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UNDERSTANDING THE ROLE OF SDG AWARENESS IN SHAPING SUSTAINABILITY ATTITUDES

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ABSTRACT

Unlocking the path to sustainable futures requires an understanding of the interaction between awareness and attitudes towards Sustainable Development. To better understand how students perceive sustainability, we looked at the ideas of 267 Kashmir university students in this study. Their attitudes are found to be strong (M=3.56, SD=0.29) and their levels of awareness are excellent (M=3.41, SD=0.37), with what our findings portray as a positive picture. In addition, this correlation is established between attitudes and awareness as ($r=0.58$, $p<0.01$), thus clarifying how the two are interconnected. Interestingly, these feelings are gender-neutral. These findings throw light on how education changes lives and prepares a generation for supporting the SDGs. Results also reveal the pressing need to craft pro-sustainability attitudes through education, an increased role of sustainability education within university curricula for the creation of future leaders in sustainable development who are knowledgeable and involved. We plant some seeds of a more equitable and environmentally aware future by adding sustainability into academic discourse.

Keywords: Awareness, Attitudes, Sustainable Development

1. INTRODUCTION

A global agenda was agreed upon at the United Nations Summit on Sustainable Development in New York during September 2015 until 2030. The agenda defined the set goals to be achieved within the following fifteen years. SDGs are generally known as the set of goals that form a common framework for the prosperity and peace of the present and future generation. 193 countries agreed to this 2030 agenda pledged to "leave no one behind" and pledged to implement 17 SDGs. Such goals comprise 230 indicators and 169 targets aimed for better world conditions. As the goals are integrated, progress in one area will probably speed up progress in other areas. Besides the fight against climate change and protection of forests, oceans, and other lifelines, policies must answer battles against poverty and all forms of deprivation by improving health and education, distributing equality, and stimulating economic growth. Though how it would be implemented is a huge challenge, SDGs is the best endeavor toward global sustainability. All people must continue to participate in order to achieve these goals (Afroz, et al. 2020).

People can participate and contribute their part only when have sufficient awareness besides favourable attitudes toward sustainable development. Determining the extent to which attitudes and knowledge influence actions pertaining to sustainable development is crucial because they can be the predictors of behaviour in the long run. Individuals can only contribute to sustainable development when they are sufficiently aware of it and have a favourable outlook on it. For future global advancement in a number of sectors, long-term sustainable development, has become imperative. In order to create a sustainable future and make wise decisions, the current generation needs to acquire Sustainable development-related capacities, such as knowledge, mindset, and skills. For sustainable development to occur, there

should be changes in knowledge, attitudes, and behaviors. Students are important recipients of primary education and agents of change in sustainable development. Education has shown its contribution toward the development of a fair and just society throughout the last two decades. SDG 4 has set its focus on the development of knowledge, attitudes, and skills; therefore, it emphasizes the importance of ESD as a tool for other means of achievement (Chen, et al. 2022).

2. THEORY OF PLANNED BEHAVIOUR

The Theory of planned behaviour has demonstrated usefulness in predicting various behavioural types in individuals. According to this theory, people's behaviour is determined by their subjective norms, control, and perceived attitudes. Furthermore, the TPB has been applied to specific behaviours like the propensity to recycle and manage waste as well as general environmentally friendly behaviours. However, some writers contend that while people's attitudes and perceptions matter, there are other variables that can also account for why people behave the way they do and those variables are knowledge and awareness of environmental issues (Wendlandt, et al. 2022). As per this theory, attitudes are very important in determining the behaviour. According to (Allport, 1935), "an attitude is a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related." Thus, an attitude is defined as a mental state that prompts a response. This kind of response may be negative or positive. An attitude can be termed as a position one takes regarding a certain issue that guides one's own actions or reactions.

In addition, one would also say that actions are considered as expressions of attitudes towards various things. In this instance, it is thought that adopting a positive attitude toward sustainable development will consequently result in actions that support environmental, social, and economic sustainability. Since it is unlikely that students will adopt sustainable behaviours if they are ignorant of environmental issues, knowledge of sustainable development and the environment is an important part of the curriculum. Thus, it is reasonable to believe that students' attitudes and modes of thinking about this matter are correlated with their degree of sustainable development knowledge (Wendlandt, et al. 2022).

There is congruence between knowledge, attitudes, and behavior. Thus, higher learning institutions should equip the students with the needed knowledge and skills on sustainable development in terms of its social, economic, and environmental dimensions. Thus, students are more likely later to take pro-sustainable development attitudes and behaviors if sustainable development issues are made more widely known to them through various disciplines and their perspectives (Wendlandt, et al. 2022).

3. LITERATURE REVIEW

The Millennium Development Goals were replaced by the Sustainable Development Goals last year, and countries across the world are making a lot of efforts into implementing these new policies. Universally, universities have also started offering courses in sustainable development as their role in this process is quite important. However, sustainability development is still not taught in the majority of Indian universities' curricula. In order to give recommendations to authorities, Mir, and Sher, (2018) conducted a study to evaluate students' knowledge, attitudes, and behaviours regarding sustainability. A survey conducted using a random sample of 437 students from three Indian universities found that although the students' attitudes toward sustainability issues are positive, they do not possess the necessary knowledge or behaviours.

Awareness of the SDGs depends on their successful implementation. Yet, nothing is known about how public perceptions of the SDGs are actually formed. Guan, et al. (2019) addressed this question in China. Using data from an online survey with 4128 valid respondents and Chaiken's heuristic–systematic model we measured the determinants for public support of the SDGs and the formation of positive attitudes. Results show that in China, value predispositions (such as anthropocentric worldviews and altruistic values) and SDG-related knowledge are the main factors influencing public support, along with demographic characteristics like gender, age, and education. The adoption of the SDGs is typically seen by the Chinese people as a development strategy rather than an environmental one.

This is very important to establish a baseline of the knowledge, attitude and behaviour (KAB) of present students in order to understand the disparity in sustainable development action goals. Using an online tool, Chen et al. (2022) obtained information from 887 elementary and 1661 secondary students across the country to evaluate the growth of a sustainable development knowledge base among Chinese students. Results of the findings show that for Chinese students, the dimension of the environment recorded the highest levels of KAB towards sustainable development. On

average, there is no significant difference in scores between the KAB scores of male and female primary and secondary pupils. Furthermore, there existed a positive association between activities, attitudes, and knowledge.

Dlamini et al. (2023) analyzed survey data to determine public attitudes and understanding on the part of a sample adult South Africans concerning the achievement of SDGs. According to the authors, more women than men replied that they had been informed about SDGs, while more youth respondents stated knowing about them than older ones. Moreover, the masters degree holders said that education was provided them on SDGs, whereas people with only high school diploma said they never received education about SDGs. It is also interesting to note half of the PhD holders said they had never heard of the SDGs, which indicates that knowledge of the goals does not correspondingly increase with educational attainment

Wee et al., (2017) conducted a study to ascertain the current state of Malaysian youths' knowledge of, and attitude toward sustainable development. In 2015, an exploratory survey was conducted with 295 students from Penang's public and private higher education institutions, which showed that, although the respondents' knowledge of sustainable development concepts and issues was broad, there was no uniformity in this knowledge. Additionally, the survey revealed that participants were eager to embrace more sustainable lifestyles and had serious concerns about sustainability.

Borojević, et al. (2017) examine young people's knowledge of sustainable development, their attitudes towards its goals, and their views on its importance in the Republic of Serbia. Key findings reveal that engagements of youths are key to the realization of the sustainability, and it opens up room for creativity and innovation as well as democratic engagement. The study revealed that 15.8% of the respondents never heard anything to do with sustainable development, and almost one third of the respondent did not know Serbia's Sustainable development strategy, while 46.8% heard something was said of Serbia's sustainable development strategy but had no details thereof. The end to hunger, healthy lives, and gender equality were the most prioritized goals of the youth while marine resources conservation was at the bottom of the list together with revitalizing of the global partnership as well as promoting peaceful societies. Gender roles have immensely impacted on perceptions as well as priorities over the concept of sustainable development, and the goals thereof. It is through these that attention needs to be drawn to youth involvement in activities of sustainable development and develops imperfections of knowledge in areas where it has to be concentrated.

Al-Nuaimi et al., 2022 assesses the effects of ESD and the sustainable consciousness of Qatari university students. Sustainability Consciousness Questionnaire (SCQ), which measures knowledge, attitudes, and behavior related to sustainable development among higher education students, is adopted in this research. Over 80 percent of students in Qatari universities and other fields understand sustainability concepts, although that percentage is lower for attitudes and behaviors. More than 60% of the students credit outside forces beyond the formal system for sustainability-related knowledge, attitudes, and behaviors. This would better equip young people to confront sustainability challenges and achieve SDG goals through a much better understanding of sustainability education within HEIs.

Afroz, et al. (2020) conducted a study to determine how much knowledge University of Malaya students had about the SDGs. A survey based on the Knowledge, Attitude, and Practice (KAP) Approach was given to every student. There were 382 replies in all, and the analysis had a 95% confidence level and a ±5% margin of error. Data analysis was conducted using SPSS Statistics version 20. The respondents' high level of knowledge and favourable attitude towards the SDGs were shown using descriptive statistics. Correlation analysis is conducted on variables such as knowledge and practice, and attitude and practice using Spearman's rho coefficient correlation. An interrelation with strong positive correlation existed between attitude and practice, r =.440, n = 382, p =.00. However, a weak negative correlation was shown between knowledge and practice on SDGs with a value of r = -.264, N = 382, p =.00. Integrating sustainability into university life is necessary to encourage moral environmental conduct and cultivate sustainable mindsets among young people.

Hdeib et al. (2024, 188–190) examine the attitudes and behaviours of Applied Science University students towards the SDGs. It focusses on the factors that influence their sustainable behaviour. University life should encompass sustainability as a tool for constructing moral environmental behavior and fostering the development of sustainable attitudes among the youth. Hdeib et al. (2024, 188–190) discuss the perspective and response of the students of the Applied Science University toward the SDGs and what drives their sustainable behavior. From the findings of this survey, students showed both high knowledge and deeper care about issues concerning sustainability and voiced a concern over energy and water wastefulness and consumption. Although very knowledgeable, there existed a "commitment gap" in that fewer people engaged in past activities, although most people supported campus sustainability initiatives. It highlights the need for motivational enhancement of students participating, social norms, and group influences for sustainable behavior to be developed. More information from these observations will let the students live sustainably.

Funa et al. (2023) responded to UNESCO's urgent call to step up efforts towards sustainable development goals by

analysing the knowledge, attitudes, and behaviour (KAB) of 342 students and 107 teachers on education for sustainable development. Three KAB levels were determined by using a descriptive cross-sectional survey via Google Forms: poor, moderate, and high. Thereafter, Pearson's Chi-square was applied to examine the associations among the various levels of KAB. Results In both groups, although it was clear that the KAB associations differed, teachers and students realized that good attitudes and knowledge alone cannot lead to favorable behaviors. Motivation and involvement should thus be strengthened in order to achieve desired, long-term behavior. It should be suggested that in education for sustainable development, barriers to changing knowledge and attitudes into behavior should be identified and determinants of KAB associations be taken.

What Flottum, et al. (2022) does within this scope is examine the associations of awareness with the SDGs by focusing on Norwegian citizens' attitudes and knowledge. The study is based on 4046 responses from an open-ended question in the Norwegian Citizen Panel survey conducted in autumn 2020. This is achieved by deconstructing the association between feelings toward the SDGs and background variables, doing manual content analysis, and undertaking structural topic modelling. Many of these findings linked the SDGs with poverty, the environment, resources, future generations, and consumption. Despite the partial success of advertising campaigns, 10% of the respondents expressed a negative opinion about the SDGs, 9% a positive opinion, and 12% did not know anything about them. Importantly, variances in sentiments were noted along demographical lines, by age, gender, and political inclination. To increase interest in the SDGs at the federal and regional levels, such observations are required.

A study by Wendlandt et al. (2022) aimed to provide standardised tests of university students' sustainable development-related knowledge, attitudes, and behaviours in northwest Mexico. In summary, the northwest Mexican university students' findings included low-moderate behavioral, moderate knowledge, and attitudes for sustainability with the theory of planned behavior. The results support the earlier study where attitudes (β =.183) and knowledge (β =.296) predict behaviors for sustainable development (R^2 =.18, p <.001). It is perhaps because educational institutions have included sustainable development education in curricula and extracurricular programs as being responsible for the education of future professionals while observing the impact of public initiatives on the adoption of sustainable behaviors by students.

In order to promote sustainable development, universities are playing an increasingly significant role. Students' opinions are significant since they will be the ones making decisions in the future. Aleixo and colleagues' (2021) descriptive and exploratory online questionnaire study investigates the perceptions of sustainable development among Portuguese public higher education students. The findings indicate that most students are aware of the SDGs and recognise its importance, despite 16% of them not knowing what they are. Higher education institutions should offer more sustainability instruction, according to students. While fewer participate in official environmental initiatives, most students follow pro-sustainability practices and practise reusing, reducing, and recycling. Even after the SDGs were published five years ago, there has been only a modest influence on students' attitudes and behaviours.

Aminrad et al. (2013) probed the connection between attitude, knowledge, and awareness of a student of form four. The questionnaire was conducted with 470 students aged 16 years of Form Four from Kajang, Selangor. It was found that knowledge, attitude, and awareness were very strongly correlated. However, knowledge and environmental awareness together were considered to be significantly but loosely correlated. It was not determined that the correlation of attitude and knowledge was particularly strong. Overall, the findings of the study have established a range of factors that influence higher levels of awareness and knowledge and favorable attitudes such as families, educators, the media, personal reading, and school curricula.

The study aims to assess the level of sustainable development awareness among youth and examine their attitudes towards sustainable development. It also seeks to explore the relationship between sustainable development awareness and attitudes, determining whether greater awareness leads to more positive attitudes towards sustainability. Additionally, the study will assess how these constructs vary with respect to socio-demographic factors, specifically gender, to understand whether differences in awareness and attitudes exist between males and females.

4. METHODOLOGY

This study, adhering to its objectives, adopted a quantitative approach. It engaged 267 university students, aged between 20 and 35, from diverse educational qualifications (UG, PG, and PhD) and diverse regions of Kashmir, using Random sampling. Data was gathered both online as well as in offline mode.

5. RESEARCH INSTRUMENTS

The survey adopted a questionnaire containing two parts. The first part included getting demographic information from the respondents and the subsequent one contained an attitude towards sustainable development and sustainable development awareness. To measure sustainable development awareness, the sustainable development awareness scale by Atmaca, et al. (2019) of 36 items was used. Attitudes toward sustainable development was measured as well, using, 20 items the Attitudes toward sustainable development scale by Biasutti et al., (2017).

6. DATA ANALYSIS

A predetermined process is used to quantitatively quantify the gathered data. SPSS version 26 software was then used to analyse the data. Frequencies, averages, and standard deviation were among the descriptive statistics that were calculated. The t-test was used to find variations in socio-demographics across variables, and bivariate correlation was used to determine associations between variables. The objective of this methodical analytical methodology was to extract significant insights from the collected data.

7. RESULTS

Demographics	Groups	Frequency	%Age	Total
Age	20-25	133	48.8	267
	25-30	123	44.7	
	30-35	19	6.9	
Qualification	UG	135	49.1	267
	PG	128	46.3	
	PhD	12	4.4	
Domicile	Rural	145	52.7	267
	Urban	130	47.3	
Gender	Male	148	53.8	267
	Female	127	46.2	

The above table illustrates that among the 267 participants, the majority fall within the 20-25 age bracket, constituting 48.8 per cent, followed by those aged 25-30 at 44.7 per cent, and participants aged 30-35 at 6.9 per cent. Regarding qualification, 49.1 per cent comprise UG students, followed by 46.3 per cent of PG students and 4.4 per cent of PhD students.

In the context of residence, a higher proportion of participants hail from rural areas at 52.7 per cent, compared to 47.3 per cent of urban regions. Concerning Gender, 53.8 per cent comprise males and 46.2 per cent females. This breakdown offers a comprehensive overview of the demographic composition of the study participants.

The table provided illustrates the average and standard deviation values for both Attitude towards Sustainable Development and Sustainable Development Awareness among males and females.

	Gender	N	Mean	Std. Deviation
Attitude Towards Sustainable Development	Male	148	3.5079	.02838
	Female	127	3.5311	.02806
Sustainable Development Awareness	Male	148	2.8520	.03318
	Female	127	2.8657	.03777

According to these findings, attitudes toward and awareness of sustainable development are comparable among men and women, with a slight increase in mean values for women in both categories. Given the small standard deviations, it appears that both genders' scores are closely clustered around their means.

The table given below represents the average and standard deviation for Attitude towards Sustainable Development and Sustainable Development Awareness.

	N	M	SD
Attitude towards Sustainable development	267	3.5622	.29107
Sustainable Development Awareness	267	3.4128	.37178

Participants' attitudes toward sustainable development are generally positive, as evidenced by the mean score of 3.5622. Most participants appear to have fairly consistent attitudes, as indicated by the standard deviation of 0.29107, which shows that scores tend to cluster near the mean.
The participants' mean score for Sustainable Development Awareness is 3.4128, which is marginally lower and indicates a moderately high level of awareness. On the other hand, the larger standard deviation of 0.37178 in contrast to Attitude towards Sustainable Development suggests that participant awareness levels varied more widely.

8. CORRELATIONAL ANALYSIS

The table provided below illustrates the correlation between Attitude towards Sustainable Development and Sustainable Development Awareness.

	1	2	
Attitude towards Sustainable development	.		
Sustainable Development Awareness	.58**	.	

Please note: The correlation is deemed significant at the 0.01 level, and this is based on a two-tailed test. There is a significant positive correlation between Attitude towards Sustainable Development and Sustainable Development Awareness. ($r = .58$, $p < .01$).

The table below illustrates the average difference between males and females.

	t	Sig.	Mean differences	95% confidence interval of difference	
				Lower	Upper
Attitude towards Sustainable development	-.248	.377	-.00875	-.07818	.06068
Sustainable Development Awareness	-154	.064	.00696	-.08173	.05655

The table shows statistical comparisons of male and female attitudes toward and awareness of sustainable development on two different variables. There is no discernible difference in the attitude toward sustainable development, as indicated by the t-value of -0.248, p-value of 0.377, and mean difference of -0.00875 with a 95% confidence interval spanning from -0.07818 to 0.06068. The statistical analysis reveals that there is no significant difference in sustainable development awareness, as indicated by the t-value of -154, p-value of 0.064, and mean difference of 0.00696 with a 95% confidence interval spanning from -0.08173 to 0.05655.

9. CONCLUSION

This quantitative piece of study utilized a sound methodology in understanding the relationships between the attitudes of university students toward sustainability and their awareness of Sustainable Development among Kashmiri students. The sample had 267 students whose demographics provided a vivid picture about their educational backgrounds, age range distribution, place of residence, and gender. The attitude toward sustainable development was also reported positive by the majority of the participants since the attitude score obtained by aggregating the answers on the scale had comparatively low variability with a mean score of 3.5622 and SD = 0.29107. Accordingly, the mean score of awareness on sustainable development was 3.4128 at a relatively high level; however, there was more variability in this dimension, with SD = 0.37178. It establishes that notwithstanding the support of students towards sustainable development and their awareness about it, the variation in awareness is greater compared to attitude variation.
Indeed, a substantial positive correlation was found between awareness and attitudes, $r = .58$, $p < .01$, indicating that greater levels of awareness correlate with more favorable attitudes toward sustainable development. The relationship outlined the importance of education and knowledge in attitude development as well as how such attitudes, according to the Theory of Planned Behaviour, are critical for sustainable behavior.
No gender differences were found to be significantly different in attitudes toward sustainable development ($t = -0.248$, $p = 0.377$, mean difference = -0.00875) or in awareness of sustainable development ($t = -1.54$, $p = 0.064$, mean difference = 0.00696), according to the results of the t-test. These results support the idea that educational interventions can be implemented equally for students of all genders because they indicate that male and female students have comparable levels of awareness and attitudes regarding sustainable development.

A bright idea toward the encouragement of sustainable behaviors among the youth group is increased teaching of sustainable development in higher learning institutions since attitudes and awareness are positively correlated. Indeed, the results provide support to previous literature that points out the role of education as sustaining advancement toward sustainability. In this regard, the education sector can introduce concepts of sustainability in the curriculum and thereby equip students with the information, mindset, and capabilities needed to drive successfully toward realization of the SDG.

The outcomes of the study shows the association between attitudes and knowledge in promoting sustainable development among college students. If educational institutions want to support the global agenda for sustainability, they must prioritise sustainability education and ensure that it is engaging and available to all students. In addition to raising awareness and improving attitudes, this will lead to important actions that support the broader goals of sustainable development.

CONFLICT OF INTERESTS

None.

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