

# Modeling Employee Retention Amidst COVID-19 Pandemic: An Econometric Approach

Dennis T. Caredo<sup>1</sup>, Argina M. Pomida<sup>2</sup>, Angelita L. Paradero<sup>3</sup> and Leomarich F. Casinillo<sup>4\*</sup>

<sup>1,2,3,4</sup>Visayas State University, Visca, Baybay City, Leyte, Philippines

<sup>1</sup><https://orcid.org/0000-0003-0891-028X>, <sup>2</sup><https://orcid.org/0000-0001-9275-8043>,

<sup>3</sup><https://orcid.org/0000-0002-3414-7671>, <sup>4</sup><https://orcid.org/0000-0003-3966-8836>

\*Email Correspondence: leomarich\_casinillo@yahoo.com

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## Abstract

*Employee retention is one of the human resource management (HRM) issues. This study determines the factors that significantly influence employee retention amidst the COVID-19 pandemic. The study employs complete enumeration and uses primary data. After which, the results are analyzed using descriptive statistics and econometric modeling. Results reveal that employees are satisfied to do their respective jobs ( $M=4.09$ ,  $SD=0.48$ ). In addition, they show that the determinants such as other income ( $p\text{-value}=0.024$ ), length of service ( $p\text{-value}=0.099$ ), as well as reward and recognition ( $p\text{-value}=0.015$ ), are significant influences to employees' retention. Hence, these conclude that better remuneration (and the increase thereof) are more likely to retain existing employees and attract employees from other organizations. Furthermore, the study specifically recommends that employee retention be improved by further refining reward and recognition that surely meet the needs and well-being of the employees.*

*Keywords: employee retention, econometric modeling, COVID-19 pandemic, Baybay City*

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## 1.0 Introduction

Satisfaction and retention of employees are affected by the COVID-19 pandemic, which has impacted the world of business and economics to a prodigious extent. The pandemic has created chaos in the world and caused a distressing social and economic crisis that led to anxiety and depression for many workers (Chow et al., 2021; Rotas & Cahapay, 2020; Sapkal, 2020). In all establishments, employees are the main resources or assets of the corporation or company. The success of every business is entirely reliant on the efficiency and loyalty of its employees (Elsafty & Ragheb, 2020; Sishuwa & Phiri, 2020). However, the pandemic has negatively impacted the well-being

of the economies. It cuts jobs or reduces employee earnings.

Many workers are getting unsatisfied due to confusion and negativity (Jarosz, 2021). According to Carnevale and Hatak (2020), there are issues and problems on employee retention confronted by human resource managers in most retail organizations. Perhaps, retaining employees saves time and money from tedious recruitment processes and trainings and helps the company achieve its goals (Monica & Reddy, 2021). Hence, supervisors need to possess the right leadership and social skills to effectively lead and manage their workers on the right path (Dirani et al., 2020).

Similarly, employee retention ascends when

supervisors sufficiently recognize the work done. According to Tessema et al. (2013), recognition for a job well done is crucial to motivate employees in an organization. Hence, recognizing worker efforts within a business is one of the significant and effective ways to reduce employee turnover. A certain department store in Baybay City, Leyte, Philippines is known for its wholesale and retail prices for general merchandise and grocery items. Currently, the present number of employees is 14.5% lower than the previous year (i.e., 138 employees down to 118 employees). The study initially measured the retention stability index of the department store.

The calculation was carried out using the formula: total number of employees serve one year plus divided by the total number of employees one year ago, and multiplied by 100 (Akin, 2008). Results revealed that the store's current retention rate was 85.51% which is lower than the ideal retention rate of at least 90% (The Great Game of Business, n.d.). Hence, it is important to examine the factors influencing employee retention to help the establishment lessen the employee retention problem considering the hiring of new employees is costly and can ruin its reputation. It is also a hassle for the organization's Human Resource Management (HRM) part since hiring is not easy.

Some HRM process steps when turnover of employees occurs are as follows: (1) updating and posting a job description, (2) reviewing resumes, (3) screening and interviewing, (4) checking references, (5) extending a job offer, (6) running a background check, and (7) completing legal paperwork. Note that retention of a motivated employee is very crucial for the organizations' success. Seemingly, employees who are happy of what they do and the atmosphere in which they work, and the higher wages or salary they have received are more likely to remain employed with their organization over a longer time. Retaining

employees also deserves constant attention and positive effort because it does more than solve turnover problems (Petersen, 2020).

Hence, this study evaluates the different factors of employee retention, such as training and development, to prevent the job switching of employees' key talents (Sinha & Sinha, 2012; Tadesse, 2018). Generally, this study aims to determine the factors that significantly influence employee retention. Specifically, it aims to: present the demographic profile of the respondents; determine the effect of demographic factors (age, gender, marital status, education, employment status and tenure, family size, and income), training and development, reward and recognition, remuneration, welfare benefits, performance appraisal, career growth, to employee retention; and suggest employee retention strategies to the different organizations' HRM. Thus, this study will help the HRM and workers understand the nature and the different characteristics of employee retention. Furthermore, this study will serve as a benchmark for policy-makers and researchers in improving the well-being of workers amidst the pandemic.

## 2.0 Methodology

This study used a research design from Casinillo and Aure (2018) that deals with econometric modeling. The model was obtained to determine the significant factors that influence employee retention. The study was conducted at Prince Mall-Baybay City Branch (Department store), Baybay City, Leyte, from November 2020 to December 2020. The department store is the first and largest among the eight stores in the Samar-Leyte area in the Philippines. It has 118 employees, the majority of which are temporary or casual employees (75%), and they are under an agency. The rest are probationary and regular employees. Due to small target population size, no sampling was done,

instead a complete enumeration was carried out to include the 118 employees of company under study.

This study used the survey method in collecting or gathering the primary data. Before the conduct of the survey, a consent letter was sent to the head supervisor of the department store asking permission to collect the necessary data for this study. As for the ethical concern, the respondents were clearly informed that their participation was voluntary and that the information gathered must be treated confidential and solely used for this research only. Specifically, the survey was self-administered, which means the questionnaires were given personally to the respondents for them to answer. The researchers used an adapted structured questionnaire as an instrument in gathering data. The adapted questionnaire was based from the study by Kyndt et al. (2009), and Sishuwa and Phiri (2020). There are different types of questions reflected in the questionnaires. In the first part, closed-ended format and dichotomous questions were used under demographic information. A closed-ended format question is a type of question with multiple options as answers. It allows respondents to select a single option. At the same time, dichotomous questions require respondents to answer with a simple "yes" or "no." These questions asked the respondents about their backgrounds, such as age, gender, marital status, educational attainment, employment status, length of service, family size, and other income. For the second part of the questionnaire, Likert scale questions were used to determine other independent variables namely: training and development, reward and recognition, remuneration, welfare benefits, performance appraisal and career growth wherein respondents chose five rating scales that start with 1-*strongly disagree*, 2-*disagree*, 3-*neutral*, 4-*agree*, and 5-*strongly agree*. They have to put

checkmarks for their desired answers as provided in each question/column. Table 1 shows the range of mean perception scores towards retention and its influencing factors.

**Table 1.** *Employees' perception score towards retention and its influencing factors*

| Range of Mean Perception Score | Overall Response   | Rating            |
|--------------------------------|--------------------|-------------------|
| 1.00 – 1.80                    | Strongly disagrees | VeryPoor          |
| 1.81 – 2.60                    | Disagrees          | Poor              |
| 2.61 – 3.40                    | Neutral            | Satisfactory      |
| 3.41 – 4.20                    | Agrees             | Very Satisfactory |
| 4.21 – 5.00                    | Strongly Agrees    | Outstanding       |

All the data from the completed questionnaires were tallied in Microsoft excel for data analysis using regression statistics format. Descriptive analysis, which includes frequency counts and percentages, mean, standard deviation, was used to describe and evaluate the demographic profile and influence the respondents' employee retention. On the other hand, the factors influencing employee retention were determined using econometric modeling, the Ordinary Least Square (OLS) model. Econometric modeling is used to evaluate the effects of independent variables on the dependent variable (Mátyás & Sevestre, 1992). The econometric model is given by

$$\begin{aligned}
 \text{Retention}_i = & \beta_0 + \beta_1 \text{Sex}_i + \beta_2 \text{Age}_i + \\
 & \beta_3 \text{Married}_i + \beta_4 \text{Regular}_i + \\
 & \beta_5 \text{Oincome}_i + \beta_6 \text{Educ}_i + \beta_7 \\
 & \text{Service}_i + \beta_8 \text{Famsize}_i + \beta_9 \\
 & \text{Training}_i + \beta_{10} \text{Reward}_i + \beta_{11} \\
 & \text{Remuneration}_i + \beta_{12} \text{Benefits}_i + \\
 & \beta_{13} \text{Appraisal}_i + \beta_{14} \text{Growth}_i + \varepsilon_i
 \end{aligned}$$

where  $i$  denotes the  $i^{\text{th}}$  employee in the survey,  $\beta_0, \beta_1, \beta_2, \dots, \beta_{14}$  are parameters to be estimated and  $\varepsilon_i$  is the random errors in the econometric model.  $Retention_i$  is the level of employees retention (scale of 1-5),  $Sex_i$  is a dummy variable that captures the male employee (1=male and 0=female),  $Age_i$  is the age of employee measured in years,  $Married_i$  is a dummy variable that captures the married employee (1-Married and 0-Not married),  $Regular_i$  is a dummy variable that captures a regular employee,  $Oincome_i$  is a dummy variable that captures employees with other income (1=With other income and 0=Without other income),  $Educ_i$  refers to the employee's level of education,  $Service_i$  refers to the number of years in service,  $Famsize_i$  refers to the family size of an employee, and  $Training_i$  refers to the perception of employees in the training and development opportunity (Scale of 1-5),  $Reward_i$  refers to the perception of employees in the reward and recognition (Scale of 1-5),  $Remuneration_i$  refers to the perception of employees in the remuneration (Scale of 1-5),  $Benefits_i$  refers to the perception of employees in the welfare benefits (Scale of 1-5),  $Appraisal_i$  refers to the perception of employees in the performance appraisals (Scale of 1-5), and  $Growth_i$  refers to the perception of employees in career growth (Scale of 1-5). To ensure the model's validity and come up with correct inference, some diagnostic test was performed. All calculations were obtained with the help of STATA version 14.0.

### 3.0 Result and Discussion

#### Socio-Demographic Profile

Table 2 reveals that the majority of the respondents were male (64.4%), followed by female (35.6%). This implies that male are dominantly working in a department store. The result is parallel to the study of Stoker et al. (2012) and Casinillo (2020) that males are dominant compared to females in a type of exhausting job. About

51.7% of the employees are from 25-34 years old, 42.3% whose age ranges from 18-24 years old, 5.8% whose age ranges from 35-44 years old and 0.85% whose age ranges from 45-54 years old. In a department store, one of the qualifications in choosing an employee is for him to be young and active. It is worth noting that young employees are energetic and will bring fresh perspective and way of thinking to a company. According to Witte et al. (2007), young workers are fast in adopting the work environment. Most of the supervisors expect that the impact of work features on job results would be efficient than for more experienced employees.

It also reveals that out of 118, 92 of them were single (78%) and only 26 were married (22%). About 64.4% of the employees were high school graduates in terms of educational background, only 17.8% attained college level, 10.2% graduated bachelor's degree, and 7.6% of the employees finished associate degree courses. This suggests that the educational background for an employee in a department store is not necessary as long as the employee can read and write and is teachable. On average, about 69.5% of the employees were on casual status, 21.2% were regular, and 9.3% were probationary. In terms of years of employment, 58.5% of the employees have been working in the store for about five years. Meanwhile, 30.5% of them have been working for less than one year.

There were employees (9.3%) who have been in the company for six to ten years and only 1.7% employees who have had a work experience of more than ten years. Regarding their family size, 62 employees have five members of the family (52.5%), followed by 51 (43.2%) who have five to ten family members. There were only five employees whose family members are above ten (4.2%). Seventy-six respondents out of 118 had no other source of income (64.4%). In comparison, 33 respondents have another source of income (28.0%), and nine employees prefer not to answer (7.6%).

**Table 2.** Socio-Demographic Profile of Employees (n=118)

| Variable               | Indicator         | Frequency | Percentage (%) |
|------------------------|-------------------|-----------|----------------|
| Age                    | 18 - 24           | 50        | 42.37          |
|                        | 25 - 34           | 61        | 51.70          |
|                        | 35 - 44           | 6         | 5.08           |
|                        | 45 - 54           | 1         | 0.85           |
| <b>Mean Age</b>        |                   |           | <b>24.66</b>   |
| Sex                    | Female            | 42        | 35.6           |
|                        | Male              | 76        | 64.4           |
| Marital Status         | Single            | 92        | 78.0           |
|                        | Married           | 26        | 22.0           |
| Educational Attainment | High Degree       | 76        | 64.4           |
|                        | College Level     | 21        | 17.8           |
|                        | Associate Degree  | 9         | 7.6            |
|                        | Bachelor's Degree | 12        | 10.2           |
| Employment Status      | Casual Employee   | 82        | 69.5           |
|                        | Provisionary      | 11        | 9.3            |
|                        | Regular Employee  | 25        | 21.2           |
| Length of Service      | Less than 1 year  | 36        | 30.5           |
|                        | 1 to 5 years      | 69        | 58.5           |
|                        | 6 to 10 years     | 11        | 9.3            |
|                        | Above 10 years    | 2         | 1.7            |
| Family Size            | Less than 5       | 62        | 52.5           |
|                        | 5 to 10           | 51        | 43.2           |
|                        | Above 10          | 5         | 4.2            |
| Other income           | Yes               | 33        | 28.0           |
|                        | No                | 76        | 64.4           |
|                        | Prefer not to say | 9         | 7.6            |

### Employee Retention

Generally, Table 3 reveals that employees like to come to work every day ( $M=4.36$ ,  $SD=0.69$ ) and are rated as outstanding (Table 1). This suggests that employees are motivated to do their job and intend to stay loyal to their current workplace. An organization aims to maintain an effective workforce and simultaneously meet operational requirements (Kossivi et al., 2016). Hence, an employer must encourage its employees to remain in the organization and give them reasonable compensation, good working condition, reward,

and recognition, among others, to stay and achieve the organizational goal (Sandhya & Kumar, 2011).

One of the possible reasons employees are interested in working is that they feel comfortable working with their teammates ( $M=4.36$ ,  $SD=0.69$ ). Therefore, it is rated as outstanding (Table 1). This result parallels Casinillo et al.'s (2020) findings which revealed that social relationship is a significant predictor of happiness at work. However, a little lower perception score was given for staying in the job in the next five years ( $M=3.93$ ,  $SD=0.76$ ), which is rated as very satisfactory (Table 1). This leads

to the inference that employees are just working temporarily in order to save money.

When employees have saved enough money, they intend to leave and find a more decent job or improve their educational background. As a whole, employee retention ( $M=4.09$ ,  $SD=0.48$ ) is rated as

very satisfactory (Table 1). In other words, in the current situation of employees, they are satisfied with their jobs and corresponding incomes. Hence, effective employee retention strategies must be in place to stay longer and maintain workforce performance (Rombaut & Guerry, 2020).

**Table 3.** Characteristics of Employee Retention

| Statement  | Mean (M)    | Std Dev (SD) |
|--|-------------|--------------|
| 1. I feel I can reach my full potential in this company.                                       | 4.02        | 0.64         |
| 2. I feel comfortable working with my teammates.   | 4.28        | 0.65         |
| 3. I understand of my career path and promotion.   | 4.02        | 0.61         |
| 4. I like coming to work every day.  | 4.36        | 0.69         |
| 5. Company goals and strategies are communicated to me.  | 4.03        | 0.64         |
| 6. I am satisfied with my job.   | 4.16        | 0.65         |
| 7. The information from the management concerning the ongoings in the department satisfies me. | 3.98        | 0.63         |
| 8. I get benefits for personal growth by updating my skills.                                   | 4.16        | 0.59         |
| 9. The company promotes innovativeness and creativity.   | 4.01        | 0.59         |
| 10. I will be working here in the next few years.  | 3.93        | 0.76         |
| <b>Grand Mean and Overall SD</b>   | <b>4.09</b> | <b>0.48</b>  |

### Factors affecting Employee Retention

It is worthy to note that training and development comprise activities intended by an organization to aid its employees to obtain the necessary skills and knowledge to perform their respective jobs accordingly (Lee et al., 2010). Before an employee does his work assignment, a supervisor conducts quality orientation and necessary training ( $M=4.23$ ,  $SD=0.74$ ). On average, this is rated as outstanding (Table 1), which implies that it is important before the employee starts his job. Perhaps training and development are very helpful in the long run to realize the company's goal, which is a critical factor for personal and professional development.

Seemingly, according to (Kadiresan et al., 2015), training is one of the important factors in retaining employees in most organizations. As a whole, the training and development program ( $M=4.14$ ,  $SD=0.61$ ) was rated as very satisfactory

(Table 1). This suggests that employees need more additional training to enhance their capability of doing their job well. In the study of Anis et al. (2010), in this age, when technology is changing so rapidly, any skill becomes obsolete quickly. To maintain the company's goal, it needs to train its employees to remain globally competitive.

Table 4 also reveals that employees' overall perception of rewards and recognition ( $M=4.14$ ,  $SD=0.61$ ) is very satisfactory (Table 1). This suggests that employees are allowed to be appreciated and recognized for their respective progress in work assignments. Perhaps, employees agree ( $M=4.03$ ,  $SD=0.87$ ) that their good performance is compensated with rewards and incentives. In the study of Markova and Ford (2011), it is stated that "Reward" is a vital instrument to enhance employees' performance. Seemingly, a well-rewarded employee feels that the company values him/her, which will encourage more productivity. Employers

need to take care of productive employees since they are the solid foundation of their existence. Nowadays, it is hard for employers to retain skilled workers in a competitive environment. Hence, employers need to comprehend the significance of being appreciated for a good job. In praising employees for their hard work, the employer needs to apply the fundamental principles of employee recognition that follows a reward system to keep them motivated (Martono et al., 2018).

On average, remuneration is the lowest as perceived by the employees ( $M=3.88$ ,  $SD=0.74$ ). However, it is still rated as very satisfactory (Table 1). When it comes to salary and benefits, a mall's employee is not ideal since it is one of the lowest-paying jobs in the country. However, it is suitable for job seekers with lower educational attainment. Note that remuneration is provided as an exchange for the employees' input to the organization. Hence, an effective remuneration program can help shape performance and employees' well-being (Armstrong-Stassen & Lee, 2009; Martono et al., 2018). In addition, according to Agustini et al. (2016), employees are more likely satisfied in their respective jobs if the management gives them reasonable compensation or incentives. Perhaps, the better the compensation bundle, the higher the retention of significant employees in the organization or company will be.

Table 4 shows that employers try to create an exciting work environment ( $M=4.14$ ,  $SD=0.77$ ) as welfare benefits. This suggests that activities during work time give enjoyment, relieving stress and developing a social closeness to other workers. In the study of Casinillo et al. (2020), the social relationship is a strong predictor of happiness at work. Furthermore, a rewarded and appreciated good employee ( $M=4.04$ ,  $SD=0.85$ ) will be more fulfilled, satisfied, and more productive, encouraging employees to stay within the company. On average, welfare benefits ( $M=4.08$ ,  $SD=0.62$ ) are another retention factor that keeps a mentally and physically healthy and help its company survive. In the study of Deckop

et al. (2006), results revealed that better welfare and health services influence the employees' work performance. Hence, to increase the performance and retain employees, employers should pay attention to improving welfare benefits.

Table 4 reveals that the management helps the employees improve their quality of work through a periodic evaluation of their performance ( $M=4.16$ ,  $SD=0.62$ ). This implies that the supervisor is inspecting and evaluating an individual's work performance to facilitate career development and attaining the company's profit objective. In general, performance appraisal ( $M=4.16$ ,  $SD=0.62$ ) is a way to evaluate the employees' performance which could be the basis for a salary increase, promotion, bonus, and even termination. The factor of employee retention is rated as very satisfactory (Table 1). According to Johari et al. (2012), employees are monitored by superiors through performance appraisal to assess their capability to pursue higher positions in an organization because competitive employees are needed for survival, especially in a turbulent economy. This is supported by Gruman and Saks (2011) that assessing employees' internal characteristics and performance appraisal is necessary for improving the organization.

In addition, employees are satisfied with their respective work assignment ( $M=4.23$ ,  $SD=0.67$ ). This suggests that employees wanted to advance their career growth by performing well in their jobs. In the study of Weng et al. (2010), career growth is directly related to organizational commitment. Hence, career growth ( $M=4.20$ ,  $SD=0.57$ ) is considered the highest possible reason employees leave or remain within the organization. Perhaps, it has been observed that lack of career growth leads to a lower motivation which is a common reason for employees to exit or leave their jobs (Liu et al., 2010). In literature, career growth exemplifies success planning development, the building of talent management, progress of leadership program, career management and self-evaluation to progress as a professional (Nouri & Parker, 2013; Weng & Hu, 2009; Weng & McElroy, 2012).

**Table 4.** Factors Affecting Employee Retention

| Statement   | Mean (M)    | Std Dev (SD) |
|---|-------------|--------------|
| <b>Training and Development</b>   |             |              |
| 1. My supervisor/manager sends me to training to improve my strengths and overcome my weaknesses.             | 4.03        | 0.82         |
| 2. The quality of orientation and training I have received is suitable of my current position in the company. | 4.23        | 0.74         |
| 3. The mentoring I am currently receiving from my senior peers helps me to work productively.                 | 4.14        | 0.82         |
| 4. The training provided by the company is well planned.  | 4.17        | 0.75         |
| 5. The training program is helpful in the long run.   | 4.13        | 0.84         |
| <b>Grand Mean and Overall SD</b>  | <b>4.14</b> | <b>0.61</b>  |
| <b>Rewards and Recognition</b>  |             |              |
| 1. Reward system is applicable at various levels of employees.  | 4.03        | 0.87         |
| 2. At work, I'm allowed to do my best.  | 4.13        | 0.81         |
| 3. I have received recognition and praise for my work.  | 3.99        | 0.89         |
| 4. My supervisor/manager cares about me as a person.  | 3.84        | 0.84         |
| 5. In the last six months, I've been appreciated for my progress.   | 4.00        | 0.83         |
| <b>Grand Mean and Overall SD</b>  | <b>4.00</b> | <b>0.62</b>  |
| <b>Remuneration</b>   |             |              |
| 1. The compensation is appropriate with my job responsibility.  | 3.99        | 0.86         |
| 2. The salary is fair in terms of my work done and experience.  | 3.81        | 0.94         |
| 3. The benefits provided by the company are sufficient to meet my basic needs.                                | 3.81        | 0.89         |
| 4. The benefits are given by the company, followed by the industry norms.                                     | 3.88        | 0.92         |
| 5. The company is obliged to give fringe benefits such as incentives, travel allowance, and bonuses.          | 3.88        | 0.88         |
| <b>Grand Mean and Overall SD</b>  | <b>3.88</b> | <b>0.74</b>  |
| <b>Welfare Benefits</b>   |             |              |
| 1. If I do a good job, I will be rewarded.  | 4.04        | 0.85         |
| 2. I have freedom to do what is right for the customer.   | 4.07        | 0.83         |
| 3. I receive enough opportunities to interact with other employees on a formal level.                         | 4.08        | 0.78         |
| 4. The management makes the wise decision for the welfare of the employees.                                   | 4.06        | 0.78         |
| 5. The management has created an exciting work environment.   | 4.14        | 0.77         |
| <b>Grand Mean and Overall SD</b>  | <b>4.08</b> | <b>0.62</b>  |

*Continued on next page*



Table 4. Factors Affecting Employee Retention (Continued)

| Statement  | Mean (M)    | Std Dev (SD) |
|--|-------------|--------------|
| <b>Performance Appraisal</b>   |             |              |
| 1. The management helps team members improve their quality of work.          | 4.24        | 0.71         |
| 2. I am regularly delivering the work assigned to me.                        | 4.05        | 0.80         |
| 3. I always inform my colleagues regarding adjustments clearly and promptly. | 4.06        | 0.82         |
| 4. Everyone in a team communicates effectively and professionally.           | 4.23        | 0.71         |
| 5. I am committed to the satisfaction of customers.                          | 4.21        | 0.72         |
| <b>Grand Mean and Overall SD</b>   | <b>4.16</b> | <b>0.62</b>  |
| <b>Career Growth</b>   |             |              |
| 1. I am satisfied working in this organization.                              | 4.23        | 0.67         |
| 2. I am expected to do things that are not reasonable.                       | 4.23        | 0.66         |
| 3. This organization tries to take unfair advantage of its staff.            | 4.17        | 0.71         |
| 4. This is a good venue for people trying to get ahead in their careers.     | 4.18        | 0.79         |
| 5. I know what is expected in my work assignment.                            | 4.19        | 0.68         |
| <b>Grand Mean and Overall SD</b>   | <b>4.20</b> | <b>0.57</b>  |

### Econometric Model

Table 5 depicts the diagnostic test for the validity of the econometric model. It is revealed that there is no problem with the variances because the model is not heteroscedastic by the Breusch-Pagan test ( $\chi^2=1.75$ , p-value=0.186). This implies that the residuals have constant variance (Mátyás & Sevestre, 2013). It is also revealed that no omitted variable bias in the model by Ramsey RESET test ( $F=1.46$ , p-value=0.231). The model had no problem of multicollinearity between pairs of predictors

( $VIF=2.05<10$ ). This implies that the regression model assumes that the independent variables are not highly correlated with each other. This assumption is tested using Variance Inflation Factor (VIF) values which should be lesser than 10 in order to be free from multicollinearity problems (Allison, 2012). There is also no problem for normality of residuals by the Shapiro-Wilk test ( $Z=0.61$ , p-value=0.2723). This infers that a valid inference can be drawn from the econometric model since the residuals follow a normal distribution (Mátyás & Sevestre, 2013).

Table 5. Diagnostic Test for Econometric Model

| Assumptions            | Test Statistic                  | p-value         | Description |     |
|------------------------|---------------------------------|-----------------|-------------|-----|
| Homoscedasticity       | Breusch-Pagan                   | $\chi^2 = 1.75$ | 0.186       | Yes |
| Omitted variables bias | Ramsey RESET                    | $F = 1.46$      | 0.231       | No  |
| Multicollinearity      | Variance inflation factor (VIF) | $VIF = 2.05$    | -           | No  |
| Normality of Residuals | Shapiro-Wilk test               | $Z = 0.61$      | 0.2723      | Yes |

In Table 6, it shows that the econometric model was significant at 21% ( $F_c=1.32$ ,  $p\text{-value}=0.2113$ ) level. This suggests that only a few determinants explain the variation of employee retention. This is due to the effect of the COVID-19 pandemic that causes health and economic crisis that leads to worry and unhappiness to workers (Chow et al., 2021; Rotas & Cahapay, 2020; Sapkal, 2020). Perhaps, the salary as a worker in a department store is relatively small to sustain amidst the pandemic crisis. Hence, workers are looking for bigger opportunities outside a mall. Moreover, only 15.17% of the data variation fits the regression model (Table 6). Thus, the model reveals that sex or gender ( $p\text{-value}=0.217$ ), age ( $p\text{-value}=0.473$ ), marital status ( $p\text{-value}=0.199$ ), employment status ( $p\text{-value}=0.231$ ), educational attainment ( $p\text{-value}=0.716$ ), family size ( $p\text{-value}=0.300$ ), training and development ( $p\text{-value}=0.723$ ), remuneration ( $p\text{-value}=0.980$ ), welfare benefits ( $p\text{-value}=0.165$ ), performance appraisal ( $p\text{-value}=0.281$ ), and career growth ( $p\text{-value}=0.766$ ) are not significant factors affecting employee retention amidst the pandemic.

The results show that the following determinants are significant, which influence the employee retention, namely: another source of income ( $p\text{-value}=0.024$ ), length of service ( $p\text{-value}=0.099$ ), and reward and recognition ( $p\text{-value}=0.015$ ). Employees are willing to stay longer as long as they have other sources of income to compensate their daily expenses aside from their salary in their job. According to Tröster (2020), goods and services in the market have reacted powerfully due to the COVID-19 pandemic, which resulted in a drastic price increase. Thus, an

additional source of income is a great aid in times of economic crisis. In the study of Casinillo et al. (2020), other income sources are a great help for family expenses, especially if the main source of income is relatively low. On the other hand, when the employees have served in the company for years, they are more likely to stick to their job. This implies that employees are more likely satisfied if they serve longer despite a small salary. Another possible reason is that employees have difficulty finding other jobs with higher salaries considering their low educational attainment and the current situation due to the COVID-19 pandemic. Wilson et al. (2020) stated that businesses and other establishments are experiencing job insecurity and financial matters during the pandemic due to the government health protocols. In addition, new employees or employees who serve shorter are more likely to leave the company. This means that they are trying to look for a greener pasture and more opportunities. It is worth noting that workers who are regularly employed are more satisfied and motivated to stay because of security with regard to salary (de Graaf-Zijl, 2012).

Furthermore, because of rewards and recognition, employees are willing to stay in their jobs. This implies that good incentives, which correspond to their achievement in the job, influence their retention as a worker. Perhaps, employees are motivated to stay at a company when their performance are being recognized and rewarded. Several studies show that workers need to be applauded, rewarded, and recognized for their contributions and continuous productivity to their job (Carnevale & Hatak, 2020; Sandhya & Kumar, 2011; Tessema et al., 2013).

**Table 6.** *Econometric Model for Employee Retention and its Influencing Factors*

| Influencing Factors                           | Ordinary Least Square Model |              |         |
|---|-----------------------------|--------------|---------|
|   | Coefficient                 | Std. Error   | p-value |
| Constant                                      | 3.571***                    | 0.472        | <0.001  |
| Dummy: Sex                                    | 0.121 <sup>ns</sup>         | 0.098        | 0.217   |
| Age (in years)                                | -0.009 <sup>ns</sup>        | 0.013        | 0.473   |
| Dummy: Married                                | 0.162 <sup>ns</sup>         | 0.126        | 0.199   |
| Dummy: Regular employee                       | -0.164 <sup>ns</sup>        | 0.136        | 0.231   |
| Dummy: Other income                           | 0.234**                     | 0.102        | 0.024   |
| Educational attainment                        | -0.018 <sup>ns</sup>        | 0.051        | 0.716   |
| Length of Service                             | 0.148*                      | 0.089        | 0.099   |
| Family size                                   | 0.089 <sup>ns</sup>         | 0.086        | 0.300   |
| Training and development                      | 0.038 <sup>ns</sup>         | 0.107        | 0.723   |
| Reward and recognition                        | 0.282**                     | 0.113        | 0.015   |
| Remuneration                                  | -0.002 <sup>ns</sup>        | 0.080        | 0.980   |
| Welfare benefits                              | -0.166 <sup>ns</sup>        | 0.119        | 0.165   |
| Performance appraisal                         | -0.131 <sup>ns</sup>        | 0.121        | 0.281   |
| Career growth                                 | 0.045 <sup>ns</sup>         | 0.152        | 0.766   |
| <b>Number of Observation</b>                  |                             | 118          |         |
| <b>F-computed</b>                             |                             | $F_c = 1.32$ |         |
| <b>-value (Two-tailed test)</b>               |                             | 0.2113       |         |
| <b>The goodness of fit (<math>R^2</math>)</b> |                             | 0.1517       |         |

Note: a – scale: 1 to 10  
 ns – not significant  
 \* – significant at 10% a level  
 \*\* – significant at 5% a level  
 \*\*\* – highly significant at 1%  $\alpha$  level

#### 4.0 Conclusion

It is concluded that employees working in the department store on study are satisfied amidst the COVID-19 pandemic. Based on the findings, there are only a few factors that influence employee retention. The study concludes that other sources of income, length of service, and reward and recognition are significant determinants in the econometric model. Employees are willing to stay longer within the company as long as they have other sources of income (e.g. small businesses) to

compensate their daily expenses aside from their salary, considering that they only receive a small salary (minimum wage rate). In addition, the study concludes that most employees in the department store have served the establishment for years, and most of them had obtained lower educational attainment. Hence, employees are not motivated to seek another job since they are already used to and more experienced in their respective work. Another reason is that it is difficult to find another job with a higher salary due to the pandemic. It is

further inferred that employees are willing to stay in their job because of rewards and recognition as long as they have been given good incentives as they also deserved to be praised and recognized with their achievements in their job. Indeed, reward and recognition are good motivators for employees to perform well in their jobs to obtain the company's goal.

### Recommendations

It is recommended that organizations provide employees benefits such as employees' transportation and lodging and meal allowances for those living in distant places in order for the employees who have served the company for years to remain loyal. It is further recommended that the HRM improve the reward and recognition system by introducing a formal recognition scheme such as giving financial rewards plus certification and promotion for a higher position for the employees to remain motivated and productive. Additionally, the researchers recommend that the employers improve the employee health insurance amidst the crisis of the COVID-19 pandemic to motivate their workers. Furthermore, it is highly recommended to increase employee retention rate and that workers be given promoted to a regular status in the company. For future researchers, it is recommended that one consider modeling the economics of happiness of workers, which is a possible limitation of the current study.

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