

Environmental Attitudes Inventory (EAI) of UiTM Penang hospitality students

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ABSTRACT: The importance of education of sustainability became more prominent in higher learning institutions of developed nations in the form of research and policy setting since the publication of the United Nations' Decade for Education for Sustainable Development report. On the other hand, this movement has yet to advance as effectively in developing and emerging countries. In line with the crucial need to expand the understanding of environmental studies in higher learning institution in Malaysia, this conceptual paper proposes to gauge students' grasp on sustainability issues by employing the Environmental Attitudes Inventory (EAI) as measurement scale. This instrument was designed to evaluate the psychological tendency in favour or disfavour towards the conservation of the natural environment, constructed on two factors: preservation and utilization. The findings will provide insight into theoretical knowledge discussion and practical recommendations in actions that can be undertaken to promote sustainability on campus.

Keywords: sustainability, environmental attitudes, higher learning institutions, hospitality students

1 INTRODUCTION

Environmental issues which arose in recent years are a cause for concern as it is more felt in erratic climate changes and numerous spillover effects experienced globally. Among the reasons for this recurring phenomenon is the escalating volume of carbon emission and other greenhouse gases released into the biosphere due to burning of fossil fuels, human activities, land clearing and agriculture (Livescience, 2016).

In Malaysia, environmental preservation and conservation awareness is gaining traction. Efforts are being undertaken to deal with emerging environmental issues. For instance, the federal government in Malaysia has announced the implementation of compulsory waste separation in the states and federal territories of Kuala Lumpur, Putrajaya, Pahang, Johor, Malacca, Negeri Sembilan, Perlis and Kedah effective on 1st of September, 2015 (Edward, 2016). This regulation is perhaps instigated by the fact that Malaysian's recycling rate is only 10.8 percent per adult. This recycling rate could be deemed as low, compared to Singapore which is at 57 percent, Australia at 52 percent, Germany at 70 percent, Japan at 95 percent and Sweden at 99 percent. In addition, the

average Malaysian produces 1.64 kilograms daily, compared to worldwide average which is at 1.2 kg daily (Lee, 2015). The agency for this implementation is entrusted to Solid Waste Management and Public Cleansing Corporation (SWCorp).

According to SWCorp Chief Executive Officer (CEO), Datuk Ab Rahim Md Noor, in a survey conducted in 2009, the findings showed that 89 percent out of 55,000 respondents have high awareness of the 3R (Recycle, Reuse, Reduce) practices. However, they do not make it as part of the daily culture. He further commented that this is largely contributed to the mindset of Malaysians who believe that the responsibility of cleaning or managing waste solely lies as on the authorities' responsibility (Irsyad, 2015). Alternatively, the manager of Universiti Malaya's successful Zero Waste Campaign manager, Jaron Keng, recommended that the nationwide program ought to start small and initiate the movement with one community at a time. Keng highlighted the cases of such campaigns in the UK and Singapore which failed initially when they went ahead at federal level because changing the mindset of the public is a massive task (Chi, 2015).

In light of this situation, this study intends to examine the higher learning institutions'

community. Universities have always been considered the pillar of a society. At higher learning level, universities are expected to produce human capitals fit to enter the workforce, and contribute to nation. Its role is so significant to the point that it is a crucial component of strategic planning and national agenda. University students are often regarded as the closest generation that has the potential to become leaders in all eclectic sectors, areas and community engagement in the near future (Moore, 2005). On that note, the responsibility of universities should not be limited to academics alone. It should integrate “soft skills” teachings based on building strong spiritual foundation, morals, values, ethics, professionalism and appreciation of natural resources. This will ensure not only an intelligent society, but a stable harmonious community as well. (Adom̄ent, Godemann, Herzig, Otte, Rieckmann & Timm, 2014; Wright, 2006).

Hence, this study proposes to investigate university students’ perception and receptiveness of sustainability concept by gauging their environmental psychology utilizing the Environmental Attitude Inventory (EAI) (Milfont & Duckitt, 2010) measurement scale. The EAI is a valid and reliable measurement based on twelve core dimensions that define a two-dimensional higher order Environmental Attitudes construct: preservation (the general belief of protecting and preserving nature into its natural state) and utilization (the general belief that humans have the right to alter nature for human needs (Milfont & Duckitt, 2010). The survey was designed to measure the positive or negative underlying beliefs of respondents toward the natural environment and its resources.

2 LITERATURE REVIEW

2.1 *Institutionalizing environment into universities*

There is a movement in many universities attempting at institutionalizing sustainability practices within their curricula, research, operations, outreach, assessment and reporting (Lidgren, Rodhe & Huisingh, 2006; Lozano, 2010). There is also public demand for a sustainable society as more people are aware of the crisis the world is facing due to deterioration of the natural environment. Thus, more universities are equipping their graduates with environmental knowledge by re-aligning their mission, vision, and educational practices (Md Shahbudin, Nejati & Amran, 2011). There seem to be a growing global consensus on the university’s responsibility towards supporting and disseminating the concept and activism of sustainability (Wright, 2004).

During the past decade, there have been 150 articles published in the Journal of Cleaner Production highlighting on the development of sustainability in the form of academics and recommended actions. Themes that were featured included discussion on education, research, outreach programs and greening of campus operations in universities. However, most of the studies were conducted in the context of developed countries, with no Special Volume (SV) focused upon Green University Initiatives and Education for Sustainable Development (EfSD) in developing and emerging countries (Wang, Shi, Sun, Huisingh, Hansson & Wang, 2013). Public awareness towards sustainability in developing countries such as Malaysia is still relatively poor (Ramayah, Lee & Lim, 2012).

2.2 *Environmental beliefs and attitudes*

Environmental attitude is believed to be a compelling predictor of pro-ecological behaviour (Kaiser, Wolfing & Fuher, 1999; Schultz, 1995). According to Whitmarsh and O’Neill (2010), pro-ecological behaviour is determined by self-identity, influenced by personal motivations through self-esteem, self-enhancement and self-understanding. Inherent traits of environmental attitude are commonly deep-seated in individuals who are exposed to effective knowledge transfer and action-related knowledge on environmental studies and issues (Frick, Kaiser & Wilson, 2004). Apart from knowledge, environmental beliefs appear to be driven by internal locus of control (positive control beliefs), personal responsibility, and perceived threats to personal health (Fransson, 1999). However, developments in psychology suggested that there emphasis on external influences also need to be considered. Clark, Kotchen & Moore (2003) integrated themes from psychology and economics to analyze pro-environmental behavior motivations for participating related to several concerns: ecosystem health, personal health, environmental quality for residents in southeastern Michigan, global warming, and warm-glow (or intrinsic) satisfaction. The results indicated that biocentric motive ranks first, altruistic motive ranks second and egoistic motive ranks third. Furthermore, Whitmarsh’s (2010) study on environmental attitudes effects on environmentally protective behaviors and political activism in environmental issues suggested that attitude intensity is indeed correlated with self-reported environmental behavior and political activism in environmental issues.

In hindsight, attitudes toward the environment are key in their behaviour toward environmentally friendly practices. While some individuals approach are purely from utilitarian perspective, others are genuinely concerned about

environmental sustainability and maintaining an ecological balance. An individual with high level of environmental conscientious might follow social guidelines and norms more stringently compared to an apathetic individual who might be more willing to “cut corners” when it comes to environmentally responsible behavior (Hirsch, 2010).

2.3 *Environmental Attitudes Inventory (EAI)*

Environmental attitudes or behaviour have been tested in previous studies by applying direct self-report methods, such as interviews and questionnaire, along with other implicit techniques such as observation, priming and response competition measures (Milfont & Duckitt, 2010). According to Krosnick, Judd, & Wittenbrink, (2005), attitudes measurement can be constructed into self-directed and implicit measurement techniques. Furthermore, as attitudes are latent and cannot be observed explicitly, it needs to be inferred from overt responses (Himmelfarb, 1993) derived from survey responses.

The EAI was specifically constructed in consideration of the multidimensional and hierarchical nature of environmental attitudes. The disposition of EAI is wide-ranging and assesses a broad perceptions of or beliefs regarding the natural environment, including factors affecting its quality. It was hypothesized that this inventory would be two-dimensional higher order structure of environmental attitudes (i.e., Preservation and Utilization). The twelve facets of EAI consist of these twelve dimensions: enjoyment of nature, conservation policies, environmental activism, anthropocentric concern, confidence in science, environmental fragility, altering nature, personal conservation, dominance over nature, utilization of nature, eco-centric concern and population growth (Milfont & Duckitt, 2010).

3 METHODOLOGY

Self-administered survey questionnaire will be conducted in the course of collecting data from respondents. The survey questionnaire will be designed with the Likert scale technique on seven ordinal scale as follows: 1) strongly Agree 2) agree 3) somewhat disagree 4) no comment 5) somewhat agree 6) agree 7) strongly agree. Respondents are required to indicate their concurrence tendency they attach to a factor, using a standard set of responses (Kumar, Abd Talib & Ramayah, 2013; Veal, 1997). The items in the questionnaire will be adopted and adapted from EAI (Milfont & Duckitt). The items will be presented in two languages, being English and Bahasa Melayu (the

official Malaysian language). The questionnaires to be distributed will consider convenience sampling among the students at the Faculty of Hotel and Tourism Management, Universiti Teknologi MARA, Penang campus. All data gathered and analyzed will use Statistical Package for Social Science (SPSS version 21) and AMOS for descriptive analysis and reliabilities.

4 RESEARCH CONTRIBUTION

The study will contribute to the body of knowledge of establishing and confirming correlation between environmental behavior and TPB. The researchers anticipate the outcome of the study will contribute in better understanding and improved theoretical framework to environmental studies in higher learning institutions. The results of the study is expected to explicate the level of university students' environmental cognizant and beliefs. The implication of discovering the results could be helpful in understanding the mindsets and conviction of university students in regards to the environment. University administrators may then reconcile the outcome of the study and subsequently strategize programs or promotions that will incite active participation from the students, thus accelerate the process of greening the campus wholly at all levels.

5 CONCLUSION

Universities nowadays are more aware of their role sustaining the natural environment. Initiatives that spans from improvement of environmental policies, curricula, creating awareness, proliferation of environmental research, greening the campus, community outreach programs, environmental education programs, community and curricula are more apparent and evolving. The development of sustainability concept in the education system is healthy, but still insufficient (Nejati & Nejati, 2013). Hence, there is a need for further investigation into the environmental attitudes of populaces of higher learning institutions as well. Universities in developing countries and in Malaysia specifically are recommended to intensify their efforts in sustainability in all aspects of academia and activism to ensure a holistic shift in sustainable development of the country.

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