

Waste segregation behaviour at source: attitude, perceived behavioural control, subjective norm, and environmental education

ABSTRACT

Municipal solid waste management has emerged as a big challenge not only because of the environmental hygiene and human health concerns but also due to huge quantities of waste generated (Shaw, 2008). Waste dumping and landfilling may also cause many negative harmful environmental impacts and serious environmental degradation (Shaw, 2008). However, it can be said that many of the environmental problems today are actually caused by attitudes rather than by technical problems (Ifegbesan, 2008) because it takes a long time to break the old traditions and alter the current attitudes and practices (Bacinski, 2010). However, research, education, and public participation are some of the useful tools for long-term improvement and changes in the ethics and attitude of public towards proper waste management (Pappu, Saxena, & Asolekar, 2007). Besides that, it is important to know that, non-governmental organizations are seeking to change the attitudes of the businessman, young people, and household so as they will appreciate that waste and its environmental effects are relevant to them (Moh and Abd Manaf, 2014). In addition to that, they have a significant role to play in bringing about community benefits via reuse, recycling and waste minimization (Athanasios & Zabaniotou, 2008) for a better and ideal living environment in the future (Eusuf, Ibrahim, Shamzani, & Affendy, 2011). The existing literature of perceived behavioural control variable is still scarce on understanding the waste segregation behaviour at source. Hence, similar research which is related to sustainable management, recycling and solid waste management (Hurlimann, 2009; Koc & Kuvac, 2016; Lewis, 2009) have been adopted in this research. Agamuthu and Fauziah (2011) justified that most of the residents in Petaling Jaya knew about the importance and

2Jurnal Pengguna Malaysiameaning of recycling but only 22.0 percent of them practice it every day. This statement shows that there are still very few people who perceive that they are actually able to perform the recycling behaviour in their daily life. The given reasons were that waste collection infrastructure, for instance, recycling bin and the location to dispose of their household waste were not easily available. Hence, it has limited the willingness of the public and community to perform the recycling behaviour (Agamuthu, Khidzir, & Hamid, 2009). The current research also offers some important insights into the perspective of subjective norm. This research is designed in order to highlight the influences of subjective norm on waste segregation behaviour at

source among households because many previous researchers only explained its role in general pro-environmental behaviour (Adejoke, Mji, & Mukhola, 2014; Ioannou, Zampetakis, & Lasaridi, 2013; Tan & Azman, 2011; Tesfai, Nagothu, Simek, & Fucik, 2016) but still not mainly emphasizing it on waste segregation behaviour at source yet. This can be seen that many scholars identified that household's attitude related to recycling activities are affected by active support and the involvement of community residential committees for public participation (Zhuang, Wu, Wang, Wu, & Chen, 2008). Trudel, Argo, and Meng (2015) also contended that altruistic, regulatory factors and social influences are some of the factors why certain groups of the community can develop strong recycling habits. Ultimately, in terms of research, there is still a lack of information on waste segregation behaviour at source. Most of them are focusing on recycling and environmental protection. Moreover, the environmental education should be given serious attention in order to generate knowledge about biophysical and the environmental problems around us (Meligrana and Andrew, 2003). Having knowledge about the environment by means of education reveals that lecturers, professors, and instructors are responsible to give applied skill and theoretical understanding to the students about environmental science (Hunter, Laursen and Seymour, 2007). For instance, Iwan Budhiarta, Siwar and Hassan Basri (2012) argued that the lack of knowledge and expertise related to recycling on the part of authorities have made the programmes ineffective in educating the general public. Low knowledge level about solid waste management among citizens is one of the obstacles to reach the goal of environmental protection (Saeed, Hassan and Mujeebu, 2009). Likewise, it is essential for households to gain knowledge and know more about waste segregation-at-source so as they are able to perform the behaviour in the right way. Hence, in the context of Malaysia, this research is aimed to provide an exciting opportunity to fill up the research gap in literature so as to advance the knowledge about waste segregation behaviour at source.