Relationship between Intelligence and Impulse Control among new entrants studying in various medical disciplines

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- **Title of the study**

- **Relationship between Intelligence and Impulse control among new entrants studying in various medical disciplines**

- **Investigators**

- **Mrs. Rupali Sarode**
- **Dr. (Mrs.) Vaishali Tendolkar**

- Introduction

- Health professional courses are highly taxing and carrying mental pressure as compared with other professional courses.

- They face unique academic challenges and vulnerable to stress than students of other discipline. Health profession students represent highly education population under significant stress.

- Students from various medical disciplines require good intelligence to understand all the medical subjects and concepts as it deals with the human body and human life.

Introduction

Many times students admitted against their will.

New entrants faces problems of coping with the transition from youth to adolescence

First time coping with independence.

Impulsivity is an important psychological construct. It appears, in one form or another in every major system of personality

It is observed that patience is absolutely virtue of students of health professional courses.

➢ Intelligence

- Intelligence is generally known **as ability or mental capacity to understand to reason, plan, solve, think abstractly, and comprehend complex ideas to learn quickly from experience.**

- In the present study, **'intelligence'** is defined by Raymond Cattle (1963) as "combination of two major clusters of mental abilities i.e. Fluid Intelligence (g_f) and Crystallized Intelligence (g_c). Fluid Intelligence (g_f) is refers to our largely inherited abilities to think and reason. . In contrast, crystallized intelligence refers to the ability to use learned knowledge and experience.

➢Impulse control :

- It is observed that **patience** is absolutely virtue of students of health professional courses.
- The concept of impulse control often referred to as self control and sometimes self regulation.
- people impose restrictions on themselves, interrupting their own activities and delaying the available gratification-
- when delay of gratification is imposed on the individual by external forces, we talk of “frustration” and
- when the delay is self imposed, we call it **“self-control”** (Shrivastava & Naydoo, 1982).

- **Aim of the study**

The study aims at studying relationship between Intelligence and Impulse Control among new entrants studying in various medical disciplines.

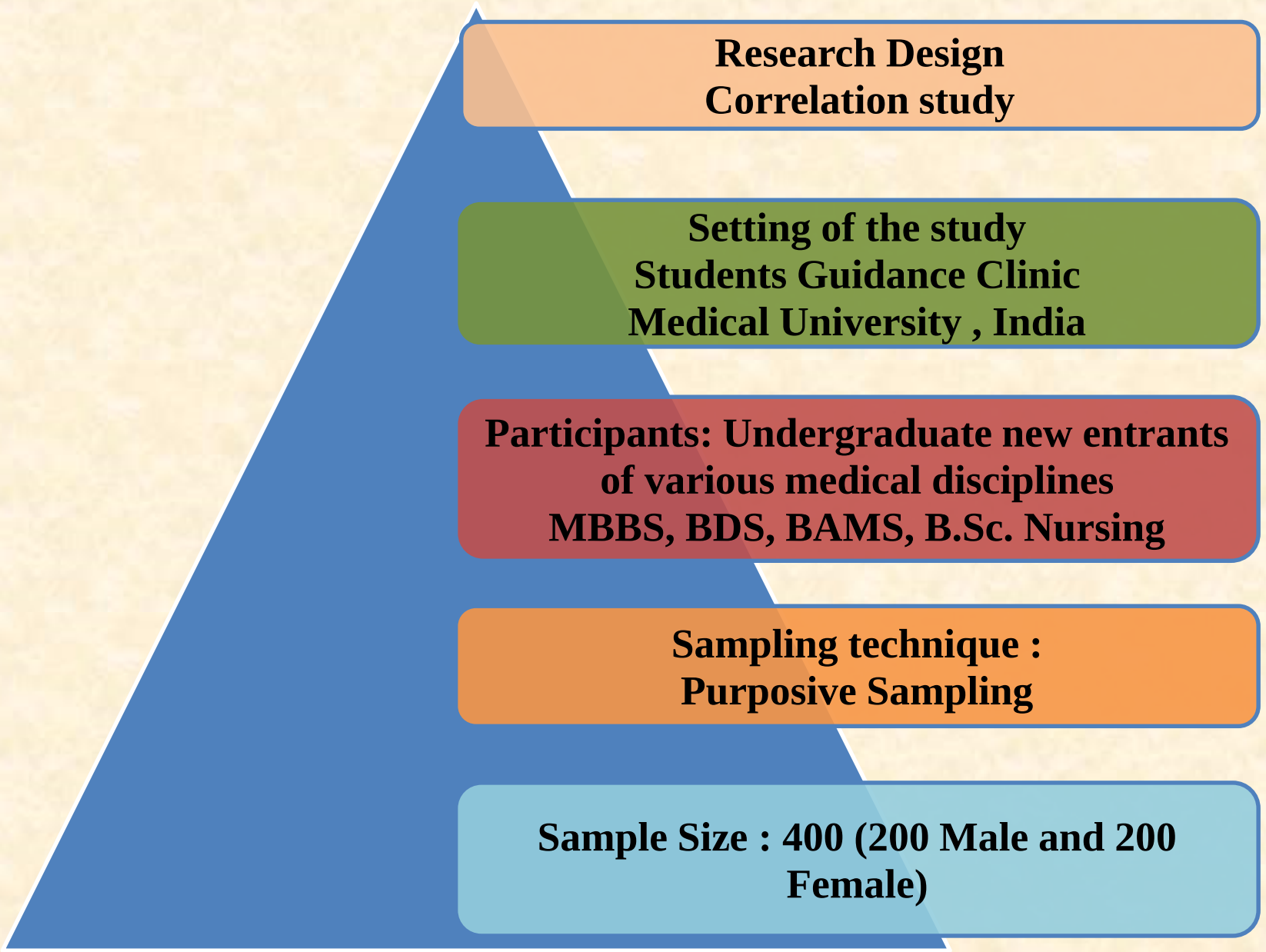
- **Objectives of the study**

- To assess level of intelligence among new entrants studying in various medical disciplines.

- To assess the impulse control among new entrants studying in various medical disciplines.

- To identify the relationship between Intelligence and impulse control among new entrants studying in various medical disciplines.

Methodology



Material

1. Demographic Data Sheet

2. Culture Fair Intelligence Test, Scale 2, Form A – By Raymond B. Cattle & Karen S Cattle.

- This test measures ***Fluid Intelligence-*** the biological ability to acquire knowledge and solve problems- such as reasoning, speed, spatial reasoning and inductive reasoning.
- Each scale contains 4 subtest- **Series, Classification, Matrices and Conditions**

3. Impulse control scale by Anjali Shrivastava and R. K. Naidu.

It contained 65 statements. It is a Paper pencil self-report measures of impulse control using likert type 5- point scale .

Method of data Collection

- Prologue of the study given to students in their college setting.
- Doubts regarding the study were clarified.
- Written Informed consent was taken.
- Both the tools administered one after the other.
- All instructions and protocols of administration for each tool were followed strictly.
- Data was collected by data collectors simultaneously in three college setting to avoid contamination.
- Average time taken to complete the data sheets was 40 minutes approximately.

Results

Table 1: distribution of subjects according to their demographic characteristics (Contd.)

Demographic Characteristics	*Categories*	*MBBS*		*BDS*		*BAMS*		*Nursing*	
		100		*100*		*100*		*100*	
		Freq.	*%*	*Freq*	*%*	*Freq*	*%*	*Freq*	*%*
Age in years	17 - 19	96	96	100	100	98	98	100	100
	20-22	04	04	00	00	02	02	00	00
Family Type	N- Nuclear	80	80	65	65	77	77	88	88
	J-Joint	20	20	35	35	23	23	12	12
Religion	Hindu	72	72	74	74	79	79	76	76
	Muslim	08	08	08	08	08	08	00	00
	Christian	05	05	05	05	00	00	03	03
	Jain	08	08	07	07	02	02	00	00
	Buddhist	02	02	03	03	11	11	21	21
	Other	05	05	03	03	00	00	00	00

Table 1: distribution of subjects according to their demographic characteristics (Contd.)

Demographic Characteristics	*Categories*	*MBBS*		*BDS*		*BAMS*		*Nursing*	
		100		*100*		*100*		*100*	
		Freq.	*%*	*Freq*	*%*	*Freq*	*%*	*Freq*	*%*
Birth Order	1	56	56	53	53	45	45	51	51
	2	36	36	37	37	39	39	36	36
	3	07	07	08	08	13	13	10	10
	4	00	00	01	01	02	02	02	02
	5	01	01	00	00	01	01	00	00
	6	00	00	00	00	00	00	01	01
	7	00	00	01	01	00	00	00	00

Table 1: distribution of subjects according to their demographic characteristics

Demographic Characteristics	*Categories*	*MBBS*		*BDS*		*BAMS*		*Nursing*	
		100		*100*		*100*		*100*	
		Freq.	*%*	*Freq*	*%*	*Freq*	*%*	*Freq*	*%*
Conflict Between Family members	a) once a week	08	08	10	10	09	09	06	06
	b) Once a month	21	21	25	25	45	45	33	33
	c) Once a fortnight	11	11	10	10	05	05	06	06
	d) Never	60	60	55	55	41	41	55	55
	e) More frequently	00	00	00	00	00	00	00	00
Choice of Health Profession	S- Self	83	83	78	78	77	77	75	75
	P- Parents	07	07	13	13	13	13	15	15
	F- Friends	00	00	00	00	00	00	01	01
	R Relatives	00	00	01	01	00	00	04	04
	SP-self & Parents	10	10	07	07	09	09	05	05

Results:

Fig. 1: Means of Intelligence scores for various groups of medical discipline.

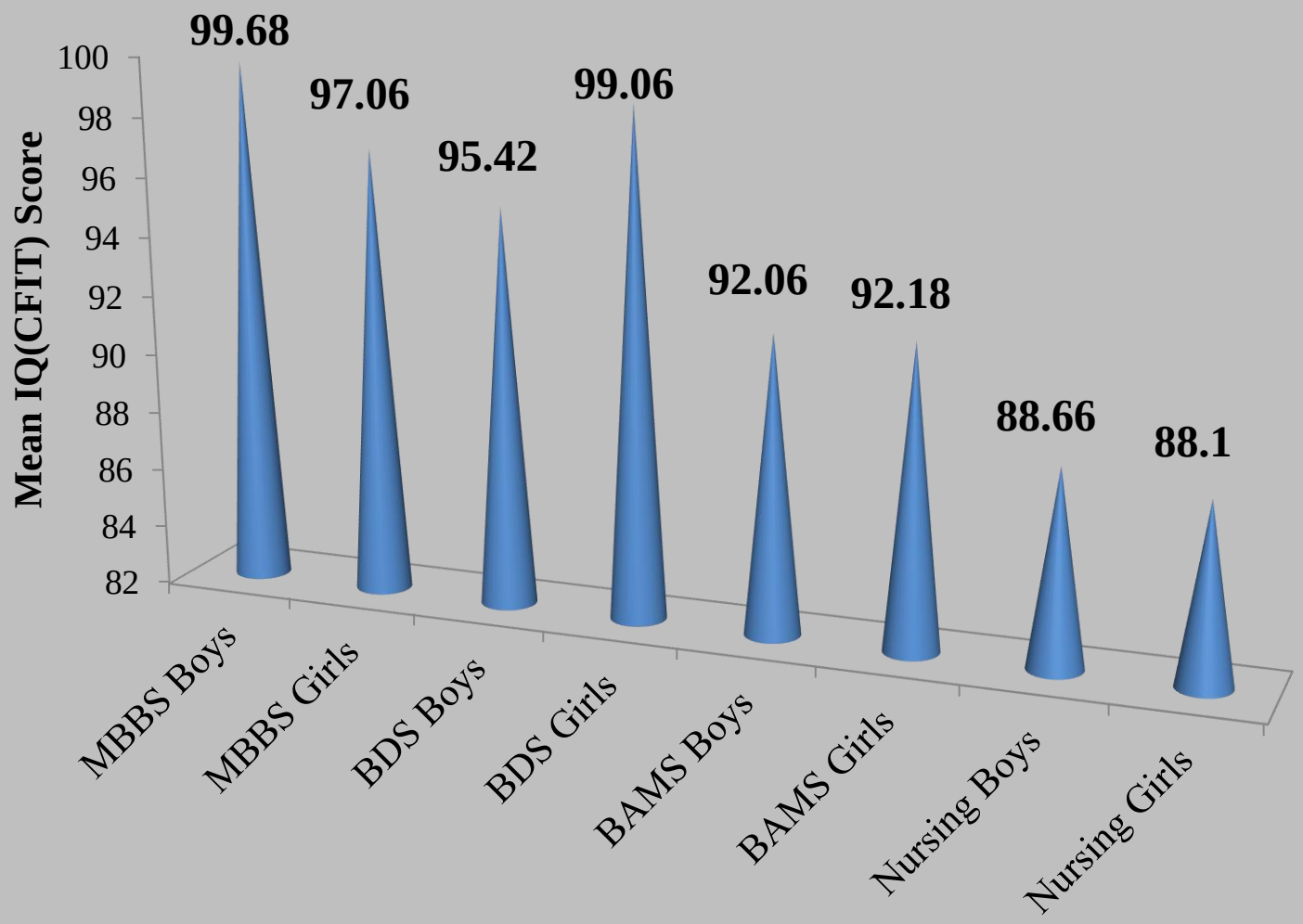


Fig. 2: Means of Impulse Control scores for various groups of medical discipline

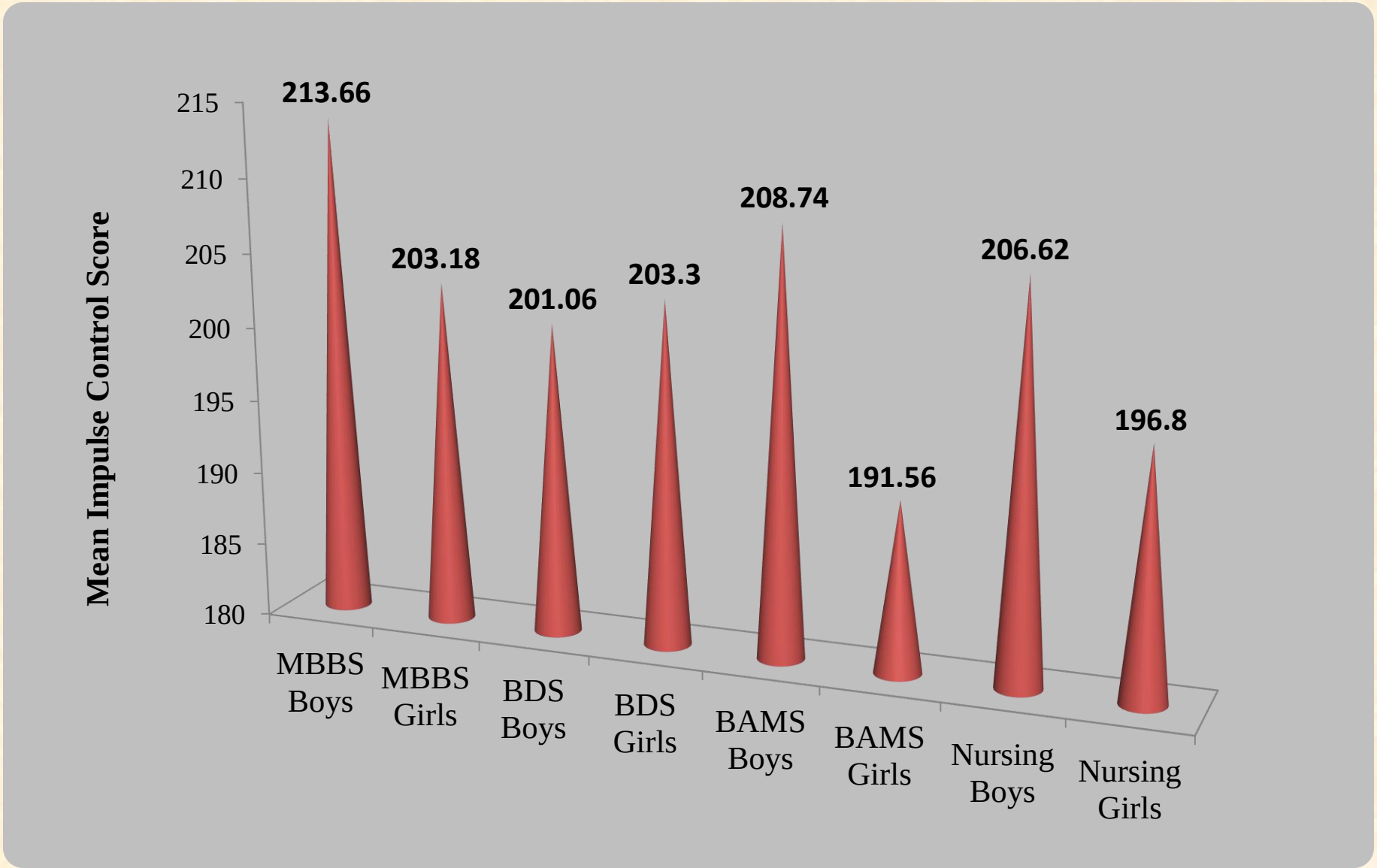


Table 2: Gender wise and discipline wise correlation between impulse control and Intelligence in new entrants of medical disciplines

	Intelligence Score (CFIT)	Impulse Control Score	N	Correlation ‘r’	p-value
Boys	93.93±12.03	207.52±25.40	200	0.137	0.054,**NS**
Girls	91.14±12.45	198.71±23.27	200	0.222	0.002,**S**
Total	94.03±12.22	203.11±24.72	400	0.173	0.001,**S**

Discussion

- Uppu, Devi and Ravi (2015) reported that majority of male students had above average I.Q. of grade IV- I.Q. 85-115 and majority of females had I.Q. below average –grade III –I.Q. 70-85.
- Another study by Jackson & Rushton (2006) reported that in students of 17-18 years, the I.Q points of male students are higher than their female counterparts on Scholastic Assessment Test.
- Lynn (2002) also reported that male of 15-16 years age have higher intelligence than females.
- Mendoza et al. (2013) found that in Brazilian students, males are having slightly higher intelligence than females.
- Colet and Vives (2005), who reported that impulsivity is negatively related to intelligence in secondary school students.
- Paolo et al. also reported that there is negative relationship between intelligence and impulsivity in males aged 20-24 years old. The high impulsiveness demonstrated reduced intellectual abilities.

Conclusion

- Intelligence is statistically significant positive relationship with impulse control among new entrants of various medical disciplines.

- MBBS boys, BAMS Boys, and Nursing Boys showed higher level of Intelligence than their girl counterparts.

- MBBS Boys, BAMS Boys, Nursing Boys and BDS girls had better Impulse Control than their counterparts.

IMPLICATIONS

- These findings can be used for policy decision regarding
  - selection of the students for health professional courses
  - all round development to improving mental health and emotional intelligence.
- Provides for the administrators and management of the health professional course institutions to pay urgent attention to

RECOMMENDATIONS

- Research may be conducted on other aspects of impulse control.
- Academic contributors of Impulse Control can be studied independently to gain more insight into the problems of health professional students.
- Further research in this area may be conducted among other professional courses students.
- A prospective study on the same students to evaluate their mental pain and impulse control as health professionals with license to practice would be an interesting one.

References

- Collins, R.B. Beleff, D. B. Jr. The inheritance of personality. American journal of human Genetics, 7, 122-146. 1995
- Ford, J. & Blumenstein, L. Self-control and substance use among college students, Journal of Drug Issues, 43(1), 56-68. 2013
- Pfefferbaum, B., & Wood PB. Self-report study of impulsive and delinquent behavior in college students. Journal of Adolescent Health, 15(4), 295-302. 1994
- Chandra, R., & Azimmundin, S. (2013). Influence of intelligence and gender on academic achievement of secondary school of Lucknow city. Journal of Humanities and Social Science, 17, (5), 9-14. Article retrieved from *www. iosrjournals.org*.

References

- Nanderi, H., & Abdullah, H. (2010). Male verses female intelligence among undergraduate student. *Journal of American Science* 6, (2), 189-194.
- Nanderi, H., & Abdullah, R., Aizan, H. (2008). Male verses female intelligence among undergraduate student. Does gender matter? *Asian Journal of Scientific Research*, *1:* 539-543.
- Nanderi, H., & Abdullah, R., Aizan, H.,Sharir, J., Kumar, V. (2010). Relationship between creativity and academic achievement: A study of gender differences. *Journal of American Science*, 6(1), 181-190.

THANK YOU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