



THE IMPACT OF SPIRITUALITY IN ENHANCING SUSTAINABLE
BEHAVIOUR AMONG STUDENTS OF PUBLIC UNIVERSITIES IN MALAYSIA

Norhasliza Hassan

*Dept. of Technology Management and Logistics,
Universiti Utara Malaysia
s93985@student.uum.edu.my*

Noorulsadiqin Azbiya Yaacob

*Dept. of Technology Management and Logistics,
Universiti Utara Malaysia
sadiqin@uum.edu.my*

Siti Norezam Othman

*Dept. of Technology Management and Logistics,
Universiti Utara Malaysia
norezam@uum.edu.my*

Abstract

The purpose of the study is to examine the factors that influencing sustainable behaviour (SB) among students in public universities in Malaysia. For this reason, this paper seeks to address the research problem about the issue of the sustainability development due to the behaviour problems regarding the environmental issues. In the current globalization arena, government of each countries facing challenges and keep on finding the better ways to manage environmental problems that occurred in Malaysia and enhance sustainable behaviour among societies. For that governments in each countries including Malaysia have been spent huge amount of money for the development and program that increase awareness among them. At this vein, investigation on factors that sustainable behaviour is important. Previous studies show little evidence about the relationship between sustainable behaviour and spirituality. Thus, this study found that spirituality plays effective role in influencing sustainable behaviour among students. Theory of Planned Behaviour (TPB), as a supportive framework is used to measure the influence of the students' experience towards determinant of sustainable behaviour. Therefore, this study is the conceptual paper that addressing the effect of spirituality (SP) and subjective norm (SN) in influencing sustainable behaviour among students.

Keywords: Theory of Planned Behaviour (TPB), Sustainable behaviour, Spirituality, Subjective Norm.



I. INTRODUCTION

Sustainable Behaviour (SB) is a great challenge for all mankind to guarantee a viable future and it can be defined as a development that meets the needs of the present without compromising the ability of future generations to meet their own needs, that integrated to the series of actions intended at protecting both of the physical and the social environment (Leeuw, Valois, & Seixas, 2014). The previous periods have witnessed to the fast economic growth through increasing customers' consumption in global. This situation will be effect environmental decline through exploitation of natural resources and over-consumption. Thus, the effects of degradation in environmental are desertification, acid rain, noise and light pollution, pollution of sea and rivers, reduction of stratospheric ozone layer, and global warming (Chen & Chai, 2010).

Nowadays, one of the most serious problems in the Malaysia is solid domestic waste, especially in urban areas. The estimated waste produced by one person is 1.0 kg/day, and among 230 available landfills, 80 percent of them have only two years of lifespan away (Said, Azura, & Fakhru'l-Razi, 2003). Even though Malaysia has been grown up well in economic and industrial development, unfortunately the level of waste management in Malaysia is still left behind. Improved management system and effective solutions are not enough, but this serious matter needs to be settled from the root cause. One of the most practical ways to solve this issue is sustainable behavior through recycling. If Malaysia could achieve higher recycling rate, this would decrease the daily amount of waste generated. Besides that, this can reduce the quantity of the needed landfills and it also contributes to prolonging the lifespan of the landfill (Zahari, 2012).

Furthermore, in Malaysia, the situation of air pollution is extremely increased due to numerous factors. With the rapid development, it has caused more complications by polluting the air through motor vehicle operations, industrial activities, open burning and more. It is estimated that the environment will have a worse impact due to the human activities (Md Razak, Ahmad, Bujang, Talib, & Ibrahim, 2013).

In the Holy Al-Quran, in verse 41 of Ar-Rum, Allah Say "mischief has appeared on land and sea because of (the need) that the hands of men have earned, that (Allah) may give them a taste of their deeds: in order that they may truly back (from Evil)" (www.alquranic.com). This verse refers to the environmental problems which we are experiencing globally due to indisputably function of human behaviour. Islam forbids the use of environmental resources irresponsibly and as a responsible human being, we are responsible for and have a duty towards nature and towards the world as a whole.

Based on the environmental problems that we discussed, enhancement of the sustainable behaviour is very essentials to solve these environmental problems that occurred in Malaysia. Sustainable behavior (SB) is defined as a sequence of actions anticipated at protecting both the social and the physical environments (Corral-verdugo, Mireles-Acosta, Tapia-fonllem, & Fraijosing, 2011). Although sustainable behaviour and pro-environmental is synonymous, but pro-environmental is only emphasize effort to protect the natural environment, while, sustainable behaviour specifies action to protect both natural and human (social) environments (Tapia-Fonllem et al., 2013).

Others reasons that may cause unsustainable behaviour level could arise from spirituality that is not deeply embedded in the human heart. Integration of spirituality in the higher educational



condition delivers an effective method for students to build understanding, translate in the form of experience, and maintain the identity, consequently, will result in a renovation. For students with religious values, activities that provide a spiritual aspect enable students to practice in daily life. For students who have spiritual qualities in themselves, but not joining any religious group, with these activities, can motivate students to think critically on the attitude of the environment, inquiry their principles and perceptions, and varying their opinions on their place, accountabilities, and benefits in the natural world over consideration and discourse (Crowe, 2013). However, previous studies showed that the humans still do not have strong fundamental in spiritual aspects in related on environmental issues (Crowe, 2013; Csutora & Zsóka, 2012; Kinsley, 1995; Rai, Srivastava, & Shukla, 2014).

Previous research has addressed several aspects of attitude influences sustainable behaviour (Abd-Ella, Soma, & Mohammed Ebad-Allah, 2012; Tan, Nasreen-Khan, Hong, & Lam, 2015), subjective norm (Alias, Hashim, Farzana, & Mariam, 2015; Han, 2015), perceived behaviour control (Busse & Menzel, 2014; Leeuw et al., 2014) and knowledge (Haron, Paim, & Yahaya, 2006; Syed Idros, 2014). However, in addition, spirituality encompasses several unexplored dimensions that lately have attracted research attention in other disciplines (Brant, 2010; Csutora & Zsóka, 2012; Rai et al., 2014). Some of these unexplored spirituality appear to be important and worthy for investigation in the context of sustainable behaviour. Furthermore, previous empirical research has focused primarily on knowledge and elements of Theory of Planned Behaviour (TPB) namely attitude, subjective norm and perceived behaviour control. Very little research has been done on spirituality (Crowe, 2013; Csutora & Zsóka, 2012; Rai et al., 2014).

II. LITERATURE REVIEW

2.1 Theoretical Foundations

This study is constructed based on two particular beliefs of Theory of Planned Behavior (TPB) theory namely; subjective norm (SN). This study adopted the TPB model to evaluate sustainable behaviour among students. Several scholars used the SN to measure sustainable behaviour of different context or different unit of analysis. For example it is the study by Pedro (2010) which measures the effect of subjective norm on sustainable behaviour among secondary education students. Meanwhile, Bratt (1999) also investigates the factors that influence resident's recycling behaviour. Therefore, this study aims to evaluate the independent variable of TPB; subjective norm significantly influence the dependent variable; sustainable behaviour. In the next section, it is certainly recommendable to discuss on the theory that can be used as a guide to establish the theoretical model. In this study, the Theory of Planned Behavior (TPB) (Ajzen, 1985) has been widely applied in the analysis.

2.2 Theory of Planned Behaviour (TPB)

Ajzen (1985) proposed Theory of Planned Behaviour (TPB), which is an extension of TRA. The major similarity between TPB and TRA is that both of them put their focus on the individual's intention to perform a given behaviour. But TPB tackles the issue of behaviours that occur without a person's volitional control. In fact, TPB adds the perceived behavioural control (PBC)



element which differentiates it substantially from TRA. PBC is the components that accounts for situations where an individual has less than complete control over the behaviour, which can differ according to various situations and actions (Ajzen, 1991). TPB has been successfully applied in sustainability studies setting in predicting the actual sustainable behavior (Alias et al., 2015).

2.3 Sustainable Behaviour

Literally, sustainable behaviours refer to consumer, for example student's actions that meet the needs of the present without compromising the ability of future consumer generations to meet their own needs (Minton, Kahle, & Kim, 2015). Regarding to Najera (2010), Sustainable behavior can be defined as "a series of considered, effective and estimated activities intended at compliant accountability for preservation and protection of cultural and physical assets. These properties comprise integrity of plant and animal species, as well as individual and social comfort, and protection of present and future human (Ken & Muga, 2014). From the past studies, the sustainable behaviour has been successfully used to explain the factors that predicted this variable in other unit of analysis such as consumers, residents and youth (Niaura, 2013; Li-ming & Wai, 2013; Kumar, 2012). In the context of this study, sustainable behaviour is referred as the actions of students aimed at protecting the socio-physical resources of this planet which they focused on aimed at protecting both the natural and the human (social) environments. Their behavior is also proactive (future-oriented) because it considers the needs of future generations coincidentally with the satisfaction of present needs. It refers to the practice of recycling, conserve the energy and reduce environmental pollution to protect the environment.

Previous studies have implemented fragmented models of sustainable behaviour from simple to complex (Alias et al., 2015; Asmuni, Khalili, & Zain, 2012; Bratt, 1999; Crowe, 2013; Derahim, Hashim, Ali, Abdul, & Aziz, 2012; Fielding, McDonald, & Louis, 2008; Kumar, 2012; Li-ming & Wai, 2013; Matthies, Selge, & Klöckner, 2012; Niaura, 2013; Onwezen et al., 2013; Pedro & Pedro, 2010; A. M. Said, Ahmadun, & Paim, Laily Hj. and Masud, 2003; Syed Idros, 2014; Zuraidah, Nor Hashima, Wan Yahya, & Mohamad, 2012). The studies were fragmented because of the size of predictors in addition to the absence of agreement on the direct and indirect predictors of sustainability models developed.

Based on above review, it can be seen that the direct predictors of sustainable behaviour models are rather fragmented and diverse. Because of such fragmentation, it is envisaged that a conceptual sustainable behaviour model needs further empirical examination.

2.4 Spirituality

According to Vaughan-Lee (2013), the spiritual can be defined as an combination of vitalities, both physical and mental that can reconstruct a sustainable world and converse the track of improvement, which is critical and nasty (Rai, Srivastava, & Shukla, 2014). Besides, Human's spiritual element is reflected the unique story from other existing things. We are satisfied by intelligent that we are dissimilar because we respect spiritual rules, since we are aware and have sense to evaluate the world of silent life, where the strongest is the greatest (Bran, Radulescu, & Ioan, 2013).



Based on the previous studies, showed that the global environmental dilemma is a consequence of a spiritual and moral predicament resulting from a lack of connectedness to, or alienation from, 'the other than human' natural world, therefore it is necessary to build the connect between spiritual ecological consciousness and sustainable behaviour (Berry, 2009; Kinsley, 1995; Maathai, 2010; Rockefeller & Elder, 1992; Vaughan-Lee, 2013).

A number of studies have empirically tested the effect of spirituality on actual sustainable behavior (Crowe, 2013; Csutora & Zsóka, 2012; Mckenzie, 2005; Rai et al., 2014).

The current research aims to study how spirituality affects student's intention to sustain environments as well as the actual behavior directly and through its effect on knowledge. The current research is targeting the Malaysian culture, which remains uncritically unexplored.

Based on previous studies, finding by Rai et al. (2014) showed that the hierarchical regression of spirituality was significantly and positively associated with sustainable behaviour among students. Research by Crowe (2013) showed that relationship between spirituality and environmental behaviour students among were significant. While, study by Csutora et al. (2012) found that the spirituality was insignificantly associated with environmental behaviour among Hungarian adults.

2.5 Subjective Norm

Subjective norm is defined as "a person's perception that others desire the performance or non-performance of a specific behaviour, this perception may or may not reflect its importance what others actually think he/she should do" (Ajzen & Fishbein. 1980). In the context of this study, subjective norm is referred to the student belief that he or she received the social pressure from his or her peer college mate, parents, lecturers and societies in performing recycling activities, conserving the energy and reducing environmental pollution to protect the environment. Previous studies conducted in sustainability setting showed a significant and insignificant influence of subjective norm on actual sustainable behavior (Alias et al., 2015; Armitage & Conner, 2001; Han, 2015; Matthies et al., 2012; Onwezen et al., 2013; Whitmarsh & O'Neill, 2010).

III. RESEARCH MODEL

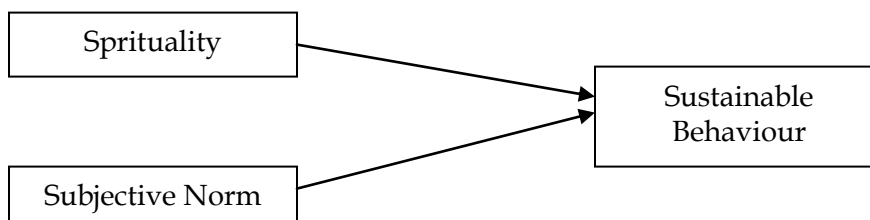


Figure 1. Research Model



IV. CONCLUSION

This study provides the significant evidence in the sustainability issues about the effective role of these determinants, namely spirituality and subjective norm that have a great positive effect on sustainable behaviour among students of public universities in Malaysia. To summarize, from review of extant previous literatures, the studies proposes a direct relationships between spirituality and subjective norm on sustainable behaviour among students in public universities in Malaysia. This indicates that increase of spirituality and subjective norm will be increasing the sustainable behaviour among students.

REFERENCES

- [1] Abd-Ella, M., Somaa, R., & Mohammed Ebad-Allah. (2012). Causal Analysis of Environmental Behavior of Egyptian Farmers. *World Rural Ob Observation*, 4(3), 18-26.
- [2] Aini, M.S., Fakhru'l-Razi, A., Laily, H.P. & Jariah, M. (2003). "Environmental Concerns, Knowledge and Practice Gap among Malaysian Teachers", *International Journal of Sustainability in Higher Education*, Volume 4, Issue 4, pp.305-313.
- [3] Ajzen, I., 1985. From intentions to actions: a theory of planned behaviour. In: Kuhl, J., Beckman, J. (Eds.), *Action Control: From Cognition to Behaviour*. Springer, Heidelberg, pp. 11-39.
- [4] Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.
- [5] Ajzen, I., Fishbein, M., 1980. *Understanding Attitudes and Predicting Social Behaviour*. Prentice Hall, Englewood Cliffs.
- [6] Alias, R., Hashim, Z., Farzana, N., & Mariam, S. (2015). Energy Conservation Behaviour among University Students. *Global Journal of Business and Social Science Review*, 1(1), 271-279.
- [7] Armitage, C. J., & Conner, M. (2001). Efficacy of the Theory of Planned Behaviour : A meta-analytic review. *British Journal of Social Psychology*, 40, 471-499.
- [8] Asmuni, S., Mhd. Khalili, J., & Mohd. Zain, Z. (2012). Sustainable Consumption Practices of University Students in Selangor, Malaysia. *Journal of Asian Behavioural Studies*, 2(6).
- [9] Berry, P. (2009). *Biodiversity in the Balance - Mitigation and Adoption Conflicts and Synergies*. Moscow: Pensoft Sofia.
- [10] Bran, F., Radulescu, C. V., & Ioan, I. (2013). Values and Environmental Ethics - Pillars of Changing Human Behaviour Toward Sustainable Development, (1).
- [11] Brant, D. W. (2010). Spirituality as a Mediator in the Relationship Between Self-care Practices and Perceived Stress Levels Among Lutheran Clergy.
- [12] Bratt, C. (1999). The Impact of Norms and Assumed Consequences on Recycling Behaviour. *Environment and Behavior*, 31(5), 630-656.
- [13] Busse, M., & Menzel, S. (2014). The role of perceived socio-spatial distance in adolescents' willingness to engage in pro-environmental behavior. *Journal of Environmental Psychology*, 40, 412-420. <https://doi.org/10.1016/j.jenvp.2014.10.002>.



- [14] Chen, T. B., & Chai, L. T. (2010). Attitude towards the Environment and Green Products : Consumers' Perspective. *Management Science and Engineering*, 4(2), 27-39.
- [15] Corral-verdugo, V., Mireles-Acosta, J., Tapia-fonllem, C., & Fraijo-sing, B. (2011). Happiness as Correlate of Sustainable Behavior : A Study of Pro-Ecological , Frugal , Equitable and Altruistic Actions That Promote Subjective Wellbeing. *Human Ecology Review*, 18(2), 95-104.
- [16] Crowe, J. L. (2013). Transforming Environmental Attitudes and Behaviours through Eco-spirituality and Religion. *International Electronic Journal of Environmental Education*, 3(1), 75-88.
- [17] Csutora, M., & Zsóka, Á. (2012). Relation of spirituality to happiness , life satisfaction and sustainable lifestyles. In *Spirituality and Sustainability: A New Path for Entrepreneurship* (pp. 1-33).
- [18] de Leeuw, A., Valois, P., & Seixas, R. (2014). Understanding High School Students' Attitude, Social Norm, Perceived Control and Beliefs to Develop Educational Interventions on Sustainable Development. *Procedia - Social and Behavioral Sciences*, 143, 1200-1209. <https://doi.org/10.1016/j.sbspro.2014.08.160>.
- [19] Derahim, N., Hashim, H. S., Ali, N., Abdul, S. A., & Aziz, G. (2012). UKM's Staff Perspective on Sustainability and Its Contribution Towards a Sustainable University. *Procedia - Social and Behavioral Sciences*, 59, 376-381. <https://doi.org/10.1016/j.sbspro.2012.09.289>
- [20] Fielding, K. S., McDonald, R., & Louis, W. R. (2008). Theory of planned behaviour, identity and intentions to engage in environmental activism. *Journal of Environmental Psychology*, 28(4), 318-326. <https://doi.org/10.1016/j.jenvp.2008.03.003>.
- [21] Han, H. (2015). Travelers' pro-environmental behavior in a green lodging context: Converging value-belief-norm theory and the theory of planned behavior. *Tourism Management*, 47, 164-177. <https://doi.org/10.1016/j.tourman.2014.09.014>.
- [22] Haron, S. A., Paim, L., & Yahaya, N. (2006). Towards sustainable consumption : an examination of environmental knowledge among Malaysians. *International Journal of Consumer Studies*, 29(5), 426-436.
- [23] Ken, T. D., & Muga, H. E. (2014). *Handbook of Research on Pedagogical Innovations for Sustainable Development (Vol. i)*. <https://doi.org/10.4018/978-1-4666-5856-1>
- [24] Kinsley, D. R. (1995). *Ecology and Religion: Ecological Spirituality in Cross-Cultural Perspective*. Prentice Hall.
- [25] Kumar, B. (2012). *A Theory of Planned Behaviour Approach to Understand the Purchasing Behaviour for Environmentally Sustainable Products*. Indian Institute of Management Ahmedabad. Indian Institute of Management Ahmedabad.
- [26] Li-ming, A. K., & Wai, T. B. (2013). Exploring consumers' green purchase behaviour towards online green advertising. *The Macrotheme Review*, 2(7), 60-81.
- [27] Maathai, W. (2010). *Replenishing the Earth: Spiritual Values for Healing Ourselves and The World*. New York: Doubleday.
- [28] Matthies, E., Selge, S., & Klöckner, C. a. (2012). The role of parental behaviour for the development of behaviour specific environmental norms - The example of recycling and re-



- use behaviour. *Journal of Environmental Psychology*, 32(3), 277-284. <https://doi.org/10.1016/j.jenvp.2012.04.003>.
- [29] McKenzie, S. (2005). *Social Sustainability, Religious Belief and Global Ethics: Outlines for Research*. South Australia.
- [30] Md Razak, M. I., Ahmad, I., Bujang, I., Talib, A. H., & Ibrahim, Z. (2013). Economics of Air Pollution in Malaysia. *International Journal of Humanities and Social Science*, 3(13), 173-177.
- [31] Minton, E. a., Kahle, L. R., & Kim, C.-H. (2015). Religion and motives for sustainable behaviors: A cross-cultural comparison and contrast. *Journal of Business Research*, 1-8. <https://doi.org/10.1016/j.jbusres.2015.01.003>.
- [32] Najera, M. (2010). *Sustainability in Higher Education, An explorative approach on sustainable behavior in two universities*. Erasmus University Rotterdam.
- [33] Niaura, A. (2013). Using the Theory of Planned Behavior to Investigate the Determinants of Environmental Behavior among Youth, 1(63), 74-81.
- [34] Onwezen, M. C., Antonides, G., & Bartels, J. (2013). The Norm Activation Model: An exploration of the functions of anticipated pride and guilt in pro-environmental behaviour. *Journal of Economic Psychology*, 39, 141-153. <https://doi.org/10.1016/j.joep.2013.07.005>.
- [35] Pedro, Á. S., & Pedro, V. M. (2010). Developing sustainable environmental behavior in secondary education students (12-16) Analysis of a didactic strategy. *Procedia - Social and Behavioral Sciences*, 2(2), 3568-3574. <https://doi.org/10.1016/j.sbspro.2010.03.553>.
- [36] Rai, P., Srivastava, P. K., & Shukla, S. (2014). Developing a Connect between Spiritual Ecology and Sustainability in the University Curriculum through an Empirical Study, 1(2), 252-274.
- [37] Rockefeller, S. C., & Elder, J. C. (1992). *Spirit and Nature - Why the Environment is a Religious Issue: An Interfaith Dialogue*. Boston: Beacon Press.
- [38] Syed Idros, S. N. (2014). Exploring Environmental Behaviours, Attitudes and Knowledge Among University Students: Positioning the Concept of Sustainable development within Malaysian Education. *Journal of Science and Mathematics Education in S.E. Asia*, 29(1), 79-97.
- [39] Tan, B.-C., Nasreen-Khan, Hong, Y.-H., & Lam, W.-H. (2015). The Influence of Environmental Values on Green Purchase Behaviour: Direct, Indirect, or Both? *International Journal of Business and Management*, 10(12), 234. <https://doi.org/10.5539/ijbm.v10n12p234>.
- [40] Tapia-Fonllem, C., Corral-Verdugo, V., Fraijo-Sing, B., & Durón-Ramos, M. (2013). Assessing Sustainable Behavior and its Correlates: A Measure of Pro-Ecological, Frugal, Altruistic and Equitable Actions. *Sustainability*, 5(2), 711-723. <https://doi.org/10.3390/su5020711>.
- [41] Vaughan-Lee, L. (2013). *Spiritual Ecology: The Cry of The Earth*. Retrieved from <http://www.workingwithoneness.org/articles/spiritual-ecology-solution>.
- [42] Whitmarsh, L., & O'Neill, S. (2010). Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours. *Journal of Environmental Psychology*, 30(3), 305-314. <https://doi.org/10.1016/j.jenvp.2010.01.003>.



- [43] Zahari, N. (2012). Investigating the Determinants of Recycling Behaviour among Secondary School Students in Penang.
- [44] Zuraidah, R., Nor Hashima, H., Wan Yahya, K., & Mohamad, S. A. (2012). Environmental Conscious Behaviour Among Male and Female Malaysian Consumers. *OIDA International Journal of Sustainable Development*, 4(8).