

A Comparative Study of Shri Mata Vaishno Devi University and the University of Jammu Regarding the Effectiveness of the Clean Campus initiative

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Abstract:

Government of India launched a cleanliness drive in the year of 2014 with the objective to make our country clean on the 175th birth anniversary of the father of nation Mahatma Gandhi. After government decision to attach this programme as social and economic movement, all the government institutions and organizations started awareness campaign and cleanliness drive. A clean environment is crucial for health. Maintaining cleanliness in educational institutions is essential for fostering a conducive learning environment, which directly influences students' academic achievement. Furthermore, a tidy and orderly environment mitigates health hazards, thereby reducing absenteeism and promoting sustained educational involvement. By prioritizing effective cleanliness in campus, significantly reduce dropout rates and enhance students' interest and performance in both academic and extracurricular activities can be achieved. The purpose of present study is to examine and compare the awareness and effectiveness of Clean Campus initiative between two universities students i.e. the University of Jammu and Shri Mata Vaishno Devi University. The major findings reveal that both universities have effectively implemented the Clean Campus Initiative and achieved positive outcomes in cleanliness, hygiene and sustainable sanitation. Shri Mata Vaishno Devi University was more active in organizing cleanliness drives, while the University of Jammu demonstrated stronger emphasis on eco-friendly practices and improved hostel management.

Keywords: Clean Campus, Higher education, Awareness and Effectiveness

Introduction

In 2014, the Government of India initiated its flagship programme, "Swachh Bharat Abhiyaan" (Clean India Mission), aimed at promoting cleanliness throughout the nation. The government associated this programme with both economic and social initiatives to encourage increased participation. This programme was initiated on October 2, 2014, inspired by Mahatma Gandhi, with the objective of achieving a clean India by 2019, coinciding with his 150th birth anniversary. Mahatma Gandhi, the

nation's progenitor, envisioned a clean India long ago; however, this aspiration remained unfulfilled due to the country's economic, political and social turmoil and instability. The current government has initiated efforts to realise Gandhiji's vision through action and spirit (Kumar, 2019, p. 163).

The Ministry of Education has instructed all institutions to develop cleanliness rankings, recognising and rewarding those that maintain exemplary cleanliness standards. Consequently, the Ministry of Education has encouraged all universities and institutions to actively participate in the Swachh Bharat Abhiyan, aiming to maintain clean and welcoming campuses (Ministry of Human Resource Development, 2017).

The Ministry of Human Resource Development has published a list of government schools. Over the past three years, the government has successfully constructed 8 million toilets in these institutions across various locations. Additionally, multiple departments, institutions and organisations affiliated with the Government of India have initiated the Sanitation awareness Campaign (Kumar, 2019, p. 164).

The clean and smart campus enables an institution to lead the redefinition of its environmental and economic culture, creating innovative patterns through sustainable solutions that meet the environmental, social and economic needs of humanity. A pristine campus often signifies the primary step that institutions and universities undertake in their quest for sustainability.

Establishment of a Clean Campus:

Cleaning is an essential practice for upholding a clean campus. Essential daily and weekly campus cleanliness includes:

1. Sweeping and mopping all hard surfaces in the classroom dormitory facility.
2. It also involves the efficient vacuuming of floors and carpets.
3. Cleaning the walls and windows of rooms and structures throughout the campus.
4. Keeping toiletries and hand soaps in public and dorm restrooms.
5. To ensure that floors drain and dry correctly after cleaning, maintain the drains.
6. Proper storage of cleaning equipment.
7. Use of effective and safe cleaning agents in restrooms, cafeterias, and food preparation zones.
8. Cleaning personnel should review and adhere to the schedules created (Sil & Maitra, 2021, p.61).

Guidelines from the University Grants Commission (UGC) for the Swachh Bharat Abhiyan:

Shinde (2023) highlighted that the University Grants Commission (UGC) has issued guidelines for the implementation of the Swachh Bharat Abhiyan in higher educational institutions. The following are several key guidelines:

- **Establishment of a Swachh Bharat Cell:** Every institution must establish a Swachh Bharat Cell to supervise and evaluate cleanliness and sanitation initiatives on campus.
- **Campus-wide sanitation initiative:** All higher education institutions must conduct a comprehensive cleanliness drive across the campus at least twice a year. This should involve the participation of all students, faculty and staff members.

- **Waste management:** Institutions must adopt effective waste management practices and ensure the proper disposal of all waste generated on campus. They should promote recycling initiatives and the use of environmentally sustainable products.
 - **Awareness campaigns:** Institutions should organise regular campaigns to raise awareness about cleanliness, hygiene and sanitation. These campaigns ought to engage both students and the surrounding community.
 - **Utilisation of technology:** Institutions should investigate the use of technology, including the installation of automatic sensor-operated faucets and toilets, to reduce water usage and improve sanitation.
 - **Swachh Bharat Summer Internship:** Institutions should promote student participation in the Swachh Bharat Summer Internship Program. This provided students with the opportunity to participate in sanitation and cleanliness initiatives in both rural and urban settings.
 - **Collaboration with local authorities:** Institutions should actively engage with local authorities to improve cleanliness and sanitation in the surrounding areas.
- By following these guidelines, higher education institutions can effectively support the Swachh Bharat Abhiyan, contributing to a cleaner, healthier and more sustainable India.

Initiatives implemented by Higher Education Institutions for the Swachh Bharat Abhiyan:

Swachh Bharat Abhiyaan, also known as the Clean India Mission, is a national initiative launched by the Government of India aimed at promoting cleanliness, hygiene and sanitation throughout the country. Higher education institutions in India have actively engaged in numerous initiatives to promote and advance the Swachh Bharat Abhiyaan. Below are some of the initiatives implemented by these institutions under this campaign:

- **Cleanliness initiatives:** Numerous higher education institutions have implemented cleanliness initiatives aimed at maintaining campus hygiene and raising awareness among students and faculty regarding the significance of cleanliness.
- **Swachh Bharat summer internships:** Various higher education institutions offer summer internships for students to participate in a range of Swachh Bharat initiatives. These internships aim to provide students with practical experience in implementing Swachh Bharat initiatives (Shinde, 2023, p. b461).
- **Awareness campaigns:** Higher education institutions have undertaken various initiatives to promote the Swachh Bharat Abhiyan among both students and the local community. These campaigns include rallies, poster contests, essay competitions and various activities designed to enhance awareness of the importance of cleanliness and sanitation.
- **Adopting villages:** Several higher education institutions have taken the initiative to adopt villages as part of the Swachh Bharat Abhiyaan, aiming to provide crucial sanitation facilities and foster cleanliness in rural communities.
- **Green initiatives:** Higher education institutions have adopted various green initiatives, including waste management, rainwater harvesting and solar energy projects, to promote environmental sustainability (Shinde, 2023, p. b461).

Indian higher education institutions are actively participating in the Swachh Bharat Abhiyaan by raising awareness, adopting villages and executing various initiatives focused on cleanliness and sanitation.

Further Achievements for Clean Campus:

Clean India, also known as the Swachh Bharat Abhiyan, is a comprehensive sanitation initiative launched by the Indian government. The aim is to convert India into a clean and sanitary nation by promoting cleanliness, sanitation and hygiene practices.

These are additional potential achievements that could be pursued for Clean India:

• Transportation within the campus

The transportation system within the campus is very effective in maintaining cleanliness. Ideally, the campus should be devoid of any pollution; however, as this may not be feasible, emissions within and surrounding the campus should be regulated and monitored consistently. The optimal methods to do this are as follows

1. The premises must be designated as a low emission zone, and vehicles entering or exiting must possess valid pollution certificates issued by the government.
2. The transportation services within the campus should predominantly operate on electricity. The promotion of electric vehicles in campus should be embraced with much enthusiasm.
3. The campus can additionally utilize solar vehicles within the campus. These are specialized automobiles that operate on less electricity and are equipped with solar panels on the roofs to recharge the battery (Sil & Maitra, 2021, p.60).

• Water Conservation

In recent years, water scarcity has emerged as a significant global issue. The accessibility of freshwater across continents is a significant concern, as a substantial portion of the global population lacks access to freshwater or experiences water scarcity for at least one month each year. The issue of water can be addressed by protecting and rebuilding global freshwater supplies. To do this, we must endeavor to execute this practice on campus, thereby ensuring cleanliness and contributing to societal welfare through this initiative. Several measures that may be implemented include:

1. **Utilizing sensor-equipped taps:** These taps are integrated with infrared sensors that detect the proximity of hands. When hands approach the tap, water is activated, and when they are removed, the water ceases to flow. This will aid in preventing water wastage through the utilization of advanced technology.
2. **Water recycling:** This method facilitates the reclamation of utilized water within the campus for diverse applications.
3. **Rainwater gathering:** This method will aid in replenishing the freshwater reserves within and surrounding the campus (Sil & Maitra, 2021, p.62).

• Waste Management

This is a significant issue for maintaining campus cleanliness. The presence of litter on campus creates an impression of uncleanliness. The primary focus of waste management should be to ensure the campus remains clean and orderly, hence upholding hygiene standards. The accumulation of rubbish generates

unhygienic conditions for humans and produces an unpleasant odor in the environment due to daily inundation of waste, posing hazards to society. The IoT-based trash management system enables the identification of bins that are filled with rubbish, facilitating prompt cleaning. garbage management encompasses both the classification of garbage and its subsequent usage. This can only be accomplished with the assistance of all individuals on campus. Classification of garbage based on its composition, including biodegradable waste, organic waste, plastic waste, glass waste, and electronic waste (Sil & Maitra, 2021, p.63).

- Despite governmental efforts, many rural areas still lack sufficient toilet facilities. The government should enhance toilet accessibility in these areas, especially within educational facilities and public spaces.
- As eco-friendly products can significantly reduce waste generation. The government could promote the adoption of such products by offering incentives and subsidies to manufacturers.
- The government could initiate campaigns to raise awareness among the public about the importance of hygiene practices, including hand washing, dental care and personal hygiene.

The role of higher education institutions in the Swachh Bharat Abhiyan:

1. Universities actively participate in government-organised cleanliness drives.
2. Universities engage participate in research and development initiatives related to the Swachh Bharat Abhiyan.
3. Universities form partnerships with various governmental and non-governmental organisations to implement the Swachh Bharat Abhiyan.

Swachh Bharat Abhiyan is a vital initiative aimed at creating a cleaner and healthier India. While the campaign has achieved successes, significant effort is still required to ensure sustainable and long-term progress. It is important to continue prioritising and investing in sanitation infrastructure, increasing awareness of the importance of cleanliness and hygiene and working towards changing attitudes and behaviours.

Review of literature

A review of prior research and existing literature has been conducted to support the present study: Majority of students believed their qualifications would improve if campus facilities and hostels were better organised. Furthermore, students placed considerable importance on the cleanliness of campus facilities (Kiplagat et al., 2017). The conditions of toilets in campus were unhygienic due to irregular cleaning practices, damaged water taps that disrupted the water supply and the absence of dustbins for waste disposal within the toilet premises (Kumar, 2019). A majority of schools had gender-segregated toilets and almost all ensured a regular supply of sanitary napkins, majority lacked adequate facilities for their disposal. Furthermore, most of the surveyed schools had no proper system for managing solid waste, although a majority provided access to clean drinking water (Nandy et al., 2020).

Secondary schools in Telangana were effectively implementing the Swachh Vidyalaya initiative (Vishnu, 2021). a positive correlation between students' perception of cleanliness and their learning experience (Reyes et al., 2024). Most schools and colleges in the Jammu district had separate toilets for male and

female students; however, only about half of these institutions provided soap or handwashing facilities, while menstrual hygiene management remained inadequate (Pushap & Sudershan, 2025).

Students perceived the Swachh Bharat Abhiyan as a behavioural change campaign that promotes the habit of cleanliness through innovative strategies and legal support (Nath et al., 2018). Similarly, the Swachh Vidyalaya Abhiyan had a positive influence on school attendance but had a minimal effect on enrolment rates. It was further stated that the initiative primarily focused on physical infrastructure, while behavioural change, quality and sustainability received insufficient attention, thereby limiting the overall impact of the programme (Borthakur & Baruah, 2019). A positive shift in hygiene practices and awareness of the Swachh Bharat Swachh Vidyalaya Program among children in rural schools (Sunderam et al., 2020). There was no significant difference in environmental responsibility among postgraduate students based on gender (male or female), geographical location (rural or urban), or academic stream (Science or Humanities) (Bakshi & Gupta, 2022).

A clean school environment significantly influences students' clean lifestyle behaviours, while teachers' clean habits further reinforce this influence, thereby enhancing the environmental impact on students' behaviour (Harahap, 2018). Hygiene practices in public universities are still markedly insufficient (Kabir et al., 2021).

Significance of the study

Maintaining cleanliness is essential for fostering a healthy community, society and nation. The preservation of a clean environment is crucial in educational institutions, as it significantly impacts students' ability to learn and thrive. A clean campus setting not only enhances academic performance but also boosts student engagement and participation in various school activities. In contrast, neglecting cleanliness can elevate stress levels among students, hindering their concentration and diminishing their motivation to learn. Furthermore, students' satisfaction with their educational surroundings is an important factor that shapes their learning experiences. An ideal learning environment nurtures a love for education, supports skill development and enhances overall academic engagement. Students' preferences regarding their learning environment significantly impact their comfort and educational outcomes. Additionally, students' contentment with their learning environment has a considerable effect on their educational journey. A nurturing and positive atmosphere encourage a passion for learning, advances skill acquisition and heightens overall participation in educational settings. The way students perceive their environment significantly impacts their comfort levels and academic performance.

This study is important because it examines the effectiveness of the Clean Campus initiative at two universities i.e. Shri Mata Vaishno Devi University and the University of Jammu, focusing on how well the program has been implemented and maintained. The research aims to assess its current status in these universities and its role in promoting a clean and sustainable campus. The findings will help universities strengthening environmental awareness, enhancing student participation and create a cleaner, safer, and more effective learning environment that aligns with the goals of the Clean Campus Initiative.

Statement of the problem

“A Comparative Study of Shri Mata Vaishno Devi University and the University of Jammu Regarding the Effectiveness of the Clean Campus initiative”

I. Objectives of the study

1. To study the significant difference in the effectiveness of Clean Campus initiative.
2. To compare the effectiveness of Clean Campus initiative between Shri Mata Vaishno Devi University and the University of Jammu.

II. Hypotheses of the study

H₀₁: There is no significant difference in the effectiveness of the Clean Campus initiative.

H₀₂: There is no significant difference between Shri Mata Vaishno Devi University and the University of Jammu regarding the effectiveness of Clean Campus initiative.

III. Methodology

Research design

A descriptive survey approach was utilised in this study.

Sample

The sample for this research was drawn from two universities: the University of Jammu and Shri Mata Vaishno Devi University. The population comprises postgraduate students from these institutions. Students were purposively selected from specific departments. The final sample included 166 postgraduate students.

Tool used

The researcher developed a tool to evaluate the effectiveness of the clean campus initiative. This tool assesses the effectiveness of the clean campus initiative on university students. It comprises 10 items, each offering four options that correspond to the statement.

IV. Analysis and Interpretation

The data was analysed using the chi-square test of independence. This analytical process was conducted with the assistance of SPSS version 26.

Analysis of the effectiveness of the Clean Campus initiative of the Postgraduate students from the University of Jammu and the Shri Mata Vaishno Devi University:

Item 1: The Clean Campus initiative enhances the quality of life for students in campus.

Table 1- Observed count and Expected count of Clean Campus Enhances Quality of life

The Clean Campus initiatives enhance the quality of life	Dissatisfied	No improvement	Now campus is more aware in maintaining hygiene	Satisfied	Total
Count	18	10	57	55	140

Universities	University of Jammu	Expected Count	17.7	16.0	53.1	53.1	140.0
		% within university	12.9%	7.1%	40.7%	39.3%	100.0%
	Shri Mata Vaishno Devi University	Count	3	9	6	8	26
		Expected Count	3.3	3.0	9.9	9.9	26.0
		% within university	11.5%	34.6%	23.1%	30.8%	100.0%
Total		Count	21	19	63	63	166
		Expected Count	21.0	19.0	63.0	63.0	166.0
		% within universities	12.7%	11.4%	38.0%	38.0%	100.0%

Table 2- Chi-Square Tests of Clean Campus Enhances Quality of life

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.706 ^a	3	.001
Likelihood Ratio	13.004	3	.005
Linear-by-Linear Association	2.425	1	.119
N of Valid Cases	166		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.98.

The table 2 indicates that the value of chi-square is 16.706 with a p-value of .001, which is statistically significant, as the calculated p-value is less than the .005 level of significance. This means that there is a significant difference between the University of Jammu and Shri Mata Vaishno Devi University regarding the Clean Campus enhances the quality of life for students. Thus, the null hypothesis indicating that there is a significant difference between the two universities regarding the Clean Campus initiative enhances the quality of life for students stands rejected.

The mean value for students from the University of Jammu is 3.06, whereas the mean value for students from the Shri Mata Vaishno Devi University is 2.73. This means that students from the University of Jammu believe the clean campus initiative improves their quality of life compared to students from Shri Mata Vaishno Devi University.

Item 2: The Clean Campus initiative is beneficial.

Table 3- Observed count and Expected count of Clean Campus initiative is Beneficial

Clean Campus initiative is beneficial			Not aware	Preventing illness and allergies	Boosting mental health	Improved academic achievement	Total
Universities	University of Jammu	Count	40	39	24	37	140
		Expected Count	33.7	38.8	26.1	41.3	140.0
		% within university	28.6%	27.9%	17.1%	26.4%	100.0%
	Shri Mata Vaishno Devi University	Count	0	7	7	12	26
		Expected Count	6.3	7.2	4.9	7.7	26.0
		% within university	0.0%	26.9%	26.9%	46.2%	100.0%
	Total	Count	40	46	31	49	166
		Expected Count	40.0	46.0	31.0	49.0	166.0
		% within universities	24.1%	27.7%	18.7%	29.5%	100.0%

Table 4- Chi-Square Tests of Clean Campus initiative is Beneficial

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.449 ^a	3	.010
Likelihood Ratio	17.194	3	.001
Linear-by-Linear Association	9.987	1	.002
N of Valid Cases	166		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.86.

The table 4 indicates that the value of chi-square is 11.449 with a p-value of .010, which is not statistically significant, as the calculated p-value is more than the .005 level of significance. This means that there is no significant association between the University of Jammu and Shri Mata Vaishno Devi University regarding the Clean Campus initiative is beneficial. The null hypothesis indicating that there is no significant difference in the Clean Campus initiative is beneficial between two universities is retained.

Item 3: The Clean Campus initiative has contributed to management of sustainable sanitation practices in campus.

Table 5- Observed count and Expected count of Management of Sustainable Sanitation Practices

Clean Campus initiative has contributed to management of sustainable sanitation practices			Not aware	Regular cleaning in campus	Use of metal and paper products instead of plastic	Collaborative approach to maintain cleanliness	Total
Universities	University of Jammu	Count	28	80	15	17	140
		Expected Count	25.3	79.3	16.9	18.6	140.0
		% within university	20.0%	57.1%	10.7%	12.1%	100.0%
	Shri Mata Vaishno Devi University	Count	2	14	5	5	26
		Expected Count	4.7	14.7	3.1	3.4	26.0
		% within university	7.7%	53.8%	19.2%	19.2%	100.0%
	Total	Count	30	94	20	22	166
		Expected Count	30.0	94.0	20.0	22.0	166.0
		% within universities	18.1%	56.6%	12.0%	13.3%	100.0%

Table 6- Chi-Square Tests of Management of Sustainable Sanitation practices

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	4.031 ^a	3	.258
Likelihood Ratio	4.206	3	.240
Linear-by-Linear Association	3.382	1	.066
N of Valid Cases	166		

The table 6 indicates that the value of chi-square is 4.031 with a p-value of .258, which is not statistically significant, as the calculated p-value is more than the .005 level of significance. This means there is no significant association between the University of Jammu and Shri Mata Vaishno Devi University regarding Clean Campus initiative contribute to management of sustainable sanitation practices. The null hypothesis, which indicate that there is no significant difference in Clean Campus initiative contribute to management of sustainable sanitation practices in campus, is accepted.

Item 4: The Clean Campus initiative has resulted in changes to the hostel setup.

Table 7- Observed count and Expected count of Changes to the Hostel setup

Clean Campus initiative resulted changes in the hostel setup			Not aware	Mess & washrooms are clean	Use of different dustbin to segregate waste in hostels	Proper cleanliness and hygiene is maintained in hostels	Total
Universities	University of Jammu	Count	8	38	32	62	140
		Expected Count	6.7	45.5	27.0	60.7	140.0
		% within university	5.7%	27.1%	22.9%	44.3%	100.0%
	Shri Mata Vaishno Devi University	Count	0	16	0	10	26
		Expected Count	1.3	8.5	5.0	11.3	26.0
		% within university	0.0%	61.5%	0.0%	38.5%	100.0%
	Total	Count	8	54	32	72	166
		Expected Count	8.0	54.0	32.0	72.0	166.0
		% within universities	4.8%	32.5%	19.3%	43.4%	100.0%

Table 8- Chi-Square Tests of Changes to the Hostel setup

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	15.575 ^a	3	.001
Likelihood Ratio	20.445	3	.000
Linear-by-Linear Association	1.898	1	.168
N of Valid Cases	166		

The table 8 indicates that the value of chi-square is 15.55 with a p-value of .001, which is statistically significant, as the calculated p-value is less than the .005 level of significance. This means that there is a significant difference between the University of Jammu and Shri Mata Vaishno Devi University regarding Clean Campus has resulted in changes to the hostel. The null hypothesis which state that there is no significant difference between the two universities in terms of changes to the hostel to setup is rejected.

The mean value for students from the University of Jammu is 3.06, whereas the mean value for students from the Shri Mata Vaishno Devi University is 2.77. This indicates that the clean campus has resulted in changes to the hostel setup in the University of Jammu as compared to Shri Mata Vaishno Devi University.

Item 5: The campus performs cleanliness activities.

Table 9- Observed count and Expected count of Cleanliness activities

Campus performs cleanliness activities			No drive	Organised but, I never participated	Inside the campus	Outside the campus	Total
Universities	University of Jammu	Count	27	28	77	8	140
		Expected Count	22.8	36.3	72.5	8.4	140.0
		% within university	19.3%	20.0%	55.0%	5.7%	100.0%
	Shri Mata Vaishno Devi University	Count	0	15	9	2	26
		Expected Count	4.2	6.7	13.5	1.6	26.0
		% within university	0.0%	57.7%	34.6%	7.7%	100.0%
	Total	Count	27	43	86	10	166
		Expected Count	27.0	43.0	86.0	10.0	166.0
		% within universities	16.3%	25.9%	51.8%	6.0%	100.0%

Table 10- Chi-Square Tests of Cleanliness activities

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	18.942 ^a	3	.000
Likelihood Ratio	20.821	3	.000
Linear-by-Linear Association	.026	1	.873
N of Valid Cases	166		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 1.57.

The table 10 indicates that the value of chi-square is 18.942 with a p-value of .000, which is statistically significant, as the calculated p-value is less than the .005 level of significance. This means that there is a significant association between the University of Jammu and Shri Mata Vaishno Devi University regarding the cleanliness activities. The null hypothesis stating that there is no significant difference in the campus performing cleanliness activities between the two universities stands rejected.

The mean value for students from the University of Jammu is 2.47, whereas the mean value for students from the Shri Mata Vaishno Devi University is 2.50. This indicates that Shri Mata Vaishno Devi University performs more cleanliness activities as compared to the University of Jammu.

Item 6: The Clean Campus program advocated for cleanliness and hygiene in campus.

Table 11- *Observed count and Expected count of campus Advocated for Cleanliness and Hygiene*

The Clean Campus program has advocated cleanliness and hygiene in campus				No change	Only among aware individuals	Helped in cleanliness but not hygienic part	Helped in achieving cleanliness and hygiene in department/ campus	Total
Universities	University of Jammu	Count	14	24	26	76	140	
		Expected Count	12.7	29.5	26.1	71.7	140.0	
		% within university	10.0%	17.1%	18.6%	54.3%	100.0%	
	Shri Mata Vaishno Devi University	Count	1	11	5	9	26	
		Expected Count	2.3	5.5	4.9	13.3	26.0	
		% within university	3.8%	42.3%	19.2%	34.6%	100.0%	
Total	Count	15	35	31	85	166		
	Expected Count	15.0	35.0	31.0	85.0	166.0		
	% within universities	9.0%	21.1%	18.7%	51.2%	100.0%		

Table 12- *Chi-Square Tests of advocated Cleanliness and Hygiene in campus*

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	9.167 ^a	3	.027
Likelihood Ratio	8.356	3	.039
Linear-by-Linear Association	2.156	1	.142
N of Valid Cases	166		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.35.

The table 12 indicates that the value of chi-square is 9.167 with a p-value of .027, which is not statistically significant, as the calculated p-value is more than the .005 level of significance. This means that there is no significant difference between the University of Jammu and Shri Mata Vaishno Devi University regarding campus advocating cleanliness and hygiene. The null hypothesis stating that there is no significant difference in campus advocating for cleanliness and hygiene between the two universities stands retained.

Item 7: The campus prioritises eco-friendly practices.

Table 13- *Observed count and Expected count of Prioritises Eco-friendly practices*

Campus prioritises eco-friendly practices			Promoting organic food in campus	No use of plastic bottles in campus	Use of electronics as an alternative of papers	Emphasises on R3 (reduce, reuse and recycle)	Total
Universities	University of Jammu	Count	27	29	15	69	140
		Expected Count	30.4	30.4	21.1	58.2	140.0
		% within university	19.3%	20.7%	10.7%	49.3%	100.0%
	Shri Mata Vaishno Devi University	Count	9	7	10	0	26
		Expected Count	5.6	5.6	3.9	10.8	26.0
		% within university	34.6%	26.9%	38.5%	0.0%	100.0%
Total	Count	36	36	25	69	166	
	Expected Count	36.0	36.0	25.0	69.0	166.0	

% within universities	21.7%	21.7%	15.1%	41.6%	100.0%
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Table 14- *Chi-Square Tests of Prioritises Eco-friendly practices*

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	26.790 ^a	3	.000
Likelihood Ratio	34.493	3	.000
Linear-by-Linear Association	11.197	1	.001
N of Valid Cases	166		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.92.

The table 14 indicates that the value of chi-square is 26.790 with a p-value of .000, which is statistically significant, as the calculated p-value is less than the .005 level of significance. This means that there is a significant difference between the University of Jammu and Shri Mata Vaishno Devi University in prioritising eco-friendly practices in campus. The null hypothesis, which states that there is no significant difference in the prioritisation of eco-friendly practices between the two universities, is rejected.

The mean value for students from the University of Jammu is 2.90, whereas the mean value for students from the Shri Mata Vaishno Devi University is 2.04. This means that the University of Jammu prioritises eco-friendly practices in campus more than Shri Mata Vaishno Devi University.

Item 8: The participation of students in Swacchh Bharat Abhiyan.

Table 15- *Observed count and Expected count of Participation of students in Swacchh Bharat Abhiyan*

Participated in Swacchh Bharat Abhiyan in campus			Not participated	Participated but no rank and reward	Participated and got rank but no reward	Participated, got rank and reward	Total
Universities	University of Jammu	Count	39	58	15	28	140
		Expected Count	39.6	59.9	15.2	25.3	140.0
		% within university	27.9%	41.4%	10.7%	20.0%	100.0%
		Count	8	13	3	2	26

Shri Mata Vaishno Devi University	Expected Count	7.4	11.1	2.8	4.7	26.0
	% within university	30.8%	50.0%	11.5%	7.7%	100.0%
Total	Count	47	71	18	30	166
	Expected Count	47.0	71.0	18.0	30.0	166.0
	% within universities	28.3%	42.8%	10.8%	18.1%	100.0%

Table 16- Chi-Square Tests of Participation of Students in Swacchh Bharat Abhiyan

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.294 ^a	3	.514
Likelihood Ratio	2.698	3	.441
Linear-by-Linear Association	1.440	1	.230
N of Valid Cases	166		

a. 2 cells (25.0%) have expected count less than 5. The minimum expected count is 2.82.

The table 16 indicates that the value of chi-square is 2.294 with a p-value of .514, which is not statistically significant, as the calculated p-value is more than the .005 level of significance. This means that there is no significant difference between the University of Jammu and Shri Mata Vaishno Devi University regarding students' participation in Swacchh Bharat Abhiyan. The null hypothesis, which states that there is no significant difference in participation in Swacchh Bharat Abhiyan between two universities is accepted.

Item 9: The department has multiple dustbins for waste segregation.

*Blue- dry waste, Green- for wet waste, Black – electronic waste and Red – sanitation waste

Table 17- Observed count and Expected count of use of Multiple Dustbins

	Single dustbin	Two dustbins (blue and green)	Three dustbins (blue, black and green)	Four dustbins (green, blue, red and black)	Total
The department use multiple dustbins					
Count	22	86	28	4	140

Universities	University of Jammu	Expected Count	23.6	86.9	26.1	3.4	140.0
		% within university	15.7%	61.4%	20.0%	2.9%	100.0%
	Shri Mata Vaishno Devi University	Count	6	17	3	0	26
		Expected Count	4.4	16.1	4.9	.6	26.0
		% within university	23.1%	65.4%	11.5%	0.0%	100.0%
	Total	Count	28	103	31	4	166
		Expected Count	28.0	103.0	31.0	4.0	166.0
		% within universities	16.9%	62.0%	18.7%	2.4%	100.0%

Table 18- Chi-Square Tests of use of Multiple Dustbins

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	2.344 ^a	3	.504
Likelihood Ratio	3.013	3	.390
Linear-by-Linear Association	2.260	1	.133
N of Valid Cases	166		

The table 18 indicates that the value of chi-square is 2.344 with a p-value of .504, which is not statistically significant, as the calculated p-value is more than the .005 level of significance. This means that there is no significant difference between the University of Jammu and Shri Mata Vaishno Devi University regarding use of multiple dustbins. The null hypothesis, which states that there is no significant difference in use of multiple dustbins between the two universities is accepted.

Item 10: The campuses have green and clean premises.

Table 19- Observed count and Expected count of Green and Clean premises

Campus has green and clean premises			No	Clean but not green surroundings	Green but not clean surroundings	Yes, clean and green surroundings	Total
Universities	University of Jammu	Count	9	7	32	92	140
		Expected Count	7.6	11.0	30.4	91.1	140.0
		% within university	6.4%	5.0%	22.9%	65.7%	100.0%
	Shri Mata Vaishno Devi University	Count	0	6	4	16	26
		Expected Count	1.4	2.0	5.6	16.9	26.0
		% within university	0.0%	23.1%	15.4%	61.5%	100.0%
	Total	Count		9	13	36	108
		Expected Count		9.0	13.0	36.0	108.0
		% within universities		5.4%	7.8%	21.7%	65.1%

Table 20- Chi-Square Tests of Green and Clean premises

	Value	Df	Asymptotic Significance (2-sided)
Pearson Chi-Square	11.444 ^a	3	.010
Likelihood Ratio	10.430	3	.015
Linear-by-Linear Association	.263	1	.608
N of Valid Cases	166		

The table 20 indicates that the value of chi-square is 11.444 with a p value of .010, which is not statistically significant, as the observed p value is more than .005 level of significance. This indicates that there is no significant difference between the University of Jammu and Shri Mata Vaishno Devi University regarding the campuses having green and clean premises. Thus, the null hypothesis, which states that there is no significant difference in campuses having green and clean premises between two universities stands retained.

Discussion of the results

The study found that the University of Jammu students stated that the clean campus initiative enhances the quality of life as compared to students from Shri Mata Vaishno Devi University. Similarly, Borthakur & Baruah (2019) found that the Swachh Vidyalaya Abhiyan was effectively contributing to the improvement in school attendance rates. The study further found that there was no significant difference between the University of Jammu and Shri Mata Vaishno Devi University regarding the Clean Campus initiative is beneficial. Cleanliness could enhance learning and teaching, resulting in improved academic achievement for students, as reported by Reyes et al. (2024); Uleanya (2020).

The study found that there was no significant association in Clean Campus initiative contribute to management of sustainable sanitation practices in campus. Sunderam et al. (2020) reported contrary results, indicating a positive shift in hygiene practices and awareness of the Swachh Bharat Swachh Vidyalaya Program among children in rural schools. The study also found that Shri Mata Vaishno Devi University performs more cleanliness activities as compared to University of Jammu. The Swachh Vidyalaya Abhiyan had a positive influence on school attendance but had a minimal effect on enrolment rates (Borthakur & Baruah, 2019).

The study found that the University of Jammu advocates more cleanliness and hygiene as compared to Shri Mata Vaishno Devi University. The hygiene standards and general cleanliness of the students did not show statistically significant differences in terms of gender (Celik et al., 2019; Reyes et al., 2024). The study found that there was no significant association between the University of Jammu and Shri Mata Vaishno Devi University regarding students' participation in Swacchh Bharat Abhiyan. Bakshi & Gupta (2022) found that there was no significant difference in environmental responsibility behaviours among postgraduate students in terms of gender (females and males), locale (rural and urban) and academic stream (Science and Humanities).

Conclusion

The comparative study of the Clean Campus Initiative between the University of Jammu and Shri Mata Vaishno Devi University indicates that both institutions had effectively implemented the program, yielding similar outcomes in most areas related to cleanliness, hygiene, and sustainable sanitation practices. While Shri Mata Vaishno Devi University is more active in organizing cleanliness activities, the University of Jammu focuses on eco-friendly practices and has observed changes in hostel management as a result of the initiative. Overall, the findings suggest that both universities are making positive contributions toward maintaining clean and green campuses, thereby supporting the objectives of the Clean Campus Initiative and fostering a healthier educational environment.

REFERENCES:

1. Bakshi, R., & Gupta, J. (2022). A study of responsible environmental behaviour in relation to gender, stream, and locale. *Indian Journal of Natural Sciences*, 12(70), 38701-38709.
https://r.search.yahoo.com/_ylt=Awr912liQ41qPwIA_VlXNyoA;_ylu=Y29sbwNncTEEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788852322/RO=10/RU=https%3a%2f%2fwww.research

- [gate.net%2fpublication%2f359588581_A_Study_of_Responsible_Environmental_Behaviour_in_Relation_to_Gender_Stream_and_Locale/RK=2/RS=Zbhe39W8rXXjEDBFMad5IDqixao-](https://www.researchgate.net/publication/359588581_A_Study_of_Responsible_Environmental_Behaviour_in_Relation_to_Gender_Stream_and_Locale/RK=2/RS=Zbhe39W8rXXjEDBFMad5IDqixao-)
2. Borthakur, M., & Baruah, J. (2019). Swachh Vidyalaya Abhiyan: Findings from an empirical analysis. *Social Change and Development*, XVI(1), 130-144.
https://r.search.yahoo.com/_ylt=Awr9zVFFRI1qYgIA0wtXNyoA;_ylu=Y29sbwNncTEEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788852550/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f334653820_Swachh_Vidyalaya_Abhiyan_Findings_from_an_Empirical_Analysis/RK=2/RS=nXO_8gdFi4lRdh9NaVY.wb3ryOU-
 3. Celik, E.Y., & Yuce, Z. (2019). Investigation of the Awareness and Habits of Secondary School Students about Cleanliness and Hygiene from Various Variables. *International Education Studies*, 12(4), 173- 184.
https://r.search.yahoo.com/_ylt=Awr.35f0RI1qVgIAA4FXNyoA;_ylu=Y29sbwNncTEEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788852725/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f332174332_Investigation_of_the_Awareness_and_Habits_of_Secondary_School_Students_about_Cleanliness_and_Hygiene_from_Various_Variables/RK=2/RS=sMEDafUwCZc0PF4B527AT_47HRg-
 4. Harahap, T. A., Saefuddin, A., & Indriyanto, B. (2018). The Relationship between Clean School Environment and Student's Clean Lifestyle Behaviour in Indonesia Junior and Senior High School. *International Journal of Scientific & Technology Research*, 7(3), 100-104.
https://r.search.yahoo.com/_ylt=AwrOp08OkI1qUgIAI89XNyoA;_ylu=Y29sbwNncTEEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788871951/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f330686412_The_relationship_between_clean_school_environment_and_student%2527s_clean_lifestyle_behaviour_in_Indonesia_junior_and_senior_high_school/RK=2/RS=21Mn9ncm14F1WfGHIq7UtQTi8JM-
 5. Kabir, A., Roy, S., Begum, K., Kabir, A. H., & Miah, M. S. (2021). Factors influencing sanitation and hygiene practices among students in a public university in Bangladesh. *PloS one*, 16(9), 1-19.
https://r.search.yahoo.com/_ylt=AwrO8tlhkI1qZwIAe21XNyoA;_ylu=Y29sbwNncTEEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788872034/RO=10/RU=https%3a%2f%2fjournals.plos.org%2fplosone%2farticle%3fid%3d10.1371%2fjournal.pone.0257663/RK=2/RS=2ZaGg6UPxoBJl0ltZqVH7yhAUdo-
 6. Kiplagat, H., Khamasi, J. W., Jelimo, J., & Mokaya, A. C. (2017). Students' perspective on the impact of cleanliness of university facilities on academic achievement: A case of a public University in Kenya. *African Journal of Education, Science and Technology*, 3(3), 93-99.
<https://www.ajest.info/index.php/ajest/article/view/56/78>
 7. Kumar, S. (2019). A study on awareness and implementation of clean India mission at university campuses. *International Journal of Engineering, Applied and Management Sciences Paradigms*, 54(2), 163-168.
https://r.search.yahoo.com/_ylt=AwrO8LugKI1qRgIAK6RXNyoA;_ylu=Y29sbwNncTEEcG9zAz

- [zEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788872097/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f372991164_A_study_on_awareness_and_implementation_of_clean_India_Mission_at_University_Campuses/RK=2/RS=mG.vjwi47jld.G90iF256oTZyxI-](https://www.researchgate.net/publication/372991164_A_study_on_awareness_and_implementation_of_clean_India_Mission_at_University_Campuses/RK=2/RS=mG.vjwi47jld.G90iF256oTZyxI-)
8. Ministry of Human Resource Development. (2017). *Action plan 17/17*. <https://www.aicte-india.org/downloads/17by17.pdf>
 9. Nandy, S., Naik, P. R., & Nirgude, A. (2020). Swachh Bharat Swachh Vidyalaya Campaign: Situation analysis of select schools in Karnataka state, India. *Indian Journal of Community Health*, 32(2), 432-437.
https://r.search.yahoo.com/_ylt=Awr.2JPfkI1qVAIAGwBXNyoA;_ylu=Y29sbwNncTEEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788872159/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f345962341_Swachh_Bharat_SwachhVidyalaya_Campaign_Situation_Analysis_of_Select_Schools_in_Karnataka_State_India/RK=2/RS=ZOG_0AFn1CpQ8u8NJIUlgIpm4jA-
 10. Nath, B., Yadav, S. K., & Kumari, R. (2018). Perception of medical students regarding “Swachh Bharat Abhiyan” a cleanliness campaign: a qualitative study. *Indian Journal of Community Health*, 30(3), 253-257.
https://r.search.yahoo.com/_ylt=Awr48qYPkY1qqgIAG31XNyoA;_ylu=Y29sbwNncTEEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788872207/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f328928380_Perception_of_Medical_Students_regarding_Swachh_Bharat_Abhiyan_a_cleanliness_campaign_a_qualitative_study/RK=2/RS=xmTkO8qTRnq6_6KSBrvhz7IvWv0-
 11. Pushap, A. & Sudershan, A. (2025). Survey on water, sanitation and hygiene practices in educational institutions of Jammu district. *Journal of Advances in Education and Philosophy*, 9(1), 42-48.
https://r.search.yahoo.com/_ylt=AwrO_Q6okY1qMAIA0jZXNyoA;_ylu=Y29sbwNncTEEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788872361/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f388028453_Survey_on_Water_Sanitation_and_Hygiene_Practices_in_Educational_Institutions_of_Jammu_District/RK=2/RS=UxXzz.ij1_kufMLgu.mH80.M7B8-
 12. Reyes, M. F., Escobal, J., Empron, A., Crispolon, A., Toca, J. M., Sepria, R., Bernadez, D., Fuguso, K., Bantilan, J., & Lamanilao, R. P. (2024). Perceptions and impact of students’ satisfaction on cleanliness with school environments. *International Journal of Management, Research, and Global Economics*, 5(3), 877–885.
https://r.search.yahoo.com/_ylt=AwrjfpXQo1qNQIAa0ZXNyoA;_ylu=Y29sbwNncTEEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788852184/RO=10/RU=https%3a%2f%2fwww.researchgate.net%2fpublication%2f381413074_Perceptions_and_Impact_of_Students%2527_Satisfaction_on_Cleanliness_with_School_Environments/RK=2/RS=TGUEFZTAPsq_rVTwnoIySziEvt
 13. Shinde, J. S. (2023). The Initiatives taken by Higher Education Institution for “Swach Bharat Abhiyaan.” *International Journal of Novel Research and Development*, 8(5), b459-b463.
https://r.search.yahoo.com/_ylt=AwrOtCbrkY1qQQIAW5xXNyoA;_ylu=Y29sbwNncTEEcG9z

[AzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1788872428/RO=10/RU=https%3a%2f%2fwww.ijndr.org%2fpapers%2fIJNRD2305158.pdf/RK=2/RS=sj5ixP30qHFpTqcAVDtpdZNabJ0-](https://www.ijndr.org/papers/2fIJNRD2305158.pdf/RK=2/RS=sj5ixP30qHFpTqcAVDtpdZNabJ0-)

14. Sil, N., & Maitra, S. (2021). Development of clean and smart campus in India. *Handbook of environmental crisis and its management*: Vol.1. (1st ed., pp. 58-65). Ideal international e – publication Pvt. Ltd. https://www.nit.ac.in/pdf/BOOK%20CHAPTERS_2021.pdf#page=61
15. Sunderam, S., Kumari, A. P., Soren, S. K., Deo, M., & Kashyap, V. (2020). Awareness of Swachh Bharat Swachh Vidyalaya and hygiene practices in rural school children. *International Journal of Science and Research*, 9(8), 622-623. https://www.researchgate.net/profile/Santosh-Soren-2/publication/358275090_Awareness_of_Swachh_Bharat_Swachh_Vidyalaya_and_Hygiene_Practices_in_Rural_School_Children/links/61fa0bcd11a1090a79c929b8/Awareness-of-Swachh-Bharat-Swachh-Vidyalaya-and-Hygiene-Practices-in-Rural-School-Children.pdf
16. Uleanya, C. (2020). Influence of cleanliness on learners learning capabilities and academic performances: A South African perspective. *Universal Journal of Educational Research*, 8(11B), 5934-5942. https://www.researchgate.net/publication/345977695_Influence_of_Cleanliness_on_Learners_Learning_Capabilities_and_Academic_Performances_A_South_African_Perspective
17. Vishnu, P. (2021). A study on the implementation of SWACHH VIDYALAYA initiative in secondary schools of TELANGANA state. *International Journal of Multidisciplinary Educational Research*, 10(12(4)), 1-10. https://r.search.yahoo.com/_ylt=AwrjcH56Ro1qYAlAzbnXNyoA;_ylu=Y29sbwNncTEEcG9zAzMEdnRpZAMEc2VjA3Ny/RV=2/RE=1788853114/RO=10/RU=https%3a%2f%2fwww.scribd.com%2fdocument%2f821070159%2fSwachha-Vidyalaya-Swachha-Bharat/RK=2/RS=GAEUPnoFDZ745R_KXNdMGDtxa2c-