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Performance of employees and students with or without learning difficulties in Greece using M.I.S., by increasing the productivity and the profit in public and private administration.

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Abstract

In this paper, we examine the performance of employees in the public and private sector in Greece. The employees are divided into two groups (Group A' & B'), that means individuals with and without learning difficulties. Also, we examine the performance of students at Technological Education Institute of Piraeus and University of Athens. This research aims to explore the use of Information Management Systems in order to improve the performance of adults with and without learning difficulties, eliminating the unemployment due to economical crisis. We examine the ease of this MIS by the employees and students, the time and the number of records were made in this ERP (Accontancy System-Navision) by this crowd and finally the performance by the groups of this research. The results were supported

the hypothesis that the use of MIS improves the performance of the adults with and without learning difficulties in business environment.

Keywords: Performance, Management Information Systems, Employees, Learning Difficulties, Cost Effectiveness, Public/Business Administration, Improvement.

1. Introduction

The purpose of this research is the effect of using Information Systems in training people with or without learning difficulties and people without specific learning difficulties.

There is a research about whether the use of Information Systems improves the performance of the employees in their workplace.

The performance of employees is examined on the Management Information System "Navision Microsoft". Their performance was measured on the scale 1-10 grades. Each record on the system was consisted of a grade. Also, in this paper was evaluated the time (in minutes) that employees were needed to navigate and make records in the MIS. The time was measured by them, because they dealt with the system by distance. The learning disability was measured by the tool "Dyslexia Screening Test for Adults-DAST". The installation of the MIS became by the researcher in each computer of employees. The duration that took place the research was 3 months. The results of this research were conducted by SPSS.

Organizations are adopting new technology and the computers do not seem to have a negative impact (Heeks R., 2002).

In the past, the most employees have acquired experience with the passage of the time and undertook senior positions, progressively. Today, the use of Information Systems has reduced the learning time, in order to get experience and to take senior tasks (DeRouin R. et al., 2005).

Also, there is a correlation between the emotional intelligence and the performance of managers. In a sample of the public sector in Israel, was found that executives, who had greater emotional intelligence, had elevated levels of performance, too (Carmeli A., 2003). The self-efficacy is positively correlated with high job performance (Stajkovic & Luthans, 1998).

According to Blankfield S. (2001), many employees and managers do not mention in their curriculum vitae that they have learning disabilities, because, today sparcely, they will be asked by them to do something manuscripts in their jobs. The use of Information Systems offers opportunities to people who have learning difficulties and improve the quality of their life (Poulymenakou A. & Holmes A., 1996).

Burgstahler S. (2002) mentions that the benefits of the e-learning are known to individuals with and without learning difficulties. The adults without learning difficulties have the same restrictions as the adults with learning difficulties. For instance, the individuals that they have not graphical environment in their computers, they have the same restrictions as the individuals with visual impairments. A noisy environment of working avoids the good audible. So, the learning by distance have designed for all students wherever they are.

In addition, Mayadas (2002) is recognized the five columns of the Asychronous Learning Network-ALN":

- Learning Effectiveness
- Faculty satisfaction
- Student satisfaction
- Cost effectiveness
- Access

All these systems increase the effectiveness, improve the quality, the productivity and the profits (Hertel G., et al, 2005).

An Information System offers solutions in many business problems that the corporation may deals with (Prastacos, G.P., 2002).

Only some people, understand the actual extent that the functions of a business may have and which depend on the Information Systems and how important role play in shaping the company's strategy (Nolan R., & McFarland, 2005).

A rapidly increasing number of organisations train their employees via the Internet, including the Universities and Colleges, military bases and even the schools (Lee D. Et al, 2008).

The Information System serves quickly the questions of the different users and any changes are handled, consistently. It is remarkable the development of the softwares concerning the programming the resources of a business (ERP-Enterprise Systems) (Ramakrishnan R. & Gehrke J., 2002). The above purpose is to receive the right business decision in order to achieve some targets (Luthans F. & Youssef C., 2004).

The use of various kind of Information Systems has an additional activity: To train the employees and improve their performance, through e-learning (DeRouin R., Fritzsche B. & Salas E., 2005).

A, moreover, Management Information System that was incorporated in the Educational Information System is the "e-learning platform", which is called "e-Aula" (Sierra J. et al, 2006). The most Information Systems work on the architectonic of general Systems. The most Information Systems work on the architectonic of general systems (Rifon A.L. et al, 2001, Avgeriou P., 2003) and on platforms based to the Management Information Systems.

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2. Sample

The sample of this research is consisted of 108 individuals. The 54 of them have learning disabilities and the 54 have not learning disabilities. Their ages are ranged from 18 to 58 years old. It comes from the students of the University of Athens and T.E.I. of Piraeus and employees-managers by the public and private sector in Athens-Greece.

3. Results

3.1 Ease of use of Management Information Systems

The table illustrated below, the answers that related with the ease of use of Management Information Systems (MIS) "Microsoft Navision" of the groups, depending on the presence or absence of learning disabilities.

Table 1

Frequences (%) of the answers in the question that related with the ease of M.I.S. (Management Information Systems) for use and examination of the differences between the two groups of this research.

«Ease of use»/ Management Information Systems	**Groups**			
	Group A'		**Group B'**	
	f	*(%)*	*f*	*(%)*
Yes	32	(53,9)	42	(77,8)
No	22	(40,7)	12	(22,2)
x^2 test	4,29			
p	0,038			

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According to the findings of the above table, significant statically differences were found in the question about the ease of use of the Information Management System depending on the presence or not of learning disabilities. [x^2(*df*=1, *N*=108) = 4,29, *p*=0,038]. Specifically, almost four of about five (77.8%) people, i.e. 77.8% in percentage, without learning difficulties mentioned that the Management Information System is easy to use it. In contrast, more than two of five people, 40,7% in percentage with learning difficulties mentioned that the Management Information System is easy to use it.

3.2 Time Navigation and Records

The table in the following illustrates the answers that related with the time navigation and records of Management Information Systems "Navision" of the teams, depending on the presence or absence of learning disabilities.

Table 2

Frequences of the performances to the time in the MIS and examination of the differences between two groups.

«Time Navigation and Records»/ Management Information Systems	**Groups**			
	Group A'		**Group B'**	
	f	*(%)*	*f*	*(%)*
4-10 minutes	30 (55,6)	(55,6)	43 (79,6)	(79,6)
> 10 minutes	24 (44,4)	(44,4)	11 (20,4)	(20,4)
x^2 test	71,79			
p	<0,001			

According to the findings of the above table, it has been found statistically significant differences [x^2(*df*=1, *N*=108) = 71,79, *p*<0,001]. Four of five individuals without learning

disabilities use the system by doing records for 4-10 minutes. Instead, 44,4% of the individuals with learning disabilities use the system by doing records for up to 10 minutes.

3.3 Performance in the Management Information System

The table below illustrates the grades of the performances of the M.I.S. "Navision" of the individuals depending on presence or not of learning disabilities.

Table 3

Means (M), Standard Deviation (SD) & Median of performances' grades in MIS and examination the differences depending on presence or not learning disabilities.

	Groups			
	Group A'	**Group B'**		
«Grades (1-10) of performance/Management Information Systems (Navision)	*M* *(SD)* *Median*	*M* *(SD)* *Median*	Mann-Whitney *U*	*p*
	6,72 (1,11) 7,00	8,28 (0,56) 8,00	300,50	<0,001

There are significant statically differences between the two groups (Mann-Whitney U=300,50, p<0,001). The group B' had better performance in comparison to group A' in the MIS.

4. Conclusions and Restrictions of the research

The restrictions are that this research on this area in Greece is at an early stage, concerning mainly children and not adults, students and / or employees with or without

learning difficulties, too. They use Information Technology both in education and in a business environment. Stephen R. & Cullen J., (2008) support this assumption that means that today research in this area, on the Information Systems is limited and is mainly carried out in schools. Moti F. (2003) emphasizes on the need to expand the research, mainly, to the adults, because researches were become mainly for the children.

As regards the records on the Management Information Systems ("Microsoft-Navision), the performance of the individuals with learning disabilities was reached an average of 67%. (Group A'). While, concerning the records on the Management Information Systems "Microsoft-Navision), the performance of the individuals without learning disabilities was reached an average of 83% (Group B').

The results were supported the hypothesis that the use of Management Information Systems improves the performance of the adults with and without specific learning disabilities. This documentation is consistent with the findings of other similar studies (Weiss J, Nolan J. et al, 2006), (Woodfine B. et al, 2008), (Colwell C., 2002), (Raaij E. & Schepers J., 2006) and implies that both of teams of this research improve their performance by using Information Systems.

Unlike the students with dyslexia who were communicating synchronously, they had difficulties, concerning their performance (Woodfine B. et al, 2008).

In conclusion, the researchers must emphasize on the development and on use of Information Systems, friendly to users with specific learning difficulties, because most of users with problem do not mention at their work. The use of Management Information Systems is a hopeful solution to the improvement of the adults' performance with or without learning difficulties at their business environment.

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