7th International Seminar on ECOLOGY, HUMAN HABITAT AND ENVIRONMENTAL CHANGE IN THE MALAY WORLD Pekanbaru, Riau, INDONESIA, 19-20 August 2014

Influential Aspects on Environmentally Ethical Behavior (EEB) of Muslim Women in Kuala Lumpur

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ABSTRACT

Women have been in the frontline of most household socio-economic activities. Thus, their participation in environmentally ethical behavior (EEB) namely pre-cycling, re-using and recycling activities towards household waste generation particularly in high density area should be discussed. To identify the influential aspects that reinforcing EEB amongst Muslim women in Kuala Lumpur, a qualitative study was conducted. The study was guided by the following research objectives: a) to identify the type of EEB that has been practicing by informants; b) to discover their reasons for performing EEB; and c) to find out the main aspect that influence them in applying EEB in their daily lives. Twenty-four of Muslim women informants were selected using convenience sampling and they have been interviewed. The findings reveal five key categories or aspects of influences: a) economic; b) social; c) religion; d) politic; and e) environment that emphasizing EEB amongst informants. The findings are useful as a platform in order to advocate EEB among Muslim community in Malaysia.

Keywords: Environmentally ethical behavior (EEB); Muslim community; Muslim women

INTRODUCTION

Kuala Lumpur is the most densely populated state in Malaysia (Department of Statistics Malaysia). As our population increases we generate more waste. Waste generation in urban area especially in high density area such Kuala Lumpur is more complex compared to rural area (Hasnah Ali et al., 2012a). Therefore government is currently encouraging our society to adopt green activities and practice environmentally ethical behavior (EEB) namely pre-cycling, reusing and recycling activities in order to reduce the amount of municipal solid waste that enters the landfill. Household acts as a main producer for municipal solid waste while women perform as a household manager. Hence, women have been in the frontline of most household socio-economic activities. Thus, their participation in EEB towards household waste generation should be discussed.

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RELATED LITERATURE

Role of women in environmentally ethical behavior (EEB)

Throughout the history of human civilization, the positions of women are particularly pronounced in domestic activities. Women in most societies are in charge for the domestic work, which include many tasks such as childcare, shopping, cooking, cleaning and wellbeing of their husbands (Bogoro Audu Gani et al., 2012). As household managers, women play a determining role in waste management. According to Eugene Asi et al. (2013), women actually are in charge of domestic waste because they are directly concerned with household tasks. For instance, Bogoro Audu Gani et al. (2012, p. 30) described that:

Women gender is in the forefront when it comes to general handling of household solid waste either because of socio-cultural or economic reasons. Women dominate the generation and storage of household solid waste with 81% and 96% over men. When it comes to carrying waste to collection centers, still it is the women.

Bogoro Audu Gani et al. (2012) further added that activities involves cooking, household sanitation, processing harvested agricultural produce and small scale home-based industrial production are the daily routine of women activities in many Africa traditional communities. These activities contribute to a large number of solid waste generation sources in residential neighborhood in Nigerian city.

Moreover, women actively participate more than men in solid waste generating activities in domestic environment. Bogoro Audu Gani et al. (2012) had summarized that there are four women's activities that are related to solid waste generation. Firstly, women are identified as managers of traditional environment, whereas they are responsible to maintain the environment as it already exists (Bogoro Audu Gani et al., 2012). In many situations women first notice deterioration of environmental conditions and the first to be affected by a deterioration of the environment as they are very close to nature (Subash, n.d; Bogoro Audu Gani et al., 2012; & Hasnah Ali et al., 2012a).

Secondly, women as rehabilitators of the domestic environment, in other words, repairing and taking preventive action to support sustainable development which is both rural and urban phenomenon, as they are usually associated with responsibility for cleanliness of the home and for the health of the family (Bogoro Audu Gani et al., 2012). According to Bogoro Audu Gani et al., (2012, p. 27):

They observe a direct impact of the unsanitary conditions such as infectious diseases and childhood diseases, accumulating waste, and lack of sanitation. Since they are responsible for the maintenance of the living space and the health of children, they have a strong sense of civic responsibility and a desire to improve their living conditions and health situation. This is why women seek collective solutions for improving the environment. They are found at the root of many initiatives on health care,

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waste collection, supply of drinking water, and environmental awareness programs.

Thirdly, women as innovators in the use of new proper technology towards the creation of clean and healthy domestic environments (Bogoro Audu Gani et al., 2012). Finally, Bogoro Audu Gani et al. (2012) stated women as protectors and caretakers of domestic environment. Bogoro Audu Gani et al., 2012 noticed that the failure to realize the crucial role of women in the management of modern society resulting a severe loss of efficiency and productivity. Hence, women are most willing to participate in projects that improve their living conditions. Furthermore, women have been playing a very active role. Thus, they are involved in waste management committees, take part actively at workshops and meetings as well as recycling activities and play a large role in motivating other members of the community (Subash, n.d.; D'Elia, 2008) even though aged over 45 based on finding by D'Elia (2008).

Influential aspect of environmentally ethical behavior (EEB)

Past researchers claimed that there are some reasons for performing environmentally ethical behavior (EEB) discovered in the past literatures.

Politic aspect is one of the reasons. Government is already introduced many concepts and campaigns related to EEB such as recycling, providing recycle bins at main centre, segregating waste based on its type and many more (Hasnah Ali et al., 2012a). However according to Hasnah Ali et al. (2012a), the researcher find out that the communities fail to involve in waste management activities as no detail explanations neither from government nor private sectors regarding these issues. Therefore, D'Elia (2008) then added that the improvements to structural and promotional aspects of recycling schemes by government were more helpful to increase recycling rates than financial penalties or rewards. In addition, Jamilah Ahmad et al. (2011) noted that law is one of the significant mechanisms in order to effectively manage the environment.

Furthermore, some researchers identified that social aspect as one of the reasons for applying EEB (Hasnah Ali et al., 2012a; Hasnah Ali et al., 2012b; Jamilah Ahmad et al., 2011; D'Elia, 2008; Lockhart, 2003).

D'Elia (2008) indicated that good facilities and awareness of these facilities can increase the recycling rate. The researcher also stressed that the lack of sufficient facilities and collection services will affect the recycling behavior (D'Elia, 2008). In the meantime, D'Elia (2008) noticed that the green campaigns that focus more on general environmental threats than specifically on waste could be more successful towards boosting household recycling rates. Moreover, the role of electronic media mainly television in promoting such campaigns can increase environmental awareness among societies and simultaneously can attract communities to participate in EEB (Jamilah Ahmad et al., 2011). Thus, those communities who interested to participate in recycling activities will produce more

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recyclable waste compared to communities who is not impressed (Hasnah Ali et al., 2012a). Hasnah Ali et al. (2012a) further explained that the understanding societies who have early childhood education related to the importance of environment to human life will ask other societies together for participating in EEB.

Furthermore D'Elia (2008) mentioned that the socio-economic status of the area in which people live and the type of accommodation was the main determinant of participation in recycling activities. Type of house outright also is one of the factors. Lockhart (2003, p. 37) stated that:

One possible explanation for this is the fact that people with more expensive homes tend to take better care of those homes. These more affluent neighborhoods tend to group together in terms of social structure. If one home recycles then other neighbors will likely do so also, nobody wishes to appear to be anti environment in an age where environmental issues are hot topics.

In addition, period of stay (Hasnah Ali et al., 2012b) and household size (Bogoro Audu Gani et al., 2012) also affects communities recycling behavior. Bogoro Audu Gani et al. (2012) described that despite large household size generated more waste in terms of solid waste handling, but can also be advantageous where the family members can sort and segregate the waste themselves. Bogoro Audu Gani et al. (2012, p. 29) further mentioned that:

The large household size can provide free and cheap labor for solid wastes evacuation to collection centres and it also encourages community effort toward evacuation of refuse from collection centres to disposal sites.

Besides that, marital status and gender influences communities in applying EEB. Bogoro Audu Gani et al. (2012) stated that women responsible towards environmental care including handling of solid waste at household level generally. Therefore married women could be a potential for sorting and segregating solid waste at the household level (Bogoro Audu Gani et al., 2012). Other than that, education level also influences the practice of EEB (Lockhart, 2003). According to Lockhart (2003), those with bachelor's degree or higher, then the willing to performing EEB also increases.

However, Bogoro Audu Gani et al. (2012) found that as educational level increases, the income level also rises and those with high income generate more solid waste than those with low income. Subsequently those with low income will spend their time in sorting and segregating solid waste which can generate more income for them (Bogoro Audu Gani et al., 2012). In addition, Lockhart (2003) discovered that people who not willing to pay for an additional bag of garbage will keep recycle what they can as long as to keep the costs down.

Instead of economic reason, Bogoro Audu Gani et al. (2012, p. 30) indicated that "... few of them see the need for environmental cleanliness as a good reason for

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waste segregation which should be encouraged." Some researchers noticed that communities who conducting activities such as reducing, reusing and recycling activities contribute to environmental conservation (Hasnah Ali et al., 2012b; D'Elia, 2008). For instance, communities who have taken environmentally-friendly actions such as reducing the use of a car or electricity consumption tend to recycle more (D'Elia, 2008). D'Elia (2008) then added religious affiliation seems to be significantly related to recycling behaviour with Catholics recycling more. However, Subash (n.d.) listed that factors such as religious barriers, traditions, social hierarchy, low rate of literacy, or the burden of domestic tasks may hinder the participation of communities towards EEB.

METHODOLOGY

The study was guided by the following research objectives: a) to identify the type of EEB that has been practicing by informants; b) to discover their reasons for performing EEB; and c) to find out the main aspect that influence them in applying EEB in their daily lives.

The discussion in this paper is based primarily on qualitative data. Qualitative research in this study refers to a semi-structured form of interviewing. Twenty-four of Muslim women informants around Kuala Lumpur were selected using convenience sampling and they have been interviewed. All informants were married and ranged in age from 21 to 60 years old. The summary of informants profile was presented in the following table:

		Informant																						
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Type of h	ouse	,																						

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Apartm ent block		х				х	х		X	X	Х												
Flat															Χ				Χ				
Shop house					Х																		
Quarter s													Х										
House ou	ıtrigh	nt																					
Own outright			Х	Х			Х		Х	Х		х		Х		Х	Х			Х		Х	Х
Rent		Х			Х			Х			Χ		Χ		Χ			Χ			Χ		

For data analysis, each interview was audio taped and transcribed manually into text. After reading each interview, a thematic analysis was conducted manually to code and interpret the data in terms of commonalities and differences, searching for emerging themes and patterns.

FINDINGS AND DISCUSSIONS

The findings were presented in three different tables based on research objectives.

Table 2 shows the main type of environmentally ethical behavior (EEB) that has been practicing by majority of informants. Most of informants buy refillable items for their household, use their own bag when going shopping, buy a bulky pack rather than a small pack, and minimize waste by throwing away as little as possible for precycling activities. Meanwhile for recycling activities, many informants stated that they try to get something repaired rather than buying a new one, take old recyclable items to a recycling centre, sort out their household waste according to whether or not it is recyclable, and recycle food cans, drinks cans, foil, glass bottles, and jars. Moreover, majority of informants indicated that they feed animals with their household organic waste, freeze food leftovers, re-use paper or newspapers for other purposes, re-use plastic items, and re-use textiles for reusing activities.

Table 2: The main type of EEB that has been practicing by informants

Key categories	Emerging themes
Pre-cycling activities	 buy refillable items for their household such as ink pens, perfume, or dishwasher liquid use their own bag when going shopping, rather than one provided by the shop buy a bulky pack rather than a small pack for products that their household consumes in quantity minimize waste by using every bit of the food that they prepare for their family and throwing away as little as possible
Recycling activities	 try to get something repaired rather than buying a new one

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	 take old recyclable items to a recycling centre sort out their household waste according to whether or not it is recyclable recycle food cans, drinks cans, foil, glass bottles, and jars
Reusing activities	 feed animals such as their pets, livestock, wild birds, stray cats and so forth with their household organic waste freeze food leftovers for another meal, or unexpected guests re-use paper, junk mail, magazines, or newspapers for other purposes such as wrappers, artwork, or to light the fire re-use plastic items such as bottles, bags, containers and so forth re-use textiles such as old baby clothes for a new baby

Table 3 demonstrates the reasons for performing EEB by informants. The findings reveal five key categories: a) economic; b) social; c) religion; d) politic; and e) environment that emphasizing EEB amongst informants. Table 3: The reasons for performing EEB

Key categories	Emerging themes
Economic	Cost saving
	Increase income
	Reduce expenses
	Cheaper price
	Gain profit
	Earn side income
	High cost of living
Social	Influence by people surroundings
	- husband
	- family
	- mother
	- children
	- school teachers
	- community
	- neighbors
	- employer
	Mass media influence
	- television
	- advertisement
	- magazine
	- poster
	- banner
	- bunting
	Campaign
	- zero plastic bag day
	- 3R campaign
	Early childhood education

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	Size of family members
	Recycle bin facilities
	School influence
	- School programme
	Life constraint
	Convenient and easy
	Time saving
	Energy saving
Politic	Facilities
	 recycling centre, recycle bin provided by town council
	Campaign
	- zero plastic bag day
	Government encouragement
	- Prime minister's advice
	Supporting government
	- Organize programme
	- Organize campaign
	Laws
	Non-govermental organizations (NGOs) role
Religion	Islamic teaching and Islamic law/hukum
-	- saving
	- avoid extravagance
	 those who waste are the brothers of syaitan (devil)
	- Alms
	- Get reward
	 environment as Allah's creature
	- Avoid waste
	- Cleanliness
	Rasulullah as a role model
	Wasatiah concept
	Khalifah concept
Environment	Help the environment
	Appreciate the environment
	Environmental conservation
	- reduce waste
	- reduce plastic usage
	- maintain cleanliness
	To control environmental pollution
	Environmental law
	Environmental awareness
	- global warming
	- depleting ozone layer
	To conserve natural resources
	- reduce timber logging

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Economic aspect

Most of informants indicated that economic aspect influencing them for performing EEB. Informant 8 noted that she can save more money and reduce daily expenses by practicing EEB:

"... akak dengan abang kamu bukannya gaji besar jadi kenalah berjimatcermat. Lagi-lagi duduk rumah sewa. Jadi nak mengurangkan beban suami dengan mengurangkan perbelanjaan harian..."

Informant 10 noticed that she can get cheaper price when she buys in a bulky pack rather than a small pack for household product and also for refillable items. Moreover she can earn side income while taking old recyclable items to a recycling centre. Informant 2 added that she has to apply EEB because of high cost of living in Kuala Lumpur.

Social aspect

Informants demonstrated that social aspect also influencing them for practicing EEB. One of the reasons is early childhood education based on the statement given by Informant 2, Informant 4 and Informant 24.

- "... sebab memang kita telah diajar dari kecil daripada ibu bapa kita." (Informant 2)
- "... kesedaran tu memang dari awal. Kita dah diajar, apabila benda tu masih boleh diguna, kita gunalah. Buat apa nak buang..." (Informant 4)
- "... memang kita amalkan juga sebab kita memang dari dulu dah diasuh. Kita tengok orang-orang tua kita dulu pun buat macam tu. Dan kita telah diasuh. Jadi kita nampak apa orang tua kita asuh kita, buat begitu, kita buat sampai sekaranglah." (Informant 24)

Furthermore, this study found that a number of informants agreed that people surrounding also influencing them for conducting EEB such as husband, family, mother, childrens, teachers, communities, neighbors as well as employers. For example, Informant 22 voiced that her neighbors are very concern about recycling activities:

"... jiran-jiran pun tidak suka kalau sampah bersepah-sepah kan... kalau buang sampah banyak sangat nanti kena tegur."

Informant 8, Informant 17 and Informant 22 agreed that mother also plays important role in EEB activities. Informant 17 further added:

" ... akak selalu ikut ibu keluar beli barang dapur kan... dah terikut-ikut macam ibu akak."

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In addition, most of informants stated that mass media mainly television is one of the influential aspects especially in recycling activities. For instance, Informant 7, Informant 12 and Informant 21 had mentioned:

- "... iklan-iklan dalam TV dengan majalah tu ada lah juga buat saya rasa untuk melakukan aktiviti ini. Contoh macam kempen untuk kitar semula kan, sedikit sebanyak membuka jugalah mata saya untuk berkitar semula ni." (Informant 7)
- "... mempengaruhi juga apabila melihat kempen kitar semula di TV yang membangkitkan semangat saya untuk mengitar semula." (Informant 12)
- "... memang dalam TV pun memang kita selalu tengok benda tu... memang bermula dari TV lah. Then kita mulakan sikit-sikit, lama-lama kita biasalah." (Informant 21)

Politic aspect

Informants indicated that recycling campaigns organized by government, recycling facilities provided by town council and recycling programs organized by NGOs influencing them for participating in recycling activities. However, some informants noted that they will involve themselves in recycling activities if only the facilities such as recycle bins or recycling centre is placed in their residential area. Therefore, Informant 1 gladly said that:

"... pada hujung bulan, suami aunty akan bawa barangan lama yang boleh dikitar semula yang telah diasingkan ke pusat kitar semula dekat kawasan perumahan kami. Yang ini aunty dah lakukan untuk masa yang agak lama juga lebih kurang 7 tahun."

Religion aspect

Majority of respondents agreed that religion aspect such as Islamic teachings, *Khalifah* concept and *Wasatiah* concept as a motivation for them performing EEB in their daily lives. For example, Informant 4, Informant 18, Informant 24 explained:

- "... kalau dalam Islam pun memang ada diajar, kita ni harus berjimat cermat, sifat yang tidak boros. Kalau boros dan kita tak berjimat dengan apa yang kita ada itu adalah syaitan, betul tak? Kalau kita berjimat cermat ni kita ikut Rasulullah..." (Informant 4)
- "Kita sebagai Muslim diajar untuk menjaga kebersihan. Mungkin dengan buang sampah secara teratur atau kitar semula dapat kurangkan

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pencemaran. Kita mestilah hormat dan sayang alam sekitar. Mereka semua makhluk Allah." (Informant 18)

"... kalau kita ada makanan lebih, nasi sejuk, hampas kelapa, roti berkulat, jangan buang dalam tong sampah. Bagilah makan kepada binatang yang memerlukan makanan. Itu sebahagian daripada amal jariah kita juga. Kita bersedekah, niat kita bila kita bagi tu kita niat bersedekah kepada semua binatang hamba Allah melata atas muka bumi, kita pun dapat pahala." (Informant 24)

Environment aspect

Surprisingly, according to data analysis, almost all informants claimed that environment is one of the reasons they taking part in EEB activities. They are willing to conserve the environment by reducing waste and plastic usage. Therefore they can maintain the environmental cleanliness and control environmental pollution.

Informant 12 described that she prefer to use drink cans and glass bottles compared to plastic bottles which is not biodegradable. She further added:

"Saya mengguna semula kertas dan surat khabar kerana boleh mengurangkan penebangan pokok... saya melakukan aktiviti kitar semula untuk menjimatkan penggunaan sumber."

In addition, Informant 14 noted that she participating in recycling activities as to reduce global warming. Informant 21 notified that she loves to do EEB activities as ozone layer depletion becoming worse.

Main influential aspect

Out of five key categories that emerged from thematic analysis, only four key categories namely economic, religion, social and environment claimed by informants as the main aspect that influence them in applying EEB in their daily lives. The findings were demonstrated in Table 4.

Majority of informants emphasized that economic as the most influential aspect in practicing EEB. For example, Informant 10 stressed that:

"Bagi akak, aspek ekonomi paling penting. Sebab sekarang kos perbelanjaan semakin bertambah. Tahu sahajalah zaman sekarang, bukan macam dulu-dulu. Tambah pula tinggal dekat bandar Kuala Lumpur ni."

Meanwhile, some informants asserted that religion aspect as the most influential aspect in conducting EEB. As noted by Informant 21:

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"... yang akak tahu konsep kesederhanaan dalam Islam... peranan sebagai khalifah di bumi juga betul... macam mana kita nak jaga bumi kita sekarang, ozon-ozon pun dah teruk...kebersihan pun kita kena jaga juga... dalam Islam memang kebersihan itu pentinglah."

In the meantime, a few informants indicated that social and environment aspect as the most influential aspect in participating EEB. Informant 2 and Informant 18 mentioned that:

- "... lebih kepada sosial. Sebab memang kita telah diajar dari kecil daripada ibu bapa kita... sebab anak akak pun buat juga." (Informant 2)
- "... kitar semula dapat kurangkan pencemaran. Yang paling penting kebersihan alam sekitar." (Informant 18)

Table 4: The main aspect that influence informants in applying EEB

Key categories	Emerging themes
Economic	Saving
	- cost
	- budget
Religion	Wasatiah concept
-	Islamic teaching
	- Cleanliness is a part of Iman (faith)
	- Avoid self-harming
Social	Family influence
	Early childhood education
Environment	To maintain clean environment

CONCLUSIONS

The results from this study revealed that economic and religion aspect is the vital factor for communities in Kuala Lumpur in conducting EEB. Therefore economic approach and religion approach should be considered by any stakeholder either government, private or non-governmental organizations (NGOs) in order to advocate EEB particularly among Muslim community in Malaysia.

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