



AN INVESTIGATION OF THE IMPACT OF IQ ON SUICIDAL IDEATION AMONG URBAN ADOLESCENTS

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ABSTRACT

This study investigates the impact of Intelligence Quotient (IQ) on suicidal ideation among 400 adolescents, consisting of 200 girls and 200 boys attending a coaching center in Kota, Rajasthan, India. The research employed randomized sampling techniques. The results of our analysis indicate that while IQ plays a role in predicting suicidal ideation, it is not the sole determinant. Our study revealed a relatively weak association between IQ and suicidal ideation. Both the Intelligence test, specifically the Mixed Group Test of Intelligence (MGTI) developed by Dr. P. N. Mehrotra, and the Suicidal Ideation Scale, as created by Devendra Singh Sisodia and Vibhuti Bhatnagar, were administered to the same selected sample. The statistical methods employed in this study included the Karl Pearson correlation and T-test. These tests were crucial in shedding light on the significant impact of suicidal ideation, revealing that it is not the exclusive factor responsible for such ideation. Additional factors, such as dietary habits, the learning environment within the coaching center, academic pressure, and others, also play a pivotal role.

Keywords: - IQ and Suicidal Ideation, Adolescents, Intelligence Test, IQ (Intelligence Quotient)

There is a notable scarcity of research on the relationship between IQ and suicidal ideation, with only a limited number of studies exploring this terrain. IQ, or Intelligence Quotient, is commonly defined as a measure of an individual's reasoning ability. In simpler terms, an IQ test is designed to assess how effectively someone can employ information and logical thinking to answer questions or make predictions. The field of suicidology has been relatively lacking in research focusing on the connection between cognitive abilities, specifically general intelligence, and the risk of suicide.

The existing body of research that has examined whether high IQ scores are associated with successful suicide attempts has yielded mixed results. Some studies suggest that suicide rates are elevated among individuals with high IQs. For instance, one ecological investigation conducted in Denmark unveiled a positive correlation between regional intelligence and completed suicide incidence in seven distinct areas, as it pertained to the general population.

Research conducted on Israeli military draftees further indicates a potential link between higher levels of intelligence and a higher likelihood of subsequent commitment to mental health care after completing their mandatory service. In a prospective cohort study drawn from the Terman Genetic Study of Genius, a striking finding emerged: individuals with exceptional talent exhibited a lifetime completed suicide rate of 2.25%, which is approximately four times higher than the suicide fatality rate observed in the general population. These findings underscore the need for more comprehensive research on the intricate interplay between intelligence and suicidal tendencies.

The formula for calculating IQ is as follows:

$$IQ = (m / c) \times 100$$

Where:

m = Mental age

c = Chronological age

Suicidal Ideation

Suicidal ideation, medically termed as an unusual preoccupation with thoughts of suicide, encompasses a broad spectrum of contemplations. These thoughts may vary from fleeting and transient to enduring and persistent, from incomplete attempts to symbolic enactments, and even meticulous planning, some of which may be intended to fail and be discovered, while others may be meticulously designed with the intent to result in fatality. Importantly, while most individuals with suicidal ideation do not progress to actual suicide attempts, a significant minority does. While it is frequently linked with conditions like depression, it's imperative to recognize that suicidal ideation is multifaceted and can be associated with a wide array of mental health disorders, life events, and family dynamics, all of which can heighten the risk of these distressing thoughts. Understanding the complexity of this phenomenon is crucial in addressing and preventing the potential risks it poses.

Statement of Problem

Investigating the Influence of Intelligence Quotient (IQ) on Suicidal Ideation Among Adolescents.

Objectives of Study

To Investigate the Relationship Between IQ and Suicidal Ideation.

Hypothesis

IQ will not exhibit a statistically significant impact on suicidal ideation.

Future Scope of the study

This study has primarily centered on coaching students preparing for the NEET and IIT entrance exams in Kota city. While this investigation offers valuable insights into the factors contributing to suicidal ideation within this specific demographic, its implications extend beyond. The future scope of this study lies in its potential applicability to a broader context, aiding in the development of policies aimed at enhancing the overall coaching environment. By probing into the underlying causes of suicidal ideation, this research serves as a foundational step in addressing mental health challenges among adolescents. As such, the study's findings may contribute to a more comprehensive understanding of the issue, with the potential for guiding interventions and policies not only in Kota but in similar educational settings nationwide.

Limitations of the study

While every effort has been made to conduct this study with diligence, it is essential to acknowledge certain inherent limitations. Time constraints and other practical factors have influenced the scope and execution of the research. By recognizing these limitations, we aim to provide a transparent view of the study's boundaries, which include constraints related to time, resources, and various logistical factors. Despite these limitations, our endeavour has been to generate meaningful insights within these confines.

Methodology

1. Study Locale:

The research was conducted in the specific context of the city of Kota (Rajasthan) chosen for its relevance to the study's objectives. This study was conducted on students of coaching centers of Kota City in Rajasthan state in India, coaching centers famous for Entrance Exams for IIT and NEET.

2. Sample selection

For the current study, a carefully selected sample of a total of 400 respondents was meticulously selected. The process involved a random sampling method, ensuring a representative sample of 200 male students and 200 female students, all within the age range of 14 to 19 years. These participants are enrolled in various coaching centers across Kota, a city situated in the state of Rajasthan, India. This diverse and well-distributed sample forms the foundation of the research, enabling a comprehensive examination of the study's objectives.

3. Data collection

The current study encompasses a total sample of 400 respondents. Employing a systematic random sampling method, the sample comprises 200 male and 200 female students, all falling within the age range of 14 to 19 years. These participants are actively engaged in educational pursuits, attending various

coaching centres located within Kota, a prominent city situated in the state of Rajasthan, India. The study adhered to ethical guidelines and maintained participant confidentiality.

4. Tools and Techniques

To assess IQ and suicidal ideation, the research employed the following tools, recognized for their reliability and validity in this context:

1. **Intelligence Assessment:** The study incorporated Dr. P.N. Mehrotra's comprehensive Mixed Group Test of Intelligence (MGTI), a well-established tool for evaluating cognitive abilities.
2. **Suicidal Ideation Assessment:** To measure suicidal ideation, the research utilized questionnaires developed by Dr. Devendra Singh Sisodia and Dr. Vibhuti Bhatnagar, recognized authorities in the field, ensuring a robust and reliable assessment of this critical variable.

5. Statistical analyses of data

Rigorous statistical analyses were conducted to derive meaningful insights from the collected data. These analyses were performed to test the hypotheses and draw relevant conclusions.

6. Conclusion

The study's findings and analyses provide valuable insights into the relationship between IQ and suicidal ideation among adolescents. The conclusions drawn from this research have the potential to contribute significantly to our understanding of this critical issue, with implications for policy, practice, and future research endeavours.

Intelligence Test

In this study, a comprehensive General Mental Ability test was administered to assess students' cognitive capabilities. The test is divided into two distinct segments: the verbal and non-verbal sections. Each of these sections is allocated a ten-minute time frame for completion, with the entire examination concluding within 20 minutes. Upon the completion of the test, valuable data is acquired, aiding in the evaluation of students' cognitive abilities. Subsequently, the IQ of each student is determined using the formula $IQ = (m / c) \times 100$, with 'm' representing the student's mental age, and 'c' representing their chronological age. This calculation provides a quantitative measure of a student's intelligence quotient.

Development and Composition of the Suicidal Ideation Scale

The Suicidal Ideation Scale, meticulously crafted by Dr. Devendra Singh Sisodia and Dr. Vibhuti Bhatnagar, encompasses a total of 25 items. These items are structured with five alternative response options, ranging from "strongly agree" to "strongly disagree," affording a comprehensive spectrum of participant responses.

Within this scale, 21 statements are positively framed (numbered 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 14, 15, 16, 17, 19, 20, 21, 22, 23, and 25), while an additional 4 statements are negatively framed (numbered 11, 13, 18, and 24), ensuring a balanced and nuanced assessment of suicidal ideation.

The reliability of this scale, a measure of its internal consistency, stands at an impressive 0.78, underlining its robustness. Furthermore, the validity of the scale, which assesses its accuracy in measuring what it intends to measure, is notably strong at 0.74, reinforcing its effectiveness as a valuable research instrument.

DATA ANALYSIS

The subsequent steps in the process of research are the analysis and interpretation of the data and the formulation of conclusions and generalizations to get a meaningful picture out of the new information collected. As is obvious, such analysis necessitates the use of formulas, symbols, and abbreviations for better presentation. Thus, the presentation of this part research work is quantitative and the use of concise terminology is frequent. These may be in relation to formulas and symbols with respect to the factors and variables and some with associated and repeated terminologies and phrases.

IQ and its Effect on Suicide Ideation

Correlations

		IQ	Suicide Ideation
IQ	Pearson Correlation	1	-.007
	Sig. (2-tailed)		.883
	N	400	400
Suicide Ideation	Pearson Correlation	-.007	1
	Sig. (2-tailed)	.883	
	N	400	400

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correlation is significant at .883 level (2-tailed)

Interpretation

To investigate the correlation between IQ and its impact on suicidal ideation, the Pearson coefficient of correlation was employed. Table 1 presents the correlation coefficient, which was calculated to be -.007. This value falls within the range of 0.0 to +0.2, indicating a very weak or virtually non-existent association. These findings suggest a low correlation between IQ and its effect on suicidal ideation. A negative correlation, as observed in this instance, signifies that the variables move in opposing directions. In this context, a decrease in one variable corresponds to an increase in the other, and vice versa. The results unequivocally indicate that IQ does not significantly influence suicidal ideation. Therefore, Hypothesis-1, which posits that I.Q. does not have a substantial effect on suicidal ideation, is supported by our findings. This aligns with previous research that also found no discernible link between IQ and its impact on suicidal ideation (Park, S. J., Yi, K., Lee, J. D., & Hong, J. P., 2015).

CONCLUSION

Based on the findings presented above, it can be deduced that there exists a limited correlation between IQ and suicidal ideation among adolescents. These results illuminate that while IQ plays a role, it is not the sole determinant of suicidal ideation in this demographic. It is apparent that other factors, yet unidentified, are also contributory to the presence of suicidal ideation. This conclusion underscores the multilayered nature of this phenomenon and encourages further research to delve deeper into the array of variables that influence the complex landscape of adolescent mental health and well-being.

REFERENCES

1. Marraccini, M. E., Griffin, D., O'Neill, J. C., Martinez Jr, R. R., Chin, A. J., Toole, E. N., ... & Naser, S. C. (2022). School risk and protective factors of suicide: A cultural model of suicide risk and protective factors in schools. *School Psychology Review*, 51(3), 266-289. <https://doi.org/10.1080/2372966x.2020.1871305>
2. Wasserman, D., Carli, V., Iosue, M., Javed, A., & Herman, H. (2021). Suicide prevention in childhood and adolescence: a narrative review of current knowledge on risk and protective factors and effectiveness of interventions. *Asia-Pacific Psychiatry*, 13(3), e12452. <https://doi.org/10.1111/appy.12452>
3. Uddin, R., Burton, N. W., Maple, M., Khan, S. R., & Khan, A. (2019). Suicidal ideation, suicide planning, and suicide attempts among adolescents in 59 low-income and middle-income countries: a population-based study. *The Lancet Child & Adolescent Health*, 3(4), 223-233. [https://doi.org/10.1016/s2352-4642\(18\)30403-6](https://doi.org/10.1016/s2352-4642(18)30403-6)
4. Park, S., Kikyong Yi, Joon Deuk Lee, and Jin Pyo Hong. (2015) "There Is No Difference in IQ between Suicide and Non-Suicide Psychiatric Patients: A Retrospective Case-Control Study". *Psychiatry Investigation*. Jul; 12(3): 330–334. doi: 10.4306/pi.2015.12.3.330