

A study on the Effect of Work Environment on Informal Learning

Merin M Abraham and Dr.Kirupa Priyadarsini

Research and Development centre, Bharathiar University & PSG Institute of Management, Coimbatore

ABSTRACT: The importance of work environment for informal workplace learning has been investigated in few research studies. However, examination and assessment of the different factors of workplace environment that affect informal learning is highly fragmented. Researchers continually point out the need for exploring more aspects at work place that may positively or negatively influence informal learning. This paper is intended to examine the effect of certain specific aspects of work environment on informal learning at workplace with reference to IT Sector

KEY WORD: Learning at Workplace, Informal Learning, Work Environment

Date of Submission: 05-03-2023

Date of Acceptance: 19-03-2023

I. Introduction

Continuous learning at workplace is more significant in the 21st century considering the rapidly changing environment and the transformation in the social, economic and political spheres. Workplace learning and its necessity for improving knowledge and skillsets is not new. However, the interest level in research circles on the how workplace learning can be improved has increased and there are different avenues of research in which learning at workplace is the pivotal theme

Many commentators, such as Stern and Sommerlad (1999), argue that, “it has acquired visibility and saliency” because “it sits at the juncture of new thinking concerning the nature of learning about new forms of knowledge, about the transformation of the nature of work and about the modern enterprise in a globalized economy” (cited in Fuller & Unwin, 2002, p. 95).

II. Review of Literature

2.1 Workplace Learning

Learning is no longer attributed only to the formal HR driven classroom sessions. Knowledge is not necessarily individualised (Gilbert, 2005) and the way an entire organisation learns plays a significant role in its profitability and performance. David Boud (1999:5) explains it as follows: “Workplace learning is concerned not only with immediate work competencies, but about future competencies. It is about investment in the general capabilities of employees as well as the specific and technical. And it is about the utilisation of their knowledge and capabilities wherever they might be needed in place and time.”

2.2 Informal Learning

Learning is usually observed as a formal process or activities that is deliberate and prearranged so as to bring about a change or transformation (Hager, 2004). However, for the last few years there has been a substantial increase to study the effect of informal learning at workplace. **Informal and incidental learning** refers to learning outside formally structured, institutionally sponsored, classroom-based activities (Marsick & Watkins, 1990; Garrick, 1998). This kind of learning is not a result of a structured or a planned activity; it may be a purposeful process but mostly non-intentional. In general terms informal learning activities are principally practical, non-instructional and distinguished by participation in everyday social and working practice (Garrick, 1998). This “every day” learning has a self-evident character and takes place in the daily working situation (Tjepkema, 2002; Van Biesen, 1989). It is seen as the development of the individual through interaction with others (Marsick and Watkins, 1990). Research investigations has brought to light that two thirds of learning at workplace can be attributed to informal way. This indicates the importance that should be given to understanding the factors that aid informal learning to the maximum at workplace. ‘Informal learning’ tends, therefore, to be considered as not only vital to understand and facilitate, but as a more significant, effective and thus ‘superior’ form of learning to formal classroom-based learning (Colley et al, 2002; Hager, 2004a).

2.1.a. Learning with others

Learning with others refers to informal learning through partaking with and considering on others' methods and happenings, and working together with others. Learning with others refers to "sharing and reflecting on others' practices and experiences" (Lohman & Woolf, 2001. p. 65) and collaborating with others. The term knowledge sharing may be only restricted to an exchange of ideas, but "learning with others" gives more importance to the role of "others". An individual learner may encourage another persons' engagement in their learning and their partners' learning (Koopmans et al., 2006). There are various ways in which individuals learn with others. This can be when they converse with each other, work on a collaborative project, share resources that are required for both, or merely by observing relevant tasks. Others mentioned in this context can be colleagues, superiors, managers or people who report to the individual.

2.1.b. External Scanning

External scanning refers to informal learning that is obtained via external sources such as workshops, conferences, world wide web, journals etc that is beyond the workplace. In many work contexts it is imperative that employees are abreast of the latest updates and trends in a particular domain. Hence there is a purposeful search of information through any accessible channels outside the workplace (Doornbos et al. 2004). The resources that are available at the workplace may not be sufficient enough in reality in the VUCA situation that many industries go through. The easiest way to search and find new information is the internet. "Fingertip" knowledge through Internet search engines (i.e., Google, Yahoo) is one of the most pervasive ways to learning informally (Paradise, 2008)

2.1.c. Self-Experimentation

Self-experimentation refers to the kind of informal learning in which individuals dynamically investigate and discover fresh ideas and procedures. Lohman (2000) found that critical reflection on action is the major form of self-experimentation. Marsick and Watkins (1990) address the importance of deliberate consideration that requires self-learners to introspect one's practices to recognise values, assumptions, and beliefs. Self-experimentation is an outcome of a continuous process of action and reflection. Individuals reflect on their past actions while assessing it against their vision, goals and purpose (Marsick & Volpe, 1999). Self-experimentation can also be considered as individual learning (Doornbos et al. 2004; Kwakman, 2003), which include learning undertakings such as studying a new application and connecting a developing situation to setbacks

2.2 Work Environment

Taiwo (2010) demonstrated that **work environment** is one of the important causes that could impact employees' performance. Moreover, a favourable working environment strengthens employees' well-being, and this would allow them to apply significant efforts in managing their tasks with a greater degree of motivation that is required for higher productivity (Akinyele, 2007). Environment is the context that influence a human being during his lifetime. In a business setting, a working environment refers to the environment where individuals work collectively and collaboratively to achieve the objectives of the organization (Awan & Tahir, 2015). According to Nakpodia (2011), a good working environment occurs when all the mandatory needs and infrastructure that could assist employees do their job is given. Vischer (2007) also defined work environment based on the combination of psychosocial factors that include employer relationship, motivation and progression, career demands, and social support. Thus we understand from literature that work environment is a blend of physical concrete factors and a list of intangible measures that includes aspects like the nature of the job, the extent of collaboration involved in the organization, the support received from the superior, organization and other stake-holders

Literature reveals aspects Work environment that has been studied previously. **Job Characteristics** (Robbins, (1990), Mehrabi (2011)), **Organisational Support** (Woojae Choi, Ronald L. Jacobs (1997), Alexandra Luciana Guță (2014)), **Supervisor Support** (Andrea D. Ellinger, Alexander E. Ellinger (2002), Tone Češnovar (2005))

2.2.a. Job Characteristics

This refers to the way in which the workplace environment is structures and includes stimulating work and diversity that endorses use of a variety of skills and knowledge, giving individuals a chance to make unique inputs which result in a feeling of importance and psychological meaningfulness. It is assumed that job characteristics are significant in enabling or hindering learning (Ellstrom, 2001). Learning in the workplace is shaped by the tasks that individuals undertake because the workplace is conducive for processes, systems objectives, and job assignment to employees (Billett, 2002). Factors like 1. Degree of job challenge (Kozlowski and Farr (1988)), 2. job transitions, job content, and status which means changes in role task-related

Characteristics 3. Level of responsibility, and non-authority relationship, which create change; and obstacles, including coping with challenging situations and a difficult boss (McCauley, Ruderman, Ohlott, and Morrow (1994)), 4. Task identity (Robbins, 1990). which refers to the understanding of how one's own job is related to the overall objective of the organization and Task significance (Moorhead & Griffin, 2002) which is indicate how an individual's job affects the lives of other individuals in the workplace setting, were found to promote or inhibit informal learning at workplace. Berg and Chyung (2008) found that the job itself and job satisfaction are thought as an important factor for encouraging an employee to participate in informal learning activities.

2.2.b. Organisational Support

This is defined as the observed support from the organization for workplace learning activities by way of practices, procedures, rules and norms. Contextual factors, such as organizational culture and incentive systems, play an enormous role in informal leaning (Lee et al., 2004; Leslie et al., 1998). Billett (2002) argues that the existing organizational factors decide how an employee is motivated or cope up with challenges when it comes to learning. If individuals perceive that their organization supports employee learning and development, and if this learning is linked to an incentive or a reward, they will demonstrate more enthusiasm towards work place learning activities (Lee et al., 2004; Tracey et al., 2001). Lohman (2005) also pointed that an unsupportive organizational culture, a lack of time, and a lack of proximity to colleague's work area are detrimental to informal learning at workplace. Thus, the way in which HR policies are structured could have an indirect effect on workplace learning (Clarke, 2005).

2.2.c. Supervisory Support

The perceived support from one's supervisor is listed in literature as a major factor that influences workplace learning (Baldwin & Ford, 1988; Clarke, 2004; Russ-Eft, 2002). Russ-Eft (2002) defines supervisory support as reinforcement and encouragement that is offered by a supervisor to inspire learning on the job. Supervisor support consists of such things as urging and facilitating participation in learning activities, give tasks such that subordinates are able to put to use the knowledge gained from previous learning activities, ensuring that there is information given about various avenues of learning, and the flexibility of work schedule to facilitate the learning process. Cohen (1990) found that employees who had supportive supervisors rated workplace learning as more useful compared to those who did not have supportive supervisors.

1.2 Research Objectives

The objective of this research is as follows

1. To explore the relationship between the constructs of Informal learning and Working conditions in IT Sector
2. To measure the direction and magnitude of Informal Learning and Working conditions in IT Sector

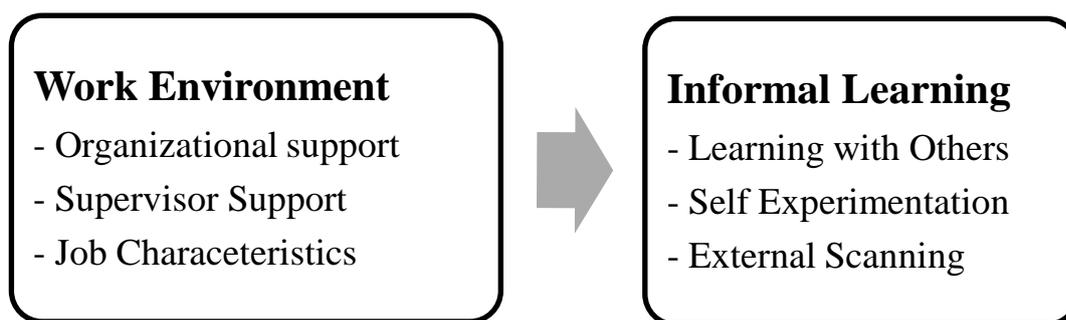


Figure 1.2.1. Conceptual framework for investigating the influence of Work Environment on Informal Learning

III. Research Methodology

This study has adopted quantitative research approach for data collection. A survey questionnaire was designed to examine the antecedents of workplace learning and its effect on organizational learning for employees in the IT Sector. The population of this study is comprised of employees of IT Sector in India. As part of a pilot study it was sent to the employees of an IT firm at Coimbatore. Out of the 275 questionnaires distributed, 113 employees answered the questionnaire. The instrument developed for this study consisted of three sections. Section A included a set of questions about the formal and informal learning, Section B included the questions on antecedents of formal and informal learning, Section C included questions on organizational

performance and Section D covered the demographic variables. All the items were measured on a five-point Likert scale ranging from 1 “Disagree” to 5 “Agree”. The collected data was then analysed using SPSS 21. In the following section, the analysis of results is presented

IV. Analysis and Interpretation

The purpose of this study is to understand the effect of work environment on informal learning at workplace. The first section provides the results of an analysis to determine the relationship between the constructs. The second section provides the results of an analysis conducted to understand the impact of working conditions on informal learning

4.1 Exploring the study constructs of Working conditions and Informal Learning

The relationship between learning with Others, Self-experimentation, Organizational support, supervisor support and job characteristics was analysed using a correlation matrix as shown in the table below. All the constructs are correlated to each other as seen from the table. It is clear that Learning with others has the highest correlation with Job characteristics (0.922). Self-Experimentation has the highest correlation with Job Characteristics (0.471). External scanning has the highest correlation with learning with others (.703). Organizational support has the highest correlation with Supervisor Support (0.479). Supervisor Support has the highest correlation with Organizational support (0.479). Job characteristics has a higher correlation to all the constructs thereby implying that the magnitude of informal learning is highly affected by the nature of the job itself in this study. If the structure of the job requires an employee to be on a learning path to a larger extent, greater will be the employee engagement in informal learning activities.

Table 4.1 : Correlation between Learning with others, Self-Experimentation, External Scanning, Organizational Support, Supervisor Support and Job Characteristics

	Mean	SD	LWO	SE	ES	OS	SS	JC
Learning with others	3.55	.745	1					
Self-Experimentation	3.01	.732	.456**	1				
External Scanning	2.58	.814	.703**	.327**	1			
Organizational Support	4.05	.722	.422**	.301**	.230*	1		
Supervisor Support	4.00	.772	.403**	.379**	.226*	.479**	1	
Job Characteristics	4.11	.555	.922**	.471**	.642**	.461**	.420**	1

4.2 Assessing the impact of the Working Conditions on Informal Learning

A Regression analysis was conducted between the constructs to explore the relationship between informal learning and working conditions. The informal learning constructs measured are learning with others, self-experimentation, external scanning and the working conditions are Organizational support, Supervisor Support and Job Characteristics

Three multiple regression analysis were carried out to assess the impact of working conditions on Informal Learning. Each of the regression results are discussed below.

4.2.a. Impact of working conditions on learning with others

To measure impact of Organizational support, Supervisor support, Job Characteristics on Learning with Others the result of regression analysis is tabulated below. Multiple Linear regression was used. The independent variable is Learning with Others and the dependent variable is Organizational support, Supervisor support, Job Characteristics. The null hypothesis to test this was learning with others is not good enough to predict the DV. The Results of the regression analysis indicate an R² (coefficient of determination) value of 0.922 with an adjusted R² of 0.84 and a significance of 0.000. This indicated the model is fit. Higher the R² better is the ability of the model to explain the variance. The alternate hypothesis can be accepted as the sig is <0.05. The Coefficients of OS, SS and JC are 0.010, 0.024, and 0.908 respectively. JC has a highest coefficient of 0.908 indicating it has the maximum impact on learning with others compared to the other study constructs. JC is also found to be significant.

4.2.b Impact of working conditions on external scanning

To measure impact of Organizational support, Supervisor support, Job Characteristics on external scanning, the result of regression analysis is tabulated below. The independent variable is external scanning and the dependent variable is Organizational support, Supervisor support, Job Characteristics. The null hypothesis to test this was external scanning is not good enough to predict the dependent variables. The Results of the regression analysis indicate an R² (coefficient of determination) value of 0.417 with an adjusted R² of 0.400 and a significance of 0.000. This indicated the model is fit. Higher the R² better is the ability of the model to explain the variance. The alternate hypothesis can be accepted as the sig is <0.05. The Coefficients of organizational support, supervisory support and job characteristics are 0.056, 0.041, and 0.686 respectively. JC has a highest coefficient of 0.686 indicating it has the maximum impact on external scanning compared to the other study constructs. JC is also found to be significant.

4.2.c Impact of working conditions on self-experimentation

To measure impact of Organizational support, Supervisor support, Job Characteristics on self-experimentation, the result of regression analysis is tabulated below. The independent variable is self-experimentation and the dependent variable is Organizational support, Supervisor support, Job Characteristics. The null hypothesis to test this was self-experimentation is not good enough to predict the dependent variables. The Results of the regression analysis indicate an R² (coefficient of determination) value of 0.266 with an adjusted R² of 0.246 and organizational support, supervisory support and job characteristics of 0.000 significance. This indicated the model is fit. Higher the R² better is the ability of the model to explain the variance. The alternate hypothesis can be accepted as the sig is <0.05. The Coefficients of are 0.022, 0.222, and 0.367 respectively. Job characteristics has a highest coefficient of 0.367 indicating it has the maximum impact on self-experimentation compared to the other study constructs. Job characteristics is also found to be significant.

Table 4.2: Multiple Regression analysis of learning with others, self-experimentation, external scanning and Organizational support, Supervisor Support and Job Characteristics

Co-efficient	Learning with others		External Scanning		Self-Experimentation	
	β	Sig	β	Sig	β	Sig
Constant	-1.557		-1.083		0.103	
Organizational Support	0.010	0.832	0.056	0.539	0.022	0.826
Supervisor Support	0.024	0.592	0.041	0.641	0.222	0.025
Job Characteristics	0.908	0.000	0.686	0.000	0.367	0.000
R ²	0.922		0.417		0.266	
Adj R ²	0.847		0.400		0.246	
Anova significance	0.000		0.000		0.000	

Job Characteristics is found to have the highest impact on all the dependent variables of Learning with others, self-experimentation and external-scanning with a beta value of 0.908, 0.686 and 0.367 respectively

5.1. Implication

Employees are an important resource of any organization. This study brings forth the implication that the perception about the extent to which the nature of a particular job requires learning at workplace influences the degree to which an employee engages in informal learning. The ease of access to seek such opportunities is also an important part of job characteristics. HR professionals can therefore bring forth such elements into the job description and the workplace setting that motivates an employee to participate in informal learning activities on his/her own accord. There is a lack of substantial research that connects formal and informal learning to HR planning and HR professionals may find it difficult to frame their plans based on existing research. Many organisations have similar training plans year after year for their employees that ultimately may not be as effective as it should be. Planning of employee training can take into account research findings on both formal and informal learning and provide adequate linkages for the best output. Organizations should emphasise on how to link informal learning experience that derives from a routine working day to formal learning [van Woekom, 18 Nijhof, and Nieuwenhuis (2002)].

5.2 Conclusion

The results of this study show that work environment has a significant impact on informal learning at workplace. There are few studies that talk about conditions that are not favourable to informal learning. However, literature supports that if management support and organizational culture is not conducive for individual learning, they can have negative influence on informal learning (Ellinger, 2005; Lohman, 2000;

Sambrook & Stewart, 2000). For example, Ellinger (2005) talks about 8 contextual factors that are detrimental to informal learning. Among the themes, unsupportive and disrespectful leaders were regarded as a major inhibitor of informal learning. Billett argues that a key determinant of the quality of workplace learning lies with the workplace's "readiness" to afford opportunities for learners to engage and that how workplaces do this (afford opportunity) is central to understanding workplaces as learning environments.

In this study Job Characteristics was found to have the highest impact on informal learning. If the nature of the job requires that an individual has to be learning constantly in order to keep up with the demands of the work, then the degree of informal learning is higher

BIBLIOGRAPHY

References

- [1]. Ashton, D.N. (2004), "The impact of organizational structure and practices on learning in the workplace", *International Journal of Training and Development*, Vol. 8 No. 1, pp. 43-53.
- [2]. Baert, H., De Witte, K. and Sterck, G. (2000), Vorming, training en opleiding. Handboekvooreenkwaliteitsvol VTO-beleid in welzijnsvoorzieningen, (Instruction, Training and Education (ITE)). Handbook for a High Quality ITE-policy in Welfare Services)
- [3]. Bernard, H. R. (2017). *Research methods in anthropology: Qualitative and quantitative approaches*. Rowman Littlefield.
- [4]. Garant, Leuven. Billett, S. (2001), "Learning through work: workplace affordances and individual engagement", *Journal of Workplace Learning*, Vol. 13 No. 5, pp. 209-14.
- [5]. Billett, S. (2004), "Learning through work: workplace participatory practices", in Rainbird, H., Fuller, A. and Munro, A. (Eds), *Workplace Learning in Context*, Routledge, London, pp. 109-25.
- [6]. Boud, D. and Garrick, J. (1999), *Understanding Learning at Work*, Routledge, London.
- [7]. Clauwaert, I. and Van Bree, L. (2008), "Workplace learning: towards a cartography of conditions for informal and non-formal workplace learning. Research report support point work and social economy", unpublished manuscript.
- [8]. Colley, H., Hodkinson, P., & Malcom, J. (2003). *Informality and formality in learning: A report for the learning and skills research center*. London: Learning and Skills Research Center.
- [9]. Collin, K. (2002), "Development engineers' conceptions of learning at work", *Studies in Continuing Education*, Vol. 24 No. 2, pp. 133-52. Education Development Center (1998), *The Teaching Firm: Where Productive Work and Learning Converge*, Education Development Center,
- [10]. Newton, MA. Ellstrom, P. (2001), "Integrating learning and work: problems and prospects", *Human Resource Development Quarterly*, Vol. 12 No. 4, pp. 421-35.
- [11]. Ellinger, A. D. (2005). Contextual factors influencing informal learning in a workplace setting: The case of "reinventing itself company". *Human Resource Development Quarterly*, 16(3), 389-415
- [12]. Eraut, M. (1994), *Developing Professional Knowledge and Competence*, Farmer Press, London.
- [13]. Fordham, P. (1993), *Informal, Non-Formal and Formal Education Programmes*, YMCA, London.
- [14]. Hager, P. (1998), "Understanding workplace learning: general perspectives", in Boud, D. (Ed.), *Current Issues and New Agendas in Workplace Learning*, NCVER, Springfield, VA, pp. 30-42.
- [15]. Lohman, M. C. (2000). Environmental inhibitors to informal learning in the workplace: a case study of public school teachers. *Adult Education Quarterly*, 50(2), 83-101.
- [16]. Lohman, M. C. (2003). Work situations triggering participation in informal learning in the workplace: A case study of public school teachers. *Performance Improvement Quarterly*, 16(1), 40-54.
- [17]. Lohman, M. C. (2005). A survey of factors influencing the engagement of two professional groups in informal workplace learning activities. *Human Resource Development Quarterly*, 16(4), 501-527.
- [18]. Lohman, M. C. (2006). Factors influencing teachers' engagement in informal learning activities. *Journal of Workplace Learning*, 18(3), 141-156. 155 Lohman, M. C., & Woolf, N. H. (2001). Self-initiated learning activities of experienced public school teachers: methods, sources, and relevant organizational influences. *Teacher and Teaching: Theory and Practice*, 7(1), 61-76
- [19]. Marsick, V. and Watkins, K. (1990), *Informal and Incidental Learning at the Workplace*, Routledge, London.
- [20]. Onstenk, J. (1997), *Learning Learn Working. Broad Professional Skill in the Integration of Learning, Working and Innovating*, Eburon, Delft.
- [21]. Organisation for Economic Co-operation and Development (OECD) (n.d.), "Recognition of non-formal and informal learning", available at: www.oecd.org/document/25/0,3343,en_2649_39263238_37136921_1_1_1_37455,00.html (accessed 9 January 2009).
- [22]. Schugurensky, D. (2000), "The forms of informal learning: towards a conceptualization of the field", unpublished doctoral dissertation, University of Toronto, Toronto.
- [23]. Skule, S. (2004), "Learning conditions at work: a framework to understand and assess informal learning in the workplace", *International Journal of Training and Development*, Vol. 8 No. 1, pp. 8-20.
- [24]. Sterck, G. (2004), "Learning policy and learning patterns in knowledge intensive labour organisations: concepts and practices", unpublished doctoral dissertation, Katholieke Universiteit Leuven, Leuven.
- [25]. Tight, M. (1996), *Key Concepts in Adult Education and Training*, Routledge, London. JWJ 21,5 382
- [26]. Tynja`la, P. (2008), "Perspectives into learning at the workplace", *Educational Research Review*, Vol. 3 No. 2, pp. 130-54.
- [27]. Tjepkema, S. (2002), *The Learning Infrastructure of Self Managing Work Teams*, Twente University Press, Enschede. Van Biesen, F. (1989), "Alledaagsleren in arbeidsorganisatie (Every day learning in labour organisations)", *Ontwerp*, Vol. 1 No. 1, pp. 4-11.
- [28]. Van Woerkom, M., Nijhof, W. J., & Nieuwenhuis, L. F. (2002). Critical reflective working behavior: A survey research. *Journal of European Industrial Training*, 26(8), 375-383

Merin M Abraham. "A study on the Effect of Work Environment on Informal Learning." *International Journal of Business and Management Invention (IJBMI)*, vol. 12(3), 2023, pp. 26-31. Journal DOI- 10.35629/8028