



## Cognitive Ability: Investigating the opinion of Postgraduate students

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### ABSTRACT

**Background:** Education plays an important role to improve an economic power of the country.

**Method:** A normative survey method is used for this study. **Results:** The rural postgraduate students are better than the urban postgraduate students in their numerical reasoning, verbal reasoning, abstract reasoning, logical reasoning, non-verbal reasoning, spatial reasoning and total score of cognitive ability.

**Conclusions:** There is no significant difference between in the dimensions numerical reasoning, verbal reasoning, abstract reasoning, logical reasoning, non-verbal reasoning, spatial reasoning and total score of cognitive ability among postgraduate students with regards to locality. This study aims to investigate the opinion of cognitive ability skills from postgraduate students to get success in the competitive exams for better job.

**Keywords:** Cognitive Ability, Investigating, Opinion, Postgraduate students, Higher education

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### Introduction

Cognitive abilities or skills are supported by specific neuronal networks. Cognitive ability is one of the most significantly studied topics in the subject of behavioral genetics (McGue & Bouchard, 1998). Cognitive capacity refers to flair for carrying out intellectual approaches, including hassle fixing, model, comprehension, reasoning, knowledge acquisition, abstract idea, and making connections. (Flavell 1999). Cognitive capability is closely associated with educational attainment, occupation, and health results. (Plomin & Von Stumm, 2018). The query of the way genetics and environment make contributions to cognitive capacity in youth becomes a relevant issue as we consider the life choices and pathways that

become available to younger humans all through this sensitive period of life. Cognitive abilities are components of intellectual functioning, including memorizing and remembering; inhibiting and focusing interest; pace of information processing; and spatial and causal reasoning. person variations between human beings are measured by means of evaluating scores on checks of those intellectual skills. checks of fashionable intelligence, such as the Wechsler adult Intelligence take a look at, are based totally on a broad pattern of these mental potential assessments, and measures of aptitudes for studying in specific educational domains, which include mathematics, or language getting to know, are based totally on a narrower sampling of the domain-applicable capabilities.



### Ways to improve Cognitive Ability

- Deal with your bodily fitness.
- Manipulate excessive Blood stress.
- Consume healthy meals.
- Be bodily lively.
- Keep your mind lively.
- Stay related with social activities.
- Manage strain.
- Reduce risks to Cognitive health.



### Components of cognitive skills

Cognitive skills have some essential components.

These are:

- ☑ Perception
- ☑ Memory
- ☑ Logical thinking
- ☑ Concentration
- ☑ Rational attitude

### Objectives

To find a significant difference in the cognitive ability and its dimensions of postgraduate students with regards to locality.

### Hypotheses

There is no significant difference in the cognitive ability and its dimensions of postgraduate students with regards to locality.

**Methodology**

**Method**

The investigator has used the Normative survey method for the present investigation.

**Sampling Technique**

A simple random sampling technique was used to collect the sample.

**Sample**

For this present study 1113, university postgraduate students from state universities of Tamil Nadu were taken for the study.

**Tool**

The cognitive Ability instrument is created by investigator to collect the data.

**Statistical techniques**

Differential analyses were used for this study.

**Analysis and Interpretation**

**TABLE-1**

**A significant difference in cognitive ability and its dimensions of postgraduate students with regards to locality**

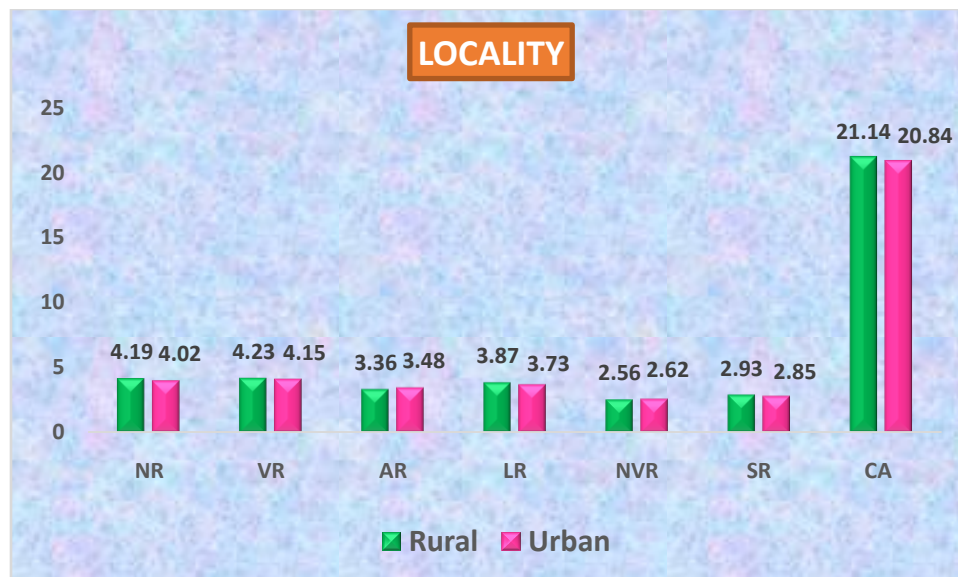
Dimensions	Locality	N	Mean	S.D.	t	P	Sig.
NR	Rural	442	4.19	1.729	1.555	0.120	NS
	Urban	668	4.02	1.794			
VR	Rural	442	4.23	1.759	0.764	0.445	NS
	Urban	668	4.15	1.812			
AR	Rural	442	3.36	1.629	1.188	0.235	NS
	Urban	668	3.48	1.615			
LR	Rural	442	3.87	1.822	1.259	0.208	NS
	Urban	668	3.73	1.758			
NVR	Rural	442	2.56	1.572	0.540	0.589	NS
	Urban	668	2.62	1.518			
SR	Rural	442	2.93	1.426	0.958	0.338	NS
	Urban	668	2.85	1.401			
TOTAL	Rural	442	21.14	7.527	0.655	0.513	NS
	Urban	668	20.84	7.592			

**NR-Numerical reasoning, VR-Verbal reasoning, AR-Abstract reasoning,  
 LR-Logical reasoning, NVR-Non-verbal reasoning, SR-Spatial reasoning**

**FIGURE-1**

**Figure showing the significant difference in cognitive ability and its dimensions of postgraduate students with regards to locality**





### Findings of the study

From the results of the above table, it is found that the calculated P values (0.120, 0.445, 0.235, 0.208, 0.589, 0.338, 0.513  $P > 0.05$ ) are greater than 0.05 and are not significant at 5% level. Hence, the formulated null hypothesis is accepted.

While comparing the mean scores of rural (Mean=4.19, 4.23, 3.36, 3.87, 2.56, 2.93, 21.14) and urban postgraduate students (Mean=4.02, 4.15, 3.48, 3.73, 2.62, 2.85, 20.84), the rural postgraduate students are better than the urban postgraduate students in their numerical reasoning, verbal reasoning, abstract reasoning, logical reasoning, non-verbal reasoning, spatial reasoning and total score of cognitive ability.

- ❖ There is no significant difference between in the dimensions numerical reasoning, verbal reasoning, abstract reasoning, logical reasoning, non-verbal reasoning, spatial reasoning and total score of cognitive ability among postgraduate students with regards to locality.

### Educational implications

- ❖ Cognitive learning approach teaches students the skills that need to learn effectively.
- ❖ Helps students build transferable problem-solving and study skills that they can apply in any subject.
- ❖ Developing cognitive skills allows students to build upon previous knowledge and ideas.

### Conclusion

Cognitive abilities are related to job performance. Greater cognitive ability is associated with greater and longer school/colleges enrollment and academic achievement. Enhanced cognitive ability is also associated with greater employment opportunities. Cognitive Ability is very necessary for postgraduate students to succeed in their employment. This study reveals that postgraduate students from rural area are better in cognitive ability test than urban area.

### Suggestions

Brain is a vital organ of our body. Practically the brain sends signals through the nervous system to other body parts. Similarly, the brain needs sharpened cognitive skills to focus, learn, think,



remember details, and eventually solve problems effectively. To score high marks and ace exams effectively, all the cognitive needs of students should be met to attain their achievement.

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