

A Study to See Effects of Psychological Counselling On Intelligence of Secondary Level Students

Dr. Sarika Mohta^{1*}

ABSTRACT

To know the effects of counselling on intelligence on young children 200 students of Akank and Modi Public School of Kota (Rajasthan) were taken for study. Dr. P.N. Mehrotra's mixed type group test of intelligence was implied. It measures verbal and non-verbal intelligence and also indicates about the areas of intelligence where the child needs guidance / counselling for improvement. Thus after scoring and analysis the data obtained, could be said that there was no significant difference in the Intelligence Quotient of both the groups in both class IX and class X testing of both experimental and controlled group. There was no difference in the I.Q. of the experimental group after two counselling interventions, establishes and confirm the theory and thought that the Intelligence is a hereditary factor which cannot be influenced by any external interventions.

Keywords: *Intelligence, Counselling, Verbal intelligence, Non Verbal Intelligence.*

Intelligence is an umbrella term describing a property of mind including related abilities, such as the capacities for abstract thought, understanding, communication, reasoning, learning, learning from past experiences, planning and problem solving.

Intelligence, like love, is one of those concepts that are easier to recognize than to define. Psychologists don't entirely agree, but as a working definition we can adopt the wording offered by a distinguished panel of experts (Neisser et al., 1996): "The term intelligence refers to individual's abilities to understand complex ideas, to adopt effectively to the environment, to learn from experience to engage in various forms of reasoning, to overcome obstacles by careful thought".

Wechsler (1940) defines "intelligence as the aggregate or global capacity of the individual to act purposefully, to think rationally and to deal effectively with the environment".

I.Q. is a reliable measure of cognitive capacity and it is stable over time. I.Q. has also come to recognized as signifying academic achievement typically of a cognitive nature.

¹ Assistant Professor in Psychology, Mody University, Lakshmangarh, Sikar, Rajasthan, India

[*Responding Author](#)

Received: July 9, 2017; Revision Received: August 24, 2017; Accepted: September 5, 2017

A Study to See Effects of Psychological Counselling On Intelligence of Secondary Level Students

I.Q. represents the intellectual raw material of success. The I.Q. is a gross estimate of the average level of functioning and it is composed of a variety of specific mental abilities. So present study is to see effects of counselling on intelligence.

Objective

- To know the effects of Counselling on the intelligence scores of secondary level students.

METHODOLOGY

Sample

All 200 students studying in class 9th and 10th of Aklank and Modi public school of kota were taken for study. Both schools are CBSC affiliated, private school, co-educational in nature.

Tools

Dr. P.N.Mehrotra's "Mixed type group test of intelligence (MGTI)" was used. It is well researched, reliable and valid test which measures verbal as well as non verbal intelligence, the test also indicates about the areas of intelligence where the child needs guidance / counselling for improvement.

Design

The research is based on primary data. Which was collected through random sampling from two schools of Kota namely Aklank & Modi Public School. The research was done on 200 students of 9th class and research was continuo on these same students till they passed the 10th class. Pre-Post experimental research design was used in which there were two groups one Experimental group (N=100) and second Controlled group (N = 100). Counselling was only provided to experimental group students. Two times in one academic year total four times in research tenure.

| | | | | | | | | | |
|--------------------------|---|----------------------------|--|-----------------------------|---------------------------------|--------------------------------|-------------------------------|-------------------------------|----------------------------|
| Experimental Group N=100 | At the beginning of IX class Pretesting | Counselling Intervention-I | After the Half Yearly Exam. of 9th class | Counselling Intervention-II | In the 10th beginning Post Test | Counselling Intervention - III | After 10th Half Yearly Exams. | Counselling Intervention - IV | 10th Standard Final Result |
| Control Group N=100 | At the beginning of IX class Pretesting | No Intervention-I | After the Half Yearly Exam. of 9th class | No Intervention-II | In the 10th beginning Post Test | No Intervention-III | After 10th Half Yearly Exams. | No Intervention-IV | 10th Standard Final Result |

Procedure

Permission was taken from the school authority. Then one introductory class was taken of the students to establish rapport. After that the MGTI was administered in both the schools on the sample of students. After the students answered the questionnaire, the same was collected and subjected for scoring and interpretation. The raw scores were calculated with the scoring method as given in the manual.

RESULTS & DISCUSSIONS

Table 1 : Mean, S.D. & t-test Value of I.Q. in Pre and Post-testing of Experimental group.

| S.No. | Dependent Variables | N | Class IX | | Class X | | df | t | Level of Significance |
|-------|---------------------|-----|----------|-------|---------|-------|-----|------|-----------------------|
| | | | Mean | S.D. | Mean | S.D. | | | |
| 1 | I.Q. | 200 | 104.92 | 13.13 | 104.58 | 16.89 | 198 | 0.15 | NS |

As per statistical results presented in the Table 1 of the experimental group of the psychological testing in class IX (At the beginning of the experiment) and in class X (after two counselling intervention).

The Mean Score of I.Q. in Pre and Post-testing of experimental group was (104.92) and (104.58) respectively and t-values is (0.15) which is insignificant showing no significant increase in I.Q. after I and II counselling intervention. Since Intelligence is a hereditary factor based on the family genes, it is naturally not possible for any counsellor and any number of counselling interventions to bring any change in this factor. The experimental group's average I.Q. found was 104 + but less than 105. This is average level I.Q.

Table 2 : Mean, S.D. & t-test Value of I.Q. in Pre & Post-testing of controlled group.

| S.No. | Dependent Variables | N | Class IX | | Class X | | df | t | Level of Significance |
|-------|---------------------|-----|----------|-------|---------|-------|-----|------|-----------------------|
| | | | Mean | S.D. | Mean | S.D. | | | |
| 1 | I.Q. | 200 | 103.79 | 13.73 | 102.88 | 15.48 | 198 | 0.44 | NS |

The statistical results of I.Q. of the controlled group's at the beginning of the experiment in class IX and second testing at the beginning of the class X without any counselling interventions have been presented in Table 2. The Mean Score of I.Q. in Pre and Post-testing of controlled group was (103.79) and (102.88) respectively and t values are (0.44) which is not significant. So there was no significant increase in I.Q. of controlled group subjects.

Table 3 : Mean, S.D. & t-test Value of I.Q. in pre-testing of controlled & experimental group.

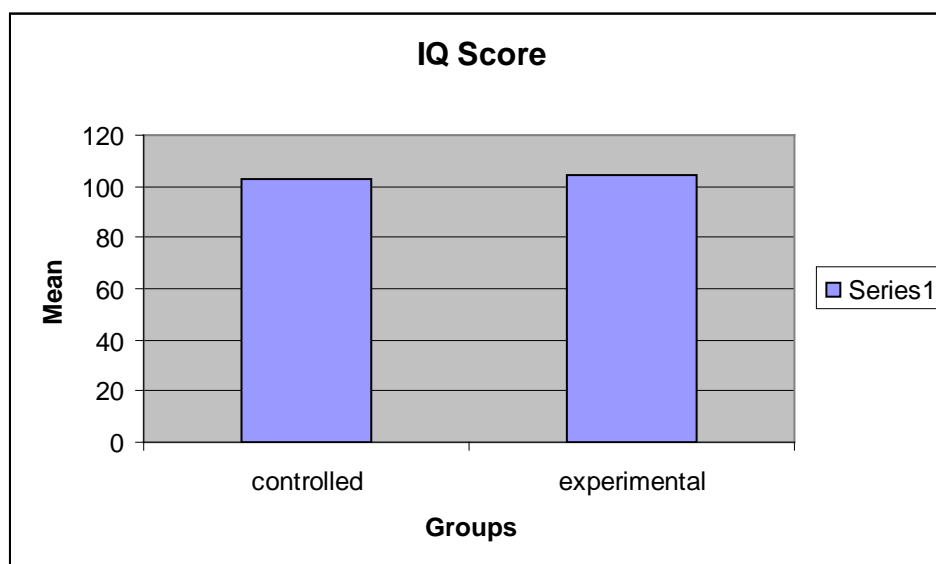
| S.No. | Dependent Variables | N | Controlled Group | | Experimental Group | | df | t | Level of Significance |
|-------|---------------------|-----|------------------|-------|--------------------|-------|-----|------|-----------------------|
| | | | Mean | S.D. | Mean | S.D. | | | |
| 1 | I.Q. | 200 | 103.79 | 13.73 | 104.92 | 13.13 | 198 | 0.59 | NS |

In Table 3 comparative statistical results of I.Q. of controlled and experimental groups at the beginning of the experiment in class IX have been given.

The Mean Score of I.Q. in Pre -testing of controlled group was (103.79) and of experimental group was (104.92). The t-Test value was obtained (0.59) which is insignificant and shows that there was no difference in intelligence of the two groups at the beginning of the experiment and they had almost the same I.Q. at the beginning of the experiment.

Table 4 : Mean, S.D. & t-test Value of I.Q. in post-testing of controlled & experimental group.

| S.No. | Dependent Variables | N | Controlled Group | | Experimental Group | | df | t | Level of Significance |
|-------|---------------------|-----|------------------|-------|--------------------|-------|-----|------|-----------------------|
| | | | Mean | S.D. | Mean | S.D. | | | |
| 1 | I.Q. | 200 | 102.88 | 15.48 | 104.58 | 16.89 | 198 | 0.74 | NS |



In Table 4 the statistical results of I.Q. of controlled and experimental groups after two counselling interventions has been given which was at the beginning of class X. The Mean Score of I.Q. in post-testing of controlled group was (102.88) and of experimental group was (104.58). The t-Test value of I.Q. was obtained (0.74). Which is insignificant. It indicates that there was no difference in the I.Q. of the two groups even after counselling interventions for the experimental group.

CONCLUSION

There was no significant difference in the Intelligence Quotient of both the groups in both class IX and class X testing of both experimental and controlled group.

There was no difference in the I.Q. of the experimental group after two counselling interventions, establishes and confirm the theory and thought that the Intelligence is a hereditary factor which cannot be influenced by any external interventions.

Limitations

The limitations of this research are as following:-

1. This investigation was conducted in the city of Kota (Rajasthan) only.
2. Present research was conducted In two schools and on 200 students only.
3. This study was conducted on urban students only.
4. The research was conducted only on students of CBSE affiliated schools,
5. managed by private management.
6. The variable under study was used is only intelligence and counselling.

A Study to See Effects of Psychological Counselling On Intelligence of Secondary Level Students

Suggestions for Further Study

Therefore, the following suggestions are made to look into the effectiveness of counselling should be kept in consideration:

1. The same study on same lines may be conducted on more schools and on larger sample.
2. This study may be conducted in other cities of Rajasthan and other states of India.
3. This study was conducted on urban students only. This may be conducted on Rural students also, and also a comparative study between urban and rural students be conducted.
4. A study also be done on this topic as a comparative study between Government Managed and Private Managed schools.
5. The study also can be conducted to consider the criteria as verbal and non verbal intelligence.

Acknowledgments

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interests: The author declared no conflict of interests.

REFERENCE

- Mehrotra, P.N., *Mixed type group test of intelligence*, National psychological Corporation, Agra.
- Neisser, U., Boodoo, G., Bouchard, T.J., Bykin, A.W., Brody, N., Ceci, S.J., Halpern, D.F. Loehlin, J.C., Perloff, R., Stenberg, R.J., & Urbina, S. (1996). Intelligence: Knows and unknowns. *American Psychologist*, 51. 77–101.
- Wechsler, D. (1940). Non-intelligence factors in general intelligence. *Psychology Bulletin*, 37, 44–45.

How to cite this article: Mohta S (2017). A Study to See Effects of Psychological Counselling On Intelligence of Secondary Level Students. *International Journal of Indian Psychology*, Vol. 4, (4), DIP:18.01.100/20170404, DOI:10.25215/0404.100