

## The Influence of Individual's Factors on Sustainability Learning in Organization

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**Abstract:** Learning has been seen as a vital role in embedding sustainability in organization. The learning process towards sustainability or also known as sustainability learning has been influence by the contextual factors. This study aims to conceptualize an integrated model of sustainability learning and contextual factors influence as a process of learning among individuals in organization. Contextual factors that may influence the learning process engaged by employees in developing knowledge about sustainability are divided into individual and organization factors. However, this study only emphasizing on individual factor's influence on sustainability learning in organization. Results of the literature review will be a guidance to propose a framework which future researchers may refer to in studying sustainability learning in organization.

**Key words:** Contextual factor, sustainability learning, individual factor, motivation, knowledge

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### INTRODUCTION

Sustainability is one of the major concerns in organization's strategy nowadays. Sustainability concept such as triple bottom line is not only concern on the economic impact of the organization, yet the priorities also have been put in environmental and social impact of the organization. However, sustainability is not a destination yet a learning process that need to went through by the organization member (Wals and Rodela, 2014). In order to embed sustainability, learning has found as one of the important element that need to be considered by the organization (Henry, 2009; Velazquez *et al.*, 2011; Erskine and Johnson, 2012; Schneider *et al.*, 2002; Dlouha *et al.*, 2013; Lankester, 2013; Craig and Allen, 2013; Moyers *et al.*, 2008). An individual member in the organization have to acquire knowledge about sustainability through learning in effort to increase awareness about sustainability, foster sustainable action and enable them to support organization's sustainability initiatives. Learning for sustainability or sustainability learning referring to the learning process to facilitate the sustainable development initiative as well as achieving sustainability goal of the organization (Henry, 2009; Fabricatore and Lopez, 2012; Lankester, 2013; Hansmann, 2010).

There are two major factors that will influence the process of change toward sustainability according to Ballard (2005). The said factor can be categorized into

organizational and individual factor. Organizational factor referring to the organization based factors such as the structure, technologies available, legal and the organization environment or situational factor. Whereas, individual factor referring to the individual's learner's such as self-efficacy, habits, beliefs, values and norms. Both of these factors also have been known as contextual factor that may influence the learning process for sustainability. Lot of attention has been given in exploring the influence of individual factors in learning as general (e.g., Coetzer and Perry, 2008; Lee *et al.*, 2013; Ellinger and Cseh, 2007; Primmer and Furman, 2012) but there are compelling need for further study on the influence of contextual factors in sustainability learning specifically due to lack of attempts to explore it. The contextual factors perhaps are important in order to enhance the understanding towards sustainability learning process specifically by considering where the learning take place and by whom (Henry, 2009; Wals and Rodela, 2014; Moyers *et al.*, 2008). Therefore, this paper attempts to bring a new perspective to the understanding of contextual factor that influence sustainability learning process in organizations. Despite there are two contextual factors involve, this paper will be focusing only on the individual factors such as individual motivation, self-efficacy and values influence towards sustainability learning. Based on the secondary data (literature review) and borrowed concept of organizational learning by McShane *et al.* (2013), new insight about the influence of

these factors towards sustainability learning process will be given by providing the definition of each factor, on how it influence learning and why each factor may contribute to sustainability learning.

### **ORGANIZATIONAL LEARNING AND SUSTAINABILITY LEARNING**

In order to understand the process of sustainability learning in the organization the concept of Organizational Learning (OL) can be borrowed as a conjunction of the Sustainability Learning (SL) concept. Organizational learning process (McShane *et al.*, 2013) can be borrowed in order to understand the role of individual employees in acquiring the knowledge in the effort to increase the usefulness of the knowledge in terms of awareness, autonomy, sense making and empowerment. Organizational learning concept acknowledges the role of knowledge sharing through training, communication, information system and observation in the learning process. Due to the importance of knowledge sharing elements in supporting the OL process, the top management of the organization should be ready to invest in the learning activities that focusing on cognitive and behaviour development of the employees (Westermann *et al.*, 2014).

The learning activities involve in OL is an anchor of knowledge acquisition and act as a change driver (Benn *et al.*, 2013) and important in supporting organizations' strategy including sustainability (Opoku and Fortune, 2011; Pourdehnad and Smith, 2012; Smith, 2012; Benn *et al.*, 2013; Cebrian *et al.*, 2013; Iarossi *et al.*, 2013). The growing attention of embedded concept between learning and sustainability has emerged the new interface between organizational learning and sustainability (Iarossi *et al.*, 2013; Duarte, 2014). Theoretically, the process of organizational learning in cultivating sustainability as a culture in the organization will allow the company to be called as sustainable learning organization which referring to the organization that have enough knowledge about sustainability, act accordingly and being a role model to others (Velazquez *et al.*, 2011). The existence of sustainability in organizations' strategy has challenged the traditional concept of organizational learning such as 4I model that consists of intuition, interpretation, integration and institutionalization as a process of learning that occur at individual level and organizational level. Tension between individual process at the intuition stage and organizational level at institutionalization process should be managed properly by the organization in order to ensure same value towards sustainability can be embed in the organization (Benn *et al.*, 2013).

Therefore, as a basic guidance to understand the connection between an individual learning and knowledge

awareness, the organizational learning process by McShane *et al.* (2013) can be adapted to sustainability learning process in this paper. Individual learning is one of the elements of knowledge acquisition in organizational learning. The individual learning will influence the knowledge use including knowledge awareness, sense making, autonomy and empowerment. Thus, based on this framework, it can be understood that, individual learning will facilitate to increase knowledge awareness toward sustainability.

**Sustainability learning:** Sustainability Learning (SL) is defined as a process of learning to facilitate the sustainable development initiative in organization in order to achieve their sustainability goal (Henry, 2009; Fabricatore and Lopez, 2012; Lankester, 2013; Hansmann, 2010). Sustainability learning has been seen as a broaden concept to understand sustainability better compared to Education for Sustainable Development (ESD) due to the broaden concept compared to ESD, besides taking all the human system level into consideration (Hansmann, 2010). In an ecological point of view, SL has been seen as a process that occurs when the social ecological system capable to adapt with dynamic change between the threshold and managing information efficiently in the effort to reduce pressure on natural or energy use (Tabara and Pahl-Wostl, 2007).

The importance of learning cannot be denied due to its significant role in embedding sustainability in organization (Henry, 2009; Hansmann, 2010; Lankester, 2013; Craig and Allen, 2013; Jucker, 2002; Moyers *et al.*, 2014; Duarte, 2014; Bradbury and Middlemiss, 2014). The high involvement of employees and stakeholders in the learning process, the greater the understanding and support towards sustainability initiative in the organization (Doppelt, 2003). The word learning itself portrays the process of assimilation of information that will be reflected in cognitions and behaviour changes in individual, group or organization accordingly (Henry, 2009). Learning has been considered as a holistic process that encompasses training as well as education in the effort of improving knowledge and skills of individual (Masadeh, 2012). However, the learning process towards sustainability is still poorly understood and further research is highly needed to increase the understanding (Bradbury and Middlemiss, 2014). Learning is required in order to achieve shared goal on sustainability because different people will have different understanding towards sustainability. Besides that, lack of understanding in term of complex interaction between social and ecological system can be enhance through effective learning process (Henry, 2009).

An individual learning process towards sustainability has been conceptualized from several learning theory such as experiential learning (e.g., Henry, 2009;

Lankester, 2013; Moyers *et al.*, 2008), social learning (e.g., Tabara and Pahl-Wostl, 2007; Henry, 2009; Lankester, 2013; Dlouha *et al.*, 2013; Wals and Rodela, 2014; D'Angelo and Brunstein, 2014) and transformative learning (e.g., Sterling, 2011; Lankester, 2013; Bull, 2013; Moyers *et al.*, 2008). In the learning process, internal cognitive of the learner, outward networking behaviour, social influence role and individual experience role has been categorized as a building blocks for sustainability learning (Henry, 2009). Based on this building blocks, it makes experiential learning is important to the individual's SL process as well as social learning (Henry, 2009; Lankester, 2013; Moyers *et al.*, 2008). The main difference between adoption knowledge through experiential learning and social learning is on the process which individual learning focusing on production of learning while social learning emphasizing on imitation or copying the knowledge from others (Henry, 2009). However, in order to increase the understanding towards SL, combination perspective between individual learning and social learning is crucial due to the uniqueness of both perspective and the advantages when it comes together (Henry, 2009; Lankester, 2013; Moyers *et al.*, 2008).

An individual learn best through knowledge acquisition based on self-experience and benefits interpreted from the environment (Henry, 2009). Besides that, emotional charge experienced by an individual such as personal crisis and financial hardship has been seen as reasons of sustainability learning (Lankester, 2013). Consistent with the OL process that has been discussed earlier, in term of knowledge and skill acquisition, hands-on experience while participating in workshop and training initiated by any level of entities such as government and private consultant will facilitates the process of learning towards sustainability (Lankester, 2013; Moyers *et al.*, 2008; Craig and Allen, 2013). Activities involves in training programme including role playing has increased the sustainable skills of the learner because they get an exposure on practical application of sustainable practices (Moyers *et al.*, 2008). This is consistent with the study by Alkhaddar *et al.* (2012); Duarte (2014); Petrini and Pozzebon (2010) that also claimed the significant role of training and education programme initiated by the organization in facilitating the sustainability learning process among individual employees since the programme will emphasizing on deep learning. Deep learning is consider as a profound of learned-matter understanding that capable to provides constant improvement to the individual who involved in the process (Alkhaddar *et al.*, 2012).

Besides experiential learning, an individual learn about sustainability through social learning which is

compose of the collective action in supporting the sustainable development practices in the organization (D'Angelo and Brunstein, 2014). The crucial elements of this collaborative learning are social interaction that will facilitate the process of embedding sustainability knowledge among individuals in the social group (Dlouha *et al.*, 2013). In social learning, besides relying on observation, the learner learn about sustainability practices informally at the same time through the interactions among family or friends and rapid communication between employees and top management (Craig and Allen, 2013; Lankester, 2013; Henry, 2009; Moyers *et al.*, 2008). Social media such as Facebook also shows a contribution in facilitating the collective learning process of SL (Lankester, 2013). However, social learning and sustainability learning is different in terms of the outcomes because in social learning the outcome is not necessary will improve the long-term sustainability especially in term of human adaptation towards ecological change which has been emphasized by sustainability learning (Tabara and Pahl-Wostl, 2007).

Even though there are multiple attempts to explore sustainability learning, the current studies are falling short in some areas. The studies are lacking to take into account relevant contextual factors which may important to enhance the understanding on sustainability learning process in a different environment context (Henry, 2009; Wals and Rodela, 2014; Moyers *et al.*, 2008).

### **CONTEXTUAL FACTORS INFLUENCING SUSTAINABILITY LEARNING**

Previous studies (Henry, 2009; Lankester, 2013; Moyers *et al.*, 2008) have stressed the need of studying contextual factors in understanding learning for sustainability or even learning in workplace as general (Antonacopoulou, 2006). This is due to the situation which factors such as social influence, internal belief systems, individual experience and endogenous network are greatly influence by the context where the learning has imposed (Henry, 2009). In some extent, to understand sustainability learning as a collective truth, it is necessarily contextual and not random totally (Tabara and Pahl-Wostl, 2007). The study related to ethics and corporate social responsibility for instance cannot neglect the contextual factors of the organization internally and externally due to complex interaction of the individuals with their environment (Ardichvili, 2013). Contextual factors are referring to the factors around the individual, group or organization that can be categorized into internal and external factors. External contextual factor or knows as outer context are referring to political context, social

Table 1: The definition of factors influence

Factors influence	Definition
Motivation	Internal or external forces of an individual that as an inducement to influence action of doing something (Goodman, 2011)
Self-efficacy	The beliefs of individual and his/her confidence in performing challenging task or learning challenging (Wang and Wang)
Values	Stable, evaluative believe that plays as a guidance to individual's preferences of outcome or action in any situation (McShane <i>et al.</i> , 2013)

context and interpretation and self-efficacy of the organization that operated internationally. At the other hand, inner context (internal factors) refers to organizational strategy, structure, and culture and management process (Haveman, 1992).

Prior to sustainability learning, the influence of contextual factors has been recognized earlier in the other learning related research. For example, the theory of human resource development learning participation by Wang and Wang has found three clusters of variables that influence the participation of employees in Human Resource Development (HRD) learning programme. The factors are individual factors (motivation, self-efficacy, organizational membership, personal characteristics, learning style, perceived learning needs, perceived benefits, learning technology orientation and individual cultural orientation) organization factors (organization context, organization policies and regulation and the work content) ; and learning process factors (Instructional System Design of HRD programme). All these factors will be mediating by environmental factors such as economic condition in influencing employees' participation in HRD learning intervention.

Based on the previous study, it can be concluded that, contextual factors that may influence individual's learning process can be categorized into two major factors. First factor is individual factors or internal factors. This factor referring to the individual's values, belief, motivation, interest and demographic profile that will influence the process of individual learning. External factor or organizational factors is the second factor which referring to organizational structure influence, size of the company, technology available or adapted by the organization as well as rules and regulation of the company. These factors are important to be considered by the individual employees and organization as a whole in order to ensure the effectiveness of any learning medium such as training. Therefore, the exploration and deep understanding on the influence of these factors is important to enhance understanding towards the sustainability learning process among employees in organization.

## INDIVIDUAL FACTORS INFLUENCE

As been mentioning earlier, individual factors may influence the individuals' learning process towards sustainability. The influence of individual factors has

been recognized in the process of learning as general. However, the influence of this factor in SL is still remaining elusive even though the need of further study has been recognized in previous study. The influence of this factors in learning process as general is becomes a guidance to understand it influence towards SL. Therefore, this section will provides the definition of each individual factor, how each factors influence learning and why each factor may contribute to sustainability learning. The factor that may influence the sustainability learning process including the motivation to learn of individual, values as well as the self-efficacy of individual. Table 1 shows the definition of individual factors that may influence the individual's learning process generally or specifically on sustainability.

**Motivation to learn:** Prugsamatz (2010) has found that motivation to learn is one of the crucial factors in sustaining learning in the organization. The combination of organization's cultural practices and individual's motivation to learn has been consider as a foundation of the learning process in the organization. This finding supports the fact that motivation is one of the principle of learning in organization which provides the learner greater satisfaction as a return of greater motivation to succeed (Smith, 2012). This is related to achievement goal theory that stated, the individuals will be more motivated to achieve different goal (goal orientation) based on their own beliefs that will influence their respond to the any challenges and situation around them (Chadwick and Raver, 2015). Proposition 1; motivation to learn will help to facilitate the process of sustainability.

**Self-efficacy and its influence in learning:** Self-efficacy of the individuals will help him/her to be more participative in the learning process especially training programme conducted by the organization. Based on this finding, self-efficacy also has been viewed as one of the important factor of self-concept that will influence the level of individual's ability in learning process. If the employees believe she/he can learn sustainability successfully, the greater the knowledge on sustainability will be embrace. Proposition 2: self-efficacy will increase the effectiveness of the sustainability learning process.

**Role of individual's value in sl process:** Study by Florea *et al.* (2013) has proposed four values that is altruism, empathy, positive norm and private

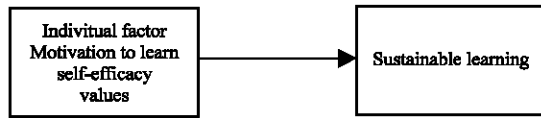


Fig. 1: Conceptual framework

self-effacement that may influence organizational sustainability initiative in organization. They believe that the employees will be more supportive in organization's sustainable initiative if they were nurtured by all of the values. The specific value centered that has been promoted through sustainability training also has been found as an effective way to increase mind-set changes towards sustainability (Murray *et al.*, 2014). The explicit values on sustainability need to articulate in the effort to develop shared vision and action plan towards sustainability in organization (Novak, 2014). Proposition 3: Necessary values will helps an individual increase their involvement in sustainability. At the same time, sustainability learning process that involves training activities will strengthen the values (Fig. 1).

## CONCLUSION

Based on the literature review, it shows that individual factor such as motivation to learn, self-efficacy and values will influence the sustainability learning process of an individual. The process of sustainability learning is not universal yet much depending on the contextual factors or the environment where the process involved. By understanding the influence of the factors towards the process, it will help the organization to organize effective learning programme such as training and workshop. However, this study is still has it limitation. Therefore, further research that utilizing quantitative method is needed to quantify the influence of every factors that involved in the learning process.

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