Computer Literacy of Government Employees Correlated to Job Performance and Satisfaction

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Article info

Abstract

This correlational study aimed to determine the relationships among computer literacy, job satisfaction, and job performance of 121 government employees in the Municipality of Calinog, Iloilo, Philippines who were selected using total enumeration during the year 2018. This study utilized the adapted Perception of Computer Technology Competencies, Performance Evaluation, and An Index of Job Satisfaction. The research used statistical tools such as the mean, standard deviation, and Pearson's r where alpha was set at 0.01. The findings of the study revealed that the participants were "Skilled" in their computer literacy, "Fairly Satisfied" in their work, and had a "High" level of job performance. Furthermore, the study revealed that computer literacy, job satisfaction, and job performance were positively correlated. It is suggested that the government employees be continuously provided by relevant trainings, seminars, and workshops because such trainings have positive bearings on their job satisfaction and performance.

Introduction

The Municipality of Calinog is located at the center of the Panay Island in the Philippines. It is a developing municipality known for its beautiful sceneries, the indigenous people are known as the Panay Bukidnon and are well-known for the following festivals: Hirinugyaw Suguidadonay festival, and Nilabugan festival. Calinog is a sought-after tourist destinations in the Province of Iloilo.

The Municipality of Calinog has paved its way to modernization introducing new technology, it also very crucial that the majority or all of its work force especially government employees who work in the municipal office and other government agencies must be literate when it comes to computers, mobile phones, tablets, multimedia projectors, and other related technology.

As technology become more accessible and advanced, the growing usage of electronic texts has widened the definition of 'literacy' and resulted in new literacies such as 'computer literacy,' 'electronic literacy,' and 'information literacy. As a result of this development, the definition of what it means to be computer literate is necessarily expanded (Son, Robb, & Charismiadji, 2011).

Using a broad definition of literacy, this article defines computer literacy as the ability to use computers effectively for the purposes of production, communication, and cooperation in a literate society (Arno, 2012). Additionally, local personnel and officials gain knowledge and skills for confidently and competently using general computer applications and online tools. It encompasses numerous facets, including technological awareness, computer components, files, papers, images, multimedia, resource evaluation, and interpersonal communication.

The fact that an individual who is computer literate has all the undeniable advantage over a person who is illiterate is noteworthy. It is also necessary to consider those who served in the government for a very long period of time had no formal education in computers during their college days. During the 1960's and 1970's, computers were not common in the Philippines and college students graduated without seeing even a shadow of it. Even today, there are still those far-flung barangays which have no access to computers and to the internet.

The issue of being computer literate or not is being brought to light in this study because this pertains to the individual's job performance and job satisfaction. According to Kasemsap (2017), job performance is the accomplishment of a given task measured against the standards of accuracy, completeness, cost, and speed while job satisfaction is the sense of inner fulfillment and pride achieved when performing a particular job.

Rahman, Miskam, and Harun (2019) claim that there is a positive and strong relationship between computer literacy and job satisfaction. They proved that the ability to use computers at the workplace will provide satisfaction among the staff as they could become more efficient, allows jobs to be completed faster, able to communicate effectively and accurate in an organization. De Gruyter (2015) also asserts that there is a strong association between the use of PC at work (and PC literacy) and the overall job satisfaction of the workers. He showed that individuals with high PC skills and having a job that requires the use of a computer are more satisfied with their jobs and less keen to retire early. Moreover, Sahito and Vaisanen (2017) provided evidence on the positive effects of ICT skills on the job satisfaction of educators in Pakistan.

In addition, one study suggests that there is a positive correlation between computer literacy and work performance, individuals with a higher level of computer literacy performed better on the job (Bently, 2015). Leonard (2019) also affirms that those employees who are computer literate are generally more efficient workers, thus are more productive. Another separate study lead by Ogundele and Etejere (2013) in which they investigated the relationship between computer literacy and job performance, and they finally concluded that computer literate teachers perform better in the schools than non-computer literate teachers in the schools by making use of computers during their teaching.

Furthermore, a study reveals that there is a positive and significant relationship between job performance and job satisfaction (Katebi, HajiZadeh, Bordbar, & Salehi, 2022). There are also some studies that claim job satisfaction has a direct impact on job performance (Oh, Rutherfor, & Park, 2014; Mount, Ilies, & Johnson, 2006). Some studies also show that a satisfied employee prefers to spend all of his/her work time in the workplace, not to be late, and also to have more accuracy, focus, and effort on his/her work to provide better quality (Sanchez-Beaskoetxea & Coca Garcia, 2015; Yuen, Loh, Zhou, & Wong, 2018).

As previously stated, most government agencies now utilize computers in various offices to assist them in providing better service to their clients in less time and increasing revenue. With the advancement of information technology, clients demand increased speed and efficiency of their services. Rather than waiting for many days, they would prefer to complete their transactions within hours or minutes. As these demands of the clients continue to increase, there is also a great need for all government employees to be computer literate. When these demands of the clients are not met, they obviously react by complaining or giving negative feedback against the employee/s, the office, or even in the whole agency as an organization. This in turn results in poor job performance and the employee/s, office, or the whole agency is less likely to be happy and content in their job.

The researchers assert that not all government employees in the Municipality of Calinog are computer literate because some government employees are of the elder generation that lacked a computer background during their undergraduate years. Thus, even though their office transactions are technologically advanced, employees are hesitant to use available computers and other electronic devices due to a lack of knowledge and abilities. The researchers recognize that the elder generation along with the younger generation require

training in the use of computers and the technology requirements of their offices. The researchers would like to share their expertise and resources with them to increase their productivity in terms of work completed, output quality, and timeliness. The researchers believe that when all government employees of Calinog become computer literate, their job performance will become better, and they will feel happy and satisfied with their work. With improved job performance and better job satisfaction of the employees comes the happiness and satisfaction of their clients because they serve as the end users of their services.

Objectives of the Study

To determine the computer literacy level of government employees in Calinog.

1. To determine the job performance level of government employees in Calinog.

2. To determine the job satisfaction level of government employees in Calinog.

3. To examine the relationship among computer literacy, job performance, and job satisfaction.
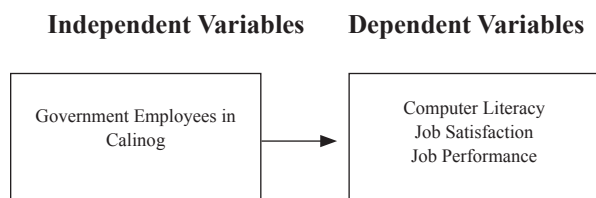
Conceptual Framework

Independent Variables   Dependent Variables

| Government Employees in Calinog | → | Computer Literacy
Job Satisfaction
Job Performance |

Figure 1 Conceptual Framework

Research Methodology

1. Population and Samples

This study employed the correlational research. Correlational research is a research design that investigates relationships between variables without the researcher controlling or manipulating any variables (Bhandari, 2022). The researchers used the correlational research to determine the relationships among computer literacy, job performance, and job satisfaction among government employees in the Municipality of Calinog during the whole year of 2018.

The researchers used the total enumeration to select their participants. A letter addressed to the municipal mayor of Calinog was made for his permission and after he approved the request, the researchers went to all government offices in the Municipality of Calinog

to distribute the questionnaires to all government employees. However, for some personal reasons, some government employees refused to receive and answer the questionnaires. After the researchers gathered all the answered questionnaires from all offices, they reached a total of 121 respondents who participated in the study.

2. Research Instrument

To determine the computer literacy level of the participants, the researchers used the adapted standardized instrument Perception of Computer Technology Competencies from Saud (2005). This instrument was composed of eight categories which were computer operations skills, set-up, maintenance and troubleshooting, word processing/introductory desktop publishing, spreadsheet/graphing, database, networking, telecommunications, and media communications.

To determine the job performance level of the participants, the researchers used the adapted standardized instrument Performance Evaluation from AIA Knowledge Resources Staff (2007). This instrument was composed of ten categories which were communications, cost consciousness, delegation, job knowledge, judgement, leadership, managing people, planning and organization, problem solving, and quality.

To determine the job satisfaction level of the participants, the researchers used the adapted standardized instrument, An Index of Job Satisfaction, from Brayfield (1951).

All three standardized instruments were adapted and slightly revised to a certain degree to suit the needs of the present study.

3. Collection of Data

In order for all government employees in the Municipality of Calinog to participate in the study, the researchers secured first the letter addressed to the municipal mayor of Calinog. After the mayor signed the letter for approval, the researchers went to all government offices and distributed the questionnaires to all government employees. While some had accepted them, some employees had refused to answer them for personal reasons. Those who answered them, the researchers were then able to collect the questionnaires right after they finished answering the questionnaire. .

4. Data Analysis

This study utilized several statistical tools such as the mean, standard deviation, and Pearson's r to analyze the data gathered from the questionnaires.

To determine the participants' level of computer literacy, the researchers utilized the following

as adapted from Saud (2005):

Score	Description
4.51 – 5.00	Very Highly Skilled
3.51 – 4.50	Highly Skilled
2.51 – 3.50	Skilled
1.51 – 2.50	Moderately Skilled
1.00 – 1.50	Not Skilled

To determine the participants' level of job performance, the researchers utilized the following as adapted from AIA Knowledge Resources Staff (2007):

Score	Description
4.51 – 5.00	Very High
3.51 – 4.50	High
2.51 – 3.50	Average
1.51 – 2.50	Low
1.00 – 1.50	Very Low

To determine the participants' level of job satisfaction, the researchers utilized the following as adapted from Brayfield (1951).

Scale	Description
4.51 – 5.00	Very Satisfied
3.51 – 4.50	Satisfied
2.51 – 3.50	Fairly Satisfied
1.51 – 2.50	Dissatisfied
1.00 – 1.50	Very Dissatisfied

To determine the significant relationship among computer literacy, job performance, and job satisfaction, the researchers used the Pearson's r in which the strength and direction of the relationship was based on LaMorte (2021) categorization:

Value of the Correlation Coefficient (r)	Strength of Correlation
1	Perfect Positive Association
0.8 – 1.0	Very Strong Positive Association
0.6 – 0.8	Strong Positive Association
0.4 – 0.6	Moderate Positive Association
0.2 – 0.4	Weak Positive Association
0.0 – 0.2	Very Weak or No Association
0.0 – -0.2	Very Weak or No Association
-0.2 – -0.4	Weak Negative Association
-0.4 – -0.6	Moderate Negative Association
-0.6 – -0.8	Strong Negative Association
-0.8 – -1.0	Very Strong Negative Association
-1.0	Perfect Negative Association

For a decision as to the significant relationship among computer literacy, job performance, and job satisfaction, the researchers used the 0.01 level of significance.

Result (s)

Computer Literacy

Table 1 provides the results on the computer literacy level of the participants. The overall mean score of the participants were described as with "Skilled" (M=2.83, SD=1.442). When it comes to category, all the participants were "Skilled" except for Media Communications in which the participants were rated as "Moderately Skilled" (M=2.32).

Table 1 Computer Literacy

Category	Mean	Description	SD
Computer Operations Skills	3.30	Skilled	1.429
Set-up, Maintenance and Troubleshooting	2.96	Skilled	1.484
Word Processing/Introductory Desktop Publishing	3.20	Skilled	1.467
Spreadsheet/Graphing	2.73	Skilled	1.440
Database	2.61	Skilled	1.498
Networking	2.85	Skilled	1.434
Telecommunications	2.69	Skilled	1.417
Media Communications	2.32	Moderately Skilled	1.364
Weighted mean	2.83	skilled	1.442

Job Satisfaction

Table 2 shows the job satisfaction level of the participants. The overall mean score of the participants showed "Fairly Satisfied" (M=3.08, SD=1.191). When it comes to category, majority of the participants were "Satisfied" with "Enjoy my work more than my leisure

Table 2 Job Satisfaction

Category	Mean	Description	SD
Enjoy my work more than my leisure time.	3.85	Satisfied	.936
Job seems like a hobby to me.	3.81	Satisfied	1.027
Find real enjoyment in work.	3.72	Satisfied	1.366
Job Is usually interesting enough to keep me from getting bored.	3.66	Satisfied	1.293
Like my job better than the average worker does.	3.62	Satisfied	1.212
Satisfied with my job for the time being.	3.57	Satisfied	1.167
Most days I am enthusiastic about work.	3.53	Satisfied	1.140
Feel fairly well satisfied with my present job.	3.45	Fairly Satisfied	1.251
Feel am happier in my work than most other people.	3.43	Fairly Satisfied	1.138
Seems that my friends are more interested in their jobs.	3.32	Fairly satisfied	.950
Each day of work seems like it will never end.	3.09	Fairly satisfied	1.231
Consider my job rather unpleasant.	2.68	Fairly satisfied	1.361
Feel that my job is no more interesting than others could get.	2.62	Fairly satisfied	1.192
Most of the time I have to force myself to go to work.	2.33	Dissatisfied	1.293
Job is pretty uninteresting.	2.22	Dissatisfied	1.254
Often bored with my job.	2.16	Dissatisfied	1.199
Disappointed that I ever took this job.	1.97	Dissatisfied	1.251
Definitely dislike my work.	1.95	Dissatisfied	1.203
Weighted Mean	3.08	Fairly Satisfied	1.191

time" as the highest (*M*=3.85) and "Definitely dislike my work" as the lowest (*M*=1.95).

Job Performance

Table 3 shows the job performance level of the participants. The overall mean score of the participants resulted in a "High" (*M*=3.51, *SD*=1.188). When it comes to category, majority of the participants have a "High" level of job performance with "Planning and Organization" as the highest (*M*=3.63) and Communications as the lowest (*M*=3.37).

Table 3 Job performance

Category	Mean	Description	SD
Communications	3.37	Average	1.220
Cost Consciousness	3.39	Average	1.185
Delegation	3.43	Average	1.211
Job Knowledge	3.54	High	1.179
Judgment	3.51	High	1.095
Leadership	3.57	High	1.181
Managing People	3.62	High	1.113
Planning and Organization	3.63	High	1.193
Problem Solving	3.51	High	1.214
Quality	3.48	Average	1.293
Weighted Mean	3.51	High	1.188

Relationship Among Computer Literacy, Job Satisfaction, and Job Performance

Table 4 presents the correlation matrix for computer literacy, job satisfaction, and job performance. Results showed that statistical significance is reported in the correlations between the following: computer literacy and job satisfaction (r= 0.572, =0.01); computer literacy and job performance (r = 0.514, =0.01); and job satisfaction and job performance (r=0.571, =0.01).

Table 4 Relationship between Computer Literacy, Job Satisfaction and Job Performance

Correlated Variable	N=121	Computer Literacy	Job Satisfaction	Job Performance
Computer Literacy	Pearson Correlation	1	.572(**)	.514(**)
	Significance (2-tailed)	.	.000	.000
	N	121	121	121
Job Satisfaction	Pearson Correlation	.572(**)	1	.571(**)
	Significance (2-tailed)	.000	.	.000
	N	121	121	121
Job Performance	Pearson Correlation	.514(**)	.571(**)	1
	Significance (2-tailed)	.000	.000	.
	N	121	121	121

** Correlation at 0.01(2-tailed):...

Discussion

A moderate (LaMorte, 2021) positive and significant association or correlation (*r*=0.572, =0.01) exists between computer literacy and job satisfaction and this confirms the study of Rahman, Miskam, and Harun (2019) that there is a positive and strong relationship between computer literacy and job satisfaction. It also substantiates the study of Gruyter (2015) that there is a strong association between the use of PC at work (and PC literacy) and the overall job satisfaction of the workers, and that of Sahito and Vaisanen (2017) that ICT skills have a positive effect on the job satisfaction of educators in Pakistan.

A moderate (LaMorte, 2021) positive and significant association or correlation (*r*=0.514, =0.01) exists between computer literacy and job performance and this supports the claim of Bently (2015) that there is a positive correlation between computer literacy and work performance, individuals with a higher level of computer literacy performed better on the job. It also verifies the studies of Leonard (2019) that those employees who are computer literate are generally more efficient workers, thus are more productive. It is also parallel to Ogundele and Etejere (2013) that computer literate teachers perform better in the schools than non-computer literate teachers in the schools by making use of computers during their teaching.

A moderate (LaMorte, 2021) positive and significant association or correlation (*r*=0.571, =0.01) exists between job satisfaction and job performance and this finding is consistent with that of Katebi, HajiZadeh, Bordbar, & Salehi (2022) that there is a positive and significant relationship between job performance and job satisfaction. It also corroborates with the claims of Oh, Rutherfor, & Park (2014) and Mount, Ilies, & Johnson (2006) that job satisfaction has a direct impact on job performance. It also conforms to the study of Sanchez-Beaskoetxea & Coca Garcia (2015) and Yuen, Loh, Zhou, & Wong (2018) that a satisfied employee prefers to spend all his/her work time in the workplace, not to be late, and also to have more accuracy, focus, and effort on his/her work to provide better quality.

Suggestion

This research has shown that computer literacy is significantly associated or correlated to job satisfaction and job performance. Those employees who are computer literate are more likely satisfied and happy in their work and as a result, they perform better in their

job. There is, however, a continuous enhancement of computer literacy among employees or workers because technology changes rapidly from time to time. It is suggested that the government employees be continuously provided by relevant trainings, seminars, and workshops because it can assure that employees or workers can keep pace with the huge wave of demands from clients who are becoming more digitally active and technologically dependent.

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