

# Occupational Performance of the Primary School Children with Special Needs

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## INTRODUCTION

- Occupation means everyday life activity.
- The children's occupation performance are self care, play, social participation and education.
- Their school performance related activities depend on gross motor, fine motor, visual-motor integration, and visual-perceptual skills.
- In Malaysia, students with special needs under category of learning disability (Down syndrome, mild autism, attention deficit hyperactivity disorder - ADHD, mild intellectual disability and specific learning disabilities) are located in the integrated special education program.
- School-based therapy has been established in developed countries.
- It has not been implemented in Malaysia.
- The evidence for this service requirement in school setting is timely to be explored.

## AIMS

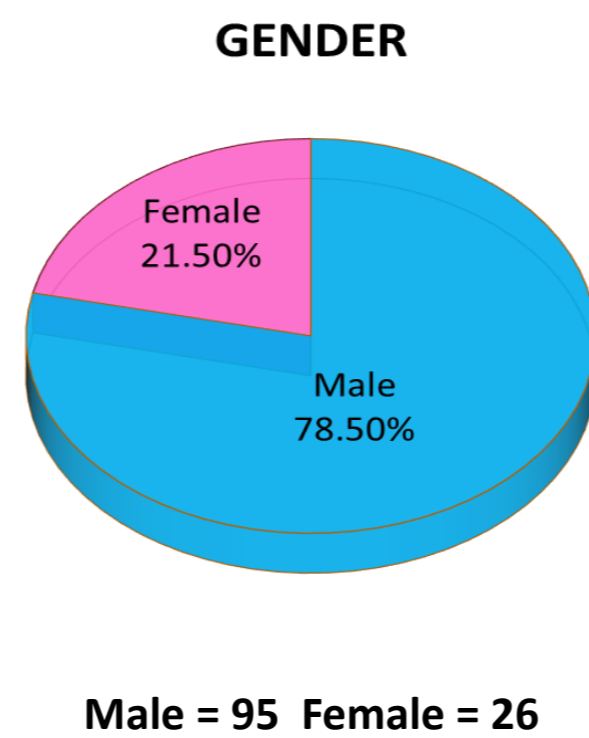
- To investigate the occupational performance of the primary school children with special needs:

*visual perceptual, visual motor integration, gross motor development, hand writing skills and school function.*

## METHODS

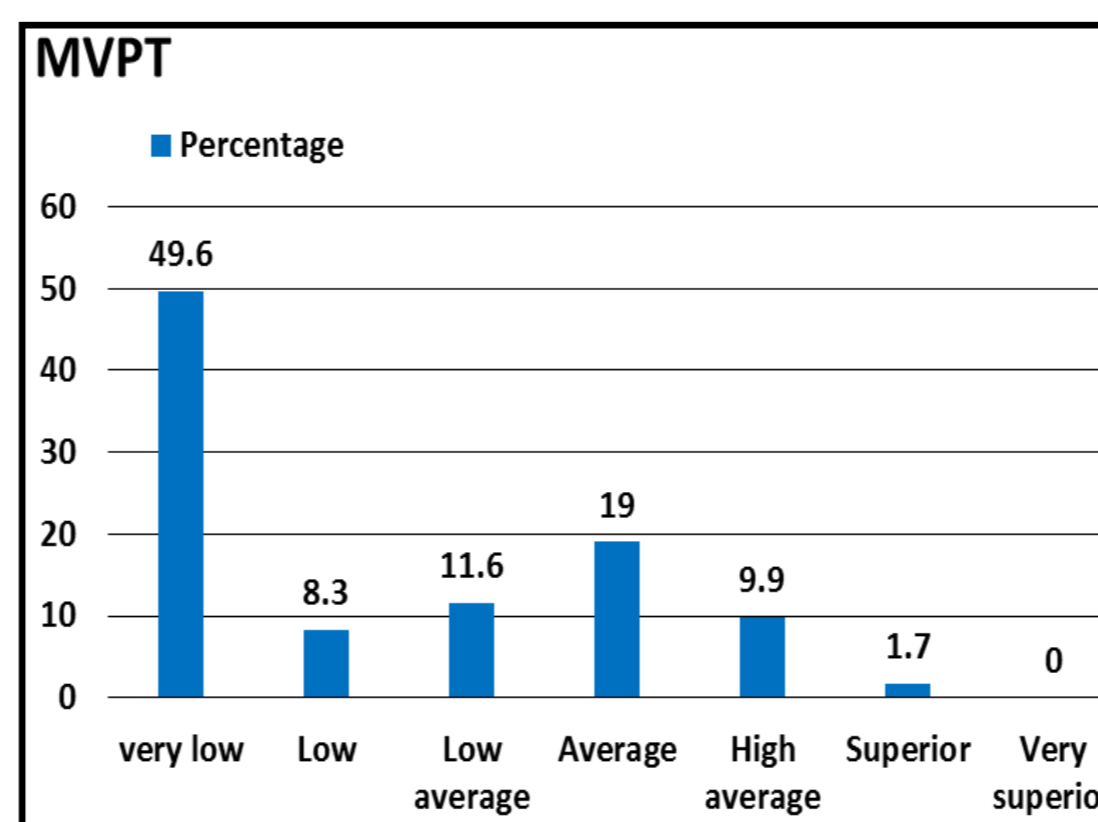
- This was an exploratory cross sectional study .
- 121 students with learning disability (6-12 years old) from the integrated special education program of 4 primary schools in Penampang, Kota Kinabalu, who can follow the instruction, were included in this study.
- Ethics approval was obtained from UMS medical research ethics committee.
- Following standardized assessment tools were used.
  1. Motor-Free Visual Perceptual Test 3rd.ed.
  2. Beery-Buktenica Developmental Test of Visual Motor Integration 5th.ed.
  3. Test of Gross Motor Development – 2
  4. Test of Hand Writing Skills-Revised
  5. School Function Assessment
- Results were analysed and tabulated by SPSS version 21.

## RESULTS

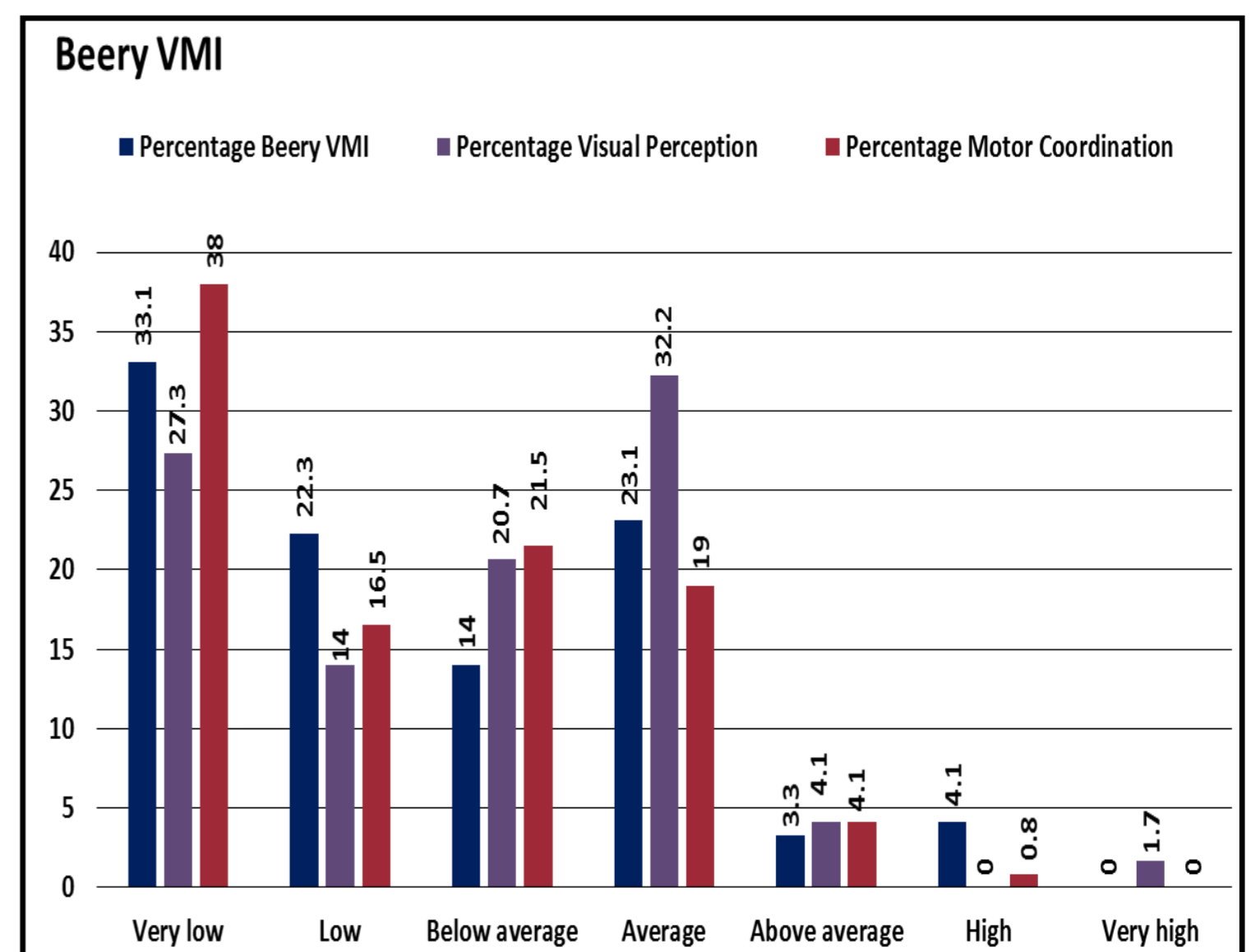


Types of the disabilities of the children	%	n
Intellectual Disability	43	52
Attention Deficit Hyperactive Disorder	24.0	29
Autism Spectrum Disorder	20.7	25
Down Syndrome	5	6
Speech Impairment	2.5	3
Specific Learning Disorder	2.4	3
Hearing Impairment	1.7	2
Visual Impairment	0.8	1

## TEST RESULTS



1. **MOTOR-FREE VISUAL PERCEPTUAL TEST**  
(Mean = 75.3 | SD = 21.8)



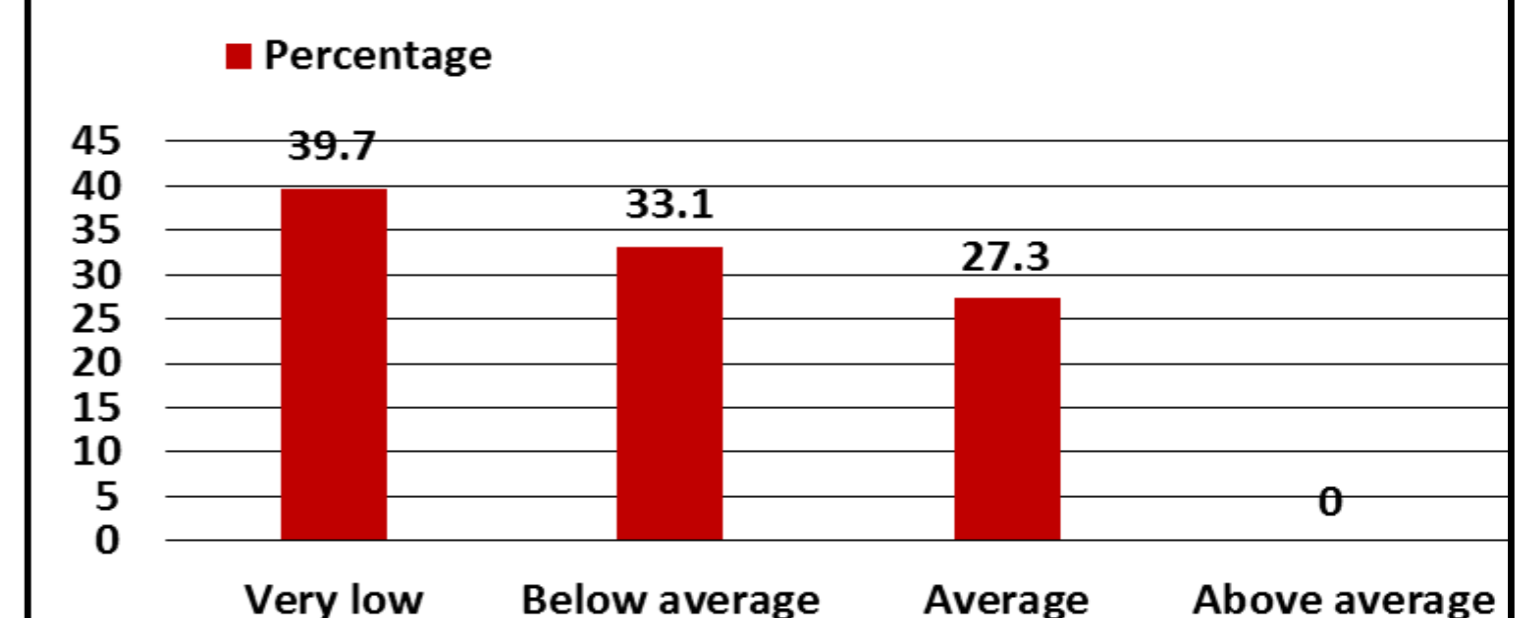
2. **Beery-Buktenica Developmental Test of Visual Motor Integration**

Mean VMI = 78.8 | SD = 20.5 | Mean Visual perceptual = 81.2 | SD = 21.1  
| Mean Motor coordination = 75.5 | SD = 19.2

3. **Test of Gross Motor Development – 2 (TGMD–2)**

	Below age level	Achieved age level
TGMD	73.55% (n=89)	26.45% (n=32)
Locomotor	75.21% (n=90)	25.62% (n=31)
Object control	69.42% (n=84)	30.58% (n=37)

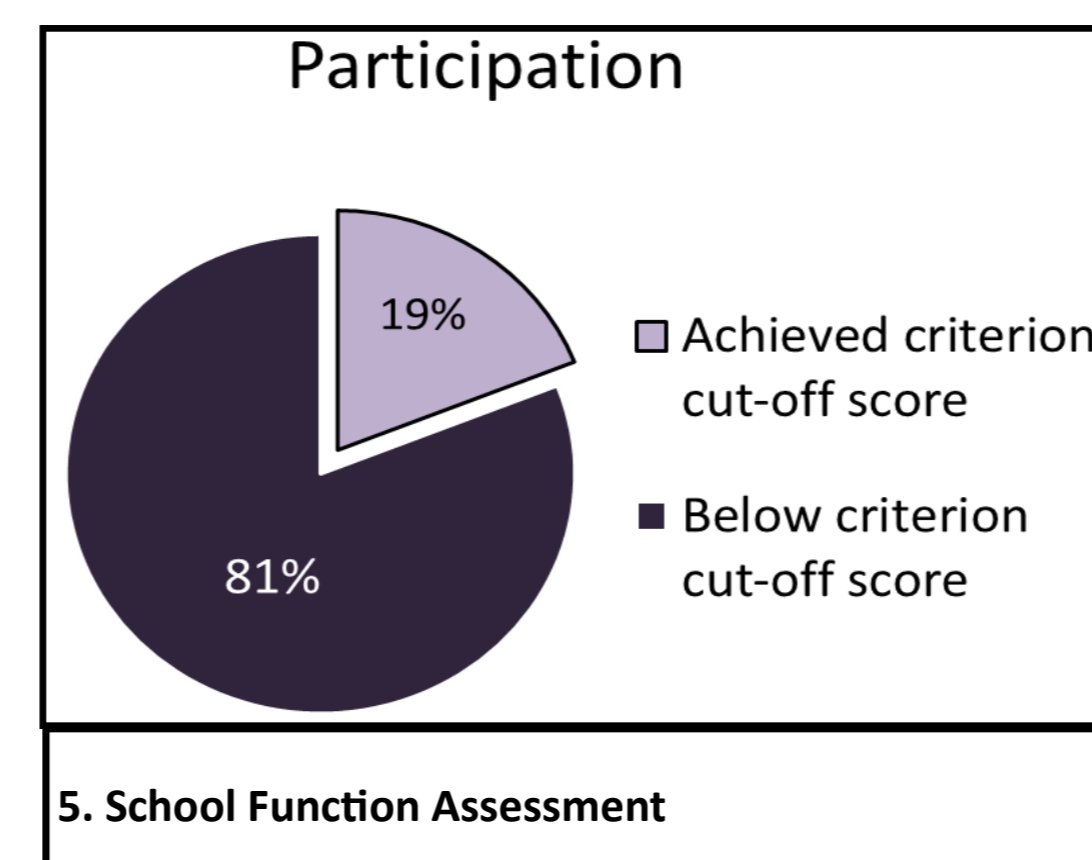
4. **THS-R**



4. **Test of Hand Writing Skills-Revised** (Mean = 74.5 | SD = 16)

**Percentage of the Children with Occupational Performance Problems**

1	Visual perception	69.5%
2	Visual motor integration	69.4%
3	Gross motor development	73.6%
4	Hand writing skills	72.8%
5	School function (Participation)	81%



5. **School Function Assessment**

## CONCLUSION

Study revealed that the students have problems in occupational performance indicating the needs of school-based therapy and other rehabilitation services in the school system.

## REFERENCES

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