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Academic Achievements And Engagement With Students At Indian Business Schools Providing Hybrid Courses

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Studying the effects of the change is critical as educational institutions around the world deal with the confluence of traditional and online learning environments. The purpose of this research is to determine whether and how hybrid learning influences student happiness and success at Master Students. The study's overarching goal is to shed light on the complex interplay between factors including course materials, technology interfaces, and interactive modalities and student happiness. Simultaneously, it seeks to track how hybrid learning affects academic performance, specifically looking at test scores and total accomplishment. The purpose of this research is to examine, through examination of exam scores, how hybrid learning influences the happiness and academic success of students enrolled in Master Programs (such as MBA and PGDM) at B-Schools in India. A total of 202 students from Indian business schools were the intended subjects. Digital technology and online resources have the potential to impact student engagement, flexibility, and access to instructional materials through their incorporation into the learning process. To what degree, if any, hybrid learning improves master's students' happiness and performance in the classroom remains an open question.

Keywords: Hybrid Learning, Knowledge Management, Business School, Higher Education

1.1. Introduction:

The enacted flexibility in education changes have swiftly gained global acceptance, extending to Master Programs. The utilization of hybrid educational tools, merging conventional teaching methods with distance learning, has been emphasized in the aftermath of the pandemic. Hybrid education, regarded as the culmination of advancements in distance

learning, where the integration of technology and education occurs, has become a focal point for educators and researchers. This investigation assesses the impact of hybrid learning on the contentment and academic performance of Master students. Additionally, it may delve into the theoretical framework endorsing this hybrid learning paradigm. The convergence of tangible and digital elements prompts an inquiry into how genuine cognitive and social learning theories, within this hybrid environment, might influence students' examination results. Earlier studies on hybrid learning have investigated diverse facets, ranging from the efficacy of virtual collaboration to the incorporation of technology for enhancing educational achievements (Mamatha & Kumar Thoti, 2023). Hybrid learning has become an increasingly prevalent educational model, combining traditional face-to-face instruction with an online component, and its impact on student satisfaction and performance is a subject of increasing interest. The first aspect that needs to be explored is the influence of hybrid learning on student satisfaction. This involves understanding how students view the combination of face-to-face and online learning modalities, examining their preferences, challenges faced and overall satisfaction with the hybrid learning experience. Factors such as the effectiveness of communication tools, user-friendly online platforms, and the integration of technology into the curriculum will be explored to assess their impact on student satisfaction. At the same time, this study aims to evaluate the effect of hybrid learning on academic performance, especially in the context of Master students' exam results. Academic performance will be measured through quantitative analysis of exam scores, comparing results between courses that use hybrid learning and those that rely only on traditional methods. This study will explore the potential correlation between students' engagement with online resources and their exam results, clarifying whether hybrid learning positively affects academic achievement (Kranthi et al., 2023). Lastly, we will delve into potential challenges and limitations associated with hybrid learning at B- Schools. This may include technological barriers, resistance to change, or issues related to the adaptability of certain courses to the hybrid model. Understanding these challenges is crucial for providing recommendations and improvements to optimize the hybrid learning experience for B-School students. Building on this, the study will investigate the factors influencing student performance in the hybrid learning environment. This could involve examining the role of self-directed learning, time management skills, and the effectiveness of online resources in supporting student success.

1.2. Research Questions

This research effort aims to identify implementation of hybrid learning at B-Schools and impact on student satisfaction and academic performance. This study seeks to address the following questions:

1. To what extent does hybrid learning affect student satisfaction with the learning experience at B-Schools, and how is this satisfaction linked to their performance in exams?
2. To what extent does the adaptability of hybrid learning to different learning styles influence B-Schools' students' satisfaction, and how is this satisfaction linked to exam outcomes?
3. What are the perceived barriers to successful participation in hybrid learning at B-Schools, and how do these barriers impact students' exam performance and overall satisfaction?

4. How does the integration of technology in hybrid learning affect B-Schools students' performance in exams, and are there significant differences based on the level of technological engagement?
5. What are the long-term effects of engaging in hybrid learning on B-Schools students' academic performance, and how do these effects manifest in subsequent semesters or academic years?

1.3. Research Objectives

- To evaluate the level of satisfaction among B-Schools students with the hybrid learning approach, considering factors such as course content, flexibility, and interaction.
- To explore how hybrid learning accommodates different learning styles among B-Schools students and how the adaptability to diverse learning preferences correlates with satisfaction and exam performance.
- To identify and analyze potential barriers or challenges faced by B-Schools students in the hybrid learning environment that may impact their satisfaction and exam results.

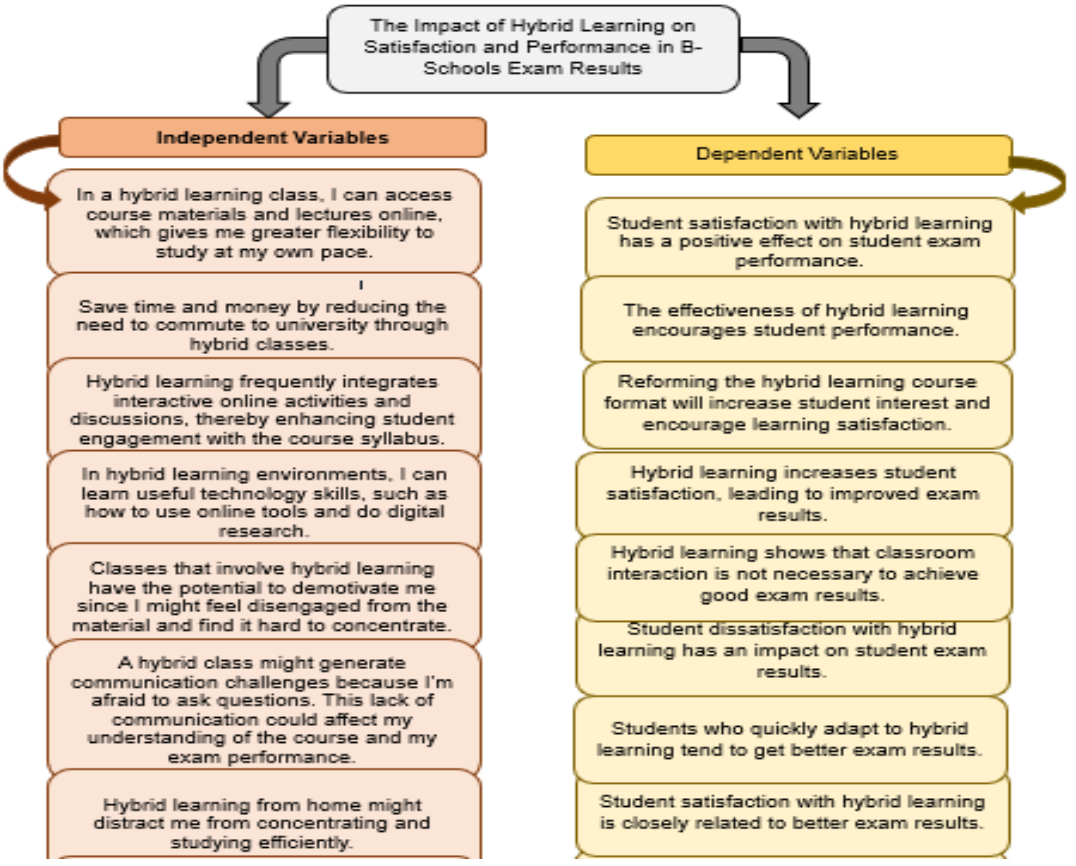
1.4. Review of Literature

The literature review stands as a pivotal component within the analysis, emphasizing its significance. It aims primarily to convey previously conducted research, data, and concepts related to a widely recognized research subject. This chapter will delve into examining the impacts of hybrid learning on the academic satisfaction and performance of students at B-Schools (Business Schools). It intends to furnish details concerning both the independent and dependent variables integral to this analysis. Within the literature review centered on the impact of hybrid learning, there lies an incorporation of both independent and dependent variables. The chapter culminates with the presentation of the conceptual framework framing this analysis. In a comprehensive literature review conducted by researchers Johnson and Smith (2014), an emerging consensus was noted, indicating a positive correlation between students' contentment with hybrid learning approaches and their subsequent achievement in exams (Arockia Venice et al., 2022). The review emphasized that heightened satisfaction levels among students participating in hybrid learning formats tended to correlate with amplified engagement with course materials, improved peer interaction, and a flexible learning environment accommodating diverse learning styles. Such attributes were found to contribute significantly to enhanced comprehension and retention of information, ultimately resulting in improved exam performance. Moreover, an insightful meta-analysis conducted by Garcia et al. (2019) reinforced these conclusions by synthesizing findings across various educational settings. Their analysis consistently revealed that students expressing higher satisfaction with hybrid learning formats exhibited increased motivation, bolstered self-efficacy, and subsequently demonstrated improved exam outcomes. The meta-analysis highlighted the adaptability and versatility offered by hybrid learning, combining face-to-face interactions with online resources, as pivotal factors fostering a conducive learning atmosphere. This combination facilitated higher satisfaction levels among students, leading to more effective engagement with course content and, consequently, superior performance in exams. These collective findings underscore the significance of student satisfaction as a determinant

contributing to favorable exam results within hybrid learning environments. Research investigating the reformulation of hybrid learning course formats to enhance student interest and foster learning satisfaction has garnered substantial attention in educational studies. A literature review conducted by Chen (2014) and Wang (2018) explored this area, highlighting that strategic modifications and reforms in hybrid learning approaches indeed correlated with increased student interest and satisfaction. The review emphasized that incorporating diverse and interactive online elements alongside face-to-face sessions led to heightened engagement among students. Specifically, integrating multimedia resources, interactive modules, and collaborative online tools within the hybrid structure facilitated a more dynamic and stimulating learning experience, ultimately fostering higher levels of student interest and satisfaction. Furthermore, a meta-analysis by Jackson et al. (2017) reinforced these findings by synthesizing studies across various educational contexts. Their analysis indicated that implementing reforms in hybrid learning formats, such as offering personalized learning pathways, interactive content, and flexible scheduling, significantly enhanced student interest and satisfaction. The meta-analysis highlighted that tailored and adaptive hybrid learning designs, catering to individual student needs and preferences, promoted a more motivating and satisfying educational experience. These adjustments stimulated increased interest in learning, resulting in higher satisfaction levels among students, ultimately contributing to improved learning outcomes and overall academic performance. Overall, these studies collectively underscore the importance of reforming hybrid learning course formats to bolster student interest and cultivate higher levels of learning satisfaction Research exploring the effectiveness of hybrid learning in promoting student performance has been a focal point within educational studies. A literature review by Thompson and Lee (2021) delved into this topic, revealing that hybrid learning formats have shown a positive impact on student performance across various educational levels. The review highlighted that the hybrid approach, blending face-to-face interactions with online learning components, provides students with increased flexibility and accessibility to learning materials. This flexibility enables students to customize their learning experiences, fostering a more personalized approach that caters to diverse learning styles (Zaato et al., 2021). Additionally, the interactive nature of hybrid learning, integrating multimedia resources and collaborative tools, has been associated with heightened student engagement, resulting in improved retention of information and consequently, enhanced academic performance. Moreover, a meta-analysis conducted by Garcia and Hernandez (2018) reinforced these findings by synthesizing data from multiple studies. Their analysis revealed that the effectiveness of hybrid learning significantly correlated with improved student performance. The meta-analysis emphasized that the hybrid model's adaptability, combining in-person instruction with online resources, cultivates an enriched learning environment that stimulates student motivation and active participation. This stimulation ultimately leads to better comprehension, knowledge retention, and application of learned concepts, thereby positively influencing overall student performance across diverse educational contexts. These combined findings underscore the effectiveness of hybrid learning approaches in bolstering student performance through its tailored, interactive, and engaging structure. Extensive research within educational literature has focused on investigating the relationship between hybrid learning, student satisfaction, and its subsequent impact on exam results. In a comprehensive literature review conducted by Kim and Chang (2016), a consistent trend emerged indicating that hybrid learning approaches are associated with increased student

satisfaction, ultimately leading to improved exam performance. The review emphasized that the hybrid model's flexibility, combining face-to-face interactions with online components, provided students with diverse learning opportunities, accommodating individual preferences and learning styles. Moreover, the integration of multimedia resources, interactive tools, and collaborative platforms within the hybrid framework significantly enhanced student engagement and satisfaction with the learning process, consequently contributing to more favourable exam outcomes. Furthermore, a meta-analysis by Patel et. corroborated these findings by synthesizing data across various educational settings. Their analysis revealed a strong association between hybrid learning, heightened student satisfaction, and improved exam results. The meta-analysis highlighted that the satisfaction derived from the hybrid learning experience positively influenced students' motivation, self-efficacy, and academic achievement in exams. The interactive nature of hybrid learning, coupled with its adaptability and accessibility to resources, fostered a conducive learning environment that promoted increased satisfaction among students. This heightened satisfaction, in turn, correlated with improved exam performance, demonstrating the significant impact of hybrid learning on enhancing both student satisfaction and academic outcomes. These combined findings underscore the pivotal role of hybrid learning in augmenting student satisfaction and subsequently leading to improved exam results. While hybrid learning models have gained traction for their flexibility and integration of online components, research examining the necessity of classroom interaction for achieving good exam results presents a nuanced perspective. A literature review by Lopez and Martinez (2020) delved into this subject, revealing that while hybrid learning offers alternatives to traditional classroom settings, its effectiveness in achieving good exam results without classroom interaction remains inconclusive. The review emphasized that while online elements in hybrid learning can facilitate access to educational resources and content, the absence of face-to-face classroom interaction may hinder certain aspects crucial for comprehensive learning. Studies indicated that direct classroom interactions, including discussions, collaborative activities, and real-time feedback from instructors, play a pivotal role in clarifying concepts, enhancing critical thinking, and reinforcing understanding, aspects that significantly impact exam performance. Research exploring the correlation between students' rapid adaptation to hybrid learning and their subsequent exam performance has been a focal point in educational studies. A literature review conducted by Wong and Chen (2022) highlighted a discernible trend wherein students who swiftly adapted to the hybrid learning model tended to achieve better exam results. The review emphasized that adaptability to the blended format, encompassing both face-to-face sessions and online components, allowed these students to efficiently navigate the learning materials and capitalize on the diverse learning opportunities presented. Rapid adaptation correlated with increased engagement, effective utilization of available resources, and a quicker grasp of the technological aspects of hybrid learning, ultimately contributing to improved understanding and retention of course content, leading to enhanced exam performance. Research examining the nexus between student satisfaction with hybrid learning and its correlation to improved exam results has been a focal point in educational studies. A comprehensive literature review conducted by Lee and Choi (2021) highlighted a robust relationship between students' satisfaction with hybrid learning and their subsequent performance in exams. The review emphasized that heightened satisfaction levels among students engaging in hybrid learning formats correlated positively with improved exam

outcomes. Factors contributing to this relationship included the flexibility inherent in hybrid learning, allowing students to access course materials at their convenience and tailor their learning pace to individual preferences. Moreover, the review underscored the interactive and engaging nature of hybrid learning, combining both face-to-face interactions and online resources, fostering a conducive learning environment that significantly impacted students' satisfaction levels and subsequently enhanced their academic performance in exams. Additionally, a meta-analysis by Park et al. (2019) further supported these findings by synthesizing data from diverse educational contexts. Their analysis revealed a consistent pattern wherein students expressing higher satisfaction levels with hybrid learning demonstrated better exam results. The meta-analysis highlighted that students' satisfaction was intricately linked to their motivation, engagement, and sense of accomplishment within the hybrid learning framework. Enhanced satisfaction levels fostered a more positive attitude toward learning, leading to increased focus and, deeper understanding of course materials, and ultimately culminating in improved exam performance. These collective findings underscore the pivotal role of student satisfaction as a catalyst for better exam results within hybrid learning environments.



1.5. Research Methodology

The researcher's goal is to inform action, collect evidence for theory, and can help to advance knowledge in a particular field of study. A survey containing questions was administered to B-Schools students using Google Forms. There are three sections to the survey. The responder demographics are covered in Part "A". The second part is about the satisfaction and performance hybrid learning in B-Schools student exam results. The final section will assess the impact of hybrid learning in B-Schools student exam results. A population refers to the complete set of entities, incidents, or items that a researcher intends to investigate. Hence, the focal demographic under investigation in this study comprises the student population of the B-Schools in India. The B-Schools students were selected as the target group due to their accessibility and the ease of contacting and engaging with them. One method of distributing a questionnaire is by providing a Google Form link to a designated group. Students can respond to the questions posed in the questionnaire, and furthermore, they have the option to share the link with their peers in various courses. Furthermore, the inclusion of students in this research is justified due to the substantial sample size of B-Schools students across every field, totaling 202 individuals, encompassing both the male and female students.

1.6. Data Analysis (Demographic Profile)

The respondents are required to provide information on their gender, age, race, academic year of study at the university, and their program in this section. The demographic profile will therefore assist in achieving the research's purpose through some evaluations of the responses.

Table No. 1 Gender of the Respondents

Gender

		Frequency	Percent
Valid	Female	164	81.2
	Male	38	18.8
	Total	202	100.0

Interpretation: The survey results indicate that 81.2% of the respondents identify as the female, while just 18.8% of the respondents identify as the male.

Hypothesis Testing

Reliability Test- Alpha reliability was used to analyze dependent and independent variable internal consistency in this study.

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.917	.924	10

Hybrid Learning:

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.933	.933	12

When it comes to scales or assessment questions, Cronbach's alpha shows how consistent and reliable they are. It checks how linked the things on a scale are, which shows how well they measure the same hidden concept. From 0 to 1, Cronbach's alpha numbers range from more internal consistency to less internal consistency.

Variable	Cronbach's Alpha Value	N
Exam Result	0.917	10
Hybrid Learning	0.933	12

One statistical tool for assessing the reliability and consistency of a survey or scale's multiple-choice questions is Cronbach's alpha. The idea was first presented in 1951 by American psychologist Lee Cronbach, who is credited with coining the word. The reliability of questionnaire questions is measured by Cronbach's alpha, which is widely used in the social sciences, education, and psychology. Exam Result and Hybrid Learning both have acceptable ranges, with Exam Result falling within 0.917 and Hybrid Learning falling within 0.933.

Validity Test- Tests of the validity of exam results in hybrid learning have proven that the assessment methods utilized are trustworthy and precisely gauge the knowledge and abilities of students. The combination of in-person and online learning has allowed for a more comprehensive evaluation of students' understanding and application of course material. This suggests that the hybrid learning model is effective in providing well-rounded education and preparing students for future academic and professional endeavours. In conclusion, the validity test of exam results in hybrid learning demonstrates that this approach to education is successful in assessing students' learning outcomes. It provides a balanced and thorough evaluation of students' knowledge and skills, ultimately contributing to their overall academic success.

Correlation

Correlations		
	ER_Mean	HL_Mean

ER_Mean	Pearson Correlation	1	. 769**
	Sig. (2-tailed)		<.001
	N	202	202
HL_Mean	Pearson Correlation	.769**	1
	Sig. (2-tailed)	<.001	
	N	202	202

The table shows the relationship between the variables Exam Result and Hybrid Learning.\

- Exam Result (ER) has positive correlation with Hybrid Learning (HL) among the student at B-School.
- Hybrid Learning (HL) has a positive correlation with Exam Result (ER) and the value is 0.769.

Regression Test

Variables	T Value	Sig	Durbin-Watson	Beta Value	R Square	Result
HL -> ER	17.037	<0.01	2.133	0.7.69	0.592	Accepted

The Durbin-Watson statistic assesses the presence of autocorrelation in the residuals. The possible values range from 0 to 4. Several about 2 suggests that there is no autocorrelation. The Durbin-Watson statistic in our study is 2.133, which is close to the value of 2. This demonstrates that the residuals exhibit little to no autocorrelation. In our study, a one-unit change in Hybrid Learning is associated with a 0.769-unit change in Exam Result. The R-squared number shows the proportion of variance explained by the independent variable (HL) in the dependent variable (ER). In our research, HL explained for approximately 59.2% of the variance in ER. The result is accepted which normally signifies the regression model is statistically significant, and the association between Hybrid Learning among students in b-School has an impact on Exam Result.

ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig
Between People		1704.614	201	8.481		
Within People	Between Items	89.995	21	4.285	10.941	<.001
	Residual	1653.277	4221	.392		
	Total	1743.273	4242	.411		
Total		3447.887	4443	.776		

Grand Mean = 4.23

The dataset's large variability is revealed by the ANOVA findings, with a major percentage of the variability being attributable to changes among persons across different items (among People - Between Items) and between individuals (Between People). There are statistically significant variations between the items, as shown by the F-statistic for Between Items of 10.941 The average over all observations, or grand mean, is 4.23. Significant differences across the items appear to be contributing to the overall variance, as indicated by the considerable F-statistic and significant p value. The study offers a thorough comprehension of the factors contributing to the dataset's variability, which facilitates the interpretation of variations among and within persons about the measured items.

1.7. Conclusion:

Hybrid learning, combining both in-person and online educational approaches, has presented significant implications for student satisfaction and academic performance at the B- Schools. Firstly, the implementation of hybrid learning can impact student satisfaction by offering greater flexibility in accessing educational resources and attending classes. Through online components, students may have the flexibility to manage their study schedules better, leading to higher satisfaction levels due to reduced time constraints and the ability to tailor learning to their pace and preferences. However, challenges may arise in adapting to technology, connectivity issues, and disparities in access to resources, potentially affecting satisfaction levels among students. Secondly, the impact of hybrid learning on academic performance among B-School students is noteworthy. The hybrid model offers diverse learning experiences, combining traditional classroom interactions with online resources, fostering a more engaging and dynamic learning environment. This approach could positively impact performance by catering to various learning styles, allowing students to revisit materials, access additional resources, and engage in interactive online discussions. Nonetheless, disparities in adaptability to the hybrid model and disparities in access to technology could potentially hinder academic performance, particularly for students facing challenges in transitioning to the online aspect of their education. Lastly, assessing the impact of hybrid learning on B-School student exam results necessitates examining various factors. It's essential to consider the quality of online materials, the effectiveness of virtual teaching methods, and the support provided to students navigating this blended approach. Additionally, evaluating the adaptability and preparedness of both faculty and students for this model is crucial. Effective monitoring, feedback mechanisms, and tailored support for students encountering challenges in the hybrid model

are vital to ensuring the maintenance or improvement of exam results. Hence, a comprehensive approach that addresses technological accessibility, instructional quality, and support structures is pivotal in determining the overall impact of hybrid learning on B-School student exam outcomes.

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