

# Employees' Satisfaction Practice Implication on the Performance of Organization (Cooperative Bank of Oromia)

Desalegn Fekadu Etefa (PhD)

Ambo University: College of Business and Economics, Department of Cooperative Studies, Researcher and Counselor at Oromia State University  
Email: [desalegnfekadu@gmail.com](mailto:desalegnfekadu@gmail.com)

## Abstract

The main objective of the study was to assess the employees' satisfaction practice implication on the performance of Cooperative Bank of Oromia. To do so, the methodology employed was descriptive & explanatory research design. Both qualitative & quantitative research approaches were followed. To conduct this study, primary and secondary data were collected. Majority of the data were collected from 300 employees working in 82 branches and the size was determined by formula of Yamane 1967. To proportionally select employees, Cochran 1963 formula was used and then respondents were randomly selected. The tools used were questionnaires, interview, focus group discussion, observation & document review. To collect the data, the tools were pre-tested and then pilot was taken to check for errors and any ambiguity. Questionnaires were prepared in 5-point likert scale. Analyses were done using both descriptive and inferential statistical tools. The descriptive statistics include, mean & standard deviation, while the inferential statistics were chi-square, ordinal logistic regression & Spearman's Rank Correlation. The results of the research were markedly reported & summarized. Accordingly, the total descriptive statistics of the respondents have been described as feeling alright with the mean values  $3.37 \Rightarrow > 67.4\% \Rightarrow > 202$  for both predicted & predictor variables. Besides, both the primary and secondary data ratified that the bank's performance is promising. Moreover, the inferential statistics computed indicated the degree of relationship between the variables. The chi-square value of the explanatory variable was significant at  $P\text{-value} < \alpha = 0.05$  & Chi-Square at  $\alpha = .05$ ,  $df 4$  were  $>$  the Table value (9.49). This shows there is association between the variable & performance of the bank. Together with this, ordinal logistic regression was applied. Consequently, computed values verified that there was strong links between the employees' satisfaction practice & performance of the bank. The correlation between performance of the bank & employees' satisfaction variable was 0.617, which is labeled as strong. Besides the odds ratio of the explanatory variable was  $>1$ , which means a unit increase in the variables cause  $> 1$  entity increase on the performance of the bank. The same result was also indicated by the inferential statistics. Accordingly, employees' satisfaction practice has strong effect on the performance of Cooperative Bank of Oromia. Thus, it was concluded that proper handling & execution of practices of human resource management (employees' satisfaction) has eloquent value on the performance of the bank. Lastly, the proposed intervention strategies identified were encouraging the employees by making the work environs attractive, conducting fair and transparent promotion systems, making consistent the reward and payment with the work load, and designing other mechanisms of encouraging workers apart from salaries by introducing other incentives so as to enhance the employees' satisfaction level, which in turn boosts the bank's performance.

**Keywords:** Cooperative Bank; Effect; Employees' satisfaction; Performance; Statistics

**DOI:** 10.7176/JAAS/81-02

**Publication date:** January 31<sup>st</sup> 2023

## 1. INTRODUCTION

The success and existence of the organization in today's competitive world is reliant on numerous matters namely: capital, equipment, and human power and other resources (Egbu, 2004; Hsieh & Chen, 2011; Asiaei & Jusoh, 2015). Of all these resources, the human aspect is the most noteworthy one, since it is the people that use all other resources (Rudrabasavaraj, 2005 cited in Seidu, 2012). Thus, organizations devote their time on recruiting, selecting, orienting and then placing employees in jobs. In addition, they equip these unique assets through effective training in order to maximize the job performance. However, these alone do not actually ensure their success. In this regard, the Human Behavior School believes that the motivations of employees have great contribution on their performance. Hence, for the success of organization, satisfied employees (motivated employees) are highly imperative. As per Kumar (2012), motivation is the psychological forces that govern the direction of a person's behavior in a company, a person's level of effort and a person's level of willpower within the face of obstacles.

Employee Satisfaction is a positive emotion resulting from the evaluation of one's work or work experiences (Nielsen, 2002; Islam & Rasad, 2006). The emotional component consists of assorted emotions corresponding to happiness, joy and disappointment (Kim et al., 2013). This could be further categorized into mental and physical satisfactions, which consist of: promotions, recognitions, income, job security, facilities,

compensations (basic pay, overtime, bonuses, travel/accommodation allowance, stock options, medical allowance, commissions, and profit sharing), the achievement of other goals that result in a sense of fulfillment, etc.

The purpose of the study was to assess the employees' satisfaction practice implication on the performance of Cooperative Bank of Oromia. Banks in Ethiopia are rivals with respect with service excellence as well as efficiency, in use of advanced technologies, branch network expansions and advertising (Nyoike, 2015; Gebre, 2017 cited in Desalegn, 2022). So as to inspire workers to continue creative and innovative, sectors such as banks have to reconsider their approach on how they utilize their most significant resources especially, the people. Thus, studying the performances of such young cooperative bank is indispensable in order that its previous performances will be well-known to the stakeholders and essential suggestions have to be forwarded for improved performances in the fourth coming to sustain in business. For that matter, to ensure sustainable result, it needs to constantly be innovative by evolving new procedures and products in a very competitive business environment.

Although extensive research has been conducted in the area of Human Resource Management, the same cannot be said on employees' satisfaction implication particularly as it concerns developing countries. In Ethiopia as a general, there is gap in considering the implication of employees' satisfaction issues and creating a positive work environment. Available studies, to the simplest knowledge of the researcher, did not adequately investigate exactly the implication of employees' satisfaction practices on the performance of Cooperative Bank of Oromia seems.

The objective of the study was to assess the implication of employees' satisfaction practice on the performance of Cooperative bank of Oromia and to identify the relationship between the variables. To this end, hypotheses were set that include alternative and null hypotheses where the alternative one stated that this practice has strong implication on the performance of the bank and there is positive and significant association between the variables. On the other hand, the null hypothesis stated the opposite. The two sets of hypotheses were tested by the inferential statistics.

## 2. LITERATURE REVIEW

Authors such as Bell *et al* (2018); Shahsavar & Kourepaz (2020) assert that the reason for writing a literature review is to give avocation to an exploration question and to help the researcher's decision of ensuing research design. Thus, this section attempted to present related literature pertaining to the research questions introduced in chapter one.

### 2.1. Employees' Satisfaction

Employee satisfaction is described as the pleasing emotional reaction of workers towards their job or work experiences (Suzuki *et al.*, 2006, cited in Desalegn, 2022). This results mainly from the application of appropriate human resource management practices, such as support amenities and strategies which empower employees to deliver top quality client service. With this concern, scholars such as Shahzadi *et al* (2004); Tadeka *et al* (2005) expressed that employee career satisfaction spirals from the mental or psychological and physical pleasure they expertise within the surroundings and from the work itself. It has been thought to be a positive emotional state that arises from the decision of all aspects of a working relationship within the workers (Cheng *et al.*, 2010).

As of the impression of Alderfer (1969); Habib *et al* (2014), this emotional part comprises of diverse emotions including happiness and disappointment (Kim *et al.*, 2013).

Employee satisfaction could be an essential constituent that ends up in recognition, income, promotion, and also the realization of alternative goals, which result in a common sense of self-actualization. Employee's satisfaction in turn leads to lower absence, reduce turnover and increase employees' loyalty to the organizations as furthered by Ijigu (2015).

In the findings of Danish & Usman (2010); Ahmad & Abdurahaman (2015), financial (salary and benefits), economic and social status, dealings with supervisors and links on the job, work situations, as well as the character of work, operating conditions, hour of work-earnings, facilities, opportunities for advancement, selection in work, enjoyment of the work, job security, and skill to adjust oneself to unpleasant circumstances were thought of as factors that influence job satisfaction.

According to Malik *et al* (2010); Judge *et al* (2017), job satisfaction is that the results of an employee's rationalization of the distinctive nature of his/her work based on a far-reaching measurement, such as the comparison of jobs, evaluation with colleagues, and also the previous work experiences possessed by an employee. Meanwhile, the findings of Bader *et al* (2013); Lee & Ok (2016); Janadari (2019) revealed that work-itself, impartial incentive system, promotions, compensation, reimbursements and working conditions or physical work environments are factors affecting noticeably employees' employment gratification in Eastern Libya Bank employees.

By the same token, scholars such as Kamal & Hanif (2009); Papageorgiou *et al* (2013) concluded that work conditions, salary, opportunity for growth, and interesting work as features perceived most vital job satisfaction motivators by employees of banks in Cyprus. Likewise, in the Eastern Region of Malaysia, Kemboi & Onyango (2015) discovered that payments system, supervising, operating environment and competition are dimensions that influenced job satisfaction levels among bankers. On the other hand, job pleasure has been measured typically with detailed characteristics of employment, which include job security, working conditions, company policies and opportunities for action, accomplishment and advancement of organization.

While, Kellerman & Onyango (2015), highly emphasized on the role of physical and virtue spaces as the most important to sustain the employees' satisfaction. As to Locke & Schweiger (1979), employees' participation in decision making is seen as one of the sources of their satisfaction. Anyways, whatever cases are mentioned so far, as to the view of Lockhead & Stephens (2004), companies in highly competitive local labor markets are expected to pay highly competitive rates against their competitors in each of their job classification.

The job satisfaction levels of public sector and private sector bank workers in India were studied by Shrivastava & Purang (2009). In line to this, their finding revealed that the private sector bank workers perceived better satisfaction with salary, social, and advance facets of the job as compared to bank workers of the public. The Public sector banks' employees on the contrary are expressed to have improved satisfaction with the security of work as compared to non-public sector bank workers.

Workers who are satisfied or happy with their jobs are more likely to be devoted to their organizations, cut back the intention for turnover, target on the delivery of quality product or service, exercise all efforts towards customers' satisfaction, and upsurge customers' loyalty (Luddy, 2005; Matzler & Renzl, 2007; Christina & Gursoy, 2009; Yee *et al.*, 2011; Ijigu, 2015). Scholars additionally confirmed that satisfied customer is an intangible asset for an organization that ensures a long business achievement (Tseng *et al.*, 2011).

In summary, employee satisfaction is closely associated with productivity that is then related with firm earnings. This implies employee satisfaction a considerable role in enhancing the organizational profit and improving working its progression. Even if the language of expression of scholars seem differ, employee satisfaction is significant and without it, organization cannot think of being successful.

As a result, to guarantee their persistent survival, organizations should endeavor to satisfy their employees with attractive pay, good supervision and sensible provocative work. Hence, to reinforce the performance of the organization, it is vigorous inevitability to recognize the implication of employees' satisfaction practice on their day to day activities.

With regard to the empirical studies, various researchers have committed much of their time to define the relation between employees' satisfaction practice and organizational performance. In short, whether it is in the existing theories or empirical studies on the relationship among practices of employees' satisfaction practice and performance of organization, since nothing is adequate, further study is recommended.

By the conceptual framework, the dependent and independent variables were identified. With regard to Mugenda & Mugenda (2003), variables are measurable characteristic that assume different values among the subjects. They define a dependent variable as one that depends upon other variables or is as a consequence of other variables. An independent variable is defined as one explicitly predecessor to the dependent variable. The dependent variable, "performance of Cooperative Bank of Oromia" is the theme of this study and is the one that is pretentious by the independent variable (employees' satisfaction practice). The performance of organization (Cooperative Bank of Oromia), in this research was evaluated in terms of financial performance, market performance (branch expansion) and shareholder value performance.

### 3. RESEARCH METHODOLOGY

In line with this, under this topic, the study area's description, research design, sources of data and data types, population and sampling design method, sample size determination, proportional sampling techniques, data collection methods, data analysis approach, validity and reliability were presented.

In this research, both descriptive and explanatory research design was used. It used descriptive since it included surveying and fact finding (Creswell, 2014). The surveying used was cross-sectional survey. A cross-sectional study is a sort of observational investigation that analyses the gathered information from the source (population, or from a subgroup), at a fixed point in time. Explanatory research, on the other hand, helps in the attempt to connect ideas to understand cause and effect. An explanatory design is used since it examined the magnitude and relationship among variables (Schmidt & Kohlmann, 2008). With regard to the research approach, the research followed mixed research methods. In connection to the sources of data, they were gathered from both primary and secondary sources that were used as an input for the research findings. The sample size of the study was 1,206 employees from 82 branches functioning as a city branches. In statistics, a sampling frame is the source material from which units are drawn for the sample. Consequently, these branches were clustered into 10 areas to make ease the management of data collection and its supervision. Accordingly, city branches were selected purposively from the other branches existing in the country. After identifying the sampling frame with

convenience, branches of the bank in Addis Ababa were given a chance to be incorporated in the sample according to their cluster proportionally which provided equivalent chance of inclusion in the sample. In this process, random sampling procedure was employed where at the first place from 82 branches; employees of the bank from the branches were selected (Table 3.1). In this sampling, branch managers were excluded to reach them through other means particularly interview while other employees were covered through questionnaire.

In this dissertation, sample size was decided by the help of Yemane 1967:  $n = N / [1 + N (e)^2]$ , where  $n$  represented sample size,  $N$  represented population, and  $e$  was the desired level of precision (0.05) i.e., the likelihood that the answer fallen outside that range (the probability not to represent). Therefore,  $1,206 / [1+1,206 (0.05)^2]$ , which is equal to  $1206/4.015 \Rightarrow 300$ . This method was utilized to calculate the published tables for sample sizes determination. At 95% confidence level and  $P = 0.5$  were assumed and the following formula was used. This formula is supposed to be easy method to determine sample size for social science research since 1% - 10% level of precision errors are acceptable for the study purpose (Kothari, 2004 & 2007).

So as to have fair and unbiased knowledge of the existing situation, randomly selected respondents from each branch was encompassed in the sample. In this regard, the findings of researchers support that taking (10 - 30 %) from the population is the optimum sample (Levy & Lemeshow, 2013). Again, to ensure equal inclusion of the employee respondents in the sample, respondents were taken from the branches proportionate to their size using the formula proposed by Cochran (1963): Where,  $n$  = Sample size of population,  $NC$  = Total population i.e. number of employees and  $N$  = Total population.

Table 3.1: Sample Frame of the Study

No.	Names of Clusters	No. of branches within the cluster	No. of employees from which sample was selected			No. of sample respondent employees			Remark
			M	F	T	M	F	T	
1	Cluster A	9	119	38	157	30	9	39	157/1206*300
2	Cluster B	8	94	34	128	23	9	32	128/1206*300
3	Cluster C	8	92	26	118	23	6	29	118/1206*300
4	Cluster D	9	92	27	119	23	7	30	119/1206*300
5	Cluster E	9	85	24	109	21	6	27	109/1206*300
6	Cluster F	8	88	33	121	22	8	30	121/1206*300
7	Cluster G	9	85	28	113	21	7	28	113/1206*300
8	Cluster H	8	82	32	114	20	8	28	114/1206*300
9	Cluster I	7	83	28	111	21	7	28	111/1206*300
10	Cluster J	7	84	32	116	21	8	29	116/1206*300
T		82	904	302	1206	225	75	300	$N / [1 + N (e)^2]$

Source: Compiled from Cooperative Bank of Oromia, 2021

Tools of data collection were questionnaire, interview, focus group discussion, observation and document analysis. However, of all tools, questionnaire was the major data collection instrument in this study. The questionnaires for the collection of the data were developed based upon the type of the models utilized. For instance, a five point Likert scale questionnaire ranging from strongly disagree, disagree, neither agree nor disagree, agree and strongly agree for close ended questionnaires (Likert, 1932; Chyung *et al.*, 2017). Consequently, “1 to 5” values were given to the scales, where “1” represented Strongly Disagree, “2” Disagree, “3” Neutral, “4” Agree and “5” stood for Strongly Agree respectively. The questionnaire was self-distributed at the Head Office and the selected branches. List of names of employees were provided to the researcher by Human Resource Manager at the head office. Lottery method was applied in selecting respondents. The questionnaire had, as its cover page, an explanation about the research to clarify points on the objective, the topic under study, and future use of the study.

The validity and reliability of the instrument was tested. Ultimately, after assuring the collection of the necessary data, further process was launched, including data processing and analysis. Following the completion of data collection, data processing was conducted through filtering inaccuracy, inconsistency; incompleteness and illegibility of the raw data to make analysis very easy. To solve such problems, editing, coding, data entry and consistency checking were done. Responses to the questions in the questionnaires were checked for errors and then codes were given. This involved allocation of numbers to the responses given by respondents for the ease of data entry and analysis (Williams, 2003; Utts & Heckard, 2021). The data were entered into the computer using the Statistical Package for Social Sciences (SPSS) software Version 21.0. To facilitate further computations, particularly that of the total average, Microsoft Excel was used. Once the process of data entry accomplished, cleaning of the data was started. Data cleaning and editing focused on checking whether the assigned value for each case was legitimate, on the logical consistency and structure of cases.

To perform required calculations, therefore, questionnaires were coded and entered into the Statistical Package for Social Sciences and Microsoft Excel. The Statistical Package for Social Sciences can accept data

from more or less any form of file and apply them to produce organized reports, charts and conspiracies of spreading and tendencies, descriptive statistics, and inferential statistical analyses.

The data collected from questionnaire were analyzed through quantitative descriptive statistical tools such as percentages and frequencies, mean and standard deviations using SPSS version 21.0 computer software. Inferential statistics were also used to experiment the hypotheses. Since the data set are not normally distributed, chi-square test of association and ordinal logistic regression model were employed among the inferential statistics. To check for the multi-collinearity problems and to further test the strength of association between the variables, Spearman's Rank Correlation Coefficient was also used.

Then, by the help of Neglerke Coefficient of determination, the goodness of the model was tested. This is in line with the suggestions of Hussain & Nassir (2015). While qualitative data obtained through interviews and focus group discussions were analyzed qualitatively in sentence form. Finally, the results were discussed and interpreted to draw important implications, conclusions, and recommendations.

#### 4. RESULTS AND DISCUSSIONS

In this chapter, discussions and analysis of the feed-backs gathered from the respondents through questionnaire, interview and focus group discussion are presented. Data analysis for this study was done in two steps; the preliminary analysis and the main analysis. The preliminary analysis involved mainly descriptive statistics summarizing the demographic characteristics of the respondents.

By the aid of descriptive statistics, either the characteristics of a sample or the rapport among the variables in a sample are described. Descriptive statistics is the discipline that describes the notable features of the data collected quantitatively (Cramer & Howitt, 2004; Kemp *et al.*, 2018). In this study, this analysis was used to ascertain frequencies and percentages, mean and standard deviation of responses that were given to all the questions in the questionnaire and was also used to express the features of selected variables.

The other analysis tool was inferential statistics. This tool moves further than the description of explicit observations to create conclusions about the entire population from which the sample observations were drawn. It is used to test hypotheses statistically, in doing so; it has shown the relationship between variables.

For that matter, Statistical Package for Social Sciences (SPSS) software program version 21.0 was used for processing the data and ultimately computing both descriptive and inferential statistics (Utts & Heckard, 2021). Besides, Microsoft Excel was used to compute the output obtained from SPSS. The study assessed the effect of human resource management practices on the performance of Cooperative Bank of Oromia. In this section, the principal outcomes of the research were analyzed and discussed corresponding to the literature reviews, stated specific objectives (research questions), and logically constructed questioners that have led to draw conclusions and recommendations.

Moreover, the results are presented in tables, pi-chart, histogram and graph to show frequency counts, percentage and statistical descriptive such as mean and standard deviation for each question and followed by narrative explanations by supporting the explanation with the interview results as well as the necessary secondary data triangulation has been made to support the explanation.

##### 4.1. Validity and Reliability Test Result

###### 4.1.1. Validity Test Result

Validity explains how well the collected data covers the actual area of investigation (Ghauri & Gronhaug, 2005; Petter *et al.*, 2007). Furthermore, Field (2005); Oluwatayo (2012); Engellant *et al* (2016) briefed that validity basically measures what is intended to be measured. In this dissertation, of the types of validity an emphasis is given to the content and constructs validity.

Content validity is defined as the degree to which items in an instrument reflect the content universe to which the instrument will be generalized (Straub *et al.*, 2004; Oluwatayo, 2012). It involves evaluation of a new survey instrument in order to ensure that it includes all the items that are essential and eliminates undesirable items to a particular construct domain (Boudreau *et al.*, 2001; Choudrie & Dwivedi, 2005; Engellant *et al.*, 2016). The judgmental approach to establish content validity involves literature reviews and then follow-ups with the evaluation by expert judges or panels (Engellant *et al.*, 2016). So, this was already checked in accordance with the previous literature, the expertise in the field and the research supervisor.

The second validity test was checking for the construct validity, which needs to do with the convergent and discriminant validity by the help of SPSS. Construct validity refers to how well you translated or transformed a concept, idea, or behavior that is a construct into a functioning and operating reality, the operationalization. Construct validity has two components: convergent and discriminant validity (Drost, 2011; Taherdoost, 2016; Clark & Watson, 2019). Convergent validity, a parameter often used in sociology, psychology, and other behavioral sciences, refers to the degree to which two measures of constructs that theoretically should be linked are in fact linked (Strauss & Smith, 2009; Edwards, 2011; Taherdoost, 2016). In brief, Convergent validity tests that constructs that are expected to be associated are, in fact, associated. With the determination of corroborating

the construct validity (discriminant and convergent validity), a factor analysis can be conducted employing principal component analysis (PCA) with varimax rotation method (Koh & Nam, 2005; Wee & Quazi, 2005). In connection to exploitation of this method, there are assumptions that have to be fulfilled such as (Pohar *et al.*, 2004; Park *et al.*, 2010; Alfayad & Arif, 2017) as per the view of some scholars. These are: Composite reliability (CR) is better if it is more than 0.7, Average Variance Extracted (AVE) to be equal or more than 0.5 and also Composite reliability (CR) has to be above Average Variance Extracted (AVE). In addition, correlation between the items that is the Average factor loading should be greater than 7 (Cassidy *et al.*, 2005; Veale, 2014; Samuels, 2017). Discriminant validity test that should have no relationship do, in fact, no have any relationship (No correlation between two constructs), Average Variance Extracted (AVE) should be more than Square of correlation (Farrell, 2010; Zaiř & Berteau, 2011; Henseler *et al.*, 2015; Franke & Sarstedt, 2019).

Hence, to check construct validity (convergent and discriminant validity) of the data collection tool used in this dissertation, initial assessment of convergent and discriminate validity was conducted using factor analysis (Varimax rotation). Based on this, as it is demonstrated in Table 4.1,  $CR > 0.7$ ,  $AVE > 0.5$  and  $CR > AVE$ , which is in line with the assumptions.

Table 4.1: Factor Analysis Results (Varimax Rotation)

Variables	Average Loading Factors	Average Variance Extracted
Employees' Satisfaction	0.882146	0.574361
PCBO	0.793682	0.511644

Source: Researcher's Computation from SPSS, 2021

The computed result indicated that all the items within the same constructs have almost high correlation with each other while they have different correlation with constructs from different items. In general, the average of each variable regarding the average variance extracted was 0.88 (employees' satisfaction). AVE of performance of Cooperative Bank of Oromia (PCBO) was 0.79. According to Crawford & Henry (2003); Zaiř & Berteau (2011); Henseler *et al.* (2015); Voorhees *et al.* (2016), Franke & Sarstedt (2019) discriminant validity has to be tested by examining the correlation coefficients of each item within and among constructs. As to them, each item should correlate highly with its intended construct, but not with other constructs. Acceptable discriminant validity is evidenced when the correlations within each construct exceed the correlations with all other constructs (Carlson, 2012; Henseler *et al.*, 2015; Voorhees *et al.*, 2016; Ab Hamid *et al.*, 2017). As shown in Table 4.2, (with the bolded variable scores) this condition holds for all items, suggesting that the scales or constructs themselves have a high degree of discriminant validity. With this regard, researchers Kasper-Brauer & Leischnig (2016); Lacap (2019); Lacap & Tungcab (2020), Muhammad *et al.* (2020); Ekanayake *et al.* (2021); Wang *et al.* (2021) suggest that the diagonal values (square of AVE) should be greater than the vertical values (correlational values).

Ultimately, construct discriminant validity was assessed by comparing correlations between all pairs of constructs with the square root of AVE of each construct. Correlations that are greater than the square root of AVE are indicative of poor discriminant validity between the constructs involved (Farrell & Rudd, 2009; Ghadi *et al.*, 2012; Henseler *et al.*, 2015). The results (Table 4.1) indicated that the square root of AVE is larger than the correlation between any construct pair as shown by the bolded square root of AVE scores along the diagonal. From this,  $AVE > \text{Correlation square}$ , hence discriminant validity established. In short, based on the results of the analyses of reflective items and related constructs, the survey items indicate satisfactory convergent and discriminant validity. This result is consistent with the opinion of Hung *et al.* (2010); Lou *et al.* (2013); Palladan *et al.* (2016); Franke & Sarstedt (2019). Therefore, the results indicate clear convergence and divergence of the reflective indicators along construct lines.

Table 4.2: Discriminant Validity for Reflective Constructs

Item	ES	PCBO
Employees' satisfaction	<b>0.88</b>	
Performance of CBO	0.33**	<b>0.79</b>

Source: Researcher's Computation from SPSS, 2021

Based on the result computed in Table 4.2, the diagonal values, which are the squares of AVE, were greater than the vertical values that are the correlational values. This means, all the bolded values were greater than the other values that are the correlational values. Thus, this signifies the existence of discriminant validity. Moreover, the result of KMO and Bartlett's Test is computed. KMO is a test conducted to examine the strength of the partial correlation (how the factors explain each other) between the variables. In connection to this, it shows that the data collection tool is more valid if it is more than 0.5. In this regard, the finding of Yong & Pearce (2013); Yavuz & Dogan (2014); Ramdani (2018), KMO values closer to 1.0 are considered ideal while values less than 0.5 are unacceptable. Likewise, the finding of researchers (Hadi *et al.*, 2016; Arifin *et al.*, 2018; Prasetyo *et al.*, 2019; Vembriliya *et al.*, 2019) indicate that if KMO and Bartlett's Test is above 0.5, it is good indicator of the

rationality of the instrument. So, the result of Kaiser-Meyer-Olkin Measure of Sampling Adequacy 0.854 is  $> 0.5$  and also sig. is  $0.000 < \alpha (0.05)$  is better reflector of validity.

Table 4.3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.854
Bartlett's Test of Sphericity	Approx. Chi-Square	10449.861
	Df	406
	Sig.	.000

Source: Researcher's Computation from SPSS, 2021

Moreover, validity can be tested by other method other than by the stated methods above. This method in composes having the total data of respondents, browsing to Correlate under Analyze then opening Bivariate, then selecting Pearson Product Momentum, we can compute the result of correlation coefficient against the critical (table) value. By this premise, if the calculated value is greater than the Table value, it is significant evidence that the questions are valid (Fisman & Svensson, 2007; Harrison & Rutström, 2008; Taber, 2018). Based on this, the calculated values of all the variables were above the critical value at level of significance 0.05, df at 2 and, two tailed (N-2). Since the sample size is 300, it should be checked at  $300-2 = 298$ . They all were significant (sig  $< \alpha = 0.05$ ). So, since the calculated values are more than the Table value, it is significant proving valid questions.

Table 4.4: Validity check by Correlation

VARIABLES	CORRELATION	TOTAL
Employees' Satisfaction	Pearson Correlation	0.592**
Performance of CBO		0.539**

Source: Researcher's Computation by SPSS, 2021

#### 4.1.2. Reliability Test Results

Reliability concerns the extent to which a measurement of a phenomenon provides stable and consist result (Ghauri & Grønhaug, 2005; Ghauri *et al.*, 2020). Reliability is also concerned with repeatability. For example, a scale or test is said to be reliable if repeat measurement made by it under constant conditions will give the same result (Mahon *et al.*, 2005). The reliability test is an important instrument to measure the degree of uniformity of an attribute which is supposed to be measured. It shows that the magnitude to which the items in a questionnaire are interrelated.

Reliability can be equated with the stability, consistency, or dependability of a measuring tool. So, testing for reliability is important as it refers to the consistency across the parts of a measuring instrument (Huck, 2007). A scale is said to have high internal consistency reliability if the items of a scale "hang together" and measure the same construct (Huck, 2007; Robinson, 2009). The most commonly used internal consistency measure is the Cronbach Alpha coefficient (Ali & Raza, 2017). It is viewed as the most appropriate measure of reliability when making use of Likert scales (Whitley, 2002; Robinson, 2009).

The usual array of Cronbach's coefficient alpha value ranges between 0-1 where the larger value reveals the larger degree of internal consistency. Different writers reached on consensus in taking different values of this test so as to attain internal reliability. In fact, no absolute rules exist for internal consistencies, however most agree on a minimum internal consistency coefficient of 0.70 (Whitley, 2002; Robinson, 2009). Thus, the most largely recognized value to be considered sufficient for exploratory studies is equal to or upper than 0.70 as it would be to reach internal reliability (Cavana *et al.*, 2001; Hair *et al.*, 2003; Nunnally, 2010).

On this regard, the detail explanation provided by George & Mallery (2003) shown alpha value ( $> 0.9 =$  Excellent,  $> 0.8 =$  Good,  $> 0.7 =$  Acceptable,  $> 0.6 =$  Questionable,  $> 0.5 =$  Poor, and  $< 0.5 =$  Unacceptable). Furthermore, Hinton *et al* (2004) have suggested four cut-off points for reliability, which includes excellent reliability (0.90 and above), high reliability (0.70-0.90), moderate reliability (0.50-0.70) and low reliability (0.50 and below).

To verify the reliability of the data collection instrument is in line, data on the various multi-items constructs representing the different components of dependent and that of independent variables were first tested for reliability by computing Cronbach's alpha values. Therefore, in this research, the inter-item consistency measure of Cronbach's alpha value was used to measure the reliability of the instruments.

Table 4.5: Cronbach's Alpha Result of Dependent & Independent Variables

Variables	Number of Items	Cronbach's Alpha	Test
Employees' satisfaction	23	0.88	
Performance of CBO	11	0.79	
Total	34	0.84	

Source: Researcher's Computation by SPSS, 2021

The Cronbach's alpha was computed for each field of the questionnaire. Table 4.5 depicted that the values

of Cronbach's Alpha for each field of the questionnaire and the entire questionnaires. As it can be seen from the table above, for each field value of Cronbach's Alpha was in the range of 0.79 to 0.88. This range is considered as high; the result ensures the reliability of each field of the questionnaire. The computed Cronbach's Alpha result was 0.84 for the entire questionnaires. This result indicated very good reliability. Hence, the aftermath of the Cronbach's alpha for the training and development and performance of Cooperative Bank of Oromia) were found to be in the acceptance range i.e.  $> 0.70$ . According to other researchers as Mallick *et al* (2014), the loading for this specific item is supportable. Hence, since almost all the items loadings were above suggested threshold value, it can be inferred that the measurement model is reliable.

#### 4.2. Demographic Characteristics of the Respondents

This part commences with the analysis of the demographic data gathered from the respondents using frequencies and percentages. The reason behind considering these variables is that the performance of organization, which is the result of employees' performance, is affected by demographic characteristics (Adio & Popoola, 2010; Wakene *et al.*, 2020). Accordingly, of the various demographic characteristics, gender, age, marital status, educational level, field of study, work experience, salary level and position of respondents are presented. Based on the exploration of the data, 75 (25%) and 225 (75%) of the employee respondents were females and males respectively indicating the higher opportunity the males have got to be employed by the bank. Regarding gender, researchers revealed that males are preferred even if they are in the minority or majority, whereas females are impoverished, particularly, while they are in the majority, and rarely even when they are in the minority (Ebenuwa-Okoh, 2010; Robb, 2012). In this study, the prevalence of males' dominance is reflected in the stated bank. Added to this, the interview conducted with the Human Resource Manager indicated the same result. Consequently, of the total number of employees of the bank, males constitute (3,601 = 70%) and females are (1,573 = 30%). This again reveals males' higher access to employment opportunity, which in turn reflects the higher opportunity the males got in income generation in the bank. The result is consistent with the finding of the same researcher (Desalegn, 2021). As to his finding, females constitute about 50 percent of the world population and contribute about 75 percent to subsistence production. On the other hand, they earn one tenth of the world's income and they own one hundredth of the world's property including land. Therefore, the researcher has come up with the premises that females' participation in economy is very low, particularly in cooperatives. So, the reality is also prevailing in the Cooperative Bank of Oromia.

With reference to age classification, the researcher categorized the employees into three (Young, Middle and Old age). With this regard, people from the age of 15 to 44 are classified as young and those in the range of 45 to 59 are middle-aged. While with age equal to and above 60 are grouped as old age (Laditka *et al.*, 2004; Ebner *et al.*, 2010). Accordingly, in this research 206 (68.7%) were in the category below 45 years that are categorized as young aged employees, while 76 (25.3%) of them are in the age group from 45-59 ages that are termed as middle aged in this research. The rest 18 (6%) are categorized as old aged, that are in the age group above 59 years (Fig. 4.2). Of the stated 206 respondents who were grouped as young age, 154 of them were males while 52 respondents were females. In the category of middle-aged groups, 56 respondents were males while 20 respondents were females. Likewise, of those classified as old-aged, 15 and 3 respondents were males and females respectively.

Moreover, the age category and the tenure of employees indicated that the bulk of the staffs were in the generation of young age which revealed an energetic workforce of the industry although there is controversy among researchers. Generally, great numbers of them were young aged by taking ILO report (2013) in Kapsos & Bourmpoula (2013) as a reference implying that they could have good productive prospects. As per Bedard & Dhuey (2006); Pellizzari & Billari (2012), age category has significant effect on the performance of individuals. Related to this, more than 85% of the respondents' term in office did not exceed 15 years. This seems to be due to the horizontal and vertical expansion of the banking business after the liberalization of the economy and its effect on creating employment opportunity. As far as the matrimonial prestige of respondents is concerned, 81 (27%) of them are single and only 6% and 0.3% of them are divorced and widowed respectively. While majority 200 (66.7%) of them are in the family engagement. In the investigation of Saif *et al* (2012), it is suggested that individual workers who are married are much devoted to their existing organization, they are employed in than their unmarried counterparts.

Educational background of the employees is an imperative element in undertaking their respective responsibilities and to make critical decisions in their activities. In this area, existing literature confirms that the qualification is identified to be positively linked with performance demonstrating that the better educated workers are, the better likely to execute well (Borman & Mehay, 2009).

The educational level of employee respondents indicated that 214 (71.3%) were identified to be first degree holders. In the contrary, 34 (11.3%) were master's holders. Whilst the rest employees, 52 (17.3%) were at the level of diploma and below. The less amount of workforces with advanced educational level (MA and above) is to reduce cost and as a consequence the bank is focused on employment of first degree holders who have the

minimum know how in the provision of its service operations.

Concerning the respondent's field of study as specified in Table 4.6, majority of them (98%) studied business related fields of study. Of these, Accounting constitutes 32%, Economics 26.3% and followed by Management, which its total covers 41.8% (Business Management - 22.7%, Business Administration = 7%, Marketing = 6.3%, Public Management = 3.8%). Contrariwise, other fields of study as mentioned, General Management and Agricultural Economics constitute 1% each. According to Griffin *et al* (2011), appropriate specialization areas contribute highly to the performance of organization than the counterparts. Thus, this is reliable with the prevailing literature, which signified the field of study of employees is highly relevant to the type of works expected of them to perform.

Meanwhile, pertaining to the service period of the employees, the result shown that large number of respondents 196 (65.3) of them were within a period of 1-5 service years in the banking industry. Likewise, about one-third of the respondents, 101(33.7%) had relatively longer service experience, which is in the period that ranges from 5-10 years. The rest, only 3 (1%) of respondents had service years above 10 years. From this, it can be deduced that the respondents' large number were new entrants with an experience below 5 years.

Long service year/experience in a particular sector can lead to high level of commitment (Affum *et al.*, 2015). This infers that the banking operation has fallen on the shoulders of the new entrants because of either high turnover or low interest of the bank to invite experienced personnel. In other words, this denotes that the sector is not in the right track in capturing and developing well experienced staffs.

Finally, the salary level of respondents indicated that 53.3% of them earn between 10,001 to 15,000 ETB whereas 7.7% and 1.7% of them earn more than 20,000 and less than 5,000 ETB respectively (Fig. 4.5). This indicates the bank's employees are getting better salary when compared to other organizations' workers in Ethiopia. Existing literature addresses that the more salary employees get, the more achievement they attain (Ertanto & Suharnomo, 2011). So, the salary level of the employees is in a good condition, which is also more reflected under the sub-heading "employees' satisfaction". Anyways, it cannot be generalized that the total performance of organization is not merely the share of those who get high salary; rather it is the cumulative effect of all employees working at different positions.

#### 4.3. Descriptive Statistics of Respondents

Based on the perceived values of respondent's response to questionnaire that were modified to represent the effect of training and development and organizational performance (performance of Cooperative Bank of Oromia) together with some demographic characteristics (gender, age, marital status, work experience, educational background and salary level) are entertained here: In this part, to illustrate the feedback of the respondents, descriptive statistics in the mode of frequency and percent, mean and standard deviation (SD) have been presented. Mean is the average of a group of numbers whereas, standard deviation (SD) is the most useful measure of variability. It tells us what is happening between the minimum and maximum scores. In other language, it states how much the scores in the data set vary around the mean. The more spread apart the data is, the higher the deviation. Moreover, standard deviation was used to indicate variation from the mean. A small standard deviation show that points are nearby the mean, while large standard deviation directs that the data is spread in excess of a big variety of values. In other words, extreme values occur more frequently.

The importance of the mean is to identify the central value in the distribution, but it does not show how far the data fall from the mean. So, it is the standard deviations that indicate how far the data fall from the mean (Lee *et al.*, 2015).

Meanwhile, some indicators of the performance of the opinion of the respondents for the variables indicated below were measured on five point Likert scale with measurement value 1= Strongly disagree (SD); i.e. very much dissatisfied with the case described; 2 = Disagree (D), i.e. unhappy with the case described; 3 = Neutral, i.e., uncertain with the case described; 4 = Agree (A), i.e., feeling all right with the case described and considered as satisfy; and 5 = Strongly Agree (SA), i.e. very much supporting the case described and considered as highly satisfied with regard to the five selected human resource management practices and demographic factors.

Cooperative Bank of Oromia in terms of return on asset, return on deposits, return of equity, in terms of maximizing dividend of shareholders, branch expansion, amount of dividend shared to the shareholders, bank's credit performance in lending money to the Coop societies, the status of the return of the money lent to the customers, the status of number of customers, the status of saving deposit accounts of the customers, and bank's performance in competitive market) were also measured on five point Likert scale with measurement value 1= Very Low (VL) with the case described; 2 = Low (L), 3 = Medium (M), 4 = High (H), and 5 = Very High (VH). To make easy interpretation, the following ranges of values were reassigned to each scale: equal to 1= strongly disagree or very low; 1.01 - 2 = Disagree or Low; 2.01 - 3 = Neutral or Medium; 3.01 - 4 = Agree or High; and 4.01 - 5 = Strongly Agree or Very High, which was later re-categorized into 3. Consequently, strongly disagree & disagree = Disagree = not satisfied and agree & strongly agree = agree and Neutral/ medium so as to compute

X<sup>2</sup>.

In short, a mean of equal/above 3 is regarded to measure satisfaction on the test variables. To analyze the collected data consistent with the overall objective of the research undertaking, statistical procedures were carried out using SPSS version 21.0 software. While the outcomes of the interview questions and focus group discussions were integrated with the responses obtained through questionnaire.

#### 4.3.1. Employees' Satisfaction Practices

With reference to the respondents' reaction with the practice of employees' satisfaction, the following statements were given to indicate their position in Table 4.1 below:

Table 4.1: Respondents' Perception on Employees' Satisfaction Practice

Employees' Satisfaction Practice	N	Mean	SD
The payment system is equitable and Salary is offered at the labor market	300	4.15	.77
There is a chance for being recognized & acknowledged to do good job	300	4.07	.72
In general, I am empowered to deliver high quality customer service	300	4.00	.77
The bank makes every effort to fill vacancies from within	300	3.87	.80
I am satisfied with my job and the kind of work I do.	300	3.83	.73
I believe my job provides me secure employment	300	3.83	.77
I have the material/equipment and tools I need to do my job well	300	3.52	.86
I am satisfied with the status I gain in the community	300	3.46	.82
The bank's rewards & compensation practices are attractive	300	3.44	.83
I am satisfied with bank's welfare programs (insurance, health care, etc.)	300	3.40	.85
I am satisfied with the bank's reward and incentive systems	300	3.38	.81
I am more motivated to perform my job when I feel there is fairness	300	3.37	.89
I have the chance to do something that makes use of my abilities	300	3.35	.86
I am satisfied with the way company policies are put into practice	300	3.34	.78
I am satisfied with how members of my work group solve problems	300	3.33	.79
My immediate superior deals with all employees fairly	300	3.26	.93
I have the opportunity to be involved in activities that promote my profession	300	3.26	.82
I am satisfied with the chances for advancement for a better position	300	3.26	.81
Promotions are done in a fair and transparent manner	300	2.96	.98
A part from salaries given, the bank motivates me in other ways to work hard	300	2.88	.92
The physical working conditions (heating, lighting, ventilation, etc.) are good	300	2.60	1.01
The manger involves my participation in the supervisory decisions	300	2.50	.89
I am satisfied with my pay and the amount of work I do (workload)	300	2.49	.93
<b>Total</b>	<b>300</b>	<b>3.37</b>	<b>0.84</b>

Source, Computed by Researcher, 2021

Pertaining to the indicators of employees' satisfaction, perception of majorities of the respondents revealed agreement that is above 3 mean values. For instance, in connection to the company's payment system, respondents proved that the scale is equitable with the country's labor market level with the mean 4.01 and SD 0.77. The result of interviews and focus group discussions were also considered consistent with the issues under consideration. Accordingly, it confirmed that the existing payment and benefit is attractive relative to other banks in the industry due to the current pay and benefit adjustment exception with the long experienced. This has created satisfaction for the employees and they are showing spirit of motivation, which increased their performance. Majority of them also appreciated that there is a chance for being recognized in the bank and they are acknowledged to do good job, which was rated at 4.07 on average. Employees are also satisfied at the degree they are empowered with mean value 4 and SD 0.77. In line with this, Robison (2009); Silva (2009), addressed that empowerment motivates an individual or team to perform any jobs effectively. The bank also makes its best to fill the required human resource at different positions by giving priority for the employees of the bank that they indicated with the mean 3.87 and SD 0.8. This implies the more adapted to the bank policy are invited, which is also indicating the more experienced contribute to the performance of activities. This in other word signifies that such mechanism encourages the employees to stay in the bank for longer.

Likewise, majority of employees are happy and satisfied with their job and also they believe that their job is secured, which was rated with mean values 3.83 and standard deviations 0.73 and 0.77. Meanwhile, with regard to the material/equipment and tools they need to do their job and the status they gain in the community being a servant of the company, mean values were 3.52 and 3.46 and standard deviations 0.86 and 0.82 respectively. According to Hainmueller *et al* (2015), availability of ample resources to employees leads to completion of work in time. From this, it can be deduced that the material and tools needed to facilitate the activities of the bank is good though there is some deficiencies.

Attractiveness of the bank's reward and compensation and the welfare programs carried out by the bank

were alright as majority of the employees agreed with the mean values 3.44 and 3.4 and almost alike standard deviations 0.83 and 0.85 respectively. Further, the reason behind for the increased degree of satisfaction with the status of the employees' nature of work was the other point addressed by interviewees and discussants. The result of their response indicated that the company adopted training and development platform in an unceasing manner to improve the nature of their work. This implies the measures taken by the employer are the cause for the satisfaction of respondents in their work. Majority of them are also satisfied with the bank's reward and incentive systems, which was confirmed by the mean value 3.38 and SD 0.81. Employees indicated their agreement by the mean value 3.37 that they are happy and motivated to perform their job when fair treatment is prevailing in the company.

In the same manner, majority of the employ respondents demonstrated their satisfaction level on the items such as: the way company policies are put into practice, how members of the work group solve problems, immediate superior dealings with all employees fairly and the presence of opportunity to be involved in activities that promote their profession with the mean values 3.34, 3.33, 3.26 and 3.26 respectively.

On the other hand, irrespective of the positive aspect of satisfaction indicator items mentioned above, there were issues to be taken into consideration by the executive of the bank. That means, employees are not satisfied on items such as the balance between the work load and payment and employees' involvement in the supervisory decisions were rated as the lowest mean values (2.49 and 2.5) respectively. In this regard, Androniceanu (2011) proved that mostly individuals with good education, relevant skills, and experience are unsatisfied with their job and salary packages resulting in high rates of turnover and low productivity. As such organizations make compensation plans for them in a bid to minimize the turnover and to motivate them.

Involvement of employees has great share to correct wrong doings. In this regard, existing literature states that the direct part personally involves employees directly in decisions that go beyond their immediate work tasks. Employee involvement is centered on the fact that participation in goal setting has been found to be related to the acceptance and subsequent commitment to the established goals, leading to favorable outcomes with regard to deed and attitudes (Lewis, 2003).

The non-existence of attractive physical working conditions (heating, lighting, ventilation, etc.) was also the other item where employees have shown their disagreement. This is rated as 2.6 and higher SD (1.01). Favorable physical working conditions are expected in the work places. Comfortable work situations make certain the well-being of workers which invariably will encourage them to apply themselves to their responsibilities with a great level of morale which may transform into higher productivity. Concerning this issue, Akinyele (2010) advocated that about 80 percent of efficiency matters are due to the working environment related issues in most organizations. Therefore, Coop Bank of Oromia should establish proper physical working environments that do not negatively influence the employees by providing among other things noise free atmospheres, suitable lighting systems, and adequate temperatures.

In addition, doing on some motivators other than regular monthly salary and also implementation of fair and transparent promotions are the other assignment left for the company. These items were rated with mean values 2.96 and 2.88 respectively. With this regard, Yucel (2012) addressed his view that employees' participation in decision making in their organization in the area of their duty matter their satisfaction. Depending on these results, the bank has to take initiative to improve those issues with which the employees revealed their response as unsatisfactory.

In general, even if the result of employees on some statements is falling in the range of disagree, in general, the cumulative response of the employees was falling in the range of covenant, which is indicated by 3.37 mean = 67.4% = 202 and SD 0.84 even if high SD is showing discrepancy among their response. This indicates the bank is remained with numerous works to correct the issues to fully raise the satisfaction of its employees to more advance its performance.

In short, for an employee to perform effectively in organization, job satisfaction is one of the vital points. It is important for both the worker and the organization. Satisfaction in job also brings about a sense of fulfillment and security to the employee. Due to these facts, the commitment level of employee will be increased, absenteeism will be reduced and the turnover rate too will be decreased. Based on the existing literature and feedback from the respondents, it can be suggested that Coop Bank Oromia should adopt reward systems that are similar to the industry in which they operate or it can develop performance based pay systems in order to reward employees according to the set performance standards and profitability goals. Therefore, for performance to be improved, Coop Bank of Oromia needs to create and maintain a sense of equity and consistence in its pay structures.

#### **4.3.2. Performance of Cooperative Bank of Oromia**

Organizations today are continuously facing external and internal forces that drive them to change due to the world are more competitive in times. Performance in banking can be mainly of financial. Commercial bank's financial performance can be measured by profitability; however there are other indicators such as non-financial measures. In this study, performance of Cooperative Bank of Oromia was assessed by both financial and non-

financial indicators, which include: in terms of return on asset (ROA), return on deposits (ROD), return of equity (ROE), maximizing dividend (wealth) of shareholders, the bank's branch expansion, and amount of dividend shared to the shareholders were analyzed by the use of the perception of the respondents as a measure for analyzing the performance of the bank.

In addition, perception of the employees towards the bank's credit performance in lending money to the Coop societies, the status of the return of the money lent to the customers, the status of number of customers, the status of saving deposit accounts of the customers and the overall bank's performance in competitive market were the other attention areas investigated in Table 4.2.

Table 4.2: Descriptive Statistics of Employees' Perception towards PCBO

<b>Descriptive Statistics on Performance of the Bank</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>
Performance of the bank in competitive market	300	3.94	.63
Market performance of the bank in terms of branch expansion	300	3.61	.84
The status of saving deposit accounts of the customers	300	3.60	.87
The status of number of customers	300	3.58	.86
Performance of the bank in terms of maximizing dividend of shareholders	300	3.51	.79
The status of the return of the money lent to the customers	300	3.50	.88
Credit Performance of the bank in lending money to the Coop societies	300	3.47	.83
Amount of dividend shared to the shareholders	300	3.47	.85
Performance of the bank in terms of Return on Deposits	300	3.43	.87
Performance of CBO in terms of Return on Asset	300	3.43	.89
Performance of the bank in terms of Return of Equity	300	3.33	.76
<b>Total</b>	<b>300</b>	<b>3.53</b>	<b>.82</b>

Source: Field Survey, 2021

As depicted in table above, the bank is competitive in the market that was confirmed by the computed mean result equal to 3.94 and SD 0.63. Majority of respondents also agreed by the mean value 3.61 that market performance of the bank in terms of branch expansion is better. Next, they again admitted that the status of saving deposit accounts of the customers with the mean value 3.6. The status of number of customers and performance of the bank in terms of maximizing dividend of shareholders were also alright (mean = 3.58 & 3.51).

In the same manner, based on the perception of the respondents, the bank is at better condition on the following performance indicators. The status of the return of the money lent to the customers, credit performance of the bank in lending money to the Coop societies and the amount of dividend shared to the shareholders with mean values 3.5, 3.47 and 3.47 respectively. Performance of the bank in terms of Return on Deposits and its performance with regard to Return on Asset were rated as 3.43 mean values. Likely, performance of the bank in terms of Return of Equity is also alright (mean = 3.33). In general, the mean of all the statements demonstrating the performance of Cooperative Bank of Oromia are rated above 3, which indicated respondents are satisfied with the statements. The SD of all the statements are almost near to each other that can be termed as high values showing difference perception of respondents. Depending on these values, it can be judged that the bank's performance is relatively better. Furthermore, the above employees' feedbacks were ratified by the secondary data that was taken from the annual reports of the bank. In this regard, the annual reports of the bank for the five consecutive periods from 2016/2017 to 2020/2021 were computed. Accordingly, indicators of both the financial and non-financial performance of the bank during the stated periods for the items identified is presented. Some of the performance indicators which were taken into consideration were: total deposits, revenues/earnings, profit after tax, assets and capital. In addition, number of customers, dividend shared, loans, balance sheet, customers' deposits and status of the bank's branches expansion were incorporated in the analysis.

**i. Deposits of CBO from 2016 to 2020**

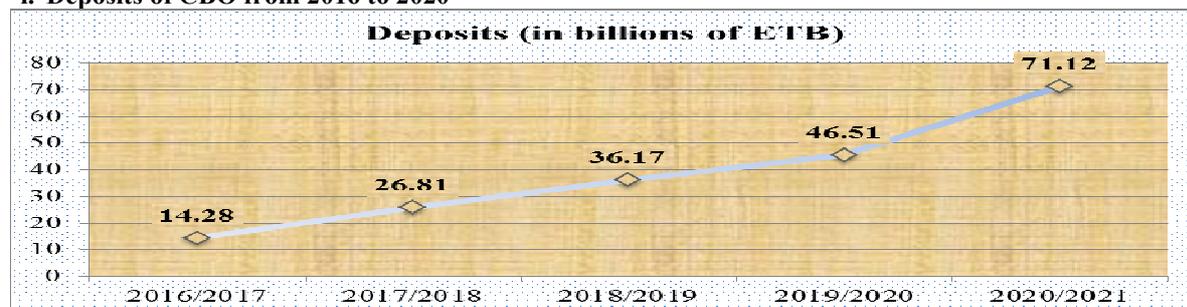


Figure 4.1: Total Deposit status of CBO, 2021

Source: Computed from CBO Annual Reports, 2021

The above graph indicated that the bank's total deposit has grown from 14.28 billion in the fiscal year 2016

to 71.12 billion ETB as of June 2021 showing 398 growth rates.

**ii. Revenues of CBO from 2016 to 2020**

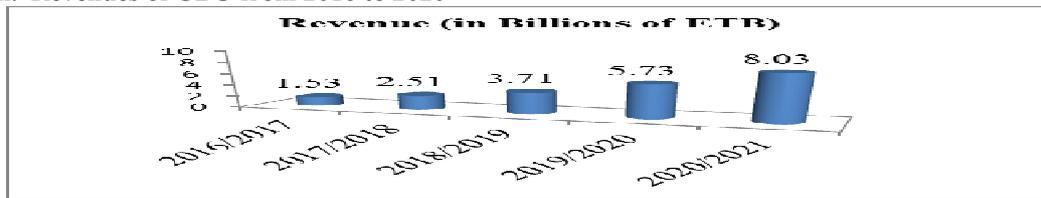


Figure 4.2: Revenues/ Earnings of the Bank, 2021  
 Source: Computed from CBO Annual Report, 2021

In connection to the total revenues generated from 2016/2017 to 2020/2021, it was increased from 1.53 billion to 8.03 billion ETB signifying 424% rate of growth in the periods.

**iii. Assets of CBO from 2016 to 2020**

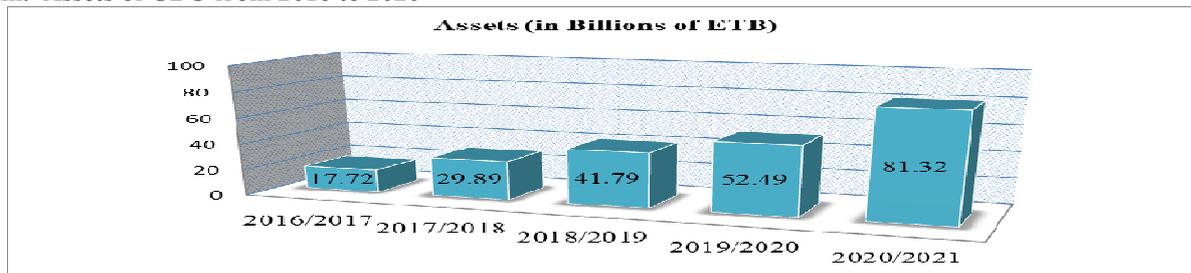


Figure 4.3: Total Assets of CBO, 2021  
 Source: Computed from CBO Annual Report, 2021

The above figure verified that the bank’s assets was reached 8.32 billion in 2020/2021 from the base year 2016/2017, which was 17.72 billion. The growth rate of the period was 359%.

**iv. Capital of CBO from 2016 to 2020**

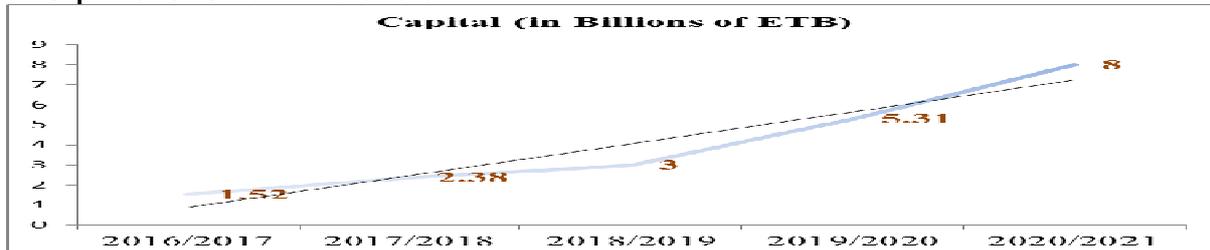


Figure 4.4: Capital of CBO, 2021  
 Source: Computed from CBO Annual Report, 2021

As it is displayed in Figure 4.4, the capital of the bank has grown from 1.52 billion to 8 billion ETB showing 426% rate of growth from 2016/2017 to 2020/2021.

**v. Loans of CBO from 2016 to 2020**

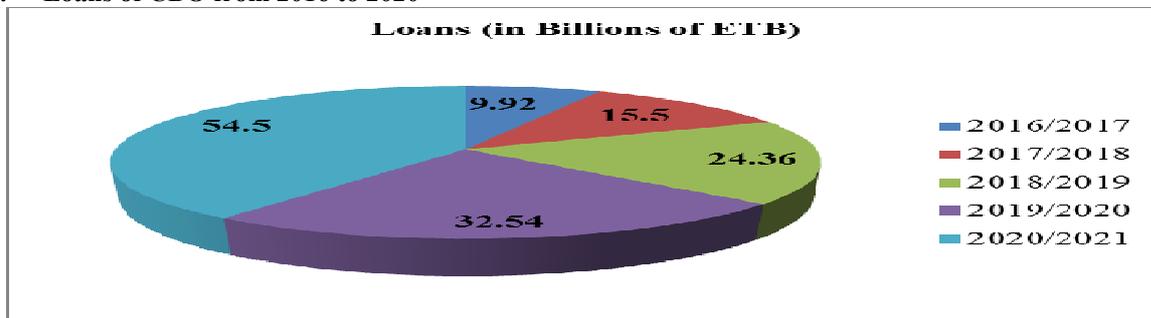


Figure 4.5: Total Loans of the Bank, 2021  
 Source: Computed from CBO Annual Report, 2021

The above pie chart indicated that the loans of the CBO increased from 9.92 billion to 54.5 billion ETB from the year 2016/2017 to 2020/2021. Based on this figure, there is enough evidence that the bank’s capital was increasing from one period to another.

**vi. Balance Sheet and Customer’s Deposit of CBO form 2016 to 2020**

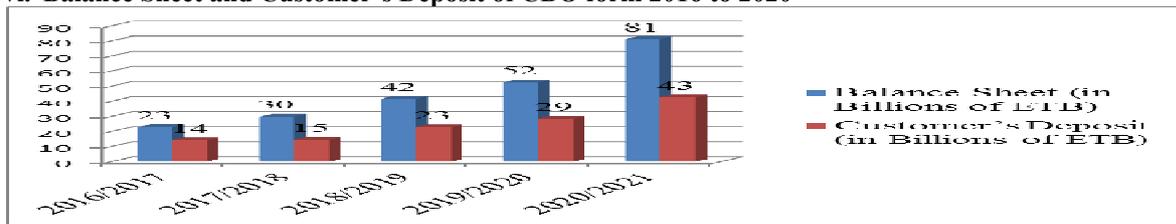


Figure 4.6: The Bank’s Balance Sheet and Customers’ Deposit, 2021

Source: Computed from CBO Annual Report, 2021

As far as the bank’s balance sheet was concerned, it has increased from 23 billion in 2016 to 81 billion ETB in 2020. Whereas, deposit of the customers of the bank grown from 14 billion in 2016 to 43 billion ETB in 2020. Thus, the balance sheet and customer’s deposit of the bank were grown by the rate of 252% and 207% respectively from 2016/2017 to 2020/2021.

**vii. Net Profit of CBO and Dividend Shared to Shareholders**

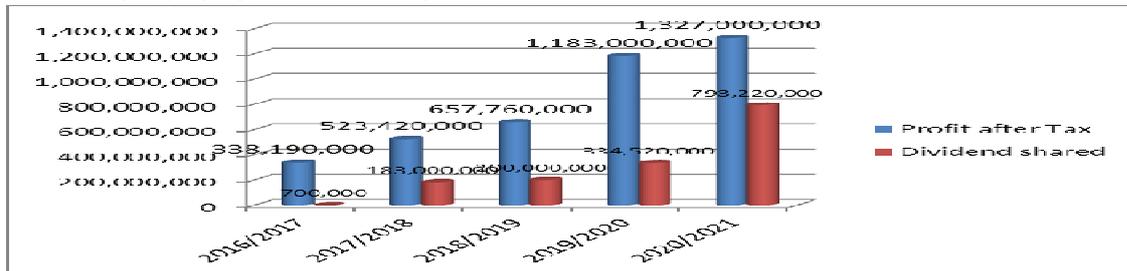


Figure 4.7: Profit of the Bank after Tax and Dividend Shared, 2021

Source: Computed from CBO Annual Report, 2021

As shown in Figure 4.7, the net profit and amounts of dividend shared to the shareholders were increasing overtime. The net profit of the bank was 338.2 million in 2016, which was increased to 1.327 billion ETB in 2020. Likewise, the amount of dividend shared to shareholders has grown from 700,000 to almost 1 billion ETB in the year 2020. This has shown an increase of rate of 292% and 500% growth respectively.

Last, but not least performance indicator of the bank was to increase its market share. In connection to this, the CBO’s numbers of branches were 256 during 2016/2017 and reached 469 in the fiscal year 2020/2021 showing an aggregate growth rate of 83%. This confirms the bank is increasing its share in the market by expanding its branch to access its clients so as to make expansive its market base.

In short, based on the reports of the bank, the performance of the bank from 2019/2020 to 2020/2021 was very high as compared with other years. In all the cases, the computed results ratified that the bank is performing well even if there are issues to be considered to further assure its sustainability in the tougher market competition.

**4.4. Inferential Statistics of Respondents**

As it is stated in the model specification, inferential statistical tools were used. Inferential statistics infer about the population depending on the sample data, based on estimation and test of hypothesis. Inferential method falls into two major categories: parametric and non-parametric approaches. Though parametric tests are highly influential than non-parametric statistics, in the inquiry of this data, the second method was used. In case where the hypotheses of normalcy and constant variance of residuals are not satisfied, Onyango & Odebero (2009), proposed the use of non-parametric methods.

Non-parametric is not dependent on the shape of the dispersal of the population and hence are known as distribution free tests. In many ways, the non-parametric tests are relatively advantageous to parametric tests. First, they could be used in circumstances where strict assumptions are requested by parametric tests do not have to be happened. Second, they are not more difficult to use as much as conceptual methods are concerned. Third, they are best suitable when dealing with qualitative values with data that could be ordered in ranks. Finally, if the size of sample is small, the parametric tests are not appropriate except the distribution of population is accurately known which is usually not likely.

Therefore, prior to decide using this model, assumptions of other continuous models were checked in condition where the statistical significance was set at  $\alpha = 0.05$ . In SPSS, p-values are labeled as “sig”. In line to this, the nature of the data was not fulfilling the presume of continuous data. Hence, in this study, non-parametric model was used where chi-square ( $X^2$ ) test of association and ordinal logistic regression were applied that fulfill the assumption of the likert scale data under consideration. In addition, Spearman’s Rank Correlation Coefficient was applied to find the strength of association between two variables and also to check for the multicollinearity problem. Before computing the result by any type of inferential statistical model, data testing was the first

determinant process. Accordingly, in the following sections this issue is going to be presented.

#### 4.4.1. Data Testing

The most critical assumptions related to chi-square test of association and ordinal logistic regression are tested. In this regard, normality, multicollinearity, and model specification tests have been made to make the data available to give reliable result and make the model fit the data. These assumptions were tested so as to reach at a conclusion about the population. When the assumptions are met, the likelihood that the model obtained from a sample of being the same as the population of concern (the coefficients and parameters of the regression equation are thought to be unbiased) is increased. Consequently, all the assumptions for using the models specified were critically checked. In this regard, the data nature of set was not normally distributed, which recommended to use non-parametric method. Of the non-parametric methods, chi-square test of association, ordinal logit regression and Spearman's Rank Correlation were specified to be applicable. For instance, the data nature used in this research fulfilled the criteria to use chi-square test of association since the two variables are measured at an ordinal level. Added to this, the major assumptions for applying ordinal logit regression model too were thoroughly tested.

Testing normality of data can be done either through graphs (Q-Q plot and frequency distribution/ normality tests), D'Agostino-Pearson omnibus, Shapiro-Wilk or Kolmogorov-Smirnov (Alfayad, 2017). In general, this was done by computing the statistic and standard error of skewness and kurtosis result, Kolmogorov-Smirnov, histogram, Q-Q plot with tests and test of assumption of proportional odds.

According to Ikhlas *et al* (2021); Obumneke Ezie (2021); Onyeiwu *et al* (2021), normality distribution of data by the help of the results of skewness and kurtosis, Kolmogorov-Smirnov and other criteria have to be thoroughly tested. In this context, the results of all the issues have shown that the data is not normally distributed. For instance, the result derived from the descriptive statistics where much emphasis lays on skewness and kurtosis. Therefore, to determine the nature of the data by this normality test measure requires calculating the value of each. Consequently, Skewness or Kurtosis z-value = Skewness or Kurtosis measure / standard error of Skewness or Kurtosis. In connection to this, by the help of this formula, the results of each Skewness and Kurtosis z- value is computed and displayed in Table 4.3 as the following:

Table 4.3. Check of Normality Distribution of Variables by Skewness & Kurtosis

Variable		Statistic	SE	Stat. of ske or kur/ SE
Employees' satisfaction	Skewness	-0.284	0.141	-2.01
	Kurtosis	-0.670	0.281	-2.40
Performance of CBO	Skewness	0.339	0.141	2.40
	Kurtosis	-0.574	0.281	-2.04

Source: Computed by Researcher, 2021

From the above table, the statistic and standard error of skewness and kurtosis identified that if the data were normally distributed. According to the verification given by Doane & Seward (2011); Ikhlas *et al* (2021); Obumneke Ezie (2021); Onyeiwu *et al* (2021), when the statistic of kurtosis z-value of each variable is divided to its standard error and its result falls somewhere in the span of -1.96 and +1.96 which is the z-value, then we can conclude that the data is normally distributed which works for skewness too. Otherwise if the output is somewhere outside of the noted span, it is not normally distributed which encourages the use of non-parametric statistics.

Accordingly, the calculated results of skewness z-value when divided by the skewness measure to its standard error for employees' satisfaction and performance of CBO were: -2.01 and 2.4 respectively that are outside of the z-value i.e., -1.96 and +1.96.

In the same manner, the calculated results of kurtosis z-value when divided by the kurtosis measure to its standard error for employees' satisfaction and performance of CBO were: -2.4 and -2.04 respectively which again signifying the results falling outside of the stated z-values. In short, the computed values of both the Skewness and Kurtosis for all the variables (all the seven z-values were  $>/< \pm 1.96$ ). Thus, the result obtained in the above Table confirmed the use of non-parametric statistics. This can further be tested from the variables' log of their skewness and kurtosis.

Table 4.4. Check of Normality Distribution of Log of Variables by Skewness & Kurtosis

Variable		Statistic	SE	Stat. of ske or kur/ SE
Log of Employees' satisfaction	Skewness	-0.316	0.141	-2.24
	Kurtosis	-0.554	0.281	-1.97
Log of Performance of CBO	Skewness	-0.254	0.141	-1.80
	Kurtosis	-0.639	0.281	-2.27

Source: Researcher's Computation by SPSS, 2021

Based on the computed data (Table 4.4), by taking the result of the performance of Cooperative bank of

Oromia as an example; using parametric method is not advisable. The data are not normally distributed with the skewness of -0.316 (SE = 0.141) and a kurtosis of -0.554 (SE = 0.281). The skewness and kurtosis z-value when divided by the respective measures to their standard errors were -2.24 and -1.97 respectively. From this, z-values were not in the range of +/- 1.96, which was also the same for the rest computed variables. In general, the computed values of the log of all the variables their skewness and kurtosis result were not falling within the z-value. Thus, the result obtained in the above Tables suggested the use of non-parametric statistics since their z-values were not falling within +/-1.96.

In addition, in order to be certain the test of normality distribution of data, additional confirmation can be carried out by the help of Kolmogorov-Smirnov and Shapiro-Wilk. According to Lofgren (2013); Joyner (2019), if the data set is less than 100, Shapiro-Wilk is used otherwise Kolmogorov-Smirnov is applied if the data is above 100. In this case, instead of Shapiro-Wilk, Kolmogorov-Smirnov is taken into consideration since the data is more than 100. In Kolmogorov-Smirnov computation, if p-values are below 0.05, then the data are not normally distributed (Razali & Wah, 2011; Hartgerink *et al.*, 2020). To do this, it is a need to get the mean of each computed variable that has to be done by transforming each of the variables. Performing this necessitates going to “transform” in the SPSS dialog box and compute variable and then following all the steps. Based on the results computed, the transformed means of the p-values of all the variables were below 0.05, which recommends applying non-parametric regression particularly order logit regression model.

Table 4.5: Test of Normality by Kolmogorov-Smirnov Statistic

Variables	Kolmogorov-Smirnov		
	Statistic	Df	Sig.
Performance of CBO	0.075	300	0.000
Employees’ Satisfaction	0.063	300	0.006

Source: Researcher’s Computation from SPSS 21.0

Furthermore, before performing analysis detail computation can be run by transforming the log of each variable. Accordingly, the computed results of all the p-values of the variables are by far less than 0.05. Thus, based on the transformed log and statistic of Kolmogorov-Smirnov, p-values are less than 0.05. This suggests using order logit regression other than any other model such as linear and multiple regressions in particular. This suggestion is in consistent to the finding of Okeniyi & Okeniyi (2012); Ogundapo *et al* (2018).

Null hypothesis states that P-values are > 0.05, which means the values are sampled from a population that follows a normal distribution. On the other hand, alternative hypothesis states that P-values are ≤ 0.05, which implies the values are not sampled from a population that follows a normal distribution. Thus, depending on the p-values computed above, the researcher rejected the null hypothesis and accepted the alternative hypothesis, since the calculated p-values for all variables were below 0.05.

Table 4.6: Test of Normality by Log of Kolmogorov-Smirnov Statistic

Variables	Log of Kolmogorov-Smirnov		
	Statistic	Df	Sig.
Log Performance of CBO	0.071	300	0.000
Log Employees’ Satisfaction	0.075	300	0.000

Source: Researcher’s Computation from SPSS 21.0

Thus, based on the results computed, since the p-values of both the Kolmogorov-Smirnov Statistic and its logs were less than the alpha level (0.05), it is suggested to use non-parametric model; ordinal regression in particular.

As mentioned earlier, normality can also be tested by the help of either Q-Q plot, Histogram or Box plots whose results are presented in Figure 4.7. The quantile-quantile plot (Q-Q plot), where the X-axis represent the actual data while Y-axis on the other portray the predicted data. When the slot line on the diagram is equal, it verifies normal distribution and otherwise, when it deviates from the two axes, it shows not normally distributed. As per Joyner (2019), in case of histogram, when visually observed, if it is not long tailed to one side (i.e., right-skewed or left-skewed) which implies normally distributed around the mean (i.e., symmetric ⇒ Mean = Median = Mode), it can be judged that the data is normally distributed. In consequence, the results of all described that the data are not normally distributed. The following figure shows that the data is not normally distributed.

**a. Histogram showing Employees' Satisfaction Practice**

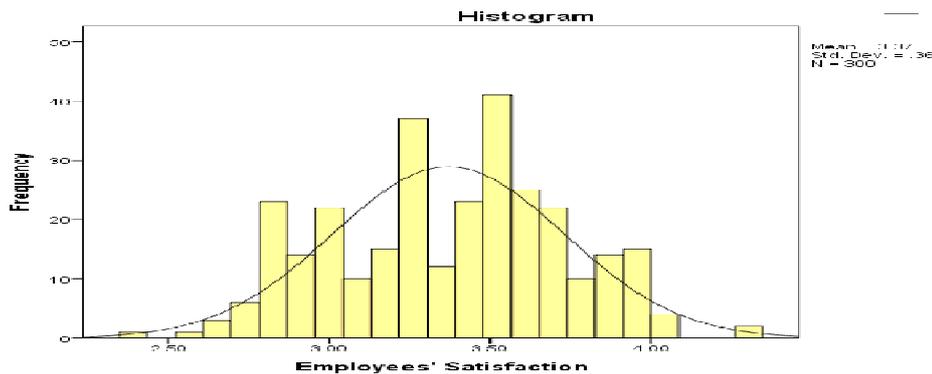


Figure 4.8: Histogram showing the Distribution of Training and Development Data  
 Source: Computed from SPSS, 2021

As it is shown on the above figures, the residuals show signs of abnormal distribution. Furthermore, as it is observed from the histograms it can be thought the residuals are not symmetrically normally distributed and the data are somewhat skewed. Therefore, based on this evidence it can be concluded that the data is not normally distributed, which recommended using non-parametric tools.

**4.4.1.1. Chi-Square Test of Association**

Chi-Square ( $X^2$ ) is among the non-parametric statistical approaches that illustrates the association between the variables. Chi-square has different curves based on the degrees of freedom. It is tilted to the right for small degrees of freedom and becomes highly symmetric as the degrees of freedom increases. As the test statistic comprises squaring the differences, the test statistics remain totally positive. A chi-squared test for independence is often right tailed (Gagunashvili, 2010; Wickens, 2014). The objective here is to decide if there is a relationship among variables or not. Therefore, by using chi-square test of association, it is easy to determine the relationships among the variables and test hypotheses where statistical significance was set at  $\alpha = 0.05$ . In this analysis, since the two variables are measured at categorical (ordinal level), chi-square is applied which is in line to Kothari (2004; 2007). To compute the data in this model, the 5-likert scale was merged into three where strongly disagree and disagree were merged to disagree and agree and strongly agree to agree. While the neutral part remained the same. In doing so, value 0 was given for disagree, 1 for neutral and 2 for agree. Similar re-categorization was also done for the measure of variables of PCBO.

Table 4.7: The Result of Test of Association by Chi-Square Test Statistics

Variables	Pearson's Chi-Square	df	Sig.
Employees' Satisfaction	53.238	4	0.000*

\*sig at 5% level of significance

Source: Researcher's Computation, 2021

As can be observed from the Table above, it is clearly observed that training and development are significantly associated with performance of Cooperative Bank of Oromia at 5% level of significance since the value of the predictor variable was less than the alpha level ( $P\text{-values} < \alpha = 0.000$ ). Thus, the swift of the calculated value for employees' satisfaction for chi-square = 53.238 at df 4, and significance level of 0.000 and 0.5 was greater than the Table value which is 9.49 at  $\alpha = 0.05$  as shown in preceding Table above. Hence, depending on this there is adequate prove to fail to accept the null hypotheses and in favor of the alternative hypotheses. This implies there is strong relationship between training and development practice and the Coop Bank of Oromia's performance.

**4.4.1.2. Correlation Analysis**

Correlation analysis was used to examine the extent the independent variable associates with the dependent variable and also to check multicollinearity problem by checking the relationship between each variable. It can also be used to test the hypotheses formulated. Unlike the Pearson's Product Moment Correlation Coefficient (PMCC), Spearman's Rank Correlation Coefficient was applied since the nature of the data was relevant to it. Thus, to find the strength of association between two variables, it is likely to look at the results of correlation. Correlation coefficients show the trend and intensity of the relationship between variables unlike the chi-square. Bivariate Correlations were used to know the nature, direction and significance of the bivariate relationship of the variables of this study. A correlation matrix was constructed using the variables in the questionnaire to show the strength of relationships among the variables considered in the questionnaire.

According to Higham (2002); Myers & Sirois (2004), correlation matrix is stated as a set of correlation coefficients between numbers of variables. The result of the coefficient ranges from +1 to -1, where +1 indicates perfect positive correlation, -1 indicates perfect negative correlation and 0 indicates no correlation. Positive

linkages take place once a change in one variable causes a movement in the other related variable in similar direction (i.e. an increase in one variable causes an increase in the other and vice-versa).

A negative association takes place while changes in related variable are happening in the reverse direction (i.e. an increase in one variable causes a decrease in the other and vice-versa). Based on the suggestion of Myers & Sirois (2004); Pallant (2010); Farres *et al* (2015), the interpretation of r value indicating the intensity of the link between two variables is as follows:  $r = 0.10$  to  $0.29$  or  $r = -0.10$  to  $-0.29$  is Weak,  $r = 0.30$  to  $0.49$  or  $r = -0.30$  to  $-0.49$  Medium and  $r = 0.50$  to  $1.0$  or  $r = -0.50$  to  $-1.0$  is High. In this analysis, this is done by the help of Spearman's rank correlation analysis after the data have been proved to be not normally distributed as presented in Table 4.8. In this regard, the relationship between the dependent and independent variables is identified at first step as the following:

Table 4.8: Correlation Coefficient of the Dependent and Independent Variables

VARIABLES	CORRELATION	PCBO
Employees' Satisfaction	Spearman Correlation	0.617**

\*\* . Correlation is significant at the 0.01 level (2-tailed). \* . Correlation is significant at the 0.05 level (2-tailed).  
 Source: Researcher's Computation by SPSS Output from Survey Data, 2021

Based on the values calculated by Spearman's, the direction of the linkage among predictors and predicted variables are displayed. Spearman's rank correlation finds the correlation between the two ordinal scaled random variables. Accordingly, the bank's performance and employees' satisfaction practice is correlated at 0.617,  $n = 300$  and  $p\text{-value} = 0.000$ , which was statistically significant. This signified positive and strong correlation between the two variables. It can thus be deduced that the execution of practices of training and development enhance the bank's performance, which was statistically significant at  $p\text{-value} < 0.01 < \alpha (0.05)$ .

Moreover, this model helps to compute the relationship between each variable. When this is done, multicollinearity issue has to be tested. The problem of multicollinearity occurs when two or more predictor variables are much linked with each other that is above 0.90. Detecting the existence of multi-collinearity between the variables was also one of the assumptions to be assessed before applying ordinal logit regression (Ombui *et al.*, 2017). To this end, the result was less than 0.9 indicating no multicollinearity problem.

#### 4.4.1.3. Ordinal Logistic Regression Analysis

Regression helps to predict the value of a variable based on the value of another variable. It is a powerful statistical method that allows examining the relationship between two or more variables of interest. Regression analysis is a statistical method to deal with the formulation of mathematical model depicting relationship amongst variables which can be used for the purpose of prediction of the values of dependent variable, given the values of the independent variable (Kothari, 2004 & 2007). Logistic regression model can be classified as multinomial, ordinal and binary (Meron, 2011). In this investigation ordinal logistic regression model was used. The ordinal logistic regression procedure empowers one to select the predictive model for ordered dependent variables. It describes the relationship an ordered response variable and a set of explanatory variables.

Since the data sets have not been normally distributed as confirmed earlier, the researcher used ordinal logistic regression to perform the analysis instead of linear regression. Ordinal logistic regression is applied to estimate an ordinal dependent variable provided one or extra independent variables. The procedure used concurs with the work of Desalegn *et al* (2021). To analyze data by the help of this tool involves looking for: Model Fitting Information, Goodness-of-Fit, Pseudo R-Square, Omnibus test, Parameter Estimates and Test of parallel lines as suggested by (Adejumo & Adetunji, 2013). In this model, five (5) kinds of link functions are there i.e., logit, probit, Complementary log-log, Negative log-log and Cauchy (inverse Cauchy). From these, logit link function, which is a transformation of the cumulative probabilities that allows estimation of the model, is preferred in the analysis as per Hahn & Soyer (2005). In the analysis, logit link function is applied because it is evenly distributed categories and is reasonable choices when the changes in the cumulative probabilities are gradual and dichotomy the response scale (Das & Rahman, 2011). Appropriateness of ordinal logistic regression is tested by the help of checking model (Model Diagnostic) where the results are presented in the following tables:

Table 4.9: Model Fitting Information

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	1784.576			
Final	1562.083	222.493	6	0.000

Source: Researcher's Computation, 2021

The model fitting information table expresses how well the model fits the data as per the opinion of Cai & Monroe (2014); Onyeiwu *et al* (2021). As one can observe from the computation, the p-value is significantly less than 5%, which signifies the model used fits the data very well and it is also evident that the model gives better predictions than if we just guessed based on the marginal probabilities for the outcome categories.

Table 4.10: Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	7490.049	7170	.858
Deviance	1562.083	7170	1.000

Source: Researcher's Computation, 2021

As clearly indicated by Person and Deviance Chi-square test results, the p values are greater than 5% level of significance for both Pearson and Deviance Chi-square. Depending on the end result of goodness of the fit indicated above, the results for the analysis suggested the model does fit very well ( $p > 0.05$ ) (i.e. fail to castoff the null hypothesis depending on the observed data. The result is in line to the finding of Archer & Lemeshow (2006). So, it was promising to infer that the model fitted the data well since the p-value was statistically not significant.

Table 4.11: Results of Model Summary: Pseudo R-Square

Cox and Snell	.524
Nagelkerke	.641
McFadden	.125

Source: Researcher's Computation, 2021

Pseudo R squares were additional measures of goodness of fit for ordinal logistic regression. They are used in ordinal regression to estimate the variance explained by the independent variable (Adejumo & Adetunji, 2013; Smith & McKenna, 2013). The results here were nearly comparable to  $R^2$  for linear regression. However, for ordinal logistic regression models, it is not possible to compute the same  $R^2$  statistic as in linear regression; instead, three approximations are computed. These are: Cox and Snell, Nagelkerke and McFadden whose values are computed as 0.524, 0.641 and 0.125 respectively for final model. The results supported the conclusion that the final model fit the data well. In this case, more focus is given to Nagelkerke = 0.641), which verified that 64.1% changes in the performance of Cooperative Bank of Oromia is the outcome of the stated explanatory variables. While the rest percentages are explained by the other factors other than the five variables identified.

Moreover, in order to ensure the assumptions are not violated about the statistical test of parallel lines, the notion that all logit surfaces are parallel must be tested. Test of parallel lines helps to determine whether it is reasonable to assume that the results of the location parameters are constant across categories of the response as supposed by Adejumo & Adetunji (2013). In connection to this, the test of parallelism contains:  $-2$  Log-Likelihood for the constrained model; the model that assumes the planes or surfaces are parallel and  $-2$  log-likelihood for the General model, the model that assumes planes or surfaces are separated.

One of the suppositions of ordinal regression is that regression coefficients are alike for all categories. If the postulate of parallelism is detested, it is preferable to imagine employing multinomial regression, which estimates distinct coefficients for every category O'Connell (2006). In case the null hypothesis is excluded at a specific level of significance, it infers the relationship function designated is wrong for the data, which implies the associations between the independent variables and logits are asymmetrical for all logits.

The chi-square statistic is the log-likelihood variance between the two models. If the lines or planes are parallel, the observed significance level for the change would be large, as the common model does not improve the fit very ample and the parallel model is sufficient. If there is indication to fail to accept null hypothesis, it is likely that the linkage function selected is wrong or that the associations between the independent variables and logits are not equal for all logits. Decision regarding the test of parallel lines is elaborated in successive table.

Table 4.12: Test of Parallel lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	1562.083			
General	.000	1562.083	6	.346

Source: Researcher's Computation, 2021

The table above (Table 4.12) shows parallel line test for final model with chi-square value 1562.083 and p-value = 0.346 which is more than the 5% level of significance. In the recommendation of Adejumo & Adetunji (2013); Erkan & Yildiz (2014), if the assumption of parallelism is rejected, it is better to consider using multinomial regression that estimates separate estimates for each category. If the null hypothesis is rejected at specific level of significance, this implies that it is possible that the link function selected is incorrect for the data or the relationships between the explanatory variables and logits are not for all logits. Therefore, there is definitely not ample evidence not to accept the null hypothesis for final model. Thus, the proportional odds notion appears to have held for final model, which supposes to apply ordinal logistic regression since the test of proportional odd is not violated. In addition, the result of Omnibus test, which compares the fitted model against the intercept only model, suggests the use of ordinal regression since its p-value was  $< \alpha = 0.05$ .

In summary, reliant on the computed results practically tested by Model Fitting Information

Goodness-of-Fit, Pseudo R-Square and Test of Parallel lines which were described in the above tables and

Omnibus test, the use of ordinal logistic regression model was found as the most applicable non-parametric method.

Moreover, the transformed log of all the variables with regard to Model Fitting Information

Goodness-of-Fit, Pseudo R-Square, Test of Parallel lines and Omnibus test (D’Agostino-Pearson omnibus) displayed in the appendices part, indicated in line with the existing assumptions. Therefore, based on these evidences there was an ample evidence to apply ordinal logistic regression model.

Table 4.13: Parameter Estimates of Ordinal Logistic Regression based on Route-One Result

Variables		$\beta$	SE	Wald	df	Sig.	95% CI	
							Lower	Upper
Threshold	[Performance of CBO = .00]	-3.014	1.379	4.780	1	.000*	-5.716	-.312
	[Performance of CBO = 1.00]	2.035	1.034	3.873	1	.000*	.008	4.061
Location	Employees’ Satisfaction	1.783	.4701	10.503	1	.000*	.602	2.445

\*sig at 5% level of significance

Source: Researcher’s Computation, 2021

Depending on the values in Table above, that is the parameter estimates of ordinal logistic regression; the coefficients, their standard errors, the Wald test and associated p-values (Sig.), and the 95% confidence interval of the coefficients were computed. These values revealed that there is a strong association between the variables (employees’ satisfaction and performance of Cooperative Bank of Oromia). From the table, the Wald statistic is the square of the ratio of the coefficient to its standard error. The significance of the Wald statistic in the column with heading sig < 0.05 stipulates the implication of the predictor variables in the model (fail to accept  $H_0 = 0$ ) and high a value of the Wald statistic shows that the comparable predictor variable is significant as stated by Brant 1990, cited in Adejumo & Adetunji (2013).

In the same table, threshold and location terms are found at the left corner of the table, where the two terms represent predicted and predictor variables respectively. In line to this, the threshold estimate for [performance = 0] is the cutoff value between low and middle performance of Cooperative Bank of Oromia while the threshold estimate for [performance = 1] is the cutoff value between middle and high performance of Cooperative Bank of Oromia. The threshold coefficients are representing the intercepts, specifically the point (in terms of a logit) where the status of the bank was predicted. Besides,  $\beta$  is computed, which expresses ordinal logistic regression coefficients (estimates). It is also called beta coefficient, which measures the degree of change in the outcome variable for every one-unit of change in the predictor variable. It measures the goodness of fit of the line. Logistic regression coefficients are indicating the trend and intensity of the linkage among independent variables and the log odds of dependent variable. In the exploration of ranked data, the constants of the predictor variable in the model is interpreted as logarithm of the ratio of the odds of response variable while the proportionate odds model is used. This means that estimates of this odds ratio, and corresponding confidence intervals, can be easily found from the fitted model.

They are simply inferred as the projected shift in the log odds of being in the higher (as contrasting to lower) category on the predicted variable (controlling for the residual independent variables) per unit rise on the independent variable. In this regard, positive and negative constants have different inferences. Positive coefficients are interpreted as for each one-unit increase on an independent variable; there is a predicted increase of a certain value in the log odds of falling at an upper level on the predicted variable.

Contrary to this, the negative estimates are interpreted as for each one-unit increase on independent variables, there is a predicted decrease of some quantity in the log odds of being in a higher level on the dependent variables, which simply mean that as the results of independent variables increase, there is a decreased probability of falling at an upper level on the predicted variable (Ikhlas *et al.*, 2021; Obumneke Ezie, 2021; Onyeiwu *et al.*, 2021). The table of Parameter estimates tells us specifically about the relationship between the explanatory variable and the outcome variable (Adejumo & Adetunji, 2013).

Based on this premises, the results obtained from the computation of parameter estimation by using ordinal logistic regression coefficients are interpreted as a following: Consequently, values of -3.014 or less on the primary covert variable that gave rise to dependent variable are classified as low given they were all reference variables in the explanatory categories (holding all other category of visible explanatory variables are evaluated at zero).

On the other hand, [Performance = 1] is the estimated cut point on the latent variable used to differentiate low and medium from high performance when values of the forecaster variables are evaluated at zero. The response variable that had a value of 2.04 or greater on the primary covert variable that gave rise to performance variable are classified as high achievement given they were all reference variables in the predictor categories (holding all other category of visible explanatory variables are evaluated at zero). Depending on the explained values that is, the values that range from -3.014 to 2.04 on the primary covert variable would be classified as

medium performance.

The computed values for the forecaster variables are also presented in the same table. When looking at training and development practice, the result of the coefficient also shown positive result and also statistically significant (p-value = 0.015, which is < 0.05). Therefore, concentrating on the route-one result, the variable was positive significant predictor of performance of Cooperative Bank of Oromia. In this case, 1.783 value shows that for each one entity rise in the employees' satisfaction practice, there is a predicted increase of 1.783 in the log odds of being on an upper level on the PCBO.

This in turn shows the contribution of individuals who pass through employees' satisfaction practice, their performance to the bank is 1.783 times more than individuals who did not pass through when the other variables in the model are detained constant. Likewise, the transformed log of the variable indicated the same, which is consistent with the normally transformed variables' result.

In the same manner, the computations made so far can further be interpreted by the help of route-two result. The key difference between Route-Two Result and Route-One Result is the Exp ( $\beta$ ) column and confidence interval (Ita, 2020; Ikhlas *et al.*, 2021; Obumneke Ezie, 2021; Onyeiwu *et al.*, 2021). The Exp ( $\beta$ ) called exponential parameter estimates column contains odds ratio reflecting the multiplicative change in the odds of being in a higher classification on the predicted variable for each one item increase on the independent variable, keeping the residual independent variables constant. The odds ratio is a value which measures the strength of effect of each independent variable in the model on the log odds of the predicted variable. Thus, an odds ratio more than 1 proposes an increasing chance of being in a higher level on the predicted variable as values on an independent variable increase.

On the contrary, an odds ratio below 1 suggests a decreasing probability with increasing values on independent variables which also mean, the occurrence is less likely than non-occurrence. Whereas an odds ratio equivalent to 1 recommends no predicted change in the likelihood of being in a higher category as values on independent variables increases.

The odds ratio is a value which measures the strength of effect of each independent variable in the model on the log odds of the predicted variable. Based on the above principle, the odds ratios for the explanatory variables were interpreted according to its result displayed in the below Table, which was computed in the SPSS → Analyze → Generalized Liner Models → Generalized Liner Models again → Ordinal Logistic by transforming the dependent and independent variables in their proper place and then completing all the steps, which is presented in the following table:

Table 4.14: Parameter Estimates of Ordinal Logistic Regression based on Route-Two (Exp. $\beta$ )

Variables		Exp.( $\beta$ )	95% Wald Confidence Interval for Exp.(B)	
			Lower	Upper
Threshold	[Performance of CBO = .00]	.49	-5.716	.312
	[Performance of CBO = 1.00]	7.649	.008	4.061
Location	Employees' Satisfaction	4.588	1.826	11.527

\*sig at 5% level of significance

Source: Researcher's Computation, 2021

In view of that the results of Route-Two of the explanatory variable is indicated in the above table. To this end, the odds of being in a higher level on the bank's performance increases by a factor of 4.588; for every one unit increases on employees' satisfaction practice. As indicated from the values of odds ratios, the values for the variable was positive in contrast to the beta value (B) computed above and the values of the odds ratios for it was also > 1, implying increasing probability of being in a higher level on the bank's performance as values increase for the stated predictor variable.

#### 4.5. Hypotheses Testing

Test of the research hypotheses were made based on the relationship between the dependent and independent variables. Accordingly, the formulated research hypotheses were checked depending on the result of P-values (statistical significance was set at  $\alpha = 0.05$ ) and the models identified based on the nature of the data.

H01: employees' satisfaction practices do not positively & significantly affect the PCBO.

HA1: employees' satisfaction practices positively & significantly affect PCBO.

H02: Cooperative Bank of Oromia is not performing well.

HA2: Cooperative Bank of Oromia is performing well.

H03: There is no positive and significant association between the variables.

HA3: There is positive and significant association between the variables.

In connection to the above stated hypotheses, chi-square test of association and ordinal logistic regression results are presented. Spearman's Rank Correlation Coefficient was also applied to determine the relationships between the variables as the following.

Based on the chi-square test of association, the variable was significantly associated with PCBO at 5% level of significance since the value of the predictor variable was less than the alpha level ( $P\text{-values} < \alpha = 0.05$ ). In the same way, the value of Pearson's Chi-Square at df 4 and level of significance at 5%, all the computed value was above the table value (9.49). Thus, depending on this computation, null hypotheses were rejected for all the variables. Likewise, by the help of Spearman's rank correlation all the variables were discovered to be positive, medium and strong relationship and also statistically significant. Thus, depending on this model all the null hypotheses were rejected.

On the other hand, by the use of ordinal logistic regression, the hypotheses set were tested. Accordingly, the computed variables found indicated the following. With this regard, other than the direction and strength of associations, all the computed results signified there was a relationship between the variables. They all were also statistically significant at  $P\text{-values} < \alpha = 0.05$  and the direction of association too was positive. Therefore, depending on this model, all the alternative hypotheses were accepted. This also implied that the all predictor variables have an effect on the performance of the bank.

In summary, based on the computations made by the above three models (chi-square, correlation and ordinal logistic regression), all the independent variables have an effect on the dependent variable. Hence, there was enough evidence to reject the null hypotheses and in favor of the alternative hypotheses.

## 5. CONCLUSION AND RECOMMENDATIONS

### 5.1. Conclusion

The primary objective of this study was to assess the employees' satisfaction practice implication on the PCBO. These days, it is obvious that organization cannot exist unless it manages its human resource well, which is capable of properly exploiting the material resources to generate surplus products for survival, growth and diversification into new fields. This is true of banking and marketing organizations, where physical capital is only a fraction of the total resources mobilized by the organization. These are service organizations where human capital makes the difference between success and failure.

Currently, the Ethiopian economic sector is dominated by government-owned commercial bank (CBE) and the industry is characterized by recently privatized new entrant banks which are in stiff competition with each other to lead the market. Having the core competency in regards to attracting, developing and capitalizing on the most valuable human resource of the organization is unquestionable. Cooperative Bank of Oromia is one among the 16 Private Banks currently in operations in Ethiopia. It is established in 2004 by primary Cooperatives, Cooperative Unions operating in Oromia regional states, different organizations and individuals. The bank has a great vision in order to benefit the grass-root members of the cooperatives and enhancing their social and cultural values, which is realized in practice.

To obtain related data on the issues, it largely focused on the perception of 300 employees working in Addis Ababa who provided related data through questionnaire. In addition, branch Managers of the selected banks, Human Resource Manager of the bank and Board Members delivered complementary data through interview and focus group discussions regarding the specified objectives or the effect human resource management practices have on the performance of Cooperative Bank of Oromia. Employees working in Addis Ababa (city branches) were selected randomly as respondents. The results were analyzed through descriptive and inferential statistics. Consequently, the results verified that the bank needs to pay much more attention to the proper application of training and development practices in order to realize its full potential and create competitive advantage. For instance, regarding the statements presented in employees' satisfaction practice, the overall descriptive statistics was 3.37. Regardless of this, employees are not satisfied on items such as the balance between the work load and payment and employees' involvement in the supervisory decisions which were rated as the lowest mean values (2.49 and 2.5) respectively. Similarly, the inferential statistics was computed to test the hypotheses and to show the relationship between the variables. Accordingly, of the inferential statistics, chi-square, ordinal logistic regression and Spearman's Rank Correlation Coefficient were employed. As a consequence, the results of descriptive statistics and the inferential statistics revealed that the practice appeared to have greater power to shape the bank's performance. Ultimately, the formulated hypotheses were tested by chi-square test of association, ordinal logistic regression & Spearman's rank correlation. Accordingly, by the help of these models all the alternative hypotheses were accepted and all the null hypotheses were rejected. Overall, by the help of chi-square, ordinal logistic regression and Spearman's rank correlation coefficient, all the predictor variables were proved to be positively affecting the performance of the bank where the degree of the relationship was labeled as strong. Eventually, the research concluded that proper handling and execution of the practices of human resource management has enormous value on the performance of Cooperative Bank of Oromia.

### 5.2. Recommendations

Depending on the results and conclusions of the study already made, the researcher provided way forward that aims at bringing human resource management of the Cooperative Bank of Oromia to establish sustainable

advantage and improve its performance. For that matter, management of this bank should start to incorporate human resource management thinking into business strategies and make the human resource management function strategically proactive, employees' satisfaction indicators in particular. It is imperative for the bank to ensure that investment in its human resources and human resource management practices will attract and retain talented and employees who satisfaction in their job to attract customers. So, indicators of employees' satisfaction mentioned in the analysis part should get great attentions, including: employees' involvement in the daily activities, making the work environs and materials attractive, conducting fair and transparent promotion systems, making consistent the reward and payment with the work load given to each position so that officers/employees who are performing better than others can be treated as special, and designing other mechanisms of encouraging workers apart from salaries by introducing other incentives so as to enhance the employees satisfaction level, which in turn boosts the bank's performance. In addition, various incentive schemes such as (Cash incentives, volume work targets and speed awards) for the top performers to motivate them since incentives can increase productivity. This way the employees feel important for the organization and endeavor hard to execute even better the succeeding phase.

The workers who spectacle promise ought to be granted with cash awards, worthwhile bonuses and credentials to create the individual stand apart from the crowd. Send a mail desiring the workers on their birthdays or saluting them when they do outstandingly well or appear with something inventive. Arrange a small bouquet for them as a gift from the organization's side.

The pay rates of the great potential employees should be assessed from time to time as financial disappointment is among the reasons for workers ceasing their employments. An attractive payment system as per the market scale that competitors are paying their employees aids employees to stay with the company for long. Other motivational undertakings at the working environment such as both internal and external training inspire the workers to memorize something more apart from their schedule work should be organized that make them take an interest in extracurricular deeds and cooperate with each other so that the luxury level boosts. In addition, the physical working environment should be conducive for the workers run their activities without any disruptions.

## REFERENCES

- Ab Hamid, M. R., Sami, W., & Sidek, M. M. (2017, September). Discriminant validity assessment: Use of Fornell & Larcker criterion versus HTMT criterion. In *Journal of Physics: Conference Series* (Vol. 890, No. 1, p. 012163). IOP Publishing.
- Adejumo, A. O., & Adetunji, A. A. (2013). Application of ordinal logistic regression in the study of students' performance. *Mathematical Theory and Modeling*, 3(11), 10-19.
- Adio, G., & Popoola, S. O. (2010). Demographic variables and self-efficacy as factors influencing career commitment of librarians in federal university libraries in Nigeria. *Library philosophy and practice*, 1.
- Affum-Osei, E., Acquah, E., & Acheampong, P. (2015). Relationship between organizational commitment and demographic variables: Evidence from a commercial bank in Ghana. *American Journal of Industrial and Business Management*, 5(12), 769.
- Ahmad, W. I. W., & Abdurahman, S. M. (2015). Job satisfaction among academic staff of Universiti Utara Malaysia: A work environment perspective. *Mediterranean Journal of Social Sciences*, 6(3 S2), 251.
- Akinyele, S. T. (2010). The influence of work environment on workers' productivity: A case study of selected Oil and Gas industry in Lagos, Nigeria. *African Journal on Business Management* 4(3), 299-307.
- Alderfer, C. P. (1969). An empirical test of a new theory of human needs. *Organizational behavior and human performance*, Elsevier, 4(2), 143-175.
- Alfayad, Z., & Arif, L. S. M. (2017). Employee voice and job satisfaction: An application of Herzberg two-factor theory. *International Review of Management and Marketing*, 7(1), 150-156.
- Ali, M., & Raza, S. A. (2017). Service quality perception and customer satisfaction in Islamic banks of Pakistan: the modified SERVQUAL model. *Total Quality Management & Business Excellence*, 28(5-6), 559-577.
- Androniceanu, A. (2011). Motivation of the human resources for a sustainable organizational development. *Economia. Seria Management*, 14(2), 425-438.
- Archer, K. J., & Lemeshow, S. (2006). Goodness of-fit test for a logistic regression model fitted using survey sample data. *The Stata Journal*, 6(1), 97-105.
- Arifin, Z., Kartono, K., & Supriyadi, S. (2018). Development of authentic assessment instrument for performance in learning mathematics in linear program. *Journal of Research and Educational Research Evaluation*, 7(2), 154-162.
- Asiaei, K., & Jusoh, R. (2015). A multidimensional view of intellectual capital: the impact on organizational performance. *Management decision*.
- Bader, H. A. M., Hashim, I. H. M., & Zaharim, N. M. (2013). Job satisfaction among Bank employees in Eastern Libya. *American International Journal of Social Science*, 2(1), 30-44.

- Bedard, K. & Dhuey, E. (2006). The persistence of early childhood maturity: International evidence of long-run age effects. *Quarterly Journal of Economics*, 121(4):1437-1472.
- Bell, E., Bryman, A., & Harley, B. (2018). *Business research methods*. Oxford University Press.
- Borman, W. R., & Mehay, S. L. (2009). Graduate education and employee performance: evidence. *Economics of Education Review* 3, 453-463.
- Cai, L., & Monroe, S. (2014). A New Statistic for Evaluating Item Response Theory Models for Ordinal Data. CRESST Report 839. *National Center for Research on Evaluation Standards, and Student Testing (CRESST)*.
- Carlson, K. D., & Herdman, A. O. (2012). Understanding the impact of convergent validity on research results. *Organizational Research Methods*, 15(1), 17-32.
- Cavana, R., Delahaye, B., & Sekeran, U. (2001). *Applied business research: Qualitative and quantitative methods*. John Wiley & Sons.
- Cassidy, D. J., Hestenes, L. L., Hegde, A., Hestenes, S., & Mims, S. (2005). Measurement of quality in preschool child care classrooms: An exploratory and confirmatory factor analysis of the early childhood environment rating scale-revised. *Early Childhood Research Quarterly*, 20(3), 345-360.
- Chang, S. C., & Lee, M. S. (2007). A study on relationship among leadership, organizational culture, the operation of learning organization and employees' job satisfaction. *The learning organization*.
- Choudrie, J. & Dwivedi, Y. K. (2005). Investigating Broadband Diffusion in the Household: Towards Content Validity and Pre-Test of the Survey Instrument. Proceedings of the 13<sup>th</sup> European Conference on Information Systems (ECIS), Regensburg, Germany.
- Christina, G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical examination. *International Journal of Hospitality Management*, 28(2), 245-253.
- Chyung, S. Y., Roberts, K., Swanson, I., & Hankinson, A. (2017). Evidence-based survey design: The use of a midpoint on the Likert scale. *Performance Improvement*, 56(10), 15-23.
- Clark, L. A., & Watson, D. (2019). Constructing validity: New developments in creating objective measuring instruments. *Psychological Assessment*, 31(12), 1412.
- Cochran, W. G. (1963). Sampling Technique, Indian Edition, Bombay, *Asian Publishing House*, 413.
- Cramer, D., & Howitt, D. (2004). *The SAGE dictionary of Statistics*. London: SAGE.
- Crawford, J. R., & Henry, J. D. (2003). The Depression Anxiety Stress Scales (DASS): Normative data and latent structure in a large non-clinical sample. *British Journal of Clinical Psychology*, 42(2), 111-131.
- Creswell, J. (2014). *Qualitative inquiry and research design: Choosing among five traditions*. London: Sage.
- Danish, R. Q., & Usman, A. (2010). Impact of reward and recognition on job satisfaction and practices on productivity: A study on steel finishing line, *The American Economic Review*, 87(3), 291-313.
- Das, S., & Rahman, R. M. (2011). Application of ordinal logistic regression analysis in determining risk factors of child malnutrition in Bangladesh. *Nutrition Journal*, 10(1), 1-11.
- Desalegn, F. E. (2021). Exploration of contributions of women in rural development and determinant factors influencing their participation, the case of agricultural cooperatives in Ethiopia. *Int. J. Polit. Sci. Develop.* 9(1) 4-16.
- Desalegn F. E. (2022). The Effect of Training and Development on the Performance of Organization, *Research Journal of Finance and Accounting, ISSN 2222-1697, Vol. 13, No.17, 2022*.
- Desalegn, Z., Deyessa, N., Teka, B., Hailemariam, D., ... & Abebe, T. (2021). Evaluation of COVID-19 related knowledge and preparedness in health professionals at selected health facilities in a resource-limited setting in Addis Ababa. *PloS one*, 16(2), e0244050.
- Doane, D. P., & Seward, L. E. (2011). Measuring Skewness. *Journal of Statistics Education*, 19(2), 1-18.
- Drost, E. A. (2011). Validity and reliability in social science research. *Education Research and Perspectives*, 38(1), 105-123.
- Ebenuwa-Okoh, E. E. (2010). Influence of age, financial status, and gender on academic performance among undergraduates, *Journal of Psychology*, 1(2), 99-103.
- Ebner, N. C., Riediger, M., & Lindenberger, U. (2010). FACES- A database of facial expressions in young, middle-aged, and older women and men: Development and validation. *Behavior Research Methods*, 42(1), 351-362.
- Edwards, J. R. (2011). The fallacy of formative measurement. *Organizational research methods*, 14(2), 370-388.
- Egbu, C. O. (2004). Managing knowledge and intellectual capital for improved organizational innovations in the construction industry: an examination of critical success factors. *Engineering, Construction and Architectural Management*.
- Ekanayake, E. M. A. C., Shen, G., Kumaraswamy, M., Owusu, E. K., & Xue, J. (2021). Capabilities to withstand vulnerabilities and boost resilience in industrialized construction supply chains: a Hong Kong study. *Engineering, Construction and Architectural Management*.
- Engellant, K., Holland, D. & Piper, R. (2016). Assessing Convergent and Discriminant Validity of the

- Motivation Construct for the Technology Integration Education (TIE) Model. *Journal of Higher Education Theory and Practice* 16, 37-50.
- Erkan, A., & Yildiz, Z. (2014). Parallel lines assumption in ordinal logistic regression and analysis approaches. *International Interdisciplinary Journal of Scientific Research*, 1(3), 8-23.
- Ertanto, Y.D., & Suharnomo, S. (2011). *Effect of salary on employee performance with self-esteem as intervening variable (Studies in PDAM Grobogan)*. (Doctoral dissertation, Universitas Diponegoro).
- Farrell, A. M. (2010). Insufficient discriminant validity: A comment on Bove, Pervan, Beatty, and Shiu (2009). *Journal of Business Research*, 63(3), 324-327.
- Field, A. P. (2005). *Discovering Statistics Using SPSS*, Sage Publications Inc.
- Fisman, R., & Svensson, J. (2007). Are corruption and taxation really harmful to growth? Firm level evidence. *Journal of Development Economics*, 83(1), 63-75.
- Franke, G., & Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: a comparison of four procedures. *Internet Research*.
- Gagunashvili, N. D. (2010). Chi-square tests for comparing weighted histograms. *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, 614(2), 287-296.
- George, D., & Mallery, P. (2003). SPSS for Windows step by step: answers to selected exercises. *A simple guide and reference*, 63, 1461-1470.
- Ghadi, I., Alwi, N. H., Bakar, K. A., & Talib, O. (2012). Construct Validity Examination of Critical Thinking Dispositions for Undergraduate Students in University Putra Malaysia. *Higher Education Studies*, 2(2), 138-145.
- Ghauri, P. & Grønhaug, K. (2005). *Research methods in business studies: A Practical Guide*. 3<sup>rd</sup> Ed. London: Prentice Hall.
- Griffin, R. W., Moorehead., & Gregory. (2011). *Organizational behavior*. New York: Cengage Learning.
- Habib, S., Aslam, S., Hussain, A., Yasmeen, S., & Ibrahim, M. (2014). The impact of organizational culture on job satisfaction, employee's commitment and turn over intention. *Advances in Economics and Business*, 2(6), 215-222.
- Hadi, N. U., Abdullah, N., & Sentosa, I. (2016). An easy approach to exploratory factor analysis: Marketing perspective. *Journal of Educational and Social Research*, 6(1), 215.
- Hahn, E. D., & Soyer, R. (2005). Probit and logit models: Differences in the multivariate realm. *The Journal of the Royal Statistical Society, Series B*, 1-12.
- Hainmueller, J., Hiscox, M. J., & Sequeir, S. (2015). Consumer demand for fair trade: Evidence from a multistore field experiment. *Review of Economics and Statistics*, 97(2), 242-256.
- Hair Jr Joseph, F., Bush Robert, P., & Ortinau David, J. (2003). *Marketing research: within a changing environment*.
- Harrison, G. W., & Rutström, E. E. (2008). Experimental evidence on the existence of hypothetical bias in value elicitation methods. *Handbook of Experimental Economics Results*, 1, 752-767.
- Hartgerink, C. H., van Aert, R. C., Nuijten, M. B., Wicherts, J. M., van Assen, M. A., & Gruber, C. W. (2020). P-Values Less Than 0.05 in Psychology: What is going on? In *The Theory of Statistics in Psychology* (pp. 35-50). Springer, Cham.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Higham, N. J. (2002). Computing the nearest correlation Matrix-a problem from finance. *Journal of Numerical Analysis*, 22(3), 329-343.
- Hinton, P. R., Brownlow, C., McMurray, I. & Cozens, B. (2004). *SPSS explained*, East Sussex, England, Routledge Inc.
- Hsieh, Y. H., & Chen, H. M. (2011). Strategic fit among business competitive strategy, human resource strategy, and reward system. *Academy of Strategic Management Journal*, 10(2), 11.
- Huck, S. W. (2007). *Reading Statistics and Research*, United States of America, Allyn & Bacon.
- Hung, M. L., Chou, C., Chen, C. H., & Own, Z. Y. (2010). Learner readiness for online learning: Scale development and student perceptions. *Computers & Education*, 55(3), 1080-1090.
- Hussain, J. N., & Nassir, A. J. (2015). Cluster Analysis as a Strategy Of Grouping to Construct Goodness-Of-Fit Tests when the Continuous Covariates Present in the Logistic Regression Models.
- Ijigu, A. W. (2015). The effect of selected human resource management practices on employees' job satisfaction in Ethiopian public banks. *EMAJ: Emerging Markets Journal*, 5(1), 1-16.
- Ikhlas, M., Kuswanto, K., Sakunti, S. R., Debi, M. R., & Collantes, L. M. (2021). A Sequential Explanatory Investigation in using ICTs on Arabic Language and Islamic Values Education: Teacher-Students Perspective. *Indonesian Journal on Learning and Advanced Education (IJOLAE)*, 3(3), 153-167.
- Islam, R., & bin Mohd Rasad, S. (2006). Employee performance evaluation by the AHP: A case study. *Asia*

- Pacific Management Review*, 11(3).
- Ita, E. O. (2020). Business Ethics in a Constrained Environment: Ethical Dilemmas of Entrepreneurship in Nigeria (Doctoral dissertation, Dublin, National College of Ireland).
- Janadari, M. P. N. (2019). *Authentic leadership and extra role behavior among public utility sector employees in Sri Lanka* (Doctoral dissertation, Universiti Utara Malaysia).
- Joyner, H. S. (2019). Semisolid Food Tribology. In *Rheology of Semisolid Foods* (pp. 133-165). Springer, Cham.
- Kamal, Y., & Hanif, F. (2009). Pay and job satisfaction: A comparative analysis of different Pakistani commercial banks. Available at SSRN 1428346.
- Kapsos, S., & Bourmpoula, E. (2013). *Employment and economic class in the developing world*. Geneva: ILO.
- Kasper-Brauer, K., & Leischnig, A. (2016). Yes, we can! A fuzzy-set analysis of challenges, skills, and enjoyment of work. *Journal of Business Research*, 69(11), 5286-5291.
- Kellerman, A. (2014). The satisfaction of human needs in physical and virtual spaces. *The Professional Geographer*, 66(4), 538-546.
- Kemboi, A., & Onyango, P. (2015). Effects of employee resourcing and development practices on organization performance in public secondary schools in Rachuonyo South Sub County. *International Journal of Business and Social Research*, 5(7), 51-60.
- Kemp, S. E., Ng, M., Hollowood, T., & Hort, J. (2018). Introduction to descriptive analysis. *Descriptive analysis in sensory evaluation*, 1.
- Kim, Y. H., Kim, D. J., & Wachter, K. (2013). A study of mobile user engagement (MoE): engagement motivations, perceived value, satisfaction, and continued engagement intention. *Decision support systems*, 56, 361-370.
- Koh, C. E. & Nam, K. T. (2005). Business use of the internet: a longitudinal study from a value chain perspective. *Industrial Management & Data Systems*, 105 85-95.
- Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.
- Kothari, C. R. (2007). *Quantitative techniques*. New Delhi, UBS Publishers LTD.
- Kumar, S, S. (2012). Motivation as a strategy to enhance organizational productivity, *Advances in Managements*, vol., 5(7), 24-27.
- Lacap, J. P. (2019). The effects of food-related motivation, local food involvement, and food satisfaction on destination loyalty: the case of Angeles city, Philippines. *Advances in Hospitality and Tourism Research (AHTR)*, 7(2), 238-257.
- Lacap, J. P. G., & Tungcab, A. P. (2020). The Influence of Brand Experience on Brand Loyalty among Mobile Phone Users in Pampanga, Philippines: A Mediation Analysis. *Asia-Pacific Social Science Review*, 20(3).
- Laditka, S. B., Fisher, M., Laditka, J. N., & Segal, D. R. (2004). Attitudes about aging and gender among young, middle age, and older college-based students. *Educational Gerontology*, 30(5), 403-421.
- Lee, D. K. In, J., & Lee, S. (2015). Standard deviation and standard error of the mean. *Korean Journal of Anesthesiology*, 68(3), 220.
- Levy, P. S., & Lemeshow, S. (2013). *Sampling of Populations: Methods and Applications*. John Wiley & Sons.
- Lewis, D (2003). Five years on—the organizational culture saga revisited, *Leadership & Organization Development Journal*, 23(5), 280-298.
- Likert, R. (1932). A technique for the measurement of attitudes, *Archives of Psychology*, 140, 1-55.
- Locke, E. A., & Schweiger, D. M. (1979). Participation in decision-making: One more look, *Research in Organizational Behavior*, 1(10), 265-339.
- Lochhead, C., & Stephens, A. (2004). Employee retention, labor turnover and knowledge transfer: case studies from the Canadian plastics sector. *Canadian Labor and Business Centre Report*.
- Lofgren, K. (2013). Normality test using SPSS: How to check whether data are normally distributed [Video file]. <https://youtube.be/liedOyglLn0>.
- Lou, J., Fang, Y., Lim, K. H., & Peng, J. Z. (2013). Contributing high quantity and quality knowledge to online Q & A communities. *Journal of the American Society for Information Science and Technology*, 64(2), 356-371.
- Luddy, N. (2005). *Job satisfaction amongst employees at a public health institution in the Western Cape*, University of the Western Cape.
- Mallick, E., Pradhan, R. K., (2014). Organizational citizenship behavior, job performance and human resource practices: A relational perspective. *Management and Labor Studies*, 39(4) 449–460.
- Matzler, K., & Renzl, B. (2007). Assessing asymmetric effects in the formation of employee satisfaction. *Tourism Management*, 28(4), 1093-1103.
- Meron Desalegn (2011). *Ordinal Logistic Regression Analysis of Correlates of Crime Severity: The case of Tigray Region, Ethiopia, (MA Thesis)*.
- Mugenda, O. M. & Mugenda, A. G. (2003). Research methods, qualitative and quantitative approaches. *African Centre for Technology Studies. Nairobi. Kenya*.

- Muhammad, S., Anjum, T., Afridi, F. K., & Alasan, I. I. (2020). Impact of transformational leadership on project success criteria: The moderating role of work engagement. *PalArch's Journal of Archaeology of Egypt/Egyptology*, 17(6), 7460-7476.
- Nunnally, J. C. (2010). *Psychometric Theory*, 2<sup>nd</sup>Ed. New York: McGraw-Hill.
- Obumneke Ezie (2021, January 14). How to analyze likert scale Questionnaire using SPSS [Video]. YouTube. <https://www.google.com/url?>
- O'Connell, A. A. (2006). *Logistic regression models for ordinal response variables* (Vol. 146). sage.
- Ogundapo, O., Nche, C., Duffy, A., & Zhang, G. (2018). Application of the Feature Selective Validation Method and Kolmogorov-Smirnov Test to Evaluate Handling Effects on Crosstalk of Ethernet Cables'. *American Journal of Electrical and Electronic Engineering*, 6(1), 32-37.
- Oluwatayo, J. (2012). Validity and reliability issues in educational research. *Journal of Educational and Social Research* 2, 391-400.
- Ombui, G. M., Geoffrey, M., & Gichuhi, A. W. (2017). Using ordinal regression modeling to evaluate the satisfaction of Jomo Kenyatta University of agriculture and technology faculty of science students.
- Onwuegbuzie, A. J., & Collins, K. M. (2007). A typology of mixed methods sampling designs in social science research. *Qualitative Report*, 12(2), 281-316.
- Onyango JO, & Odebero SO (2009). Data analysis for educational and social research: Quantitative and qualitative approaches. Kenya J. Educ. Planning, Econ. *Management*, 1(1), 44-53.
- Onyeiwu Ph D, C., Muoneke, O. B., & Abayomi, A. M. (2021). Effects of Micro-finance Bank Credit on Small and Medium Scale Businesses: Evidence from Alimosho LGA, Lagos State. *The Journal of Entrepreneurial Finance*, 22(2), 4.
- Palladan, A. A., Abdul Kadir, K., & Yen, W. C. (2016). Effects of strategic leadership, organizational innovativeness & information technology capability on effective strategy implementation. *International Journal of Organizational and Business Excellence*, 1(2), 1-18.
- Pallant, J. (2010). *SPSS survival manual: a step by step guide to data analysis using SPSS*.
- Papageorgiou, G., Giorgalli, F., & Petrou, A. (2013). Management for motivation and job satisfaction in the coop banking industry. *International Journal of Economics and Statistics*, 1(1), 14-20.
- Park, C. W., MacInnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, 74(6), 1-17.
- Pellizzari, M. & Billari, F. C. (2012). The younger, the better? Age related differences in academic performance at University. *Journal of Population Economics*, 25(2), 697- 739.
- Petter, S., Straub, D., & Rai, A. (2007). Specifying formative constructs in information systems research, *MIS Quarterly* 31(4), 623-656.
- Pohar, M., Blas, M., & Turk, S. (2004). Comparison of logistic regression and linear discriminant analysis: a simulation study. *Metodoloski zvezki*, 1(1), 143.
- Prasetyo, K., Masrukan, M., & Sunawan, S. (2019). The Development of Mathematical Literation Instruments Based on Class IV Geometry Material Conservation. *Journal of Research and Educational Research Evaluation*, 8(1), 1-13.
- Ramdani, Z. (2018). Construction of academic integrity scale. *International Journal of Research Studies in Psychology*, 7(1), 87-97.
- Razali, N. M., & Wah, Y. B. (2011). Power comparisons of Shapiro-Wilk, Kolmogrov Smirnov, Lilliefors and Anderson-Darling tests. *Journal of Statistical Modeling and Analytics*, 2(1), 21-33. Robnsson, J. (2009). *Triandis theory of interpersonal behavior in understanding software privacy behavior in the South African context*. Master's degree, University of the Witwatersrand.
- Saif, S. K., Nawaz, A., & Jan, F. A. (2012). Predicting job-satisfaction among the academicians of universities in KPK, Pakistan. *Industrial Engineering Letters*, 2(2), 34-45.
- Samuels, P. (2017). Advice on exploratory factor analysis.
- Schmidt, C. O., & Kohlmann, T. (2008). When to use the odds ratio or the relative risk? *International Journal of Public Health*, 53(3), 165.
- Seidu, Y. (2012). *Human resource management and organizational performance: Evidence from the retail banking sector* (Doctoral dissertation, Aston University).
- Shahsavar, Z., & Kourepaz, H. (2020). Postgraduate students' difficulties in writing their theses literature review. *Cogent Education*, 7(1), 1784620.
- Shahzadi, I., Javed, A., Pirzada, S. S., Nasreen, S., & Khanam, F. (2014). Impact of employee motivation on employee performance. *European Journal of Business and Management*, 6(23), 159-166.
- Shrivastava, A., & Purang, P. (2009). Employee perceptions of job satisfaction: comparative study on Indian Banks. *Asian Academy of Management Journal*, 14(2), 65-78.
- Silva, S. (2009). *Does Empowerment Motivate Employees in the Hospitality Industry (Sri-Lanka) to Increase*

- Performance*. GRIN Verlag.
- Smith, T. J., & McKenna, C. M. (2013). A comparison of logistic regression pseudo R2 indices. *Multiple Linear Regression Viewpoints*, 39(2), 17-26.
- Straub, D., Boudreau, M.-C. & Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information Systems*, 13, 380-427.
- Taber, K. S. (2018). The use of Cronbach's alpha when developing and reporting research instruments in science education. *Research in Science Education*, 48(6), 1273-1296.
- Tadeka, F., Ibaraki, N., Yokoyama, E., Miyake, T., & Ohida, T. (2005). The relationship of job types to burnout in social workers at social welfare offices. *Journal of Occupational Health*, 47(2), 119-125.
- Taherdoost, H. (2016). Validity and reliability of the research instrument; how to test the validation of a questionnaire/survey in a research. *How to test the validation of a questionnaire/survey in a research (August 10, 2016)*.
- Tseng, M. L., Lan, L. W., Wang, R., Chiu, A., & Cheng, H. P. (2011). Using hybrid method to evaluate the green performance in uncertainty. *Environmental Monitoring and Assessment*, 175(1-4), 367-385.
- Utts, J. M., & Heckard, R. F. (2021). *Mind on statistics*. Cengage Learning.
- Veale, J. F. (2014). Edinburgh handedness inventory–short form: a revised version based on confirmatory factor analysis. *Laterality: Asymmetries of Body, Brain & Cognition*, 19(2), 164-177.
- Vembriliya, Z. A., Khumaedi, M., & Masrukan, M. (2019). Development of Assessment Performance Materials Cylinder Students Grade IX SMP Adiwiyata-Based. *Journal of Research and Educational Research Evaluation*, 8(1), 30-38.
- Voorhees, C. M., Brady, M. K., Calantone, R., & Ramirez, E. (2016). Discriminant validity testing in marketing: an analysis, causes for concern, and proposed remedies. *Journal of the academy of marketing science*, 44(1), 119-134.
- Wakene, D. K., Munapo, E., & Olufemi, A. P. (2020). The effect of demographic factors on intention to use banking services: evidence from Ethiopia. *GSI*, 8(6).
- Wang, L., Ali, M., Kim, H. J., Lee, S., & Hernandez Perlines, F. (2021). Individual entrepreneurial orientation, value congruence, and individual outcomes: Does the institutional entrepreneurial environment matter? *Business Strategy and the Environment*, 30(5), 2293-2312.
- Wee, Y. S. & Quazi, H. A. (2005). Development and validation of critical factors of environmental management. *Industrial Management & Data Systems*, 105, 96-114.
- Whitley, B. E. (2002). *Principals of Research and Behavioral Science*, Boston, McGraw-Hill.
- Wickens, T. D. (2014). *Multi-way contingency tables analysis for the social sciences*. Psychology Press.
- Williams, A. (2003). How to write and analyze a questionnaire? *Journal of Orthodontics*, 30, 245-252.
- Yamane, T. (1967). *Statistics: An introductory analysis* (No. HA29 Y2 1967).
- Yavuz, G., & Dogan, N. (2014). Maslach burnout inventory-student survey (MBI-SS): a validity study. *Procedia-Social and Behavioral Sciences*, 116, 2453-2457.
- Yee, R. W., Yeung, A. C., & Cheng, T. E. (2011). The service-profit chain: An empirical analysis in high-contact service industries. *International Journal of Production Economics*, 130(2), 236-245.
- Yong, A. G., & Pearce, S. (2013). A beginner's guide to factor analysis: Focusing on exploratory factor analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2), 79-94.
- Yucel, I. (2012). Examining the relationships among job satisfaction, organizational commitment, and turnover intention: An empirical study. *International Journal of Business and Management*, vol. 7, pp. 44-58.
- Zaiř, A., & Berteau, P. S. P. E. (2011). Methods for testing discriminant validity. *Management & Marketing Journal*, 9(2), 217-224.

## ACKNOWLEDGEMENTS

The execution of such most important research is never the effort of anyone alone. The contributions of many different people and organizations, in their different ways, have made this possible. Therefore, after all these years of hard work, it is necessary to express my gratitude to those who in one way or another contributed and extended their support and valuable backing in the preparation and completion of this academic work. First and foremost, I would like to thank Almighty God, for his blessing, mercy bestowed on me abundantly and for this wonderful opportunity he has given me to write this dissertation. Next, I would like to take immense pleasure to extend my heartfelt thankfulness to Professor S. Nakkiran, my PhD supervisor. Besides, I thank all the participants in my survey, who have shared their precious time all through the progression of data collection. Finally, I express my appreciation to all writers of those materials I referred. May God bless you all!