0 it is found that there is about 14 % difference in the self-concept of mexican students with and without LD and 25 % difference between the general self-concept of mexican students with and without LD however, there is only about a 10 % difference in the academic self-concept of students with and without Learning Disorders. This suggests that academic self-concept is not the major contributor to the negative self-concept of mexican students with LD. The general self-concept of mexican students with LD is one of the highest contributors of negative self-concept in Mexican students with LD.

The trend of students with learning disorders having lower self-concept as compared to those without learning disorders is valid for Mexican students. Demographic location does not seem to impact this result. The results of sub-scale analysis of general self-concept and academic self-concept vary from study to study, so they might be affected by the change in demographic locations.

Limitations

This study has limitations. There were insufficient numbers of participants in this study. This limits the generalizability of this study. This study has not considered the social status of students. According to a previous study by Easterbrook et al. (2020); social status plays a vital role in structuring the sense of self-concept and identity. For example, a student with a learning disorder of a high social status may have a better self-concept than a student without Learning Disorders but belonging to a low social status; this may question the reliability of the results. The impact of effective learning interventions for students with learning disorders has not been considered. For example, reading fluency can be improved by repeated practice in reading under guided conditions as per Chard et al. (2002). This may increase the academic self-concept of students with learning disorders hence bringing a change in their sense of self-concept.

CONCLUSION

The study found a difference in self-concept of students with and without learning disorders in Mexico. Mexican students with learning disorders have a lower self-concept as compared to students without learning disorders. Students with learning disoders have a much lower sense of general self-concept as compared to students without LD. This suggests that the general self-concept is a major factor that contributes to their negative self-concept. The difference in academic self-concept of students with and without LD is less as compared to that of the general self-concept. This seems interesting as a learning disorder is thought to impact the academic areas of students with learning disorders. The study's results show that a demographic location may not affect the result of self-concept of students with learning disorders being lower than that of students without learning disorders. The demographic location seems to impact the sub-scales of Self-concept (ie general self-concept).

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