A Model of Work Related Self-Directed Learning (WRSDL) as the Basis for Organizational Learning

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Abstract. *This study focuses on the work-related self-directed learning (WRSDL) practices in order to capture a comprehensive understanding regarding the phenomena. Considering that there has been no solid theory about WRSDL, it is necessary to conduct an explorative study that shall provide a rich data in order to strengthen the body of knowledge. This explorative study using qualitative method was conducted in examining WRSDL practices among staffs and managers from various departments in a private organization in Indonesia. This organization has been chosen deliberately by knowing that being a learning organization is one towards the goal to be achieved. In this organization, improvement and innovation have always been the central issues and become a way of life ingrained among employees. A total of thirty staffs and managers were purposively selected and interviewed in-depth using the semi-structured approach. The rich data gathered were analyzed using content analysis technique. This study resulted in the construction of a conceptual model of WRSDL that highlights three important factors; the driving factors, the barriers, and the preferred learning practices. This model shows the dynamic interaction of these three factors and indicates the benefits and ways how to cultivate WRSDL in an organization. Implications of the model to the body of knowledge, future research and practitioner are provided at the end of the paper.*

Keywords. *Self-Directed Learning; Work-Related Self-Directed Learning; Organizational Learning.*

I.   INTRODUCTION

Globalization, tight competition and uncertain eco-sociopolitical circumstances have brought drastic changes to the way organizations conduct their business. In these circumstances, not only the management that must be able to adapt and strive to survive instead the employees at all levels are required to change to improve their competencies. They need to change their mindset about the way they develop their competencies and the way they learn in the workplace [1]. The employees need to realize that organizations require people who perceive that learning is important and they must have initiative to take learning as their own responsibility [2, 3]. Even though learning is a natural process for survival [3.4], yet the initiative to learn for some individuals are very low, dependent on others (such as supervisor, trainer or colleague) to direct their learning. Thus it is no longer tenable. Every employee needs to be ready as self-directed learner in order to survive in the rapidly changing business environment [5].

II.   LITERATURE REVIEW

A common definition of self-directed learning (SDL) introduced by Knowles [3] is as a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. The self-directed learners are those who have self-concept as independent and active learners [3], who demonstrate a greater initiative to take responsibility in making learning meaningful [6], view problems as challenges, ready to change and enjoy learning [7]. Other characteristics such as curiosity, discipline, confidence, goal-oriented, committed, and ability for self-reflection [8,9] are also essential of a self-directed learner.

Besides the personal characteristics, some researchers [9, 10, 11,12] identified some of the organizational factors that could enhance the emergence of WRSDL. Self-directed learning does not occur in a vacuum [13]. SDL is a natural learning for each of the individual, however its manifestations are in a continuum [3,4]. Learners may perform different levels of self-direction in different learning situations [12,14]. Setting up a supportive learning climate such as providing the availability of resources (both human and non human), establishing fluent communication could enhance the tendency for self-directed learning to emerge [15,16], even the nature of works that is susceptible to change will coerce the emergence of WRSDL [17]. However, lacking of solid evidence that could answer what factors could cultivate the emergence of WRSDL [18, 19] and how organization promotes WRSDL [1, 20, 21, 22] implicates the need for further study on this matter. A better understanding of WRSDL will contribute to the development of a robust theory, practical implication as well as for future research reference.

III. RESEARCH METHODOLOGY

Considering that there has been no solid theory about WRSDL, it is necessary to conduct an explorative study that shall provide a rich data in order to strengthen the body of knowledge [22]. This qualitative study was carried out in one of the largest motorcycle manufacturing company in Indonesia where improvement and innovation have always been the central issues and a way of life among employees. The participants in this study were selected using purposive sampling technique. The participants selected were those who have a minimal of one year working experience in the company and perceived being prominent in practicing WRSDL by their Supervisor and HR department. Thirty staffs and managers were interviewed in-depth using semi-structured instrument to get their views and experience of what, why and how they carry out WRSDL. Data collected were analyzed using content analysis technique.

IV. FINDING: CONSTRUCTION A MODEL OF WRSDL

This study propose a model which incorporates the *driving factors* that consist of personal characteristics (motivation, curiosity, personal mastery, learning skills, sense of responsibility, self-efficacy, independence/self-reliance, adaptiveness/flexibility, knowledge sharing and value of knowledge); organizational factors (shared vision, positive learning environment, leader as agent of learning, and nature of work); and family support. This model identifies the *barrier factors* (situational, institutional and dispositional); and the *preferred learning-practices* (informal and formal learning). The dynamic interaction among factors that explain ways how to cultivate WRSDL in the organization [3, 6, 13, 14, 15, 16, 23, 24, 25, 26, 27, 28, 29] are also highlighted.

A. The Driving Factors

Research findings indicated that the emergence of WRSDL is influenced by the dynamics interaction between the driving factors and the barrier factors, where the occurrence is also moderated by the learning practices that are applied in the organization. This study identifies the driving factors of the emergence of WRSDL that consist of personal characteristics, organizational factors, and family factors.

Personal Characteristics

This research findings have strengthened previous findings where the emergence of WRSDL is driven by certain personal characteristics including motivation, curiosity, personal

mastery, learning skills, sense of responsibility, self-efficacy, independence/self-reliance, adaptiveness/flexibility, knowledge sharing and value of knowledge which are identified as characteristics of highly self-directed learners. Personal characteristics become an important variable in determining a learners' ability to self-direct their own learning [1, 30, 31, 32]. By understanding the personal characteristics of self-directed learners it is expected to develop learners to be more self-directed in their own learning which brings benefit for their own and their organization.

a) Motivation

Motivation is an important factor that needs to be existing for self-directed learning to take place [27]. People are motivated to learn when they know that they will receive some kind of rewards intrinsically and extrinsically after they successfully accomplish their goals. Learners who are motivated and take the initiative in learning will learn more things and tends to maintain and utilize what they learn better and longer than those who sat at the feet of teachers/trainers passively waiting to be taught [3]. Even some learners who are motivated by intrinsic rewards put their learning effort simply for the acquisition of knowledge, skills and ability; where they continually expand their knowledge in a broad range of topics and fields of knowledge.

b) Curiosity

This study has strengthened previous literature where curiosity was acknowledged as one of the prominent personal characteristics of learners who are self-directed [26, 33, 34,] 35, 36). Learners carry out WRSDL because of their curiosity or willingness to deepen their knowledge related to their field. This curiosity could be internally driven based on their reading or observation or past experiences or even through engagement with their colleagues. This is relevant with some previous studies where curiosity was identified as one of the important factor that needs to exist to drive self-directedness in learning [35, 36, 37]. Moreover, it is indicated that curiosity is the second most frequent reason for adults to involve in learning project [38]. The same researcher further asserted that satisfaction of curiosity is the second most frequent reason for adults to involve in a learning project [38].

c) Personal Mastery

Self-directed learners view their workplace as a place to develop personal growth by utilizing their intellectual potential [39]. This study showed that the self-directed learners have high-self-conscious; they recognize and monitor their life purpose, vision, values and commitment and they commit in taking steps towards continual development in mastering what they aspire to achieve. It is named as personal mastery orientation [40]. These are learners who have high orientation in mastering certain knowledge and skill at their workplace to ensure personal growth and optimizing their true potentials. They set learning objective at a very high level [41, 42] and take each learning task as interesting and important [42]. They must be able to think critically and question rules or norms of what they are doing [14].

d) Learning Skills

This study strengthen what previous scholars found about the importance of cognitive skills as the key role of the emergence of WRSDL in terms of deciding learning goals, selecting learning strategies and materials, and implementing evaluation [7, 43, 44]. Adult education scholars agree that self-directed learners get benefit from having core learning skills such as reading, comprehension, arithmetic, critical thinking and problem solving [6, 45]. This capability will equip the learner to critically identify and modify weak or unconfirmed ideas, which helps to strengthen the individual's knowledge base [45]. This is

relevant with what some scholars have emphasized that cognitive skills such as analytical thinking, critical thinking, system thinking and mental model play as key roles in WRSDL in terms of deciding learning goals, selecting learning strategies and materials, and implementing evaluation (43, 44, 46]. This study also found that the system thinking skill is also important where they can see themselves as part of a complex system where every little actions taken will have impact on the main system. They seek connectivity between their works with others so that they could indirectly contribute to improve the overall productivity and quality of the organization.

e) Sense of Responsibility

This study found that the learners take responsibility to do WRSDL because of their awareness on the importance of enhancing their knowledge, skills and abilities to ensure that they can achieve the goals set by the organization or by themselves. This is relevant with the opinions that self-directed learners assume ownership of the tasks assigned and takes it as personal responsibilities for completing it not because of they were given the task by their supervisors and viewing problems as challenges, not obstacles [47, 49]. The self-directed learners demonstrate a greater awareness and willingness to take responsibility in making learning meaningful thus making them more effective learners [6, 3, 48].

f) Self-Efficacy

Self-efficacy is the perceived ability to cope with specific situations in relation to the self-assessment of their ability to perform any tasks or action to achieve the goals [50]. Self-efficacy was recognized as important component of self-directed learning pursuits [7, 51, 52]. The self directed learners have clear understanding of their learning needs. They are confident and able to locate learning resources and know when they would need them. They took difficult tasks as challenges not as obstacles to avoid [49]. They believed that if they continue learning they would be able to perform or solve whatever obstacles that arise. Self-efficacy also helps improve the level of self-directed learning [53]. Furthermore, it is asserted that the learners who have high self-efficacy are more successful when carrying out self-directed learning when compare to learners with low self-efficacy [54].

g) Independence/Self-reliance

This study found that the need to be self-reliant is one of the factors that drive WRSDL. This is in line with another researcher who mentioned that a self-directed learner is a person who has self-concept, independent and an active learner [3]. In self-directed learning the locus of control is in the hand of the learner and not the supervisor or trainer [45]. The heart of WRSDL is the issue of power, control and access to resources [55]. Therefore, the self-directed learners are autonomous and independent in their learning [48].

h) Adaptiveness/Flexibility

One of the important research finding indicate that adaptiveness/flexibility is one of the prominent characteristics of the self-directed learners. In situations where they encounter severe problems that they were not sure about the solution they keep persistence by holding to the belief that they have the capacity to learn and adapt in accordance to the situational needs. The participants of this study address that every challenging circumstance as a trigger and motivator for them to learn. This is relevant with the initiative to learn which derives from the need to adapt to environmental changes [3]. The initiative to learn is a mean for survival. However, learners may perform different levels of self-direction in different learning situations; the higher the level of self-directedness the more ready the learners are willing to adapt to the situation [12, 14].

i) *Knowledge sharing*

One of the characteristics of the self-directed learners is willingness to continually update their knowledge and making their knowledge applicable in their related fieldwork or surrounding. The self-directed learners are not only updating but also looking forward to share their knowledge. They believe that by sharing it can further be multiplied through questions or discussions that occurred. They love to teach and share their knowledge because by doing so they increasingly feel the need to be more resourceful and it motivates them to further gain and generate new knowledge.

j) *Value of Knowledge*

This study found the importance of values as a principle to guide what is important in their life. The participants of this study put a high value of knowledge gained as result of learning as compared to material things. Knowledge will multiply and bring positive impacts not only to the owner but also to others, and can be shared from one person to another or from one generation to the next generation. The feeling of satisfaction on the ability to acquire and share knowledge motivates a learner to carry on their quest for learning.

Organizational Factors

Besides the personal characteristics, there are several organizational factors that influence the emergence of WRSDL. These factors consist of shared vision, positive learning environment (PLE), leader as agent of learning and nature of job.

a) *Shared Vision*

Employees need a clear picture of what need to be achieved so that they can translate and take it as personal objective (internalization) and stay on track and align their effort into it [16]. A clear shared vision will flourish a sense of common purpose [16]. This will enable employees to plan, strategize, monitor, evaluate and make decision on their learning in line with achieving the organizational objective. Furthermore, once the employees obtain a sense of clear purpose the work itself can be an intrinsic motivator for the employees [56].

b) *Positive Learning Environment (PLE)*

This study found that the serious effort of the management in encouraging learning by providing learning opportunities, facilities and ensuring the availability of experts (could be the senior employees or other networking sources) to provide consultation, and even the reward policy that is related to learning has been perceived as important factors in encouraging the emergence of WRSDL. The positive learning environment reflected by daily working activities, interaction, problem solving and the way they face challenges shape values that influence their propensity to learn such as what, why and how to learn. The management encouraged exploration, research, experimentation, learning from errors and ensuring a conducive learning environment by promoting smooth communication, dialogue and discussion so that employees continue learning and make learning as their way of life. The supervisor's attitude where they believe that their staffs have natural willingness and abilities to develop themselves has nourished the emergence of WRSDL. At the same time, the employees perceived their workplace as a working environment where diverse perspective are acceptable, mistake are tolerable and collaboration and access to the organizational information are uncomplicated. It is clearly stated that the availability of resources enhances self-directedness in learning and the lack of certain resources diminishes it [11]. And relevant with it another study implicated the availability of learning materials and resources strongly influences self-directedness of the employees to carry out their learning [28]. The daily working activities, interaction, problem solving and the way they face

challenges shape values and beliefs of the organizational members and influence their initiative to carry out learning [57]. Even, in this organization the employees will feel left behind if he/she does not continuously do learning.

c) Leader as Agent of Learning

Leaders as role models who inspire their staffs to go higher perceived as important factors in cultivating the emergence of WRSDL [58]. Leaders encourage employees' learning by showing positive examples such as reading and knowledge sharing as a habit, encouraging employees to try new things, and build strong interpersonal relationship so that employees feel free to interact and ask questions without fear or prejudice. Moreover, leaders themselves need to have critical skills to encourage WRSDL [58] among their staffs.

d) Nature of job

Nature of job that requires rapid adaptation, deep analysis and critical thinking require employees to do a lot of higher order thinking. In this kind of work, flexibility of action and creativity for solving problems, trigger the needs for learning. Freedom on how the employees learn and work has become vital in generating new ideas, innovations and continuous improvement. This nature of work has driven them to carry out WRSDL, to ensure that they are able to keep up with up-to-date knowledge. This is relevant with what another researcher mentioned in that WRSDL is particularly relevant when learning must be done fast in response to the unexpected changes [59]. Therefore, organizational environment plays a role in affecting WRSDL activities [60].

Family Support

This study also implicated that family support is a significant factor in motivating employees to take the initiative to always do self-improvement. Some of the participants came from family background whose parents are educators. This is relevant with the study done by Brockett and Hiemstra [47], Brookfield [61], Cho and Kwon [30] and Candy [14] that family background influences the emergence of WRSDL. Since childhood they have been instilled by their parents regarding the importance of learning and trained them to take responsibility for their own learning. Likewise, those who have spouse who emphasizes self-development have higher tendency to do WRSDL.

B. The Barriers

Several factors could inhibit the emergence of self-directed learning [15,16]. This study identifies three categorizations of barriers that could inhibit the emergence of WRSDL. It is similar to the classification of the barriers of SDL introduced by Zirkle [62]. The three categorizations are situational barriers (barriers due to the given situation such as family-work conflict, unsupportive social environment), institutional barriers (barriers due to the organizational practices that exclude or discourage learning such as work-overload, no discretionary time for learning), and dispositional barriers (barriers that come from within of the individual such as attitudes and perceptions about oneself as a learner, physical limitation, such as fatigue).

a) Situational

A given situation may not allow learning to take place even if the willingness has been high. The individual circumstances such as work-family conflict, lack of money, or geographical concerns may inhibit the occurrence of WRSDL [62].

b) Institutional

Institutional barriers such as lack of time for learning, over-load of work, tight deadlines, and negative leadership characteristics have been identified as inhibit factors of the emergence of WRSDL. This is relevant with previous study [62, 63].

c) Dispositional

This study found that something within individual condition such as negative attitude, physical and/or mental fatigue or exhaustion could limit the emergence of WRSDL. Age also was identified as the barrier where older people may experience physical and cognitive slower pace in learning, such as difficult to memorize too much facts and slower in handling internet-related learning all the time [64].

C. Compatibility Between Preferred Learning Practices and the Learning Facilitated by the Organization

The self-directed learners are able to identify the learning resources and able implement appropriate learning strategies in order to meet their learning goals [3]. Previous study indicated that the self-directed learners do not rely on a single method of learning in carrying out WRSDL [30, 65, 66]. Organization need to be sensitive to the employees learning style and requirement. The individual learner somehow creates a social, learning resources circle, which create an essential factor to positive learning environment. Instead of relying on formal training alone, the employees need to develop their skills through ongoing engagement with their works and social environment. It is also mentioned that mostly employees learn by asking questions, listening, observing, reading and reflecting on their work environment, which occurs naturally through experience in daily life, unstructured, spontaneously, unconsciously and lack of teacher directed [66]. That is informal learning. This study found that the compatibility between the employees' preferred learning practices and the learning facilitated by the organization has cultivated WRSDL in all levels. Regarding this, it is found that in an organization where the environment nurture learning, the employees will feel left behind if he/she does not continuously learn [57].

D. The Dynamic of the Model

There are three important components to consider in cultivating WRSDL, they are the driving factors, the barriers and the compatibility between preferred learning practices and the learning facilitated by the organization. This model shows the dynamic interaction between the driving factors (personal characteristics, organizational factors and/or family support), the barriers and the compatibility of the preferred learning practices facilitated by the organization. For example, WRSDL could occur as being triggered by curiosity to get a deeper understanding about certain knowledge (the learning need triggered by personal factors). This curiosity will motivate the action towards learning, and this motivation will be stronger if facilitated by the PLE (such as learning facilities provided, peer and/or supervisor encouragement). However, this motivation can be decreased due to the existence of barrier factors, such as due to a heavy work-load or family-work conflict. At the same time, the emergence of WRSDL will be strengthened or weakened by the existence of the compatibility of the employee's preferred learning practices and the learning facilities provided by the organization. For example, if the employees preferred to learn through face to face discussion but no place for him/her to make it happen, so that the initiative to carry out WRSDL will be weaken. In the end, this model show that once WRSDL has been cultivated, both individuals and organizations would benefit. WRSDL as a learning type in

the individual level could be put as the basis for the organizational learning. It is showed in Figure 1 below:
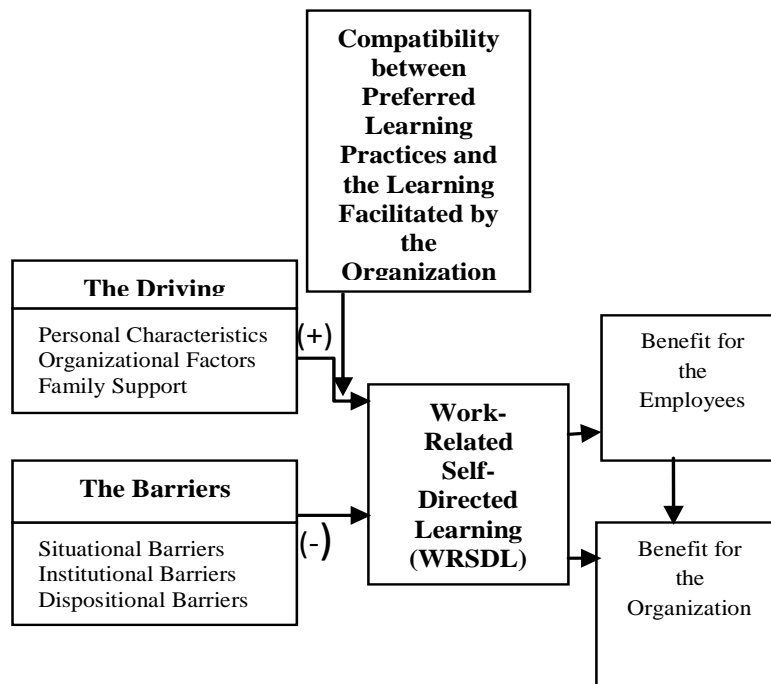

Fig. 1. A Model of WRSDL

V. CONCLUSION

The WRSDL model that has been introduced from this study was expected to contribute to the body of knowledge where the development towards a strong theory about WRSDL can be achieved. This research strengthens the notion that WRSDL is a natural kind of learning. WRSDL is a survival kit, even in the workplace context. The important thing to consider is how to cultivate WRSDL so that it can become the basis towards organizational learning. A deeper and broader study regarding the driving factors such as personal characteristics, organizational factors, support from family and equally important the barriers need to be conducted to augment the better understanding of WRSDL and shall contribute to strengthen the body of knowledge, to the practitioner as well as for the future research.

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