

Integrating Research and Education through Quantitative Techniques

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ABSTRACT

The present research study intended to evaluate the cognitive abilities particularly Intelligence Quotient, Focus Factor, Decision making ability and Creative Quotient of an esteemed educational institute, St. Anne's Convent School, Chandigarh. Detailed study was conducted on a sample of 27 (initial sample 30) students of the school. At initial stage, Test-1 was conducted on subjects. In the second stage, 90 days of customized training (IPCT-Q1) was provided to the subjects. Third stage included Quarterly Monitoring of IPCT-1. In the fourth stage, next 90 days of customized training (IPCT-Q2) was provided to the subjects. Fifth stage included Quarterly Monitoring of IPCT-Q2. Tracker test (Test-2) was conducted on subjects and finally the data were analyzed. The results indicated significant up-swing in IQ, FF, DMA and CQ of the participants.

Keywords: *Intelligence Quotient, Focus Factor, Decision Making Ability, Creative Quotient*

St. Anne's Convent School is an English medium, co-educational senior secondary school, affiliated to Central Board of Secondary Education (CBSE). It is a Christian minority Institution, established by the Simla- Chandigarh Educational Society, in the year 1977 and administered by the Religious Congregation of the Ursuline Sisters of Mary Immaculate, in the Catholic Church. The school is under the religious jurisdiction of the Catholic Bishop of Shimla- Chandigarh Diocese.

The children of today are gearing up to become adult citizens of tomorrow. The growth is parallel to the future of our country, reflected through quality of the present education system. A school must stimulate curiosity in the young, impressionable minds and equip them with tools to be better human beings. It widely accepted that the learning process is instrumental in shaping one's personality and the way he/she deals with situations of life. The shift of thoughts from bookish knowledge to knowledge of life, in schools, has brought forth a sea of change. People have warmed up to the idea of education being the key to a well-rounded development instead of just a mean to acquire degrees and monetary success in life.

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Education must facilitate the cultivation of a healthy thought process and groom our cognitive abilities. In the present competitive world, education is a basic necessity for human beings after food, clothes and shelter. School is the foremost fountain of knowledge children are exposed to. It gives a chance for them to acquire knowledge on various fields of education such as people, literature, history, mathematics, politics, and other numerous subjects. This contributes to cultivation in the thought process. When one is exposed to the influences coming from various cultural sources, his/her on world and existence becomes vast. School education must focus on the aspects, which contribute immensely to the development of the young minds as they step into adulthood. Education has been taken up as a major tool for human development. Now-a-days there are many means and sources of learning. Some children may learn through the use of different learning material rather than merely listening to an inspirational talk by the teacher. The pupils have several sources of information pertaining to the various aspects of human life, but, most of the students of today lack depth of thought and breadth of vision due to poor study-habits. The study-habits of learner means the ability to schedule his time, the plan of his study, the habits of concentration, note-taking, reviewing, over-learning, the judicious application of whole and part method, massed and distributed learning and so on. Education is the back bone of a progressive nation. The teacher occupies a pivotal position in the system of education. The teacher is the backbone of the educational system, maker of mankind and the architect of the society. It is on the quality of the teacher that a country depends for excellence in all walks of life. Education is a powerful instrument for social, political and economic development of a country. Success of educational process to great extent depends on the character, ability and personality of the teacher who is correct, one of the arch of education. A teacher has to displace exceptional empathy, persistence diligence, sincerity research orientation, honesty and flexibility as a person. Teachers are the models in the classrooms, whose attitude and personality are imitated by the students consciously as unconsciously. It is teacher's task to create and foster the spirit of open mindedness enquiry, sympathetic attitude and critical interest in all the matters of human concern, which is the finest fruit of education. Science is one of the important subjects at secondary school level. The aim of teaching science is to develop spirit of inquiry, creativity, problem solving, scientific mindedness, ability to interpret, expanding environmental critical ability etc. in a child. Education is the process through which an individual develops individuality and a person evolves exclusive personality of his own. Education should be individualized and personalized to the utmost and should constitute a preparation for self-learning.

METHODOLOGY

The first step included sample selection and then, rapport was formed with the subjects. The subjects were tested twice and monitored for 6 months.

Stages Of Study

- Stage-1 At initial stage, Test-1 was conducted.
- Stage-2 In the second Stage, 90 days of customized training (IPCT-Q1) was provided to the subjects.
- Stage-3 Third Stage included Quarterly Monitoring of IPCT-Q1.

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- Stage-4 In the fourth Stage, next 90 days of customized training (IPCT-Q2) was provided to the subjects.
- Stage-5 Fifth Stage included Quarterly Monitoring of IPCT-Q2.
- Stage-6 Tracker test (Test-2) was conducted on subjects.
- Stage-10 Analysis of data.

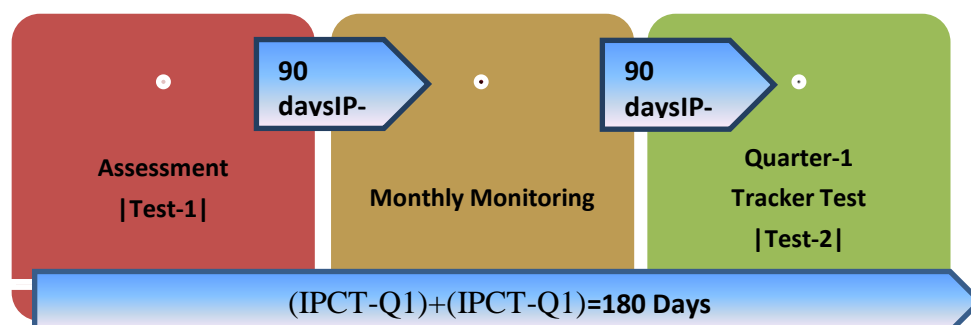


Fig 1: Design of the Research work

Participants

Table 1: Details of the participants

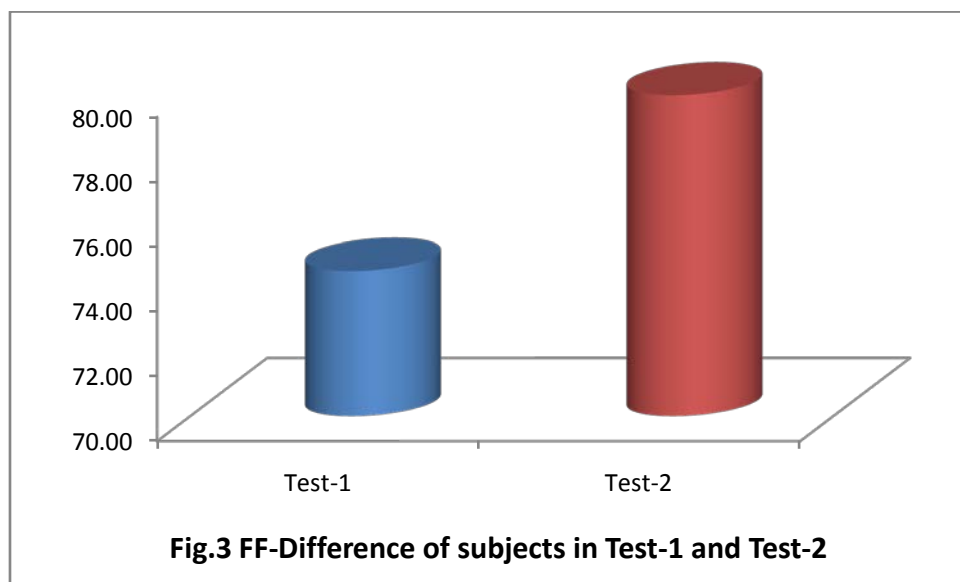
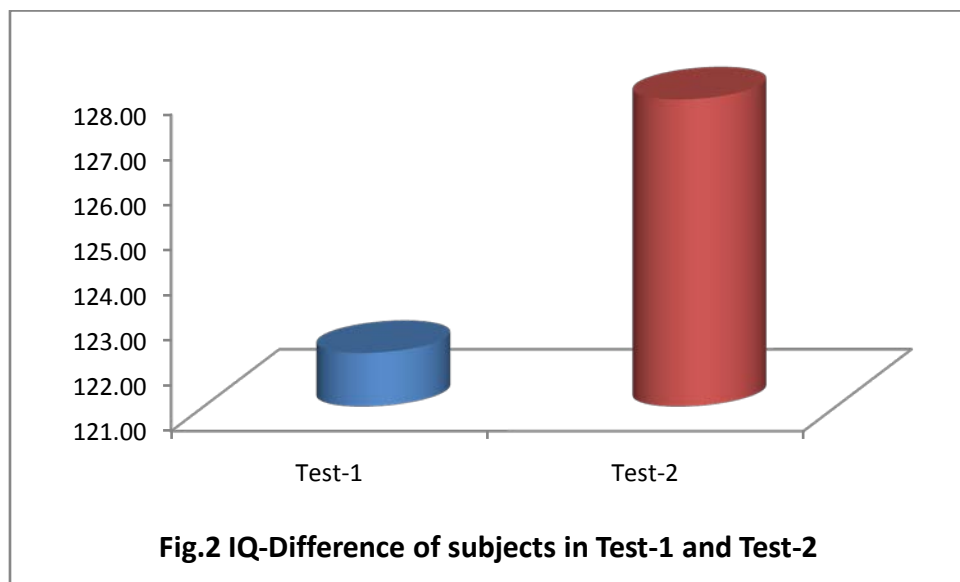
UID	Name	Age (Y)	M/F	Grade
290	Sikander	12	M	6
291	Prerna James	13	F	8
292	Harkaran	12	M	6
293	Mookshikha	11	F	6
294	Chia	11	F	6
295	Ajay Partap	11	M	6
296	Angel	12	M	6
298	Gautam	11	M	6
299	Sanaa	14	F	8
300	Sohil	13	M	7
301	Nivesh	13	M	7
302	Prachi	12	F	7
303	Saanvi	12	F	7
304	Ananya	13	F	7
305	Jigyasa	12	F	7
307	Suhani	13	F	8
308	Mehak	13	F	7
309	Akshat	13	M	8
310	Mehar	13	F	8
311	Diya	13	F	8
312	Jissa	13	F	8
313	Aaron	12	M	6
315	Damanjot	13	M	8
316	Aarush	12	M	7
317	Mohd. Tabish	12	M	7
318	Surbhi	13	F	8
319	Yashsavi	13	F	8

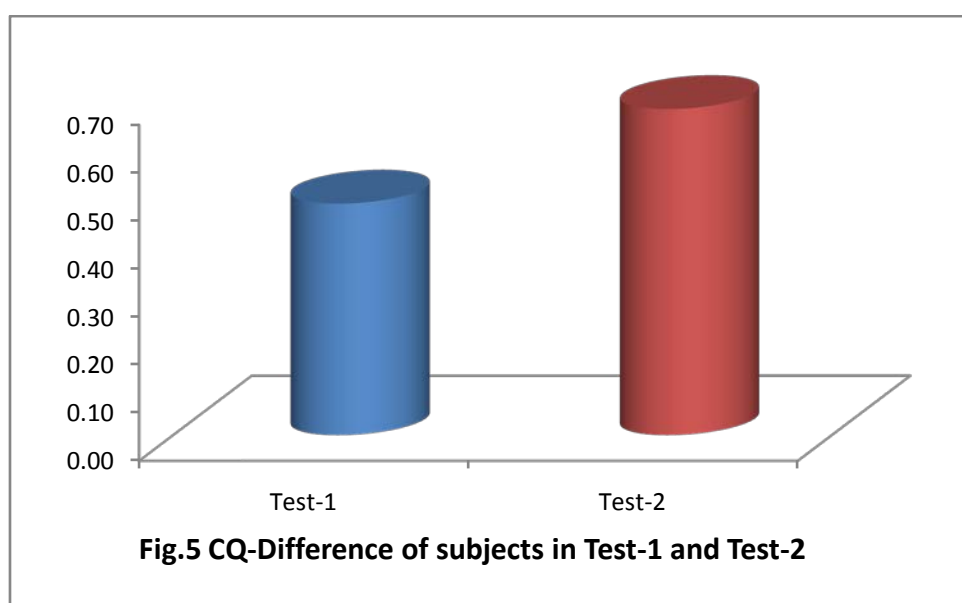
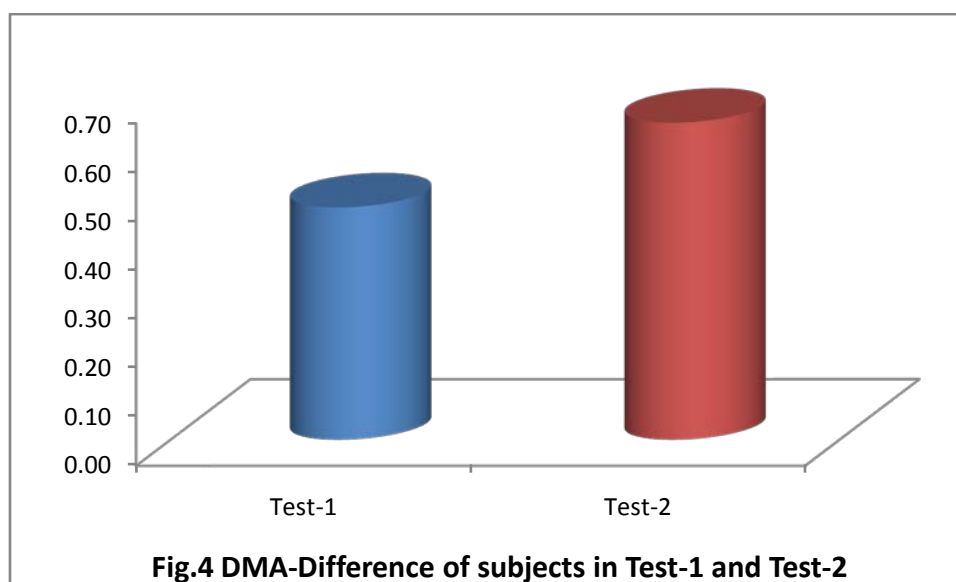
RESULT AND DISCUSSION

Once the data was obtained, it was coded, tabulated and analyzed, keeping in mind the objectives of the study. Appropriate statistical tools were used to draw meaningful inferences.

Table2 : Difference in Cognitive factors of Students in Test-1 and Test-2

Cognitive Factors	Test-1 (Assessment)	Test-2 (Tracker Test First Quarter)
IQ	122.18	127.79
FF	74.48	79.90
DMA	0.48	0.65
CQ	0.48	0.68





CONCLUSION

To recapitulate, it is revealed that the education, if imparted through the individualistic style and pattern can do wonders to enhance the scholastic achievement as well as the cognition. There are certain cognitive ability factors that can be inferred as super sets for complex cognitive functions which can then be reordered by applying customized education methodology. In the contemporaneous research, an extremely significant drift towards higher level of Cognitive Abilities was recorded after the completion of 180 days of customized training solution. It was contemplated that there had been a phenomenal surge IQ, FF and DMA. To wrap up, it is evident that learning style can develop cognition and ameliorate cognitive abilities.

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