

Factors Affecting Academic Performance of Adolescents Other Than IQ

Dr. Rinita Jain¹

¹Consultant Academic, Counselling and Rehabilitation Psychologist, PsyCare Foundations, Jaipur

Publication Date: 2026/04/06

Abstract: The concept of intelligence is complex and multifaceted, with various interpretations and measures. Beyond traditional Intelligence Quotient (IQ), newer concepts like Emotional Quotient and Spiritual Quotient have emerged. This study introduces Academic Quotient (AiQ), focusing on academic intelligence in adolescents. Amidst rising anxiety and pressure to excel, students struggle to balance knowledge, awareness, and curiosity, impacting academic performance despite high IQ. A pilot study on 345 students in Jaipur and Delhi was done on the basis of random sampling. The tools used were RPM (Raven's progressive matrices) for measuring IQ, Academic Intelligence Quotient Scale by Dr. Rinita Jain and Emotional Maturity Scale by PsyCom Services. The study revealed anxiety, aptitude, and communication as key factors influencing AiQ, beyond IQ. Anxiety, categorized into career, educational, behavioral, and personal types, affects individuals uniquely. The findings suggest that targeted interventions i.e. right and timely information, counseling, and guidance can balance these factors and enhance academic success. By recognizing AiQ's distinct role, educators and policymakers can develop strategies addressing anxiety and aptitude, ultimately boosting adolescent academic achievement. This research underscores the need to look beyond IQ and nurture students' overall academic intelligence.

Keywords: *Intelligence, Academic Intelligence, Anxiety, Aptitude, Communication, Academic Achievement, Information, Counselling, Guidance.*

How to Cite: Dr. Rinita Jain (2026) Factors Affecting Academic Performance of Adolescents Other Than IQ. *International Journal of Innovative Science and Research Technology*, 11(3), 3273-3280. <https://doi.org/10.38124/ijisrt/26mar1837>

I. INTRODUCTION

Intelligence is one of the most widely used, yet most widely debated concepts in scientific and everyday life. Intelligence means different things to different people. Intelligence Quotient (IQ), Emotional Quotient (EQ), Spiritual Quotient (SQ) are some of the concepts on which lots of work is being done. In the same run a need of new concept was felt and named as AiQ (Academic Quotient) which is related to Academic Intelligence. This concept was emerged when working with adolescent academic achievement.

Adolescence is a state of confusions since ages. This is an era of anxiety which has increased the intensity of their problems manifold. With increasing competition, technological innovations and media revolution, they are expected to be the best at every front. There can be as many reasons and factors which can affect students' academic performance as many lies the individual differences. Students who are anxious, angry or depressed don't learn: people who are caught in these states do not take in information efficiently or deal with it well. Powerful negative emotions twist attention toward their own preoccupations, interfering with the attempt to focus elsewhere. Indeed, one of the signs that feelings have veered over the line into the pathological is that they are so intrusive they overwhelm all other thought,

continually sabotaging attempts to pay attention to whatever other task is at hand.

Psychologists say that these days students have a pyramid of needs. At the base of this pyramid each student needs psychological empowerment and skills to manage life better. At the second rung of this pyramid are people who are vulnerable and have run into problems. For instance, divorced parents, alcoholic father, sexual abuse and psychiatric disorders are some of the situations which are bound to turn an adolescent vulnerable. And last came people who require specialist help. These people may have developed disorder like depression or anxiety and need to consult a psychologist.

It is realized that people on the first two levels of the pyramid can be dealt by sensitive teachers or school counsellors. The last level requires outside help for which various organizations are working.

So realizing the need a study was designed to see what are prominent factors affecting adolescent academic performance and intensity of their prevalence.

➤ Objective of the Study:

To determine the factors affecting academic performance of adolescents and the intensity of their prevalence.

II. METHODOLOGY

On the basis of random sampling 345 students from schools and colleges of Jaipur and Delhi were selected and following assessment tools were conducted on them:

- Observation
- Personal Interacction
- Other group information generation techniques.

- RPM (Raven’s Progressive Matrices) for IQ
- Emotional Maturity Scale by Psycom Services.
- Academic Intelligence Scale by Dr. Rinita jain

III. ANALYSIS

The objective of the study was to determine the factors affeting academic performance of adolescents and the intensity of their prevalence. The variables taken were:

In addition to this other instruments which were used:

- Interview

- Adolescents (girls/boys/school students/college students)
- Types of anxiety

Table 1 Anxiety Variables in the Population

Sample Category	Sample Size	Counselling Needed n (%)	Not Needed n (%)
Boys	165	124 (75.15%)	41 (24.85%)
Girls	180	105 (58.33%)	75 (42%)
College Students	69	53 (76.47%)	16 (23.53%)
School Students	276	184 (66.78%)	92 (33.33%)
Sample as a Whole	345	238 (69%)	107 (31%)

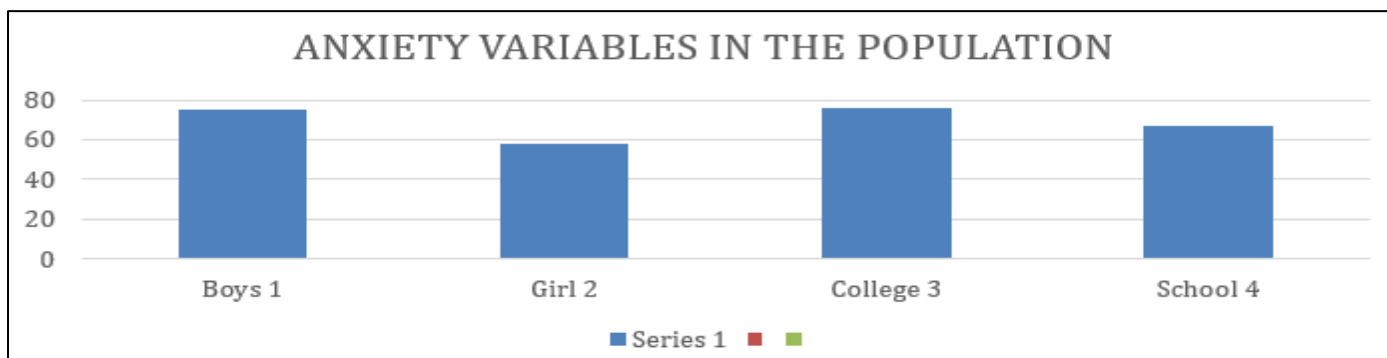


Fig 1 Anxiety Variables in the Population

Figure one depicts that out of 345 samples it was found that 68.69% student’s academic performance were hampered due to some or other anxiety and they require counselling for same. In the population boys were more with 75.15% than girls with 58.33%. College students were found more anxious with 76.47% than school students (66.78%).

Table 2 Variable with Concentration Problem

Factor	Variables	Always	Sometimes	Never	Total	χ^2	df	p
Lack of concentration	School Girls	39	90	17	146			
	School Boys	41	55	34	130			
	College Girls	4	26	5	35			
	College Boys	14	17	3	34			
	Total	98	188	39	345	25.16	6	>.01

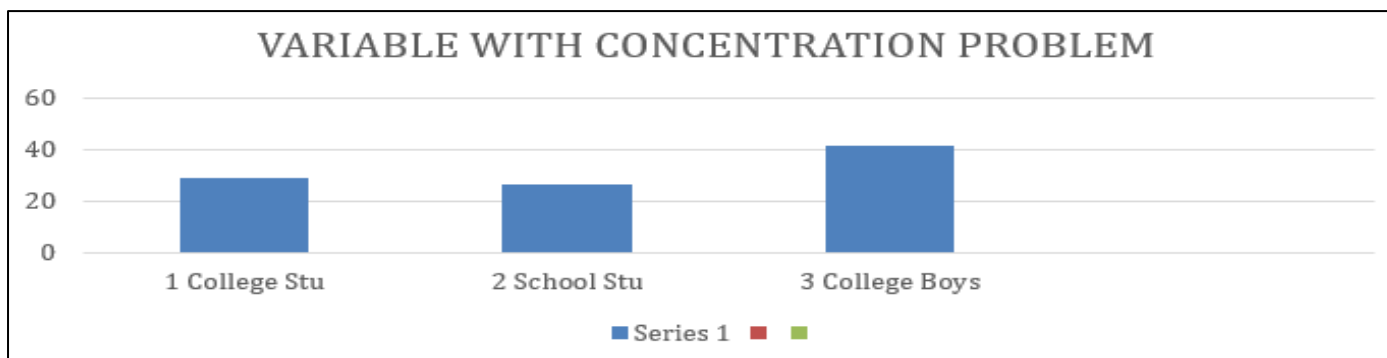


Fig 2 Variable with Concentration Problem

Figure 2 depicts that 58.49% says that they cannot concentrate as sometimes their mind wanders to some other events than what they are reading or studying. While 28.40% says this happens with them always whenever they want to

study. College students and school students are close with 28.88% and 26.47% respectively who always are unable to study due to this. This problem was found maximum with college boys with 41.17%.

Table 3 Variable with Recall Problem

Factor	Variables	Always	Sometimes	Never	Total	χ^2	df	p
Unable to recall in exams	School Girls	16	125	5	146			
	School Boys	23	101	7	130			
	College Girls	9	26	0	35			
	College Boys	0	29	5	34			
	Total	48	281	17	345	29.59	6	>.01

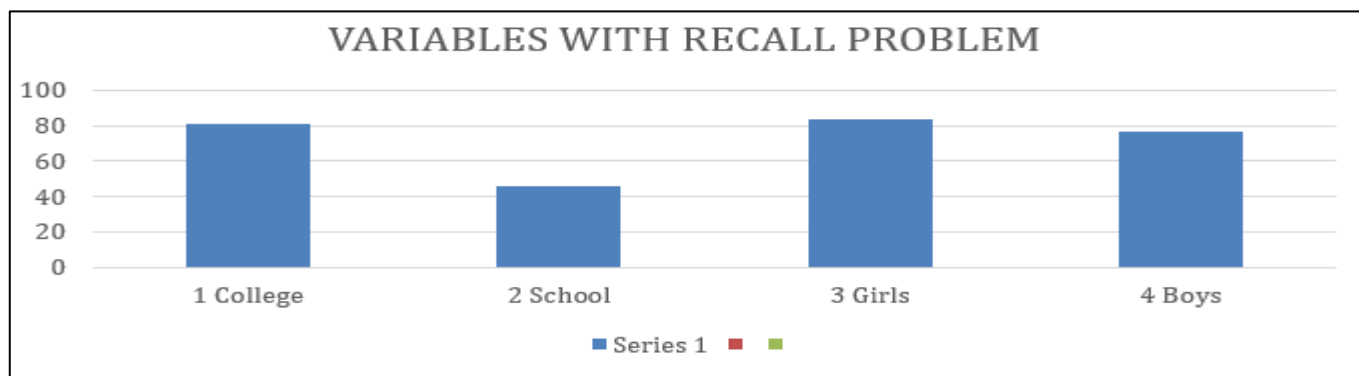


Fig 3 Variable with Recall Problem

Figure 3 depicts that 81.11% of the students says that they are not able to recall what they learnt thoroughly during examination time. College students found saying the same were 80.88% while school students were less with 45.48%. This factor was more prevalent in girls with 83.68% than boys with 76.78%.

Table 4 Variable with Memory Problem

Factor	Variables	Always	Sometimes	Never	Total	χ^2	df	p
Reduced memory problem	School Girls	28	40	78	146			
	School Boys	12	38	80	130			
	College Girls	3	20	12	35			
	College Boys	2	18	14	34			
	Total	45	116	184	345	27.54	6	< .01

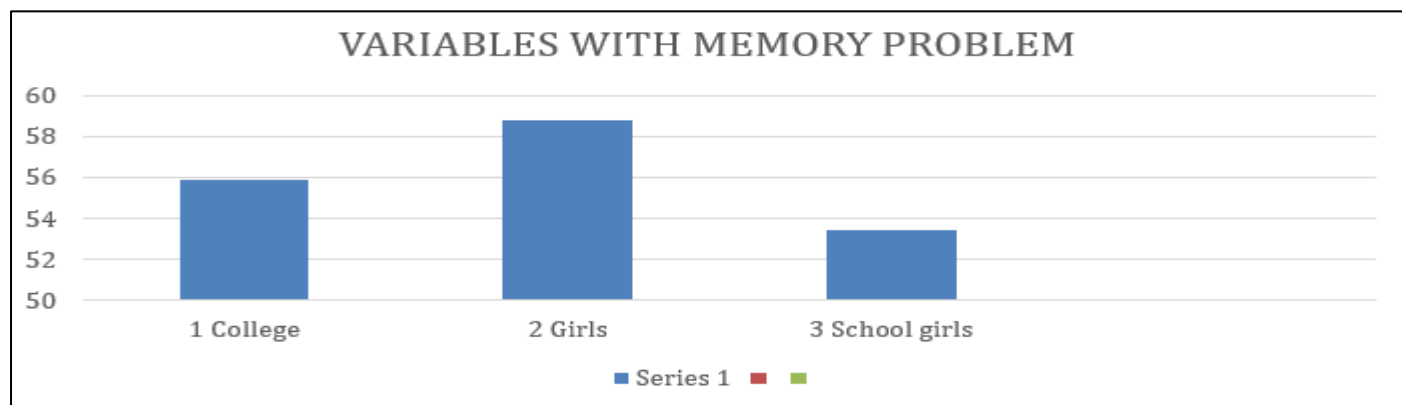


Fig 4 Variable with Memory Problem

Figure 4 shows that with 53.01% of students resistance that their memory power at present age is not diminished at all than previous years, it was found that 33.91% of population sometimes feels that yes, their memory power is reduced while 12.75% says that they always feel that this has happened to them. When college students were seen in this it

was found that they face this difficult situation more with 55.88% and within whole sample population girls were with maximum number I.e. 58.82%. At the same time maximum number to resist and say that they never found this happened to them were school girls with 53.47%.

Table 5 Variables with Anxiety of Physical Looks

Factor	Variables	Always	Sometimes	Never	Total	χ^2	df	p
Physical looks anxiety	School Girls	45	82	19	146			
	School Boys	43	65	22	130			
	College Girls	10	21	4	35			
	College Boys	14	14	6	34			
	Total	112	182	51	345	4.85	6	> .05

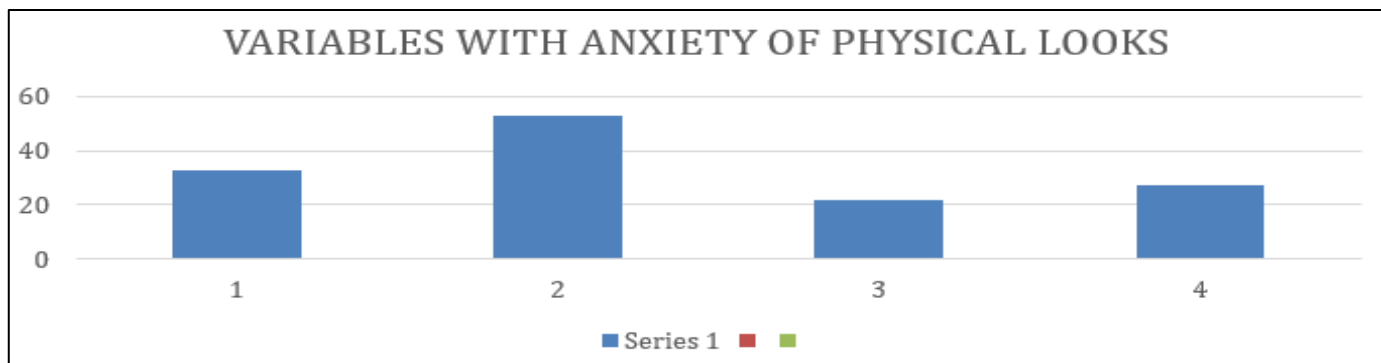


Fig 5 Variables with Anxiety of Physical Looks

Figure 5 brings one important factor which came out with mixed response from population was physical looks i.e whether they are anxious about their looks. 53.04% say sometimes they think a lot about how they look while 32.78% always think about looking good and attractive. Only 15% says that they never think about it. 32.12% of school students approved it fully, while 51.47% of college students says that

sometimes it really affects their studies. 30% of girls and 35.15% of boys believe it a major factor while 57.22% of boys and 48.48% believe that sometimes it comes in between the studies. Negligible percentage of boys and girls, school and college students believe that it does not exist at all where studies are concerned.

Table 6 Variables with Nervousness in Communication

Factor	Variables	Always	Sometimes	Never	Total	χ^2	df	p
Nervousness in communication	School Girls	22	74	50	146			
	School Boys	38	74	18	130			
	College Girls	2	21	12	35			
	College Boys	12	14	8	34			
	Total	74	183	88	345	27.19	6	< .01

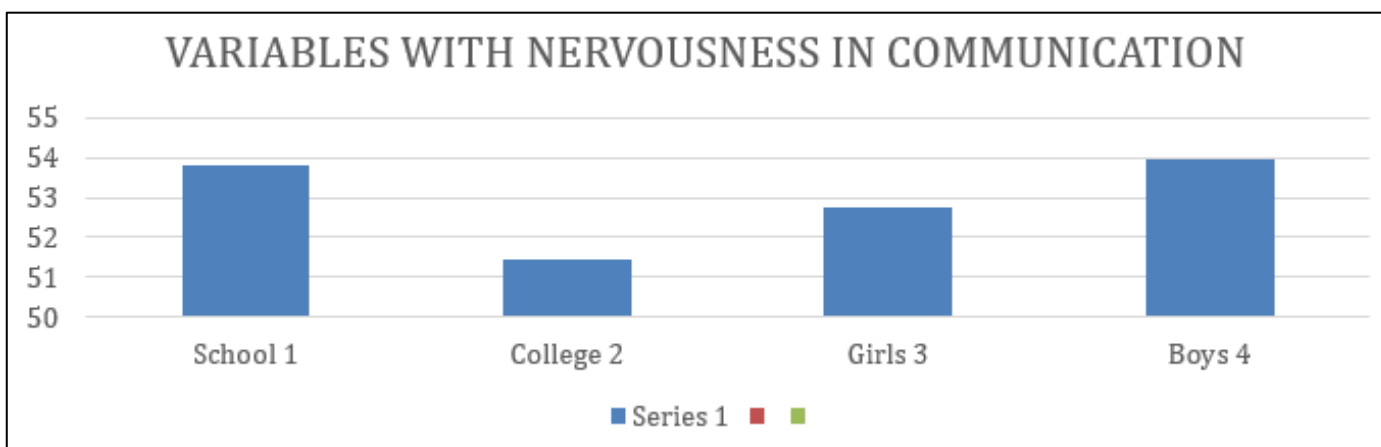


Fig 6 Variables with Nervousness in Communication

Figure 6 predicts that nervousness in communication was found always with 35.29% of the total sample. 41.17% sometimes get nervous or stammer communicating while 23.52% were found themselves always confident. School students, college students, girls, boys all of them found to be

of same category as their percentage falls around 50% on sometime feeling nervous communicating with 53.79%, 51.47%, 52.77%, 53.93% respectively. 33.5% of girls were found confident in comparison of 16.96% boys.

Table 7 Variables with Opposite Sex Attraction as a Major Hurdle

Factor	Variables	Always	Sometimes	Never	Total	χ^2	df	p
Opposite sex attraction as hurdle	School Girls	41	61	44	146			
	School Boys	43	45	42	130			
	College Girls	7	21	7	35			
	College Boys	5	16	13	34			
	Total	96	143	106	345	11.03	6	.05

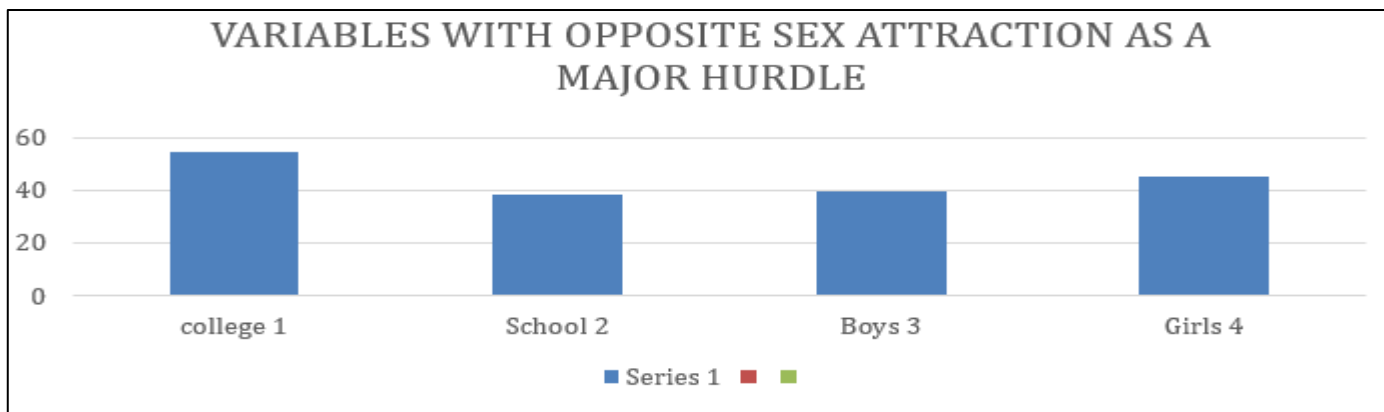


Fig 7 Variables with Opposite Sex Attraction as a Major Hurdle

Figure 7 tells that 41.44% students find that sometimes opposite sex attraction became the major hurdle concentrating on studies. 28.11% accepted it as a constant hindrance which prevails always when they want to study while 18.26% completely denies its presence. 54.41% of college students found it as an interfering factor sometimes

while firmly only 17.64% goes for it. 38.26% of school students sometimes get carried away while studying while 30.68% says that it always has presence in their mind. Girls got more percentage than boys for sometimes with 45.55% and 39.96% respectively while 29.69% of boys affirms it completely which is more than girls affirmations i.e. 26.66%.

Table 8 Variables with Inferiority Complex as a Factor

Factor	Variables	Always	Sometimes	Never	Total	χ^2	df	p
Prevalence of inferiority complex	School Girls	34	71	41	146			
	School Boys	23	72	35	130			
	College Girls	5	16	14	35			
	College Boys	7	12	15	34			
	Total	69	171	105	345	7.75	6	< .05

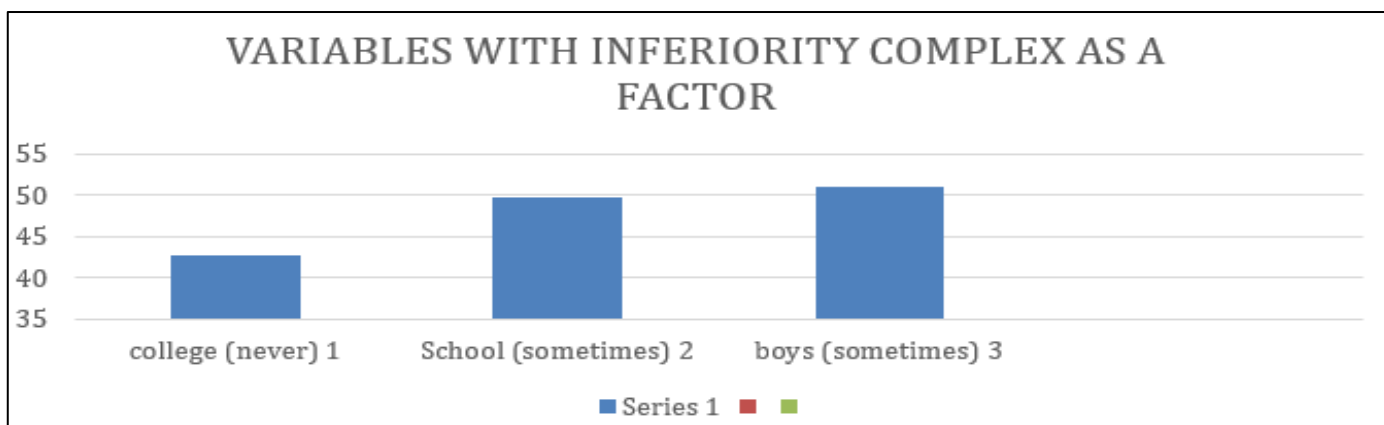


Fig 8 Variables with Inferiority Complex as a Factor

Figure 8 depicts that having a complex of some or other kind of inferiority complex found to be prominent sometimes among 49.85% of the total sample. 30.72% resisted saying that they don't have a complex of any kind which can interfere in their studies. While 20% found it as a major factor which

comes always during performing in academics. School students and boys with 51% each found that sometimes it plays a great role in deteriorating academic percentage. While college students got the highest percentage as 42.64% saying that this factor never plays any role.

Table 9 Variables with Felt Absence of Guidance

Factor	Variables	Always	Sometimes	Never	Total	χ^2	df	p
Felt absence of guidance	School Girls	64	58	29	146			
	School Boys	47	41	42	130			
	College Girls	13	11	12	35			
	College Boys	13	15	9	34			
	Total	133	125	87	345	13.06	6	.05

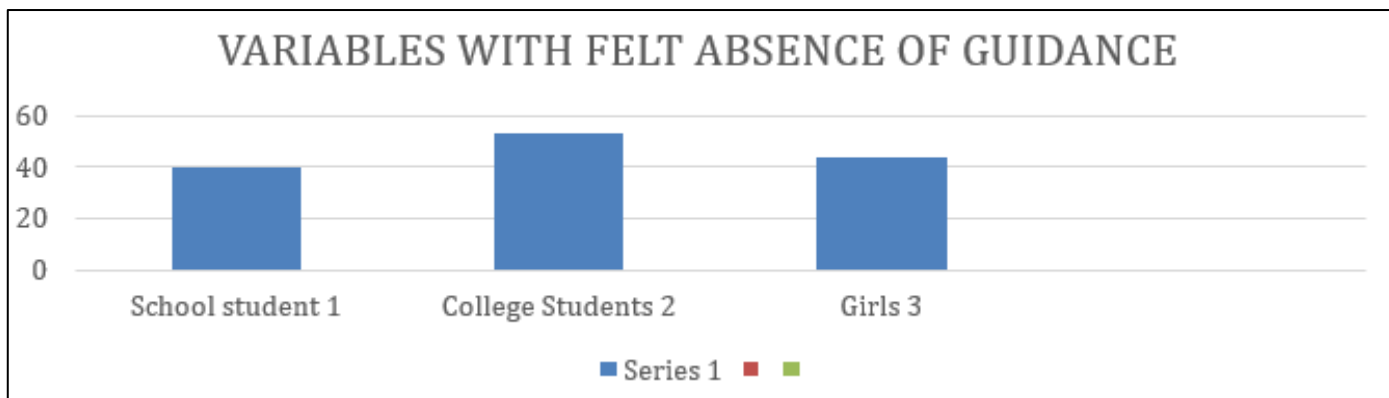


Fig 9 Variables with Felt Absence of Guidance

Figure 9 tells that 38.85% of students found that there is nobody to talk about their worries so that they can concentrate on their studies. 36.52% caught in such situations sometimes while 24.92% says that they never feel so. School students (40.07%) found it always with 43.83% of school girls that there should be someone who can clear their confusions and lower their anxiety. 52.94% of college students were found saying that sometime it becomes essential to look forward to people who can help them out with the situations they are caught into.

40.07% of school students and 42.22% of girls always got caught into such situation. School boys scored highest percentage i.e 32.07% saying that they require nobody while for the same school girls scored the least with 16.47% and the school girls scored highest with 43.83% as seekers of somebody clearing their concepts and solving their problems.

After analyzing the data, it is seen that the factors which affect the adolescents' academic performance most are:

- Weak memory/forgetfulness
- Concentration
- Examination Fear

- Lack of confidence
- Physical appearance/Self appearance
- Opposite Sex Attraction
- Inferiority Complex

The other factors which emerged out after talking, interacting and observing them are:

- Relationship with parents
- Relationship with peers
- Lack of interest in the course they are reading

So after seeing the above factors we can interpret that factors which define Academic Intelligence (AiQ) of adolescents other than IQ can be broadly classified into three categories:

- Anxiety
- Aptitude
- Communication

Table 10 depicts each factor separately;

Anxiety can further be classified into four categories:

Table 10 Variable with Decision of Choosing Career

Career	Educational	Behavioral	Personal
Decision of choosing career	lack of concentration	relationship with parents	How do I look
	weak memory / forgetfulness	relationship with peers	opposite sex attraction
	problem solving and	lack of confidence	self etc.
	concept learning.	aggression etc.	

- Career Anxiety: includes decision of choosing career. The term coined for this is decision phobia.
- Educational Anxiety: includes lack of concentration, forgetfulness, problem solving and concept learning.

- Behavioral Anxiety: includes relationship with parents, peers, lack of confidence, aggression etc.
- Personal Anxiety: includes self appearance and opposite sex attraction.

➤ Intensity of Factors Prevalent

It can be interpreted after analysing the data that no factor is prevalent in very high percentage among the sample taken but 68.69% require guidance and counselling to lower the anxiety which affect their studies.

This states that no individual suffers from all the anxieties at the same time or in other words different factors determine individual's anxiety pattern. As seen that students liked to opt more for the option “sometimes” than ‘always’ and ‘never’ indicating that at different time different anxiety is affecting them. At one moment it can be Career (C) anxiety or Educational (E) anxiety and on the other moment it can be Behavioral (B) anxiety or Personal (P) anxiety.

Thus it can be concluded that CEBP anxieties are prevalent among adolescents. They affect each individual differently and intensity of their prevalence on each individual is situational.

➤ Implication of the study

Factors emerged and the intensity prevalent in the study shows that majority of the students are anxious due to prevailing imbalance in their developmental curiosity level with their existing awareness and knowledge level. Out of students total environment whether it is his family, teachers or education system, nobody is able to empower these students with integrated and balanced growth pattern rather with the advent of media and technological innovations they are making them confused and helpless which is the underlying reasons for all the anxiety they are going through.

Now the question arises, “Is low AiQ manageable and can be converted to higher side”? The answer is ‘Yes’, it is possible to accentuate the academic performance of those with good IQ. This can be done by balancing their KAC level i.e.(Knowledge, Awareness and Curiosity) with right ,timely and appropriate ICG.(Information, Counselling and Guidance).

Now finally the question arises” Who is going to do it and how it is going to happen”?

After vigorous research it can be recommended that following can be the various ways to provide ICG to adolescents.

- Group Orientation in schools and colleges
- Psychological growth/Skills development sessions
- Advisory/ Counselling system

IV. CONCLUSION

It can be concluded from analysis, discussion and further implication of the study that the factors affecting adolescent academic performance other than IQ are developmental anxieties (CEBP), intensity of relevance of the same is individual and situation based and the factors emerged out played a role in framing an intervention for orienting and providing skills and psychological growth sessions.

RECOMMENDATIONS

If academic standards of adolescents has to be raised and student unrest minimized, it is imperative that they should be provided with sound, stimulating and relevant education by blending it with ICG sessions. The child guidance centre, the school and college psychologist, NGO's the counselling centre and organizations should increasingly being called upon to shoulder the responsibilities of giving succour to alleviate the avoidable suffering caused by developmental hazards and tensions. No society can afford to ignore the basic need to render help to adolescents who are going to be youth of tomorrow.

REFERENCES

- [1]. Jain, R. (2004). *Academic quotient as predictor of knowledge, awareness and curiosity level and need of information, counselling and guidance among adolescents* (Doctoral dissertation, University of Rajasthan, Jaipur).
- [2]. Munson, H. (1971). *Foundations of developmental guidance*. Allyn & Bacon.
- [3]. Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- [4]. Morgan, C. T., & King, R. A. (n.d.). *Introduction to psychology*. Tata McGraw-Hill.
- [5]. Shane, H. C. (1973). *The educational significance of the future*. Phi Delta Kappa Educational Foundation.
- [6]. Eiserer, P. E. (1965). *The school psychologist*. Prentice-Hall of India.
- [7]. Saarthak. (2000, January 20). Adolescence. *The Times of India*.
- [8]. Rao, N. S. (1995). *Counselling and guidance*. Tata McGraw-Hill.
- [9]. Kuppuswamy, B. (1964). *Advanced educational psychology*. University Publishers.
- [10]. Garrison, K., Kingston, A., & McDonald, A. (n.d.). *Educational psychology*. Vakils, Feffer & Simons.
- [11]. Chulani, V. (n.d.). *Mantras for teenage success*. Pauline Publications.
- [12]. Finney, D. L. (n.d.). *Clear your past, change your future*. New Harbinger Publications.
- [13]. Chauhan, S. S. (1978). *Advanced educational psychology*. Vikas Publishing House.
- [14]. Weinberg, G. (1977). *Know yourself, help yourself: Practical ways to a powerful personality*. St. Martin's Press.
- [15]. Paul, K. (1999). *Study smarter, not harder*. Jaico Publishing House.
- [16]. Choudhary, R. B. (n.d.). *Dynamic memory methods*. Diamond Pocket Books.
- [17]. Psy-Com Services. (n.d.). *Manual for emotional stability questionnaire*.
- [18]. Solve Your Problem. (n.d.). Retrieved from <http://www.solveyourproblem.com>
- [19]. American Academy of Child and Adolescent Psychiatry. (n.d.). Retrieved from <https://www.aacap.org/publications/factsfam/anxious.htm>

- [20]. PACER Center. (n.d.). Retrieved from <https://www.pacer.org/ebd/ebdart.htm>
- [21]. UniversityAberdeen.(n.d.).Retrieved from https://www.psy.e.abdn.ac.uk/information_test_intelligence.html
- [22]. Psychologica. (n.d.). Retrieved from <http://www.psychologica.co.uk/sa/at.htm>
- [23]. Anderson, D. R., Huston, A. C., Wright, J. C., & Collins, P. (1998). Sesame Street and educational television for children. In R. G. Noll & M. E. Price (Eds.), *A communications cornucopia: Markle Foundation essays on information policy* (pp. 279–296). Brookings Institution Press.
- [24]. Anderson, D. R., Huston, A. C., Schmitt, K. L., Linebarger, D. L., & Wright, J. C. (2001). Early childhood television viewing and adolescent achievement: The recontact study. *Monographs of the Society for Research in Child Development*, 66(1), Serial No. 264.
- [25]. Huston, A. C., Anderson, D. R., Wright, J. C., Linebarger, D. L., & Schmitt, K. L. (2001). Sesame Street viewers as adolescents: The recontact study. In S. Fisch & R. Truglio (Eds.), *“G” is for “growing”*: *Thirty years of research on Sesame Street* (pp. 131–143). Erlbaum.
- [26]. Jain,R (2021) Manual of Academic Intelligence Quotient , PsyCare Foundations, Jaipur.ISBN: 978-81-9516735-7