

**AWARENESS AND WILLINGNESS AMONG HIGHER EDUCATION STUDENTS
TO PARTICIPATE IN UNIVERSITY SUSTAINABILITY INITIATIVES**

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Abstract

Past decade has witnessed an increasing level of concern among key stakeholders of our society, namely, corporate sector, government agencies, and educational institutions on the development of feasible sustainability management policies and successful adoption of them through various programs and schemes. Of these three key stakeholders, educational institutes at University level plays a major role in creating socially responsible citizens. Those universities that are engaged and committed in sustainable development activities such as Environment Protection, Water Preservation, Ecological footprints, Recycling Wastes, Rural development and community development can be called as Sustainable Universities. The present study tries to identify the awareness and willingness levels among students of a University related sustainability activities. A self-administered questionnaire was administered and surveyed among 400 respondents with a mixture of under graduate and post graduate students of a private university. Implication of the study and scope for future research were discussed in the end.

Key words: *Sustainability Management, Higher Education for sustainable development, Student Environmental Awareness, University Sustainability, Willingness.*

Introduction

As per the report of a global action scientific research Higher Education for Sustainable Development" (HE4SD). The scientific research was undertaken by Dr. Andy J. E. Johnston, a sustainable development educational and practitioner United Nations agency diode the education work Forum for the potential, a UK Sustainable Development Organization (www.forumforthefuture.org). In the recent past it has increasingly become evident that capacity building has become a central theme to the quest of various sustainability initiatives. Since then Capacity building has become a core goal and crux of technical help provided by the United Nations to its member countries. Rather than being looked simply as an element of a development program, capability building has turn out to be a principal priority of all

global organization activities. Agenda 21 gives us a clear understanding about the importance and nature of capacity building, which is the solution to developing countries to explain their own developmental issues. The word sustainable development thus became famous at the dawn of Rio Earth Summit in 1992 that prioritized world environmental conservation making appropriate improvements upon the initial framework introduced in the UN conference, Stockholm in 1972, from the topic of Human Environment.

A chapter within the agenda 21 speaks about the concept of "Local Agenda 21," which provides a vision as to how the local governments can gradually develop sustainable initiatives on their own. One of the key themes that agenda 21 portrays is

local self-determination and community engagement. It calls for the local authorities to step into the dialogue with the citizens, local organizations, public and private enterprises. Active engagement of local communities seeks consultation and consensus-building within the local bodies, communities, business enterprises industrial organizations and universities. The concept of sustainability acquires significance in the university context because the role of university administrators in bringing awareness among the students and replicating this concept throughout the university, will be instrumental. Prof Dame Julia King (Vice Chancellor, Aston University, 2012) has stressed upon the need for universities in partnering with the social enterprises. She held that there is a renewed focus in the area wherein the universities have started supporting and developing the social enterprise. Social enterprises have tremendous potential in actively engaging, participating and practicing sustainable developmental initiatives (Elkington, 1997). Over the decades universities always have had a strong social mission of working extensively within and supporting their local communities. Next section briefly discusses the literature review on the sustainable development.

Literature Review

With the growing number of universities and increase in number of educational institutions proportionately in the Indian educational landscape, there is a growing need imbibe the term sustainability in the in the universities policies and practices. The present-day universities are holding on to the slogan of sustainable development, wherein they are more inclined towards adopting responsible behaviours that benefits its stake holders who are their immediate and societal counterparts (Waas et al., 2010). Universities consists of vast and diverse sub-systems which are both

independent and interdependent. Making a university a sustainable one requires series of transformations and a systematic approach (Alshuwaikhat and Abubakar, 2008) which may be top-down / bottom-up. The term sustainability is often talked at the top-management level, but the sustainable initiatives are not reaching the lower level management. To improve this awareness, it is important for higher education communities to adopt an approach that is interdisciplinary in nature (Ferreira et al., 2006). Therefore, it is important for higher educational communities to prioritize the sustainable development at all levels. According to van Weenen (2000) the major stake holders who take part in the sustainable development of higher education communities include staff, faculty, students, funding bodies, employers and community. For universities to create a sustainable environment there should be a common consensus among the major stake holders of the university (Wals and Jickling, 2002)

For CSR to diffuse into to any nation the role of students and faculty is instrumental. It is the current students who take up the job positions in various sectors hence their role can be held crucial. Making students aware of the CSR initiatives faculty role is very much essential. Emanuel and Adams (2011) in their empirical study has put forth that students are interested and willing to participate and support in sustainable initiatives. Similarly using Higher Education for Sustainable Development (HESD) approach Barth and Timm (2011) students have a positive perception about the sustainability concept and were in the agreeing terms with the positive outcomes associated with its implementations. Chinese universities follow a top-down approach wherein management decisions are not in line with the student's awareness and perceptions contradicting the statements made by Beringer and Adomßent (2008) that passions and contributions of the students are critical

assets in sustainable university projects. Write (2009) held that there are few studies which aimed at addressing the level of sustainability knowledge with in the major stake holders of the university. Geng et al. (2013) says government support, leadership and comprehensive planning were found to be key success factor for effective implementation of green university project. Sadusky (2014) studied awareness level of students on sustainability found that majority of students were not aware of university sustainability programs and participation level was also low. Thus, this can be held as gap which sites need to investigate the awareness of the major stakeholders within the university.

Methodology

The survey of self-administered questionnaire was distributed via mail to 400 students of a private university which practices sustainability initiatives in south India out of which only 331 was returned. The questionnaire consist of four sections 1) Demographic Information of students 2) Awareness of sustainability concept 3) Current green behaviour of students 4) Willingness to participate in university sustainability initiatives and 5) Willingness to pay for university sustainability initiatives. The questionnaire was designed in such a way that those who responded as 'no' for question on awareness of term sustainability were taken to the next page of questionnaire where the introduction of term sustainability was given later the current green behaviour of respondents were collected. As you can see Table. 1 the complete descriptive statistics of respondents were given. The survey was conducted between time periods of November 15th, 2014 to December 2nd 2014.

(Insert Table 1)

Analysis and Results

Fig 1 shows awareness level of sustainability concept among students. We can see only more than 60 % of students are aware of term sustainability concept. Those who are aware of term sustainability were asked about universities various sustainability initiatives as one can see **Fig 2** shows awareness level among students about university sustainability initiatives and their concern about environment. More than 80 % of them showed more concern towards environment. Majority of them were not aware about World Declaration on Sustainable Development held in Rio de Janeiro in 1992, especially Agenda 21. When asked about university sustainability practices except universities sustainability practices in social sector category such as community outreach programs (Rural Development, Self Help Group, Rural Skill Development, Self-Employment Skill, Charity, Scholarship helping for poor) that benefit the local environment and universities partnerships with government, non-governmental organizations, and industry working toward sustainability. (NABARD, State Planning Commission, Entrepreneurship Development Institute) for development of local region. Rest all other sustainability practices were well known to students.

(Insert Table 2)

Fig 1 – 1 Overall Awareness Level of Term Sustainability Concept

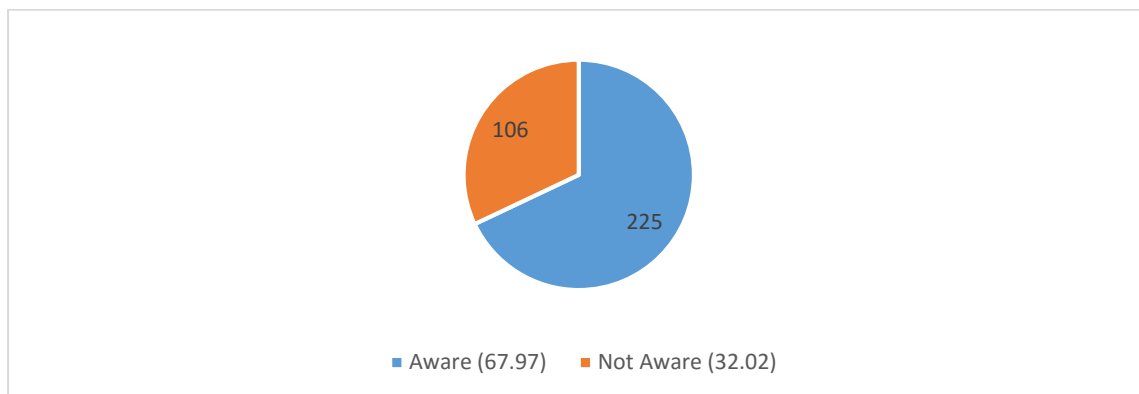
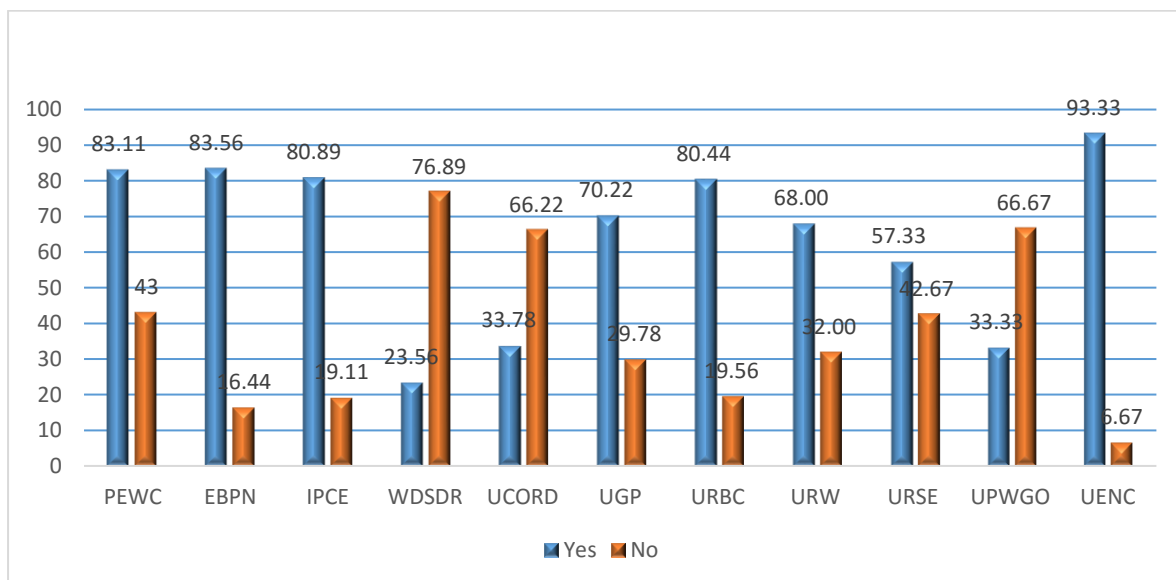


Fig. 2 - Perception about Present Environment and Awareness of University Sustainability Initiatives



Where

PEWC= I am very concern about environmental problems (Such as Deforestation, Waste Generation, Pollution etc.)

EBPN= I believe that our present economic practices towards environment will have negative impact on people of future generations

IPCE= I know the importance of preserving and conserving the environment.

WSDR= I know about the World Declaration on Sustainable Development held in Rio de Janeiro in 1992, especially Agenda 21

UCORD= I know my university engages in community outreach programs such as (Rural Development, Self Help Group, Rural Skill Development, Self-Employment Skill, Charity, Scholarship helping for poor) that benefit the local environment.

UGP= I know my university follows green practices such as (planting trees in and outside campus, conserving water through waste water recycling techniques).

URBC= I know my university has recycling bins across campus

URW= I know my university reuses campus waste. (Such as Water Waste, Paper Waste, and Plastic Waste)

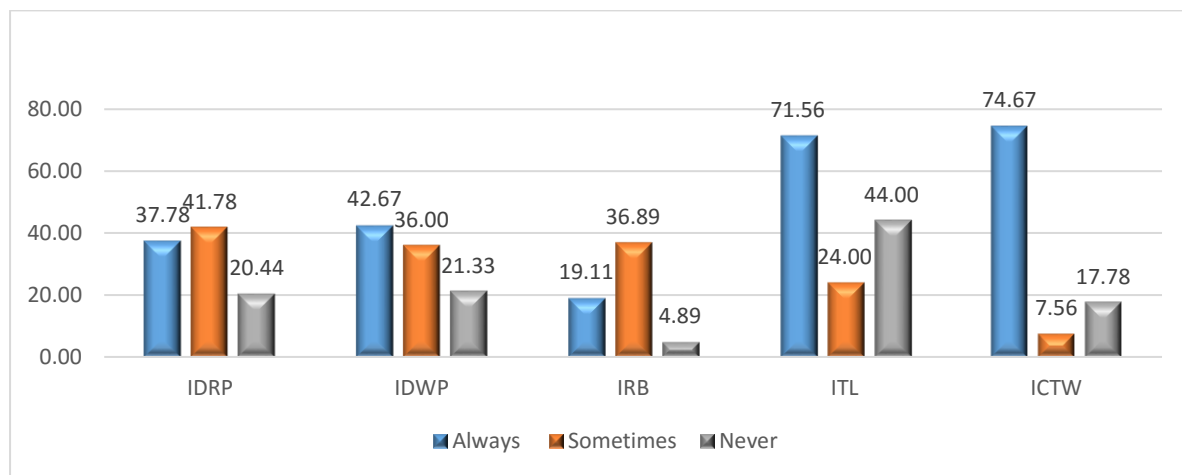
URSE= I know my university uses renewable and safe energy sources. (Such as solar panels)

UPWGO= I know my university has created partnerships with government, non-

governmental organizations, and industry working toward sustainability. (NABARD, State Planning Commission, Entrepreneurship Development Institute).

UENC= I know my university curriculum includes environmental science as compulsory course paper for all departments

Fig 3 - Current Green Behaviour of Respondents Who are Aware of Term Sustainability Concept



Where IDRP=I do recycling Practice (Such as Plastic recycling, Paper Recycling, Electronic Wastes etc.)

IDWP=I Properly discard waste according to label written in the bin.

IRB=I use reusable water bottle.

ITL=I Turn off lights when not in use.

ICTW=I close the tap when not in use to prevent wastage of water

As we can see **Fig 3** shows current green behaviour of respondents who were aware of sustainability concept. Only 37 % of students have plastic recycling habit and around 40 % of them properly discard their waste according the label written in the bin. Compare to **fig 2** were more than 80 % of the respondents said they were aware of recycling bins installed in campus but their current behaviour of discarding waste according to label written in the bin seems

very low less than 45 %. Though they are aware of sustainability concept but none of them are inculcating it in their lifestyle. Even **Fig 4** which shows their mode of transport to reach campus apart from hostellers majority of them reach campus through their own vehicle which is generally not considered as green practice. **Fig 7-9** shows results of respondents who are not aware of sustainability concept.

Fig 4 - Current Mode of Travelling to Reach Campus

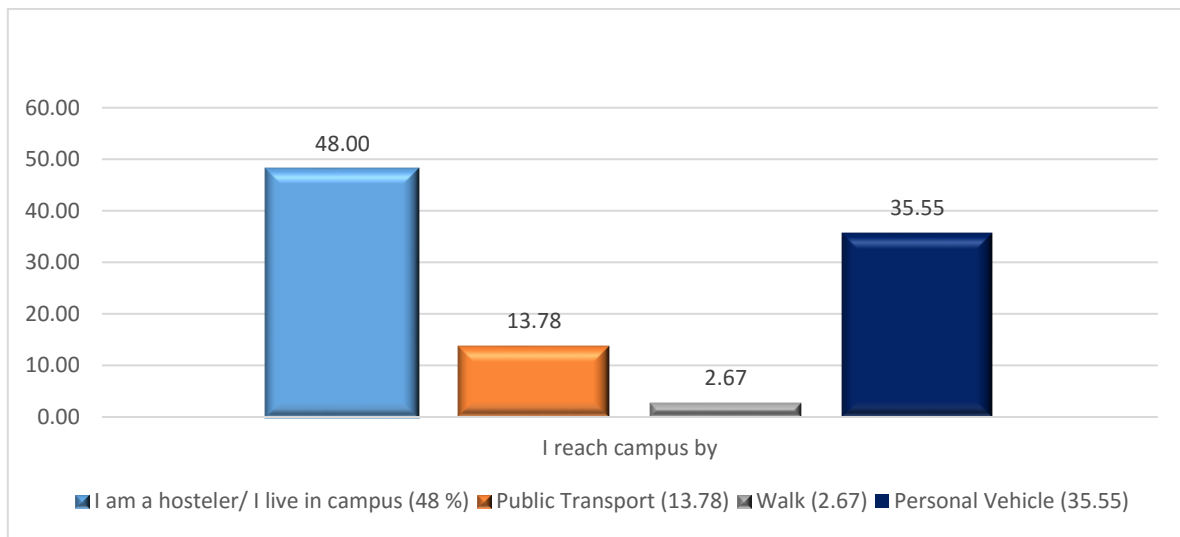
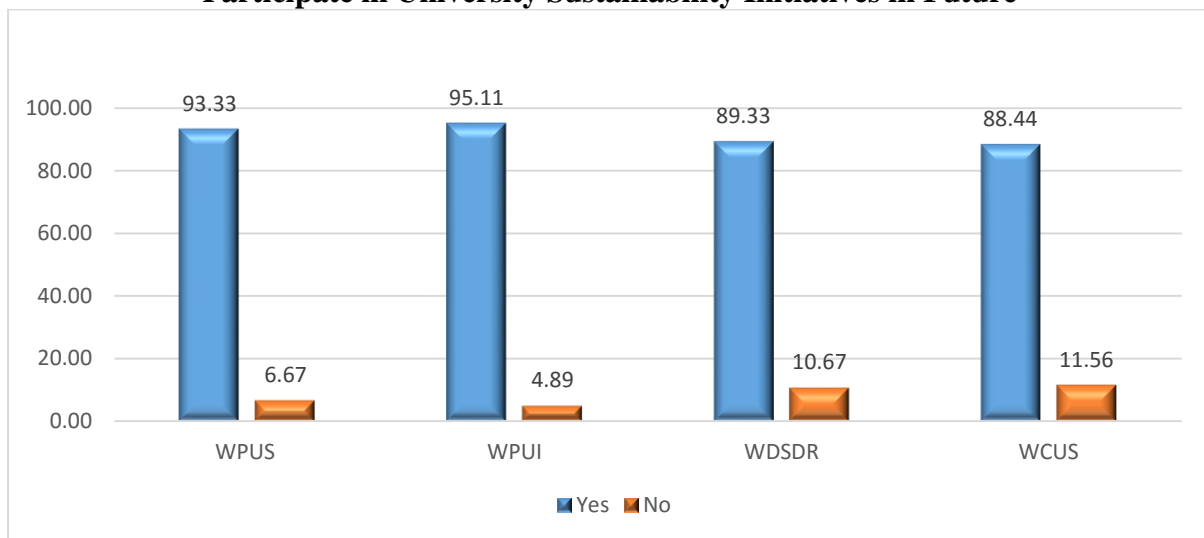


Fig 5 - Willingness of Respondents Who are Aware of Term Sustainability Concept to Participate in University Sustainability Initiatives in Future



Where

WPUS= I would like to participate university sustainability initiatives in future

WPUI= I will support and participate in my universities initiatives to protect the environment in future

WDSDR= I want to help to create a sustainable campus, community, and world

WCUS= How much amount you would like to contribute for your university sustainability initiative.

Almost all of the respondents who are aware of term sustainability were willingness to participate in future university sustainability initiatives (See **fig 5**). More than 50 % of respondents were not willing to pay for university sustainability initiatives.

Fig 6 - Willingness of Respondents Who are Aware of Term Sustainability to Pay for University Sustainability Initiatives

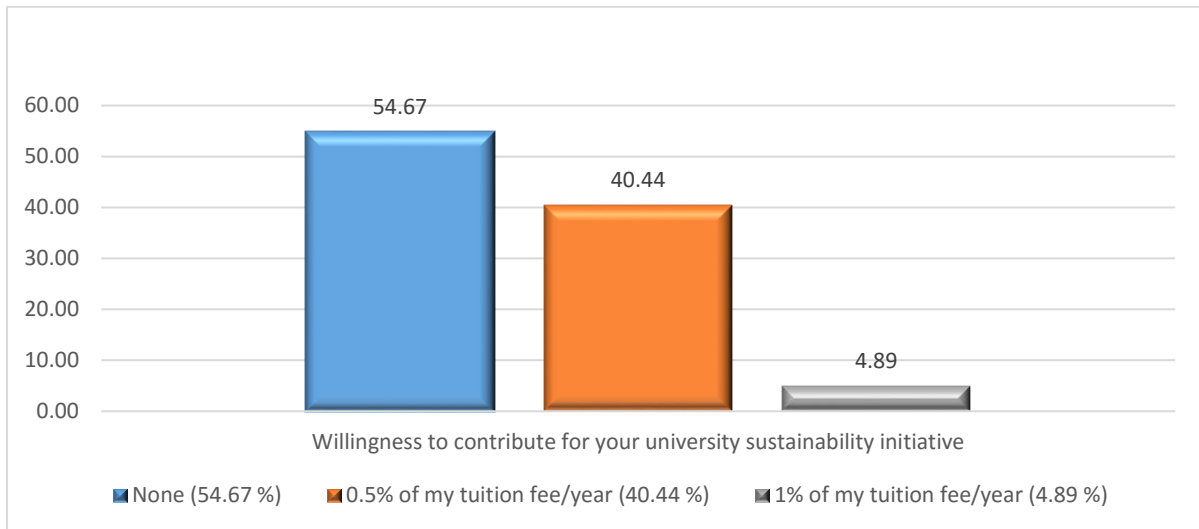


Fig 7 - Current Green Behaviour of Respondents Who are not Aware of Term Sustainability Concept

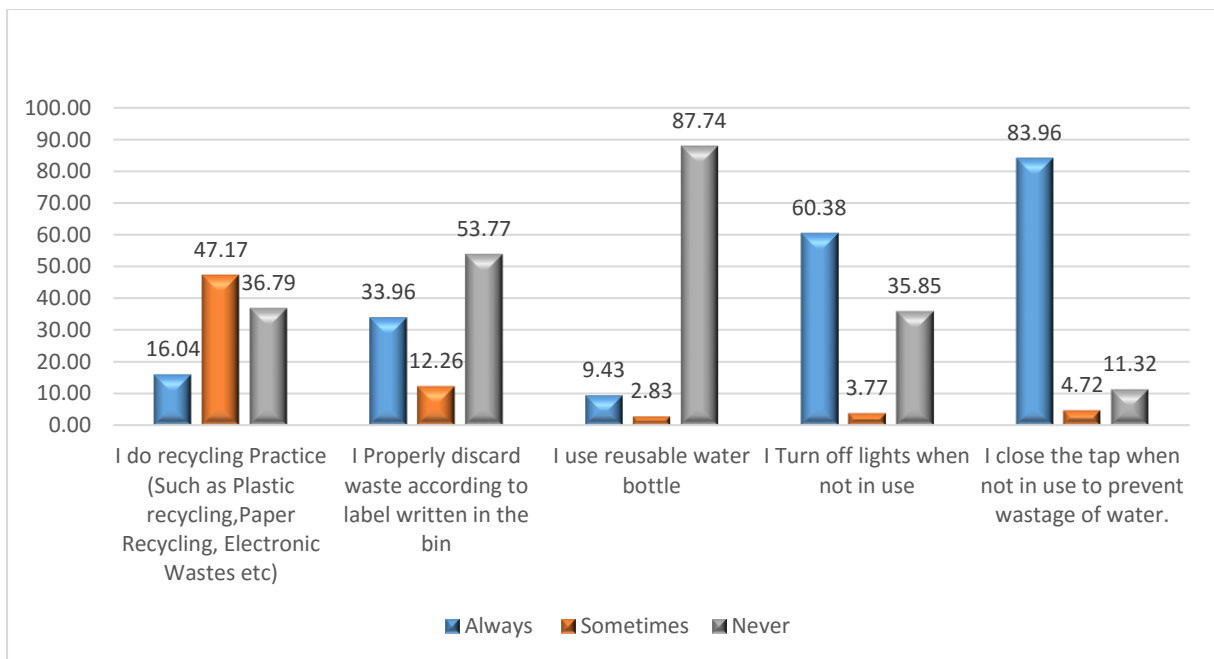


Fig 8 - Willingness of Respondents Who are not Aware of Term Sustainability Concept to Participate in University Sustainability Initiatives in Future

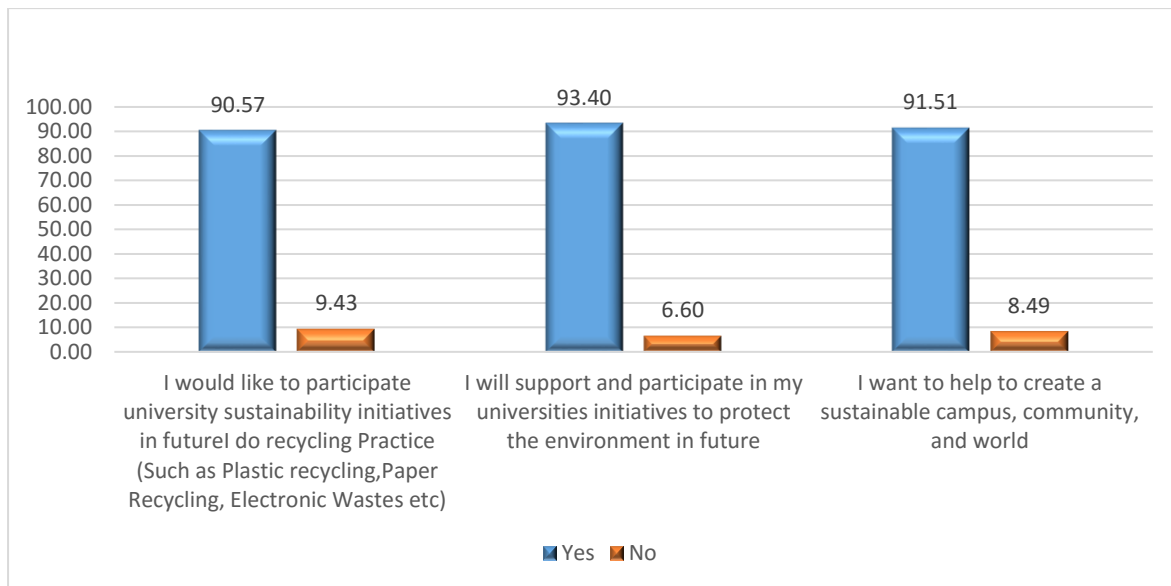
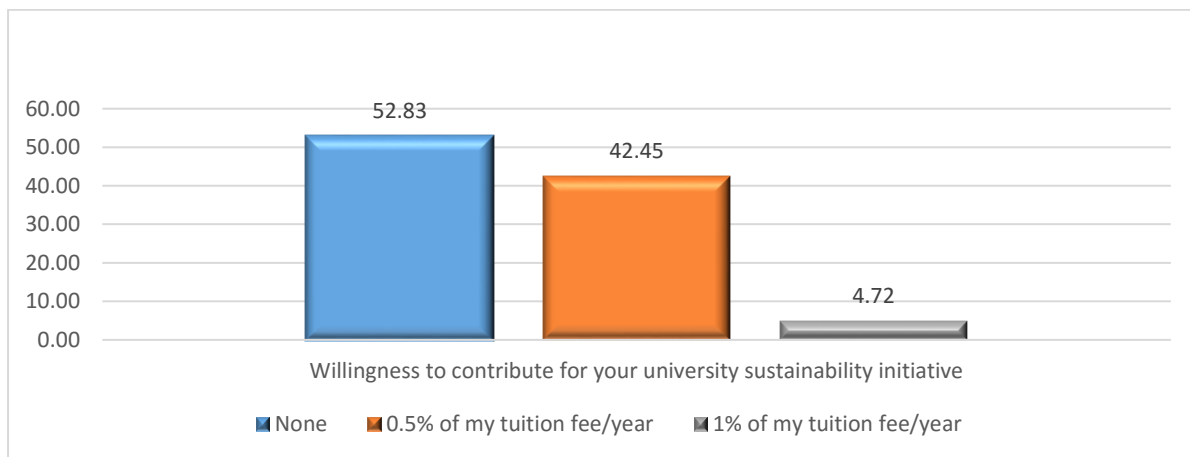


Fig 9 - Willingness of Respondents Who are not Aware of Term Sustainability to Pay for University Sustainability Initiatives



Conclusion

From the results it can be concluded that majority of students though they were aware of sustainability initiatives of university were shown resistance towards contribution of fee. Their willingness to participate in university sustainability initiatives in future were found to be high. Majority of the students were not aware of

university sustainability practices in social sector category such as community outreach programs (Rural Development, Self Help Group, Rural Skill Development, Self-Employment Skill, Charity, Scholarship helping for poor) that benefit the local environment and universities partnerships with government, non-governmental organizations, and industry working toward sustainability. (NABARD,

State Planning Commission, Entrepreneurship Development Institute) for development of local region. The university must communicate/promote about their sustainability practices (Especially social schemes) to students since their willingness to participation was found to be high. Though students who are aware of sustainability concept but their actual behaviour is not up to the mark.

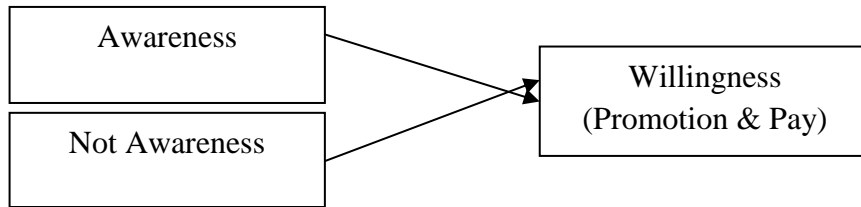
Limitations and Future research

This potential outlook on a regular theme throughout this study, namely, the limitations of market forces isolated in resolving the sustainability development challenges facing universal supply chains, and they require for corresponding contract by public institutions and/or policies to assist and to ensure that voluntary actions bring about the preferred sustainability initiatives outcomes in the University among higher Education students.

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Chart 1 - Conceptual Framework:



Source: Developed by the authors

Table 1 - Descriptive Statistics of Respondents

		Number	Percent
Gender	Male	136	64.65
	Female	117	35.34
Age	18-20	163	49.24
	21-23	151	45.62
	24-26	12	3.63
	27-29	5	1.51
	>30	0	0
Qualification	UG	200	60.42
	PG	131	39.58
	Total	331	100

Table 2. Awareness level among students of term “Sustainability Concept”

		Number	%
Aware	Male	136	60.44
	Female	89	39.56
	Total	225	100
Not Aware	Male	78	73.58
	Female	28	26.42
	Total	106	100