
FACTORS INFLUENCING KNOWLEDGE AND UNDERSTANDING OF THE SUSTAINABLE DEVELOPMENT GOALS (SDGS) AMONG UNIVERSITY STAFF AND STUDENTS: A CASE STUDY OF SUAN SUNANDHA RAJABHAT UNIVERSITY

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Abstract

This research aimed (1) to examine the level of knowledge and understanding of the Sustainable Development Goals (SDGs) and (2) to analyze the factors influencing such knowledge and understanding among staff and students of Suan Sunandha Rajabhat University. The examined factors included personal background characteristics, learning experiences, attitudes and motivation, and organizational environment, with the purpose of proposing guidelines for integrating the SDGs into the university's educational management and activities. A quantitative research approach was employed. The sample consisted of 725 participants, including 331 staff members and 394 students, determined using Yamane's (1973) sample size formula. The research instrument was a questionnaire that had been validated for content validity and demonstrated a high level of reliability. Data were analyzed using descriptive statistics and multiple regression analysis. The findings revealed that the overall level of knowledge and understanding of the SDGs among the participants was low. Factors that significantly influenced knowledge and understanding at the .01 level included awareness, attitudes and motivation, communication channels through academic courses and social media, and participation in academic service activities. All variables together explained 34.9% of the variance in knowledge and understanding of the SDGs. The results highlight the crucial role of universities in driving sustainable development at both institutional and societal levels.

Keywords: Sustainable Development Goals (SDGs), knowledge and understanding, influencing factors, staff and students, Suan Sunandha Rajabhat University

Introduction

The Sustainable Development Goals (SDGs) were adopted by all United Nations (UN) member states in 2015 as a global framework for balanced development across economic, social, and environmental dimensions. Under the 2030 Agenda for Sustainable Development, 193 countries committed to achieving 17 goals, 169 targets, and 248 indicators by 2030, guided by the principle of "leaving no one behind" (United Nations, 2015). The SDGs are commonly organized into five interconnected dimensions—People, Planet, Prosperity, Peace, and Partnership—which emphasize integrated and inclusive development (Office of the National Economic and Social Development Council [NESDC], 2025). Achieving these goals requires collaboration across all sectors, including higher education institutions, which play a vital role as centers of learning, research, and human resource development.

Suan Sunandha Rajabhat University has demonstrated its commitment to the SDGs by aligning its vision, mission, and institutional policies with the United Nations' sustainable development principles (Suan Sunandha Rajabhat University, 2022). However, practical implementation has revealed disparities in the level of knowledge and understanding of the SDGs among staff and students, influenced by factors such as information sources, learning experiences, and participation in SDG-related activities. Moreover, the absence of systematic and effective approaches to promoting SDG awareness has limited the integration of SDG principles into academic and institutional practices. Therefore, this study aims to examine the factors influencing knowledge and understanding of the SDGs among staff and students at Suan Sunandha Rajabhat University, with the goal of developing practical guidelines to support the effective integration of the SDGs into teaching, management, and community engagement, thereby strengthening the university's role in advancing sustainable development.

Research Objectives

1. To examine the level of knowledge and understanding of the SDGs among staff and students.
2. To analyze the factors influencing knowledge and understanding of the SDGs.

Hypothesis of the Research

The level of knowledge and understanding of the SDGs among staff and students of Suan Sunandha Rajabhat University is influenced by factors related to awareness and participation in SDG-driven initiatives.

Scope of the Research

1. Population Scope

The population of this study comprised two groups. The first group consisted of academic staff and administrative personnel from all faculties and departments of Suan Sunandha Rajabhat University, totaling 1,935 individuals based on data from the 2025 fiscal year. The second group included undergraduate and graduate students enrolled at Suan Sunandha Rajabhat University during the 2024 academic year, totaling 28,389 students. The sample size for each group was determined using Taro Yamane's formula. Accordingly, the sample consisted of 331 staff members and 394 students.

2. Variable Scope

2.1 The dependent variable of this study was the level of knowledge and understanding of the Sustainable Development Goals (SDGs) among staff and students at Suan Sunandha Rajabhat University.

2.2 The independent variables consisted of factors hypothesized to influence knowledge and understanding of the SDGs, including awareness of the SDGs, attitudes and motivation toward the SDGs, SDG-related experiences, communication channels related to the SDGs, organizational environment supporting the SDGs, and gender.

Research Methodology

This study employed a quantitative research design to examine the level of knowledge and understanding of the SDGs and to analyze influencing factors among staff and students of Suan Sunandha Rajabhat University. The population consisted of staff and students from both the main and regional campuses. A stratified random sampling method based on participant

status was applied, yielding a sample size of 725 participants (331 staff members and 394 students) at a 95% confidence level using Yamane's formula.

The research instrument was a questionnaire developed from relevant theories, concepts, and previous studies on sustainable development and SDGs. The questionnaire comprised four sections: demographic information; knowledge and understanding of the SDGs; influencing factors (including awareness, attitudes and motivation, learning experiences, communication channels, and participation in SDG-related activities); and additional comments. Items related to knowledge and influencing factors were measured using a five-point Likert scale.

Content validity was evaluated by three experts using the Index of Item-Objective Congruence (IOC), with results indicating acceptable validity. The instrument was pilot tested with a group like the target sample, and reliability analysis using Cronbach's alpha coefficient indicated a high level of reliability.

Data collection was conducted during the 2025 academic year using both paper-based and online questionnaires. Participants were informed of the research objectives and assured of confidentiality, and data were used solely for academic purposes. Data analysis involved descriptive statistics (frequency, percentage, mean, and standard deviation) and multiple regression analysis, with a significance level set at .01.

Research Results

The research results are divided into two parts, as follows:

1. Level of Knowledge and Understanding of the Sustainable Development Goals (SDGs) among Staff and Students

1.1 The analysis was based on data collected from a sample of 725 participants using a knowledge assessment test on the Sustainable Development Goals (SDGs). The instrument comprised true-false items, including both positively and negatively phrased statements, to evaluate respondents' conceptual understanding of the SDGs. Correct responses were awarded one point, whereas incorrect or uncertain responses received zero points. The total scores were subsequently categorized into three levels—high, moderate, and low—according to Bloom's (1971) classification criteria. The overall distribution of participants' levels of knowledge and understanding of the SDGs is presented in Table 1.

Table 1: Overall Levels of Knowledge and Understanding of the Sustainable Development Goals (SDGs)

Level of Knowledge of the Sustainable Development Goals (SDGs)	Total Score (Points)	Frequency (Number of Participants)	Percentage (%)
High level	12 – 15	178	24.60
Moderate level	9 – 11	103	14.20
Low level	0 – 8	444	61.20
Total		725	100

The results of the analysis indicate that, overall, staff and students demonstrated a low level of knowledge and understanding of the Sustainable Development Goals (SDGs), as determined by the total scores obtained from the knowledge test and their comparison with the established classification criteria. These findings suggest that the level of awareness of the

SDGs among the participants remains insufficient and requires further enhancement to effectively support the advancement of sustainable development within the context of Suan Sunandha Rajabhat University.

2. Factors Influencing Knowledge and Understanding of the Sustainable Development Goals (SDGs)

2.1 The analysis of relationships among variables revealed that learning-related factors concerning the Sustainable Development Goals (SDGs) exhibited a moderate positive correlation with the level of knowledge and understanding ($r = .359$, $p < .01$) and a strong positive correlation with attitudes and motivation ($r = .709$, $p < .01$). These results indicate that appropriate learning experiences significantly contribute to the development of positive attitudes and a deeper understanding of the SDGs.

Furthermore, the results of the multiple regression analysis showed that all independent variables collectively explained 34.9% of the variance in knowledge and understanding of the SDGs ($R^2 = .349$), which represents a moderate explanatory power. Factors that demonstrated a statistically significant positive influence included learning-related factors concerning the SDGs, attitudes and motivation, experiences of participation in related activities, communication channels through academic courses and social media, as well as the gender of the respondents. The detailed results of the regression analysis are presented in Table 2.

Table 2: Results of Multiple Regression Analysis Examining Factors Influencing Knowledge and Understanding of the Sustainable Development Goals (SDGs)

Factors	B	Std. Error	β	t	Sig.
Awareness of the Sustainable Development Goals (SDGs)	1.42	0.383	0.378	3.711	< .001**
Attitudes and Motivation toward the Sustainable Development Goals (SDGs)	0.952	0.371	0.215	2.563	.011*
Experience of Receiving Information or Participating in Activities Related to the Sustainable Development Goals (SDGs)	0.789	0.241	0.17	3.281	.001**
Communication Channels through Academic Courses Related to the Sustainable Development Goals (SDGs)	1.455	0.435	0.155	3.344	.001**
Gender	1.379	0.419	0.145	3.295	.001**
Organizational Environment Related to the Sustainable Development Goals (SDGs)	-0.974	0.393	-0.232	-2.479	.014*

$R = .591$, $R^2 = .349$, Adjusted $R^2 = .308$, $F = 8.621$, $p < .001$

* $p < .05$ indicates statistical significance at the .05 level.

** $p < .01$ indicates statistical significance at the .01 level.

Conclusion and Discussion

The findings indicate that enhancing knowledge and understanding of the Sustainable Development Goals (SDGs) in higher education institutions requires a systematic management approach that promotes stakeholder participation across policy, teaching and learning, research, and academic services. This approach aligns with the participatory development management framework, which emphasizes reducing social inequality and strengthening community capacity based on the Sufficiency Economy Philosophy (Phusit Phukamchanoad, 2018). Encouraging the active involvement of staff and students in decision-making and SDG-related initiatives can reduce awareness gaps and foster a shared sense of organizational ownership.

Moreover, the results are consistent with curriculum-based learning management approaches that emphasize the integration of knowledge, instructional practices, and assessment. Previous studies have shown that enhancing faculty members' understanding of curriculum-based learning management improves teaching quality and student engagement (Benjama Saiwijit & Somphoom Sawaengkun, 2025). In addition, research by Luedech Girdwichai, Suwaree Yordchim, Phusit Phukamchanoad (2015) suggests that learning experiences grounded in the Sufficiency Economy Philosophy strengthen students' intrinsic motivation and awareness of sustainable development. Therefore, integrating SDG-related content into curricula, supported by institutional policies and continuous capacity development, is essential for advancing sustainable development in higher education in a concrete and sustainable manner.

Recommendations

Universities should systematically integrate the SDGs into curricula and extracurricular activities, develop proactive communication channels through digital media, and promote continuous training and participatory activities for staff and students. These efforts will enhance knowledge, understanding, and awareness of sustainable development in alignment with participatory and sustainable development principles.

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