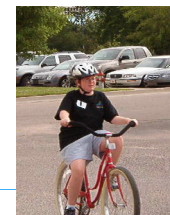




# Autism Awareness

**Karli Visor**  
**Southwestern Oklahoma State University**  
**Research Supported by CPGS Research Grant**  
**Faculty Sponsor: Dr. Lisa Appeddu**



Picture of my brother, Karson Visor, learning to ride a bicycle in summer 2010. Karson has been diagnosed with Autism.

## Introduction

Autism is one of a spectrum of disorders (Autism Spectrum Disorders, ASDs) characterized by impairments in communication and socialization and the presence of repetitive or restrictive behaviors (American Psychiatric Association, 2000). According to data released by the CDC (2007), approximately 1 in 150 of 8-year old children in the United States had an Autism Disorder. But what causes this disorder in these children? While the exact etiology and contributing factors are poorly understood, both genetic and environmental factors are likely to contribute to the development of ASDs (Hertz-Picciotto, Croen, Hansen, Jones, van de Water, & Pessah, 2006). Furthermore, the general public appears to be unaware of what Autism is. The objective of my research was to determine what students know about Autism and to educate them on ASDs.

## Aim of Study

The goals of this research were:

- To determine how many SWOSU students know a person with Autism.
- To determine SWOSU student knowledge about the definition, causes, treatment and prevalence of ASDs.
- To educate SWOSU students about ASDs.

## Materials & Methods

This project was done to meet course requirements of ALHLT 3043 Health Statistics. The following steps were followed:

- Received approval from SWOSU Protection of Human Subjects Committee.
- Conducted survey through convenience sampling of 55 SWOSU students in ALHLT 2453 Medical Terminology and ALHLT 3933 Management of Healthcare Institutions in November 2010.
- After students completed the survey, an informative handout was given to educate the students about Autism that related the questions asked on the survey.
- Data was organized and analyzed using Microsoft Excel® and Chi Square analysis.

## Results

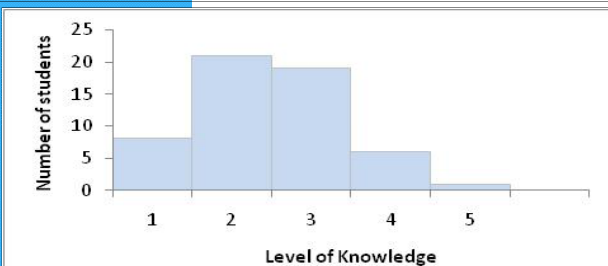


Figure 1. Student self-rating of level of knowledge about Autism (1 = Least & 5 = Most).

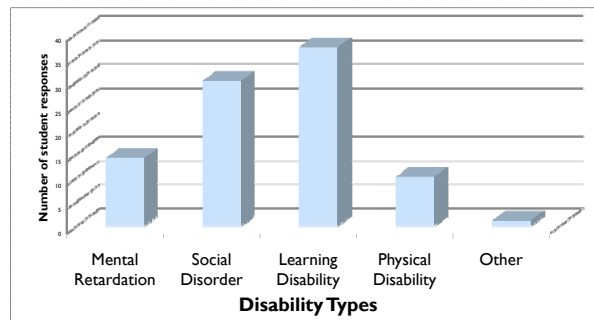


Figure 2. Student responses when given choices in defining disabilities associated with Autism (Note: Students were given opportunity to choose more than one option).

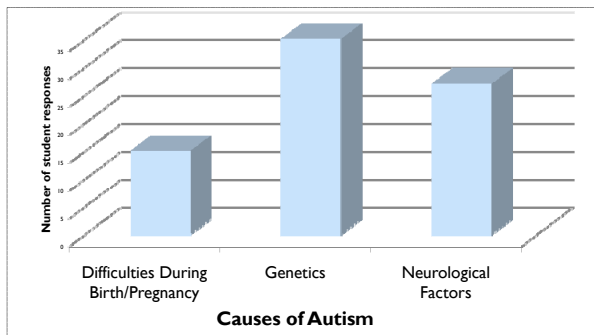


Figure 3. Student responses when given choices in defining probable causes associated with Autism (Note: Students were given opportunity to choose more than one option).

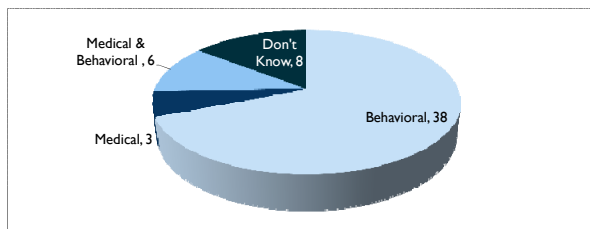


Figure 4. Student choices as to the best treatment option for Autism.

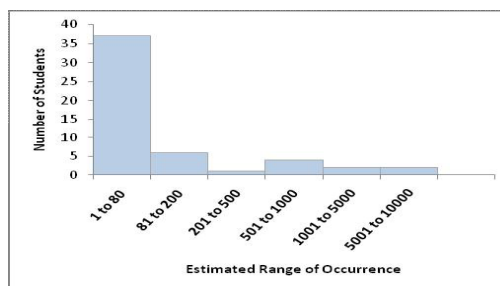


Figure 5. Student estimates for statement: "Autism occurs in approximately one in \_\_\_ children."

## Conclusions

- Approximately half of SWOSU students surveyed (22/55) reported to know at least one person diagnosed with Autism.
- Most students claimed to have little to a moderate level of knowledge about Autism (Figure 1). Only one student claimed to be extremely knowledgeable on ASDs (5 rating).
- Although most students self-reported to know very little about Autism, most had a good idea about the definition of Autism (Figure 2), primarily characterizing it as being a social disorder and learning disability. This is in agreement with the CDC (2007), which defines children with ASDs as having impairments in social interactions and communication, resulting in learning disabilities and the presence of unusual behaviors and interests. Mental retardation is not a common characteristic of ASDs.
- Figure 3 illustrates the top three causes of Autism as identified by students. Other potential choices which had six or less responses included vaccinations, environmental toxins, social influence, and maternal illness. While the exact cause of ASDs are unknown, it is generally thought to be a combination of environmental and genetic influences (Hertz-Picciotto, Croen, Hansen, Jones, van de Water, & Pessah, 2006).
- Students chose behavioral treatment as the best treatment option for individuals with Autism. (Figure 4) While some cases of ASDs respond to medical treatment, the most common form of therapy is behavioral (Moore and Symons, 2009).
- The last question asked on the survey was to fill in the statement, "Autism occurs in approximately one in \_\_\_ children." The distribution of responses are shown in Figure 5 – most students over-estimated the prevalence of ASDs, and only six students guessed in the generally correct range of 81 to 200.
- Preliminary results suggest SWOSU students surveyed in health-related classes had an above average general knowledge about ASDs, which was more than what they had estimated themselves to know.

## Literature Cited

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text rev.). doi:10.1176/appi.books.9780890423349.7060
- CDC. (2007). *Autism Spectrum Disorders: Fact Sheet*. Retrieved from [http://www.cdc.gov/ncbddd/actearly/pdf/parents\\_pdfs/AutismFactSheet.pdf](http://www.cdc.gov/ncbddd/actearly/pdf/parents_pdfs/AutismFactSheet.pdf).
- Hertz-Picciotto, I., Croen, L.A., Hansen, R., Jones, C.R., and van de Water, J. (2006). The CHARGE Study: An Epidemiologic Investigation of Genetic and Environmental Factors Contributing to Autism. *Children's Health*. 114(7): 1119-1125.
- Moore, T.R. and Symons, F.J. (2009). Adherence to Behavioral and Medical Recommendations by Parents of Children with Autism Spectrum Disorders. *Autism and Developmental Disorders*. 39(8):1173-1184.