International Journal of Research Publication and Reviews

Knowledge of Occupational Hazards among Business Centres Computer Operators in Tertiary Institutions in Rivers State

Amesi Stephen Chinwendu[1], Dan-John Melissa Ihuoma[2]

Department of Human Kinetics, Health And Safety Education, Ignatius Ajuru University Of Education Rummoulumeni Port Harcourt
[1]Email:Amesteph88@gmail.com
[2]Email:Danjohnmelissa93@gmail.com

ABSTRACT

This study investigated the knowledge of occupational hazard among computer operators in business centres in tertiary institutions in Rivers State. Five research questions guided the study. The study employed descriptive survey research design. The 400 computer operators sampled were drawn purposively from randomly selected shops in business centres of tertiary institutions in Port Harcourt. The questionnaire used for the survey was self-structured and titled Computer Operators' Occupational Hazard and Control Scale (COHHACS). Data collected was analyzed using mean, SD, t-test and ANOVA statistical techniques. Findings are that computer operators are exposed toErgonomic hazards; use of poor chairs without adjustable height and back rest, and none use of document holder when typing, Physical hazards; mainly noise, Chemical hazards; no major exposure, Biological hazards; mainly waste around work environment, and Psychosocial hazards; mainly small pay compared to the work they do, pressure to meet deadlines and abuse from customers.It was concluded that this research it is lucid that computer operators in business centres in tertiary institutions are faced with various Occupational hazards cutting across ergonomic, physical, chemical, biological, and psychosocial with the major hazards found in ergonomic, psychosocial and physical Occupational hazards. It was recommended that cchool administrators should consider building a more standard business centres (shops) for computer operators.

INTRODUCTION

As man continues to appreciate the place of technology in this information age, the computer has for its multiple functions and applicability to all works of life become man's companion. In today's world, man can barely do without it. With more upgraded versions and higher models of personal computers now in market at relatively affordable prices (Mvungi, Meharo, Mmbuji, Mgonja & Kitua, 2008), there is upsurge in purchase and usage of computer by many organizations, institutions, government parastatals and individuals. Hiremath (2015), states that computer has influenced all sphere of man's doings bringing changes in various sectors of the society. Thus, computer use is well integrated into many occupations (Blagojevic, Petrovic and Blagojevic, 2012).

Computer discovery has greatly transformed most professions and work performance (Akimbinu &Mashalla, 2014). One can talk about the speedy processing and easy management of data in offices; programmed and controlled production in factories; e-commerce in business world and more. In education, learning and research has been transformed by growing technology (Bada, Adewole & Olalekan; 2009). There is great and important shift from hard copy to soft copy. Educational institutions are now placing emphasis on e-learning and processes. This has removed the monotony in routine task and many other functions performed by students, academic and non-academic staff including school administrators. It has also to an extent removed the tardiness, tedium and bulky nature of paper work.

Although computer in this 21st century is relatively available and affordable, in developing nations like Nigeria, not everyone is proficient at computer works or even own personal computer. Other accessories such as printers, photocopiers, scanners, etc., which are not very cheap are also needed to do related works. So not everyone who has tasks to do on computer can conveniently, promptly and satisfactorily do them, especially in tertiary schools where students, lecturers and other workers rely greatly on computer for research, registration processes, typing of assignments and other documents. They recourse to business centres to get their work done. These and more have opened wide job opportunities for computer literates.

Consequently, small business centres abound in tertiary schools in Nigeria. Computer operators who have acquired various computer skills and certifications are therefore very much needed to render varying computer related services. However, the business centres are mostly substandard (Ezetoha, Nwokeke, Ohanenne & Onyenvaobinn, 2014). They assert that some ate of kiosks form, not ceiled and lack good ventilation. Majority lack standard chairs and desks and are generally faced with epileptic power supply, hence depend on generators chained close to their shops for theft fears.

Truly, computer has made things easy. Someone has to sit or stand and bear the stress of entering data into or issue the right command to it before it can ever be productive: and that someone is the 'Computer Operator'. In most cases, Computer Operators, especially in tertiary institutions work for long hours, sometimes under pressure to deliver timely quality services to the consumers of their services.

A computer operator is someone that is skilled in basic computer application and can perform specific task in computer such as, handle operating

System; programs or packages like processing, spreadsheet, presentation, database, photo-editing, E-mail and internet services and common knowledge of hardware. The computer operator is equipped with knowledge, skills, and attitudes to clerical occupation (CTEVT, 2014), and to pursue new opportunities in ICT, thus, he/she can be employed in all field of life or even be self-employed to own a business centre.

Computer Operators for this research purpose are computer end-users who are skilled in applications of various software packages and are engaged in the provision of computer work related services as their job on part or full time basis. In the context of this study, computer operators are those who consistently use computer operation as a source of ends meet. Computer operation is the source of livelihood for most computer operators (Akinbinu & Marshal, 2014). They are either self employed as business centre owners, secretaries in private or government offices, bank cashiers and other computer related jobs.

A computer business centre is a place where services like word processing, data processing, accounting, internet café, photocopying, lamination, typing, scanning, binding, online registrations, digital passports, instant photo printing are done (Paoli & Merllié, 2019).

In this study, we shall consider few definitions of computer from different authors. According to Vermaat (2013), a computer is an electronic device, operating under the control of instructions stored in its own memory that can accept data (input), process the data according to specified rules, produce information (output), and store the information for future use.

A computer is a programmable device that stores, retrieves, and processes data (Worksafe, 2015).

Inouye (2014) stated that a computer is a machine or device that performs processes, calculations and operations based on instructions provided by a software or hardware program.

Devesh and Al-Bimani (2011) affirmed that human interaction with the computer no matter the use cannot escape body and limbs movement. The use of keyboard and mouse for example involves the arms, wrists and fingers. And growing digits ofIssues health wise are reported by American Optometric Association (AOA) (2013) following increasing computer use at work.

According to Ellahi, .Khalil and Akram, (2011), revolutionizing work places with computer is creating some health risk for employees. They noted that some silent forces of the same new technology man is planning to conquer the universe which has kidnapped his biological system and man pays his health as ransom. In a typical workstation using computer requires the workers to stay hours in a position and the result is increase in computer related injuries like back and neck pain, repeated strain injuries, computer vision disorders, and stress (Konnur, 2008 & Ellahi et al. 2011).

These health problems are caused by computer related hazards. Awadi, Awadallah, Hegazu, Naguil and Akami (2013), state that using computer is not free from health hazards. Sitting for prolonged time before a computer leads to the overload of spine, placing high task on sense of vision with upper arms and fingers moving repeatedly for keying with mouse and keyboard (Blagojevic et al., 2012). They further argued that ruling out exposure to some chemical pollution, dust, noise and vibrations from work environment plus some unpleasant microclimatic situations is impossible. Therefore, the operator is bond to face certain health challenges, mostly physiological and psychosocial.

The knowledge of these hazards, associated health problems and controls are paramount to computer operators' health. Unfortunately, business centers' computer operators in our tertiary institutions are ready to work at any condition to make ends meet. For instance, working in unsuitable work environment, with poor work organization, and poorly designed workstation.

This attitude suggests poor awareness or feeling of less concern of any hazards therein. Recent studies shows that computer operators have poor knowledge of aspect of computer hazards likewise their control (Chiemeke, Akhahowa & Ajiayi, 2007; Devesh &Al-Bilnani, 2012 and Hiremath, 2015).

Computer Operators will be unable to eliminate these hazards, but the control is possible, thus reduce the harm consequent to the hazards. Sadly, what looks, like the norm is the operators enduring whatever harm faced and at best seldom seek medical treatment for what could be prevented? They are, apparently, unperturbed about hazard control. Perhaps, they know not available hazard control measures or lack the means, the right environment or organizational support to effect known measures that is if they recognize in the first place their job hazards.

The foregoing accentuates that additional work be done on health hazards of computeroperators. Chiemeke et al. (2007) and Devesh and Al-Bimani (2012) agreed that most researches on computer users are done in developed countries and very few in developing countries. Most work done concentrated on ergonomic hazards while other hazard categories are less emphasized. All these constitute gap in knowledge. The health hazards among computer operators in Tertiary institutions in Rivers State therefore, attempts to fill this gap in knowledge.

Aim and Objectives of the Study

This research aimed was to ascertain the knowledge of occupational hazards among business centres computer operators in tertiary institutions in Rivers State.

Research Questions

The questions drawn to guide the study were:-
1.   What is the knowledge of ergonomic hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

2.   What is the knowledge of physical hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

3.   What is the knowledge of chemical hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

4.   What is the knowledge of biological hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

5.   What is the knowledge of psychosocial hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

METHODOLOGY:

The study employed descriptive survey research design. This survey type suitably met the purpose of the study, that is, to investigate the occupational hazards of computer operators in business centres. The population was all computer operators in business centres in tertiary institutions in Port Harcourt. The population was 6,000 computer operators in the five (5) sampled institutions (Tertiary institutions Computer operators Association, 2021).

Sample and Sampling Techniques: The sample size for this study was 400 calculated using Taro Yamane (Yamane, 1973) formula with 95% confidence level.

Table 1: Showing samples for various Institutions

S/N	Institutions	Sample
1	University of Port Harcourt (UNIPORT)	120
2	Ignatius Ajuru University of Education (IAUE)	106
3	Rivers State University (RSU)	90
4	Port Harcourt Polytechnic (PHPOLY)	52
5	Rivers State College of Health Science and Technology (RIVCOHSTECH)	32
	TOTAL	**400**

The purposive random sampling technique was used to select computer operators from institutions. This technique was considered appropriate because it involves selecting people who possess the characteristics needed for the study.

Instrument for Data Collection: The instrument was a self-constructed questionnaire tagged Computer Operators' Occupational Hazards Scale (COOHS).

Reliability of the Instrument: The instrument reliability was determined using the coefficient alpha by Cronbach method. The validated instrument was administered to 20 business centre computer operators in Ken Sarowiwa Polytechnic Bori, who were not among the study sample population but have similar characteristics with the sample population. Thereafter, data collected was analyzed for reliability. The following internal consistency coefficients were obtained: 0.620 for knowledge, 0.614 for ergonomic; 0.601 for physical; 0.774 for chemical; 0.600 for biological; and 0.620 for psychosocial hazards.

Method of Data Collection: Three trained research assistants helped in distributing the questionnaire. The collection of data lasted for a period two weeks. 400 questionnaires were distributed to the respondents and 331 was retrieved, giving the retrieval percentage of 82.8%.

Method of Data Analysis: Descriptive and inferential statistical tools were employed in analyzing the collated data. Frequencies, percentage, mean and standard deviation were utilized in answering all the research questions. Student's t-test was applied to test hypotheses four while one, two, three and five were tested using analysis of variance (ANOVA).

RESULTS

The result for each research questions and its corresponding hypotheses are presented in tables.

Research Question 1: What is the knowledge of ergonomic hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

Table 2: Ergonomic hazards exposure of Computer Operators in business centres

S/NO	ITEMS	MEAN	SD	DECISION
1	My chair height is adjustable to allow my feet be flat on the floor	2.8282 1	1.27506	Sometimes
2	The chair I use have no adjustable back rest to support lower back	3.2607	1.05369	Most times
3	My screen is about an arms-length from me	1.9080	1.07451	Never
4	The top of my screen is slightly below eye level while viewing	2.1534	1.23330	Sometimes
5	While typing my shoulders are relaxed with upper half of arms at the side of the body and lower arms parallel with floor	2.3344	1.12394	Sometimes
6	I use document holder at same height with and side of the monitor	2.8988	1.13091	Sometimes
7	My system gives me problem, it doesn't	2.3344	.99314	Sometimes
Criterion Mean (X) = 2.5	**Average mean = 2.5**			

* signifies negative items.

From the table above only viewing distance (item 3) was not accepted as a hazard. They however, accepted using chairs without adjustable height, improper viewing angle, awkward posture of hands and shoulders, none use of document holder and problematic system (items 1, 4, 5, 6, and 7) as hazards they face some times and using chair without adjustable back rest (item 2) most times. Judging from the criterion mean of 2.5, the computer operators accepted items 1, 2 and 6 as their major ergonomic hazards.

Research Question 2: What is the knowledge of physical hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

Table 3: Physical hazards exposure of Computer Operators in business centres.

S/NO	ITEMS	MEAN	SD	DECISION
8	The lighting in my shop is suitable to work comfortably	1.7301	1.00191	Never
9	My shop is properly ventilated	2.0307	1.14984	Sometimes
10	My shop is very noisy (noise from generator, copiers, printers, people and work environment)	2.9294	1.03979	Sometimes
11	The temperature in my shop is comfortable	2.1380	1.00275	Sometimes
12	The air in my shop is comfortable	2.0767	.90653	Sometimes
13	I notice light reflections and glare (flash) on my screen and work surfaces	2.4080	1.02992	Sometimes
Criterion Mean (X) = 2.5	**Average mean = 2.21**			

* signifies negative items

In table 3 above the respondents accepted all but one item as hazards they are sometimes exposed to. They are poor ventilations, noise, unomfortab1e temperature, uncomfortable air, and light reflections and glare (items 9, 10, 11, 12, and 13). Item 8; inadequate lighting is the rejected one. Noise (item 10) is their major physical health hazards,

Research Question 3: What is the knowledge of chemical hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

Table 4: Chemical hazards exposure of Computer Operators in business centres.

S/NO	ITEMS	MEAN	SD	DECISION
14	My work environment is dusty	2.3815	1.10650	Sometimes
15	Particles of toner are blown into the air in my shop	2.1662	1.01991	Sometimes
16	Fumes (smoke) from generator get into shop	2.2492	1.15579	Sometimes
17	There is a concentration of irritating smells (disinfectants, petroleum products, air fresheners, body spray etc) in my shop	2.2092	1.01801	Sometimes
18	My computer terminals and other machines produces hot gases	2.4769	1.07307	Sometimes
19	Irritating smells from work materials such as top gum, papers, copier, computer, ink, etc are perceived in my shop	2.3 138	1.03038	Sometimes
20	I use my mouth to get ink properly filled into the ink container	2 .3138	1 20440	Sometimes
Criterion Mean (X) = 2.5	**Average mean = 2.30**			

* signifies negative items

In table 4 above, respondents accepted all items (items 14-20) as chemical hazards they are sometimes exposed to. These are dusty work environment, particles tonner in air, fumes from generator, concentration of irritating smell, hot gases from machine terminals, and using their mouth to get ink properly filled into ink containers. However, based on criterion mean of 2.5, they experience no major chemical hazard exposure.

Research Question 4: What is the knowledge of biological hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

Table 5: Biological hazards exposure f Computer Operators in business centres.

S/NO	ITEMS	MEAN	SD	DECISION
21	Are there waste around the workstation and Environment	2.6431	1.06080	Sometimes
22	Are there moulds/slime (growing things) on walls and other surfaces	1 6000	89235	Never
23	Has there been occasion(s) of contraction of communicable disease(s) from work (e.g. catarrh, cough, cataract infections etc)	1.9631	1.02071	Never
24	Has there been occasion of insect bite or bite from animals in workstation	1.9662	1.08387	Never
25	Are there human excreta (urine and faeces) around workstation	1.6615	1.01648	Never
*26	There is a convenient place to ease oneself	2.2769	1.29228	Sometimes
Criterion Mean (X) = 2.5	**Average mean = 2.02**			

*signifies negative items

For biological hazards in table 4.4 only waste around work stations (item 21) and lack of a convenient place to ease themselves (item 26) where accepted as the biological health hazard they are sometimes exposed to. They state that exposed to moulds and slime, communicable diseases insect bite and human excreta around workstation pose no serious hazard concern. Waste around the work environment i the major biological health hazard exposure based on the criterion mean of 2.5.

Research Question 5: What is the knowledge of psychosocial hazards of Computer Operators in business centres in tertiary institutions of Rivers State?

Table 6: Psychosocial hazards exposure of Computer Operators in business centres.

S/NO	ITEMS	MEAN	SD	DECISION
27	My pay is small compared to the work l do	2.8333	1.08893	Sometimes
28	I enjoy working with computer	1 .5586	.92754	Never
29	I am afraid of losing my job	2.4105	1.21702	Sometimes
30	I do have pressure to meet deadlines	2.6605	1.04193	Some times
*31	My job gives enough time for family and friends	2.4506	1.02024	Sometimes
32	I experience abuse from customers (for instance physical, verbal or sexual abuse)	2 5001	96853	Some times
33	Communication with colleagues and customers is challenging	2.3488	l.022	Sometimes
Criterion Mean (X) = 2.5	**Average mean = 2.39**			

* signifies negative items

From table 6 above, we can see that they accepted exposure to all but one as psychosocial hazards. They include; small pay, being afraid of losing their jobs, pressure meeting deadlines, lack of time for family and friends, abuse from customers, and challenging communication with colleagues and customers, that is, items 27, 29, 30, 31, 32 and 33 respectively. They however rejected not enjoying working with computer, item 28, but accepted small pay, deadlines pressures and abuse from customers (items 27, 30, and 32) as major psychosocial hazards the computer operators are exposed to.

Note: the grand mean of 2.51, 2.39, 2.31, 2.1 and 2.02 for ergonomic, psychosocial, chemical, physical and biological health hazards respectively shows that computer operators have more exposure to ergonomic hazards and least to biological hazards.

Discussion of the Findings

Ergonomic Occupational Hazards

The result from table 2 showed that the computer operators sometimes use chairs without adjustable height, most times without adjustable back rest. Using such poorly designed seat is a very obvious hazard of the group under study with great implications. When a chair height is fixed, the user cannot adjust it to suit him/her. The user cannot adjust it if high, to allow the feet touch the floor completely. Consequently, the users' thighs will be pressing aga1st the edge of the seat pan and pressure the muscles, the tendons, blood vessels and nerves. The result is muscle discomfort and stiffness, lower limb pain, blood flow obstructions and other MSDs. When the chair is lower than normal, the knee suffers from awkward positioning. This also amounts to pain and reduce venous return through the lower limb.

Use of chairs without back rests as found are even worse. It means most of thorn sit without back support. The spine is subjected to awkward posture

resulting in great pain at the entire back and especially the lower back. Not using document holder and improper viewing angle cause neck pain as they often complain. Not using document holder of same height with and beside the monitor will compel the user to move the head often between the screen and document to see clearly for accurate typing. Whereas, viewing the monitor with the screen top above the level positions the neck in an uncomfortable angle of above 15°-20° from the screen. Awkward positioning of hands and shoulders causes upper arm pains with other MSDs. It means they shrug their shoulders, stretch their arms and bend the wrist while typing, stressing muscles and the tendons of arms and hands.

From the result they also agreed their systems sometimes give thorn problem not functioning as they want. Trouble shooting is troublesome likewise other effort to fix the problem and nothing wearies a worker's Occupational more than working with problematic tool. It causes pain .and stress too. This finding agrees with that of Blagojevic et. al (2012), who found awkward posture as a hazard among computer users. Both Liu et. al. (2012) and Ahmed-Rafat et. al. (2008) reported ergonomic hazards among computer users. Mvungi et al (2008) specifically found poor siting chairs and poor positioning of the wrist and these corresponds with this study.

Physical Occupational Hazards

Poor ventilation, uncomfortable air and temperature as found (see second result from table 3) could be due to overcrowding and poor built of the shops, especially in UNIPORT where most shops are in kiosk form. These hazards connote extreme temperature and extreme humidity depending on prevailing whether condition at the given time. These could cause thermal diseases and skin problems for the operators and concentration loss. Reflections and glare, major causes of eye problem complained by most computer users, were found too. Light reflections come mainly from sources of fight outside the workstation a the shops have no windows most time, some sit outside, while those whose shops have windows do not utilize window blinds to regulate incoming light intensity.

Noise was the major physical hazard the studied group are exposed to. Among other sources, generator use is the major noise source in the business centres. The electric energy supply in the country has not helped the computer operators in any way so they heavily depend on the generators. These generators are not positioned far from the workstations for safe keeping and no provision made specially, for them to be kept. Noise causes lack of concentration, annoyance, hearing problems. Although the respondents said this noise exposure is sometimes, the mean of 2.9294 shows that it is almost in the category of most times. These findings agree with the finding of Blagojevic et. al. (2012) and Ezetoha et al., (2014) who concluded that environment contributes to Occupational problems of computer users especially in substandard centres.

Chemical Occupational Hazards

The result from table 4 revealed that computer operators sometimes are exposed to dust in the environment, particles of tonner and irritating smell from work materials, disinfectants, air fresheners, and perfumes or-body spray. These could cause skin problems, and irritate respirator tract. The result may be cough and catarrh. The hot gases from machine terminals found contribute too to the uncomfortable feel of the air in the environment of work. Using mouth to sometimes fill ink: into ink container of printer's calls for concern. Sometimes they use syringe but they argue that use of mouth is needed for proper filling. This can be poisonous to the gut.

There was no major chemical Occupational hazard found among operators, they however agreed exposure to all the hazards items in small measures. There were scares materials regarding computer usage chemical hazards. Blagojevic et. al. (2012) found dust and chemical pollutants as factors increasing the Occupational disorders of computer operators.

Biological Occupational Hazards

The findings from table 5 revealed that the studied group is sometimes exposed to waste around the environment and lack a place of convenience. The waste ranges from pieces of paper, polythene, particles of food especially from snacks to dust bin and refuse dump. Lack of convenience for the respondents except for PHPOLY which has a public toilet facility. Computer operators are forced to ease themselves in nearby bushes or anywhere the feel they can. The waste, refuse dump, and exposed human-excreta become reproducing grounds for vectors Thus there is possibility of disease transmission. Also bad odour from the waste decaying process will not be friendly to the computer operators but rather offensive, irritating and annoying.

Further, in the event of communicable disease outbreak, the spread will be quick among this group as the vectors would readily spread such disease since there are wastes around the work environment. Where there is at all no place to ease themselves they enduringly; hold the waste products within their system. This can be really discomforting. Waste is the major biological Occupational hazard exposure was found.

Psychosocial Occupational Hazards

From the result, one major psychosocial hazard they are sometimes exposed to is small pay compare to the job they do. that is, their reward sometimes is not commensurate with the effort put in. Another major psychosocial hazard found is pressure to meet deadlines. This is not shocking because students and university staff have lots of work to do and would visit the computer operators when needed. So they are most times in hurry to get their work done. They however succeed in mounting pressure on the computer operators who tries to work so hard, put so much time and sometimes leave to eat at the right time just to satisfy their customers.

To find abuse from customers as major psychosocial hazard faced by computer operators was not startling. This abuse ranges from verbal, non-verbal, physical to sexual. Some customers are quite abusive and lack self-control. They are impatient with the operators and get provoked at the slightest mistake they make. Some harass them sexually especially the male customers to female operators. This also implies that whatever abuse prevention policy or strategy they have is ineffective. Communication with colleagues and customers can sometimes be challenging as found. This brings quarrel and disagreement among them, disrupt work activities and severe relationships. A few are sometimes afraid to lose their little jobs particularly those who work for other people. This causes anxiety,

Lack of time is also a hazard faced by the respondents as revealed by the finding. The stated that their jobs sometimes allow them not enough time for family and friends. This is so because the operators work for hours daily to meet up with work delivery and take more work for more pay. All these

psychosocial Occupational hazards mentioned can cause stress, headaches, body pains, fatigue, loss of concentration and absenteeism. Krause et. al. (2010) reported effort reward imbalance among computer employers as discovered in this work revealed (small pay comi5arecl to work done) stating that it causes pain.

The study overall findings on exposure to; ergonomic (2.51), psychosocial (2.39). chemical (2.31), physical (2.21) and biological (2.02) hazards revealed as widely reported in literature that computer users are more exposed to ergonomic hazards followed by psychosocial hazards (Barredo & Mahon, 2007 and Blagojevic et. al., 2012). It however varied on more exposed to physical hazards than chemical. This study found otherwise.

Conclusion

From this research it is lucid that computer operators in business centres in tertiary institutions are faced with various occupational hazards cutting across ergonomic, physical, chemical, biological, and psychosocial with the major hazards found in ergonomic, psychosocial and physical Occupational hazards. A cause for worry is the inadequate measures taken to check these hazards. They therefore, risk suffering various Occupational problems consequent to the hazards. Hence, all stake holders are called to take up adequate measures to eliminate the hazards where possible or minimize the outcome and save the Occupation of computer operators who have proven themselves useful to tertiary institutions.

Recommendations

Following the study findings, recommendations made were:

1.　　　School administrators should consider building a more standard business centres (shops) for computer operators.
2.　　　These business centres should have separate building far from the centre for a common plant to be kept for power supply to augment the erratic electricity supply for the operators and other businesses. This will reduce noise and other generator use associated hazards.
3.　　　Before permitting anyone to operate a computer business shop, regulatory bodies of schools in collaboration with the Computer Operators' Association body should inspect the workstation for up to standard with great attention accorded the sitting chairs and desks.

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