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Factors affecting the academic achievements of under graduate college students in Ayodhya district eastern Uttar Pradesh

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Abstract
The research delves into the multifaceted factors affecting the academic achievement of undergraduate college students in Ayodhya district, Eastern Uttar Pradesh with A sample of 300 students from Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya. The students were proportionally and randomly selected from four college of the University to represent the undergraduate population. Leveraging the students' most recent examination scores as benchmarks, a structured questionnaire was developed to gauge the influence of various factors on academic performance. The questionnaire covered factors such as Family Dynamics, Self-assessment, Institutional support, Peer Group & Social Circle, Technology & Digital Influence, Stress Management, Study Habits & Time Management, and Governmental Policies & Support. Employing multivariate regression analysis at a significance level of 0.05, the study scrutinized the significance of these factors. The study found that factors including Family Dynamics, Self-assessment, Institutional support, Peer Group & Social Circle, Technology & Digital Influence, Stress Management, Study Habits & Time Management, and Governmental Policies & Support collectively account for 80.36% of the variation in students' academic performance. This underscores the multifaceted nature of academic achievement determinants. Thus, the research sheds light on the paramount importance of fostering conducive environments within families, promoting self-assessment practices, enhancing institutional support systems, nurturing positive peer relationships and social circle, leveraging technology, implementing stress management techniques, cultivating effective study habits, managing time efficiently, and ensuring supportive governmental policies. The findings underscore the necessity for holistic interventions targeting diverse aspects of students' lives to foster academic success and enhance educational outcomes in the region.

Keywords: College students, academic performance, family, dynamics, self-assessment, institutional support, social, technological influence, stress management, study habits, government policies

Introduction
This study looks at what influences the academic achievement of undergraduate college students because getting a good education is important for everyone, but it can be hard for some individuals. The studies have revealed that it is because of many reasons, like family background, how well the college helps students, and even how students manage their stress (ref, year). Shahzadi & Ahmad (2011) [1] examined the factors influencing academic performance among university students. Their model suggested that home environment plays the strongest role, impacting both learning skills and academic performance. Additionally, academic interaction was shown to influenced study habits and home environment, and ultimately affects academic achievement. Singh & Kamra, (2016) [2] found in the study that prolonged internet surfing for non-academic purposed was linked to lower academic performance. This suggested the importance of time management and minimizing distractions.

Academic performance is a complex outcome influenced by a multitude of factors. The review explored key themes identified in recent research, highlighting the individual, socioeconomic, school-related, and parental influences on student achievement. Learning is critically important for academic achievement as it facilitates the acquisition of knowledge, development of critical thinking skills, retention and application of concepts, motivation and engagement, preparation for future success, and personal growth. Effective learning strategies and environments are essential for supporting students in achieving their academic goals. Studies by Shahzadi & Ahmad (2011) [1] and Sharma *et al*. (2017) [4] emphasized the importance of learning skills and

motivation in academic success. The home environment plays a crucial role in academic achievement by providing a supportive learning environment, fostering parental involvement, offering emotional support, reflecting cultural and socioeconomic factors, promoting stability and routine, and serving as a model for academic attitudes and behaviours. Home environments are essential for maximizing students' potential and ensuring their academic success. Shahzadi & Ahmad (2011) [1] found that strong learning skills are influenced by a positive home environment, ultimately leading to higher academic performance. Studying habits and time management are critical for academic achievement as they enable students to make efficient use of their time, optimize learning opportunities, prevent academic stress and burnout, maintain consistent progress, effectively prepare for exams and assessments, and develop transferable skills that are essential for success in academia and beyond. Effective time management and strong study habits are crucial for academic achievement, as identified by Singh & Malik (2016) [3] and Arora et al. (2017) [5]. Prioritizing a healthy lifestyle and avoiding tobacco gives your brain the tools it needs to function at its best, significantly improving your chances of better academic achievements. Research by Kavi & Walvekar (2020) [14] suggested that healthy lifestyle choices, such as regular breakfast consumption and avoiding tobacco use, can positively influence academic performance among secondary school students. Parental support, socio-economic background, and academic background all intertwine to influence academic achievement. Several studies highlighted the significant role of parental support and a positive home environment in influencing academic performance (Shahzadi & Ahmad, 2011; Kapur, 2018; Dhakal, 2020) [1, 7, 12]. Parental socio-economic status and academic background can also plays a crucial role in academic performance (Dhakal, 2020) [12]. Quality teachers and effective teaching methods work together to create an optimal learning environment. The quality of teachers and the teaching methods employed significantly impact student learning outcomes (Kapur, 2018; Dhakal, 2020) [7, 12]. The availability of learning resources and a positive school climate are additional school-related factors that influence academic performance (Dhakal, 2020; Khan et al., 2020) [12, 13]. Positive parental involvement, guidance, and support were consistently identified as important factors in student academic achievement (Shahzadi & Ahmad, 2011; Khan et al., 2020) [1, 13]. The influence of gender on academic performance remains an open question. While Arora & Singh (2017) [5] suggested a potential correlation, further research is needed to understand the underlying causes (Singh & Kamra, 2016) [2]. Technology presents a double-edged sword. Excessive internet usage can be a distraction (Singh & Kamra, 2016) [2], but social media can potentially enhance learning if used judiciously (Basumatary & Kumar, 2020) [15]. Positive academic influences from peers can benefit student performance (Khan et al., 2020) [13]. Understanding the complex interplay of individual, socioeconomic, school-related, and parental factors is crucial for promoting student academic success.

Therefore, the was undertaken with the objective to find out the relationship between academic achievement of undergraduate college students and various factors like family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support.

Martials and Methods
Sample and sampling technique: The sample of the study consisted of 300 undergraduate college students of university namely Acharya Narendra Deva University of Agriculture and Technology, Kumarganj, Ayodhya, Uttar Pradesh state. For selecting the sample, the proportionate simple random sampling technique was used from four colleges in the main campus. The data was collected using a questionnaire consisted of three Likert scale ranging from (0= Disagree, 2= agree). The questionnaires were distributed to the students via Google form and physical questionnaire.

Hypothesis: Null hypothesis (H₀): There is no significant relationship between academic achievement of undergraduate college students and various factors like family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support have no significant relationship.

Alternative hypothesis (H₁): There is a significant relationship between academic achievement of undergraduate college students and various factors like family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support have no significant relationship.

Statistical techniques: Data analysis pack in Microsoft excel version 2013 was used to perform Multivariate regression analysis test to analyze and interpret the data of this study.

Results and Discussion
The multivariate regression analysis was preformed to analyze the relationship and impact between academic achievement of undergraduate college students and various factors like family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support.

Table 1: The model summary of Regression analysis.

Table-I	
Model summary output	
Regression Statistics	
Multiple R	0.8964
R Square	0.8036
Adjusted R Square	0.7982
Standard Error	7.4371
Observations	300

*Predictors: (Constant), family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support

In Table-1 R Square, indicates the percentage of variance explained in academic achievement by family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support. The table revealed that R Square Value was 0.8036 which indicate that the family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support collectively account for 80.36% of variance in academic achievement of undergraduate college students.

Table 2: The results of ANOVA of selected variables

Table-ii		Results of ANOVA			
	Df	SS	MS	F	Significance F
Regression	8	65846.08	8230.76	148.81	0.00
Residual	291	16095.31	55.31		
Total	299	81941.40			

*Dependent Variable: Academic Achievement
**Predictors: (Constant), family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support

Table-2 shows the value of F-test (148.81, $p<0.000$) which determined that the model is a good fit for the data. According to the p- Value at ….. level of significance. This model is significant. Which implies that ……

Table 3: The multiple regression analysis.

Results of coefficients	Coefficients	Standard Error	t Stat	P-value
(Constant)	26.238	1.122	23.379	0.00000000
Family dynamics	0.575	0.271	2.121	0.03479592
Self-assessment	0.748	0.282	2.652	0.00844682
Institutional support	1.248	0.270	4.632	0.00000546
Peer group & social circle	0.853	0.256	3.325	0.00099851
Technology & digital influence	0.258	0.275	0.937	0.34974970
Stress management	0.687	0.283	2.428	0.01577272
Study habits & time management	0.803	0.253	3.178	0.00164157
Governmental policies & support	0.747	0.250	2.985	0.00308038

*Dependent Variable: Academic achievement

Table-3 Found the contribution of the factors in the variance of academic achievement of undergraduate college students. Independent factors such as Family dynamics, self-assessment, institutional support, peer group & social circle, stress management, study habits & time management, and governmental policies & support are significant contributors to the dependent factor academic achievement (p-Value <0.05). Above table suggested that institutional support has the highest impact with coefficient value 1.248 on the academic achievement if changed by one numeric value. These are the factors in the order from having highest impact to the lowest institutional support, peer group & social circle, study habits & time management, self-assessment, governmental policies and support, stress management, and family dynamics.

It was hypothesized to check the impact of the family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support on the students' academic achievement. By using regression analysis it was found that family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support have a statistically significant impact on students' academic achievement. The results revealed that institutional support followed by peer group & social circle and study habits & time management were the top three most influential factors among all others.

Conclusion
The research looked at most of the factors that might affect the academic performance to see which ones have the biggest effect on how well students do in college. The study included factors like parental encouragement, educational background of family, and the overall home environment. As success is not just about external support, it is also about believing in oneself, self-assessment, which includes things like how you evaluate your strengths and weaknesses, and how motivated you are to learn, was another key ingredient. The college one chooses becomes the academic home of the students for a few years. So, it's no surprise that the kind of institutional support you receive matters. It includes aspects like quality teaching, access to libraries and resources, and the availability of helpful faculty and advisors. Peer group and social circle can significantly impact the studies. Supportive friends who motivate you to focus and study can be a huge asset. We live in a digital age, and technology is everywhere. The research will also explore the influence of technology and digital media on the studies of students. College life can be stressful, from exams to deadlines. This research also looked at stress management techniques and how they impact the academic performance. Study habits and time management skills are like the secret spices in our academic success dish. How one organize their study schedule, their ability to focus, and the techniques they use to learn all play a part in the academic achievement. Governmental policies and support schemes can have a big impact on students' ability to access quality education. By understanding these eight key ingredients such as family dynamics, self-assessment, institutional support, peer group & social circle, technology & digital influence, stress management, study habits & time management, and governmental policies & support, this research aims to create a clearer picture of what truly influences academic achievement of undergraduate college students. This knowledge can then be used to create a more supportive learning environment for all students, helping them reach their full potential. The top three most influential factors were institutional support, peer group & social circle and study habits & time management among all others. The performance of college students in academic achievements can be improved significantly by providing them best support from institution, better understanding among peer group & social circle, and improving study habits and time management. The insight can help University administration making meanful changes in colleges, creating new programs

to help students, or even changing government policies by understanding what makes students successful, we can help more young people to reach their full potential. Love and support from family fuels the academic journey, family dynamics play a big role.

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