



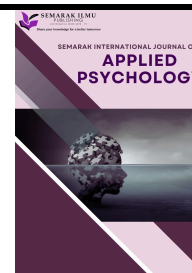
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Knowledge Creation Influences the Awareness Attribute of Sustainability Campus Management

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ABSTRACT

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The abstract explores the relationship between knowledge creation and its impact on the awareness attribute within the context of sustainability campus management. It delves into how knowledge creation shapes and influences the level of awareness associated with sustainable practices in campus management. The concept of sustainability campus management has become increasingly important in today's organizations and institutions. Effective knowledge management is crucial for the success and sustainability of campus management. The creation of knowledge is essential for developing a culture of knowledge awareness. When individuals within an organization or institution know the importance of knowledge, they are more likely to seek out and share information actively. It can lead to a continuous knowledge creation and sharing cycle, which can benefit the entire organization. The study aims to uncover how the generation and dissemination of knowledge contribute to fostering a heightened consciousness of sustainability objectives among stakeholders. Furthermore, knowledge creation is significant for promoting sustainability in campus management. By creating and sharing knowledge about sustainable practices, institutions can reduce their environmental impact and promote a more sustainable future. The analytical study and article content analysis are used to evaluate. Content analysis is used to analyze the findings and reveal the significance of the knowledge creation influences on the knowledge awareness attribute. By examining the interconnectedness of knowledge creation and awareness within the campus management framework, this research seeks to provide insights that can inform strategies for enhancing sustainable practices and promoting a culture of environmental responsibility within academic institutions.

1. Introduction

In today's organizations and institutions, the concept of knowledge management has become increasingly important Nonaka *et al.*, [1]. Effective knowledge management is crucial for the success and sustainability of campus management. Alavi *et al.*, [2] One of the key factors that contribute to

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knowledge management is knowledge creation. The creation of knowledge is essential for developing a culture of knowledge awareness, which involves actively seeking out and sharing information. When individuals within an organization or institution are aware of the importance of knowledge, they are more likely to contribute to the continuous cycle of knowledge creation and sharing [3]. Chaurasia [4] this can benefit the entire organization, as it promotes a culture of learning and collaboration. Moreover, knowledge creation is particularly important for promoting sustainability in campus management. By creating and sharing knowledge about sustainable practices, institutions can reduce their environmental impact and promote a more sustainable future [4]. This can also lead to cost savings and increased efficiency. For instance, institutions can implement energy-efficient measures, such as using renewable energy sources or improving building insulation, based on the knowledge created and shared within the organization.

Overall, knowledge creation plays a critical role in knowledge management and sustainability in campus management. By promoting knowledge creation and sharing, institutions can foster a culture of knowledge awareness and promote sustainable practices for the benefit of all stakeholders [4]. This requires understanding and integrating knowledge creation strategies into the organizational culture. This research aims to delve into the theoretical and practical aspects of this integration, exploring the dynamic relationship between knowledge creation strategies and the development of knowledge awareness attributes in the context of sustainability. Sanchez [5] through an in-depth literature review, this study seeks to contribute to the evolving discourse on effective knowledge utilization for sustainable campus management. In the realm of higher education, the integration of knowledge creation and awareness is pivotal for fostering sustainability in campus management. The dynamic landscape of contemporary academia necessitates a comprehensive understanding of knowledge management strategies and their implications for sustainable practices [5].

This paper explores key contributions in this domain, drawing insights from seminal works by renowned scholars, thereby laying the groundwork for an academically rigorous exploration of the interplay between knowledge creation and sustainability in campus management. The primary objective of this study is to critically examine the intersection of knowledge creation and sustainability within the context of campus management. Specifically, the research aims to identify the key factors influencing knowledge creation, explore their impact on sustainable practices, and propose strategies that can enhance knowledge awareness for promoting sustainability in higher education institutions. In the pursuit of advancing sustainable campus management, the symbiotic relationship between knowledge creation and heightened awareness stands as a linchpin. Acknowledging the foundational works of Nonaka and Takeuchi in "The Knowledge-Creating Company" [1] and Alavi and Leidner's [2] exploration of "Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues" (2001), this study delves into how the process of knowledge creation significantly influences the awareness attribute of sustainability within university campuses.

Nonaka and Takeuchi [1] laid the groundwork for understanding knowledge creation within organizational contexts, emphasizing the dynamic nature of knowledge and its transformative potential. Building upon this, Alavi and Leidner [2] contributed conceptual foundations and identified research issues in the realm of knowledge management, providing a theoretical framework that resonates with the organizational aspects crucial for sustainable practices. Knowledge creation plays a crucial role in influencing sustainability practices within higher education institutions. Studies like Santos *et al.*, [6] and Fawehinmi *et al.*, [7] explore how social responsibility practices affect service quality and student satisfaction. These studies reveal how knowledge creation influences academic behavior, environmental knowledge, and campus management practices. Understanding these

dynamics can help improve sustainability education and practices in higher education, ultimately benefiting campus management.

1.1 Literature Review

Nonaka and Takeuchi's groundbreaking work [1] laid the groundwork for understanding knowledge creation as a dynamic process within organizations. Alavi and Leidner's conceptual foundations [2] further enriched the discourse by highlighting the importance of knowledge management systems. However, the literature review identifies a gap in connecting these foundational principles to the contemporary imperative of sustainability awareness in campus management. Recent contributions, such as Ordieres-Meré *et al.*, [8] exploration of digitalization for sustainability and Wamsler's [9] emphasis on education for sustainability, provide insights into evolving trends. Furthermore, Al-Omouh *et al.*, [10] investigation into the impact of social capital and collaborative knowledge creation during the COVID-19 crisis presents a timely perspective on the challenges and opportunities in the pursuit of sustainability.

In the field of knowledge management, sustainability, and higher education, there are certain gaps in the literature. To provide a clearer understanding of these gaps, I will summarize each in descriptive measure—integration of Digitalization and Sustainability Ordieres-Meré *et al.*, [8]. While Ordieres-Meré *et al.*, [8] discuss the opportunities for sustainability through digitalization, there is a need to understand the specific mechanisms and strategies for integrating digitalization into sustainability practices on university campuses. This gap highlights the need for further research to explore practical applications, challenges, and the overall impact of digitalization on fostering sustainability in higher education. Furthermore, Al-Omouh *et al.*, [10] investigation into the impact of social capital and collaborative knowledge creation on e-business proactiveness during the COVID-19 crisis. However, there is a gap in understanding the broader implications of knowledge management in responding to crises, including its role in organizational resilience, adaptability, and recovery beyond the specific context of the COVID-19 pandemic. This gap calls for further research to explore the role of knowledge management in responding to crises more broadly.

Green Human Resource Management in Higher Education Anwar *et al.*, [11] investigate Green Human Resource Management and its impact on organizational citizenship behavior towards the environment in a university setting. However, this gap highlights the need for further exploration of the broader spectrum of green practices and initiatives in higher education institutions. Future research could explore additional aspects such as curriculum development, campus infrastructure, and institutional policies contributing to environmental sustainability. Organisational Climate and Knowledge Sharing in Higher Education Al-Kurdi *et al.*, [12] focus on the role of organizational climate in managing knowledge sharing among academics in higher education. However, a potential gap lies in the exploration of specific factors within the organizational climate that influence knowledge-sharing behaviors, and how these factors contribute to or hinder effective knowledge creation and dissemination within academic institutions. This gap highlights the need for further research to explore the factors that influence knowledge-sharing behaviors in academic institutions. Uslu *et al.*, [13] for knowledge management strategies for higher education, there might be a gap in understanding the practical implementation challenges and success factors associated with these strategies. This gap calls for further research to explore case studies, best practices, and lessons learned from the application of knowledge management strategies in diverse higher education settings.

Higher Education's Contribution to Sustainable Development Goals Maia and McCowan, [14] address higher education and sustainable development goals. However, a potential gap may exist in

exploring specific initiatives, programs, and policies implemented by universities to actively contribute to achieving sustainable development goals. Further research could provide a detailed examination of successful practices and identify areas where universities can enhance their impact on sustainable development. Education 4.0 in Higher Education Miranda *et. al.*, [15] discuss the core components of Education 4.0 in higher education, particularly in engineering education. By exploring these areas, researchers can provide insights that facilitate the development of effective strategies and policies for creating sustainable and knowledge-centric university campuses. Knowledge creation, as explored in various studies such as Santos *et. al.* [6], Fawehinmi *et al.*, [7], and Žalėnienė and Pereira [16] significantly influences the awareness attribute of sustainability campus management, underscoring its pivotal role in fostering environmentally conscious behaviors and practices within higher education institutions Giwa *et. al.*, [17]. Drawing insights from a range of studies such as those by Caniglia *et al.*, [18], Durst and Zieba [19], Shahzad *et. al.*, [20], Debrah *et. al.*, [21], Leal Filho *et al.*, [22], Dzhengiz and Niesten [23], and Abbas [24], it becomes evident that knowledge creation plays a crucial role in shaping the awareness attribute of sustainability campus management. These studies collectively highlight how the creation and dissemination of knowledge contribute to fostering environmentally conscious behaviors and practices within higher education institutions, ultimately promoting sustainability initiatives and addressing pressing environmental challenges.

2. Methodology

This study follows a systematic literature review methodology to explore the current state of knowledge creation and sustainability in campus management. Relevant articles and books from the identified taxonomy are critically analyzed to extract key themes, methodologies, and empirical findings. The analysis is organized chronologically, allowing for a comprehensive exploration of the evolution of thought in the field. The selected articles are analyzed to identify patterns, trends, and gaps in the existing knowledge, providing a comprehensive understanding of the research objective. The article ranges between years 1995 to 2021 trends.

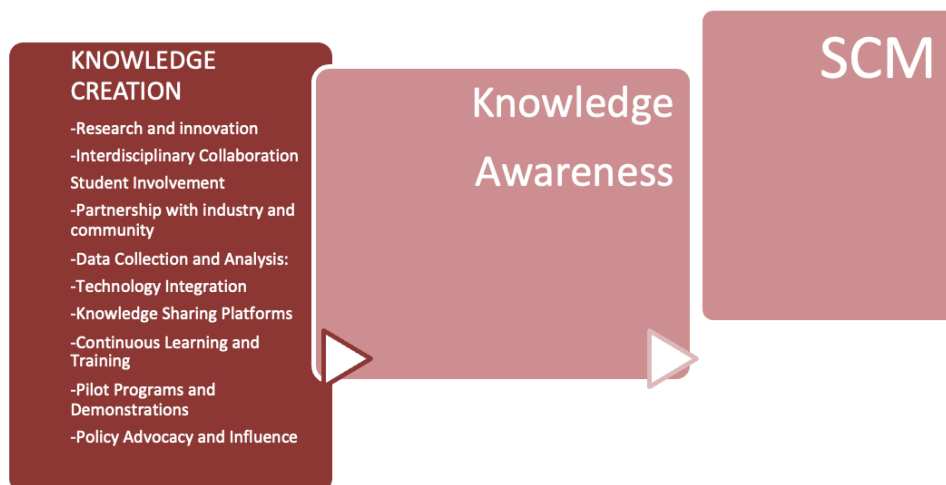


Fig. 1. Knowledge creation for sustainability campus management

The above figure is an infographic related to Knowledge creation that will contribute to the awareness of sustainability campus management (SCM). Through the deliberate and proactive

promotion of knowledge creation within the academic sphere, campus management assumes a pivotal role in catalyzing the continuous evolution and effective implementation of sustainable practices of SCM. Integrating technology into research frameworks can improve data collection processes, leading to more efficient analysis and synthesis of knowledge. Continuous learning and training programs can help students actively participate in research, fostering a culture of lifelong learning within academic communities. Collaborations with industry and community stakeholders can facilitate the real-world applications of research findings, benefiting both parties and advancing societal progress. Knowledge-sharing platforms can help disseminate research outcomes, promoting transparency and broader engagement with academic insights. Pilot programs and demonstrations can offer opportunities to test the feasibility and effectiveness of innovative solutions, paving the way for scalable implementation and widespread impact. Policy advocacy and influence can leverage research findings to shape decision-making processes, driving positive change at the local, national, and global levels.

2.1 Content Analysis

Table 1
 Findings on knowledge creation

Year	Authors / Title article/book	Key Findings and Relevance to Knowledge Creation and Campus Sustainability
1995	Nonaka, Ikujiro, and Hirotaka Takeuchi [1]/ The knowledge creating	This foundational work explores the dynamics of knowledge creation and its potential role in shaping sustainable campus management
2001	Alavi, Maryam, and Dorothy E. Leidner [2]/ Knowledge management and knowledge management systems: Conceptual foundations and research issues	The conceptual foundations discussed may provide insights into managing knowledge for sustainable campus practices
2020	Ordieres-Meré, Joaquín, Tomas Prieto Remon, and Jesús Rubio. [8]/ Digitalization: An opportunity for contributing to sustainability from knowledge creation." Sustainability 12, no. 4	Highlights digitalization as a tool for sustainable practices, connecting technology and knowledge creation for campus sustainability
2020	Wamsler, Christine [9]/ Education for sustainability: Fostering a more conscious society and transformation towards sustainability	Emphasizes the role of education in fostering a conscious society and transformation towards sustainability on campus.
2020	Al-Omoush, Khaled Saleh, Virginia Simón-Moya, and Javier Sendra-García [10] / The impact of social capital and collaborative knowledge creation on e-business proactiveness and organizational agility in	Addresses the impact of collaborative knowledge creation on organizational agility during crises, such as COVID-19

	responding to the COVID-19 crisis	
2020	Anwar, Nosheen, Nik Hasnaa Nik Mahmood, Mohd Yusoff Yusliza, T. Ramayah, Juhari Noor Faezah, and Waqas Khalid [11]/ Green Human Resource Management for organizational citizenship behaviour towards the environment and environmental performance on a university campus." Journal of Cleaner Production 256	Investigates how Green HRM influences environmental performance, applicable to sustainability practices on university campuses
2020	Al-Kurdi, Osama F., Ramzi El-Haddadeh, and Tillal Eldabi [12]/ The role of organizational climate in managing knowledge sharing among academics in higher education." International Journal of Information Management 50	Discusses the organizational climate's role in facilitating knowledge sharing, relevant for academic knowledge management.
2021	Uslu, Banu Çalış, Buket Doğan, Kazım Yıldız, Anil Bas, Önder Demir, and Eyüp Emre Ülkü [13]/ Knowledge Management Strategies for Higher Education	Offers insights into knowledge management strategies that can be applied to enhance sustainability in higher education settings
2021	Maia, and Tristan McCowan [14]/ Higher education and the sustainable development goals.	Examines the intersection of higher education and sustainable development goals, guiding knowledge creation for campus sustainability
2021	Miranda, Jhonattan, Christelle Navarrete, Julieta Noguez, José-Martin Molina-Espinosa, María-Soledad Ramírez-Montoya, Sergio A. Navarro-Tuch, Martín-Rogelio Bustamante-Bello, José-Bernardo Rosas-Fernández, and Arturo Molina [15]/ The core components of education 4.0 in higher education: Three case studies in engineering education. Computers & Electrical Engineering 93	Presents case studies on education 4.0, offering potential technological approaches for knowledge creation and sustainability in education

2.2 Gap Analysis

The existing research on knowledge creation and management has primarily focused on the theoretical aspects of these practices. However, there is a significant gap in the literature when it comes to exploring how these practices can directly impact sustainability awareness in campus

settings. To address this gap, this research seeks to delve deeper into the practical implications of knowledge creation by contextualizing it within the framework of sustainable campus management. By doing so, it aims to identify strategies that can be employed by organizations to better promote sustainability and raise awareness among stakeholders.

2.3 Trending Themes

In recent years, there has been a growing trend towards leveraging technology and education to enhance sustainability, as reflected in the works of Ordieres-Meré *et al.*, [8] and Wamsler [9]. In particular, Ordieres-Meré *et al.*, [8] exploration of digitalization examines how digital technologies can be used to promote sustainable development. Meanwhile, Wamsler [9] argues that education for sustainability is crucial in addressing environmental challenges and fostering sustainable practices. Furthermore, the COVID-19 pandemic has highlighted the need for adaptable and collaborative approaches to knowledge creation for sustainability. Studies by Al-Omoush *et al.*, [10] and Al-Kurdi *et al.*, [12] demonstrate the importance of collaborative knowledge creation in response to external crises. Al-Omoush *et al.*, [10] emphasize the need for interdisciplinary and cross-sector collaboration to tackle complex challenges, while Al-Kurdi *et al.*, [12] highlight the role of social media in facilitating collaboration and knowledge sharing during the pandemic.

2.4 Future Vision

As we move forward, it is becoming increasingly evident that creating a sustainable future for campus management necessitates a comprehensive integration of knowledge-creation principles. Recent studies, such as Anwar *et al.*, [11] exploration of Green Human Resource Management and Uslu *et al.*, [13] research on knowledge management strategies for higher education, provide a glimpse into the potential future trajectories. The vision is one where universities embrace sustainable practices by strategically creating and disseminating knowledge, fostering a conscious society committed to environmental well-being. By taking a holistic approach, it is possible to realize a sustainable future for campus management that balances economic, social, and environmental considerations. Overall, these works suggest that sustainable development requires not only technological and educational innovations but also adaptable and collaborative approaches to knowledge creation.

3. Results

The study aims to provide a detailed understanding of the impact of knowledge-creation processes on sustainability awareness in campus management. The research will take a holistic approach by synthesizing the perspectives on knowledge dynamics [1]. Meanwhile Alavic and Leidner's [2] mention conceptual foundations. The research will focus on identifying the factors that influence knowledge-creation processes and how they impact sustainability awareness. It will also examine the role of organizational culture, leadership, and communication in promoting sustainable practices in campus management. The research findings are expected to provide valuable insights into the strategic frameworks that can be implemented to enhance knowledge awareness and improve sustainable practices. The research may also identify the gaps in the current approaches to sustainability in campus management and highlight the potential challenges that need to be addressed to promote sustainable practices effectively. Overall, this research will contribute to the existing literature on sustainability by providing a detailed understanding of the linkages between

knowledge-creation processes, sustainability awareness, and strategic frameworks for sustainable practices in campus management. The analysis of various articles and books of the relationship between knowledge creation and the awareness attribute of sustainability campus management reveals consistent findings across multiple studies. Notably, Nonaka and Takeuchi [1] emphasize the dynamic process of knowledge creation within organizations, positing that the creation of explicit and tacit knowledge contributes significantly to organizational learning. Alavi and Leidner [2] extend this idea by discussing the conceptual foundations of knowledge management systems, highlighting their role in fostering knowledge creation and dissemination.

Furthermore, recent research by Ordieres-Meré *et al.*, [8] explores the impact of digitalization on sustainability, suggesting that digital tools and platforms can enhance knowledge creation and, consequently, contribute to heightened awareness of sustainability practices on campuses. The study by Wamsler [9] delves into education for sustainability, emphasizing the role of knowledge dissemination in fostering a more conscious society. Al-Omoush *et al.*, [10] and Anwar *et al.*, [11] contribute insights by linking social capital, collaborative knowledge creation, and green human resource management to organizational awareness and proactiveness. Overall, the synthesis of these studies suggests a positive correlation between knowledge-creation processes and the awareness attribute of sustainability campus management.

4. Conclusions

In conclusion, the reviewed literature collectively supports the notion that knowledge creation plays a pivotal role in influencing the awareness attribute of sustainability campus management. The foundational work of Nonaka and Takeuchi [1] underscores the importance of knowledge creation for organizational learning, which extends to the campus context. Alavi and Leidner [2] contribute by establishing the conceptual foundations of knowledge management systems, emphasizing their role in facilitating knowledge creation and dissemination within organizational structures. Recent studies, such as those by Ordieres-Meré *et al.*, [8], Wamsler [9], Al-Omoush, *et al.*, [10], and Anwar *et al.*, [11], provide contemporary insights into the intersection of knowledge creation and sustainability awareness. The findings suggest that advancements in digitalization, educational strategies, social capital, and green human resource management contribute synergistically to the cultivation of awareness in sustainability campus management. As institutions aim to enhance their sustainability efforts, recognizing the intrinsic link between knowledge creation and awareness becomes imperative. This synthesis encourages future research and practical interventions that prioritize and strategically leverage knowledge-creation processes to foster a heightened awareness of sustainability practices within the academic community. This awareness, in turn, can contribute to the overall success and effectiveness of sustainability initiatives on university campuses.

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