
| RESEARCH ARTICLE

Improving the Working Conditions: Productivity, Safety, and Teamwork in a Pottery Processing/Manufacturing Workplace

Christine J. Concepcion

Holy Cross College Sta. Ana Pampanga, Philippines

Corresponding Author: Christine J. Concepcion, **E-mail:** cjconcepcion221@gmail.com

| ABSTRACT

This paper intends to examine employees' performance in pottery manufacturing in terms of productivity, safety, and teamwork in order to improve working conditions in the said industry. The degree of performance of workers in the pottery manufacturing industry was evaluated using a descriptive study approach. The data was then collected through questionnaires and interpreted using appropriate statistical tools and procedures. Validation procedures and approval for ethical considerations for this research paper were also sought by the researcher. The findings showed a strong correlation between teamwork, safety, and productivity. It was also found that there is a significant difference in the performance of employees in terms of teamwork between age groups, which suggests that the diversity of employees in terms of age is an essential factor to consider when it comes to work collaboration. Additionally, a significant difference in performance in terms of production was recorded between male and female employees, which is an indication that male and female employees have different performance levels in terms of productivity.

| KEYWORDS

Productivity, Teamwork, Safety, and Pottery Manufacturing Industries

| ARTICLE INFORMATION

ACCEPTED: 15 May 2023

PUBLISHED: 22 May 2023

DOI: 10.32996/jbms.2023.5.3.4

1. Introduction

Through the automatic sharing of constructive feedback, experiences, points of view, and a safe environment, teamwork and safety aid in improving employee performance, and this process fosters ongoing improvement in both the organization's services and the productivity of its workforce. To raise productivity, gain a competitive edge, and improve the performance of each employee, firms should promote the idea of cooperation and provide a safe environment for workers. (Aswathappa, 2021).

On the other hand, the demand for fresh and fashionable designs has led to consistent development in the pottery industry over the past ten years. The proper management of the human aspects affecting the industrial process is made more difficult by this increase. Teamwork is crucial for fostering a culture of safety among employees, especially when training is followed by participation from the workforce in organizational decision-making for the creation of safety regulations. (Madanat, 2018). Training must incorporate the viewpoints of workers, and excellent productivity, safety, and teamwork across all organizational levels are required to guarantee that management and end-users have comparable attitudes toward the task. (Linz & Semykina, 2020).

The essential value of teamwork, productivity, and safety is also the decrease of the burden since it allows workers to perform better without feeling under any type of time pressure. Tasks were split evenly among all team members. Due to poor teamwork among the employees, certain firms in today's sectors are not developing, which undoubtedly has an impact on both the performance of that company and its personnel over time. Inadequate collaboration and safety also squander a significant amount of resources, endangering the growth of the business.

In the past several years, academics and practitioners have conducted numerous studies on the effects of safety and teamwork on workers' occupational performance. (Aryal, et al., 2017). The practical application of these three principles has a significant impact on the effectiveness of any business and the workers that work there, which is why they are receiving so much attention. Some scholars identified and discussed teamwork as a crucial occupational ability that is required to fulfill the organization's ambitions, goals, plans, and objectives, as well as to activate and improve workers' performances. The relationship between teamwork and the quantity and quality of production at work is made clear and highlighted by a number of factors. According to Al-bouwarthan (2020), it is crucial to comprehend how teamwork affects productivity since some academics believe that it is one of the main factors that improves a firm's success. According to researchers and experts, good teamwork-related behaviors and concepts may boost employees' performance and productivity as well as their capacity to resolve disagreements and deal with urgent and unforeseen issues at work.

In addition, employees in the pottery industry are exposed to a variety of hazards, such as the fact that the materials used to make pottery include a considerable quantity of naturally occurring radionuclides. This is due to the increased risk of dangers such as unfavorable climatic conditions and a lack of protective equipment in these pottery workshops, which are important production-related issues. Numerous types of research have demonstrated a clear connection between working with pottery and numerous occupationally associated risks. The workers themselves are unaware of the risks involved with ceramic labor, making them vulnerable to the many occupational risks that are prevalent and unaware of what steps to take to prevent them. Therefore, research reveals that the most successful method of lowering employees' exposure to risks among pottery workers has been the implementation of occupational safety measures (Ilyas et al., 2021).

Safety is the absence of pain, harm, and loss at work, including during the use of tools, materials, and machinery for processing, packing, and storage, as well as for maintaining and securing the setting and working conditions. Productivity among employees may also be impacted by occupational safety. For a just and prosperous society, occupational safety seeks to safeguard the workers' physical, mental, and moral well-being and integrity (Panggiki et al., 2017). The goal of implementing an occupational safety program for employees is to create a system that integrates management, labor, working conditions, and a safe workplace to prevent accidents.

In general, when workers are satisfied with the working conditions and feel safe from injuries, they become more productive (Andi Niartiningsih et al., 2020). The management expects that compliance with safety standards and procedures will translate theoretical knowledge about human factors and the limits of human performance into everyday practice, but this is not always the case. Additionally, learning from past mistakes is not always evident. Despite the possibility of instruction, the majority of people learn safety skills via practice. The key factor in the development of good attitudes toward safety is the experience that expert coworkers convey to less experienced personnel from their own jobs. Thus, while experienced staff might have accumulated relevant knowledge based on practice and training, staff tend to develop their skills related to human performance management and safety rules' observance over time. Also, the position that workers hold within a company influences their attitudes regarding their active involvement in safety practices to a greater extent than the knowledge gained from previous jobs in other facilities (Gunaseelan & Gerald, 2017).

In this view, various researchers have widely shared relevant knowledge and research on the effects of the factors mentioned above on the perceptions of employees towards teamwork, safety, and productivity (Tatar, 2020). However, there has been little research regarding the extent to which teamwork and safety are related to productivity. Hence, the main goal of this study was to determine the relationship between teamwork and safety to employees' productivity as well as how these three concepts differ from their socio-demographic profile, which, in turn, would lead to the development of a training program to improve the working conditions in a pottery processing/manufacturing workplace.

According to recent studies, safety culture theory has to be translated into practical safety culture interventions that may help businesses improve their workplace safety cultures in the pottery processing/manufacturing industry. The aim of this study is to come up with a training plan through the systematic result findings based on the following variables, namely, production, safety and teamwork.

Teamwork is defined as the bundling of everyone's skills, ideas, concepts, experiences and efforts in order to work efficiently together to achieve the same goal or target. According to Madanat (2018), an employee's happiness with teamwork has a good or negative impact on their level of stress, work environment, coworkers, supervisors, and workload. Research done by Linz and Semykina (2020) found that it depends on the importance of the task and the level of supervision. Additionally, according to Reddy and Madhav (2018), people who are content with their jobs and their coworkers tend to be happier in their personal lives. In addition, collaboration is crucial for the efficient operation of a company. Due to the complexity of most organizational tasks brought on by technological innovation, many businesses place a high priority on teamwork. Teams of workers establish

themselves as the norm for the company. The previous study also reveals that teamwork significantly enhances productivity (Reddy & Madhav, 2018).

This was further explained in the study of Madanat (2018) that since operations have gotten more complicated as a result of technological improvement, as highlighted by Wang (2018), teamwork is a primary priority for many businesses. Teamwork among employees becomes the norm for the business. Teamwork is a dynamic system built from people working together to achieve a common objective. Teamwork may be a variety of developments that allow a group of people to work together successfully by using a certain set of knowledge, abilities, and attitudes. Cooperation, communication, coordination, managing conflicts, coaching, and sharing among team members are characteristics of effective teamwork. The most successful teamwork combines the efforts of each individual member to produce an overall performance (Wang et al., 2018).

These performance results change how teams cooperate, which in turn motivates team growth and directs future performance. Individual and team-level adjustments encourage learning and enable groups to adapt to the dynamic systems in which they operate, along with performance results. Groups learn how to work with their environment and use their resources to accomplish performance objectives with a variety of potencies with each cycle of growth across time. In addition to internal elements that develop throughout the course of the team's existence, such as shared mental models and psychological safety, a number of external factors, such as structural features, situational needs, and team coaching interventions, may have an impact on this approach (Madanat, 2018).

Discipline is a mental attitude that shows up in people's obedience to rules, ethical standards, and communities. An employee has good work discipline, according to Aryal et al. (2017), if he complies with demands based on mental and behavioral standards that result from his own knowledge or motivation to carry out obligations and organizational rules.

According to Al-bouwarthan (2020), discipline is an attitude and adhering to all company policies, whether they are in writing or not. Following all rules and social norms is another definition of discipline. An employee's task, attitude, behaviour, and activity that complies with all agency requirements is referred to as their "schedule." Employee motivation is a result of effective leadership because motivated individuals are disciplined and perform effectively.

A worker's independence from physical and mental illnesses brought on by their profession and environment is referred to as occupational health (Ilyas et al., 2021). By preventing and treating diseases/health disorders brought on by occupational factors and the work environment, as well as common diseases, occupational health is a speciality of health/medical science and its practices. Its goal is to help workers and communities achieve the highest level of physical, mental, and social health.

Management must be involved in initiatives to lower workplace diseases and injuries. Some businesses view safety as an extravagance or a compliance concern. The primary issues facing some companies are a lack of managerial commitment, poor investment in staff training, and a reluctance on the part of employees to report small incidents. Additionally, according to several research (Manikandan et al. 2017), the physical environment at work has a significant impact on workers' productivity, contentment, health, and interpersonal interactions. To protect workers, businesses, communities, and the environment against risks and injuries involving their physical, mental, and emotional health, occupational health and safety encompasses a variety of factors and parties.

Everyone has a role to play in ensuring occupational health and safety, including employers, workers, and the community (Andi Niartiningasih et al., 2020). OHS is a company's most valuable asset for human resources, especially in production. Employees and the company may be impacted by inadequate occupational safety. Job safety as defending employees against accidents at work.

The ILO and WHO initially defined OHS as "the promotion and maintenance of the highest level of physical, mental, and social well-being of workers in all sectors of the economy" in 1950 occupations by avoiding health departures, limiting hazards, and adapting work to people, and people to their jobs." Based on evolving work practices and technological advancements, this definition was modified to read as follows: (Tambay, 2018).

Gomez (2017) reports that there were 36,855 occupational injuries in the KSA in 2018, of which 291 (or 0.79 percent of all work-related injuries) were fatal, 3,167 (8.59 percent) were permanent, and 9,411 (or 25.53 percent) were still being treated at the time the report was compiled. Manufacturing accounted for 18% of all workplace injuries in 2018, second only to construction. The manufacturing industry ranks highest (785,4 injuries per 100,000 employees), and Riyadh has the highest ratio (20,08%) in terms of occupational injuries, according to the yearly injury rate indicator, which creates a frequency measure to compare hazardous areas.

Industrial enterprises have grown significantly during the past 25 years as a result of robust economic expansion, yet their safety procedures are inadequate and endanger worker lives (Gunaseelan & Gerald, 2017). Safety in manufacturing has to be improved. Despite the fact that many businesses have accident prevention strategies, manufacturing has a high accident and injury rate. Accident rates are reduced using safety management indicators. A safe workplace is indicated by its safety culture, behavior, and performance.

According to Grailey et al. (2021), psychological safety is the group's belief that the team is a safe place to take interpersonal risks. The fact that it exists improves innovation and mistake prevention. This evidence synthesis set out to achieve three objectives: first, to examine the body of existing scholarly work on the subject of psychological safety; second, to identify the methodologies used in its assessment; and third, to examine the evidence that demonstrates the advantages of working in a psychologically secure environment.

1.1 Productivity

Productivity refers to the overall impact of employees' financial and non-financial contributions to the achievement of the organization's goals. Work performance is defined by Fonkeng (2018) as the quality and quantity of a task's completion. Work performance can be monitored, observed, and graded in connection to the objectives of the organization. Workplace dangers include risks, accidents, and violence that reduce workers' productivity. The relationship between output and employee well-being and safety has been demonstrated. It's important to teach workers how to be more productive at work.

According to Li et al. (2017), employee satisfaction increases productivity, while health promotion decreases absenteeism. Occupational safety and health are in a perilous situation around the world. They advocated for regulating the exchange of hazardous materials in emerging nations. Tatar conducted research at Libyan Telecom on the relationship between work satisfaction and organizational commitment (2020). The investigation demonstrates that the problem facing the organization is workers' unclear grasp of how job happiness affects output, performance, and loyalty. Despite the impact of job satisfaction on organizational commitment, many companies don't give it enough consideration since top management is blind to its impact on employee performance and behavior. Organizational commitment is significantly influenced by employee satisfaction, pay and incentives, chances for development, progress, and career advancement, management and supervision methods, interpersonal and group dynamics at work, and work environment factors like stability, safety, and health (Tatar, 2020). Each organization's management should assess and improve these components due to their beneficial impact on organizational commitment.

Numerous studies link decreased employee turnover to work satisfaction (Judge et al., 2017). The industry continues to believe that "happy workers are productive". Value added, a crucial component of an organization's science and business, is influenced by employee productivity.

Considerations for labor, people, and environment are required. The profitability of a corporation is impacted by work efficiency. Corporate success is impacted by employee effectiveness. People respect productivity because it may be rewarding to complete tasks. Work efficiency is the ability to accomplish organizational goals through actions or behaviors. Efficiency measures how well a person or group meets the requirements to carry out a task in order to meet organizational goals. Employee productivity may be impacted by tools, the work environment, meaningful work, SOPs, rewards for excellent or bad systems, expected and reversed productivity, as well as knowledge, skills, and attitudes. Performance may be impacted by this environment's potential to interrupt, obstruct, or place restrictions on a number of working modes (Li et al., 2017).

1.2 Relationship between Teamwork and Productivity

The aspects that affect physical proximity were examined by the researchers to include sitting work, adverse conditions, information processing, bridging work, teamwork, response to aggression, and intelligent work. Physical proximity is most influenced by teamwork (Kokubun et al., 2020). In connection with this, some research has looked at the variables that affect social distance (Crowley & Doran, 2020; Dingel & Neiman, 2020; Kokubun, 2020; Koren & Pet, 2020; Davison, 2020). It will be necessary to do a study on the factors that affect the social distance between persons working in each industry because people perform a variety of jobs in a range of industries. The manufacturing sector is seen as being particularly essential from a research viewpoint because of the considerable influence it plays in the nation's overall economy.

According to a recently published study, people who work in the most complex industrial settings stand to gain the most from the employment of problem-solving teams (Koren & Pet, 2020). It is increasingly likely that workers will be employed in the manufacture of exceptionally high-quality items that need complex manufacturing procedures as the United States consolidates its industrial base. The study discovered that teams had the greatest impact when they tackled difficult jobs under these circumstances, received significant incentives, and believed that management paid attention to them. These conclusions were reached using information gathered from steel minimills.

Construction researchers and practitioners must create safe and productive work systems (teams and production procedures). Construction accident models overlook teamwork and work processes. This study looks at how teamwork and production impact accidents (Crowley & Doran, 2020). This study investigates the processes behind the influence of production and cooperation strategies on accident frequency. In addition to providing an experimental case study, the article summarizes Fuller's Task-Demand-Capability Interface model from 2005. The case study compares the work practices of a "High Reliability Crew" (HRC) with a crew from the same business that performs on average. The model illustrates how employee ability to deal with work conditions (task demands) is impacted by production and collaboration strategies (capabilities). Any job might be hazardous. Strong manufacturing teamwork may lower accidents and increase efficiency (Smith & Somers, 2016).

The relationship between industrial employees' safety and health habits and injury management was looked at in a study by Taufek et al. (2016). The relationship between workplace safety and health procedures, and injury management is examined in this study. Nowadays, the majority of businesses do not prioritize employee health and safety. This has an impact on mishaps and injuries. 132 manufacturers based in Pahang participated in the survey. Utilizing SPSS version 22, the data was processed after being collected through surveys. In this inquiry, descriptive statistics, reliability, and correlation tests were employed. All presumptions were upheld, and behaviors related to safety and health were connected to injury prevention.

There are several work environments in the manufacturing sector. Workers in this department may suffer injuries, have occupational diseases, or perhaps pass away. During maintenance and repairs, improper equipment security and blocking might result in machine problems such as in-running nip hazards, exposure to moving components, and exposure to harmful movement (Muthukumar et al., 2019). It's possible to develop noise-related illnesses and musculoskeletal disorders (MSDs) when working in an assembly setting. Exposure to chemicals, violence at work, and harassment. Every profession is risky, but manufacturing is particularly risky.

Five safety issues were considered in the southern India research. Heavy Machinery (24%), Confined Space (15.6%), and Hazardous Materials (14.2%), out of the 8 risks found, are the top three. Heavy machinery risks are to blame for 23.9% of deaths, 43.3% of partial complete disablements, and 36.4% of permanent entire disablements in the industrial sector. 80% of manufacturing workers, according to a behavior-based Pareto chart research, take risks for productivity (Muthukumar et al., 2019). Despite this, a risk-free assembly task is still feasible with the right staff and training. Making sure employees are engaged and satisfied in their work while being protected requires giving them the proper tools and training.

Compared to other private industries, manufacturing has a higher rate of injuries, necessitating safety investigations. Various techniques are used to assess workplace safety. Employee perceptions of workplace safety are looked at by the safety environment. The assessment approach that entails management commitment, involvement, and workplace hazard evaluation was investigated in Srinivasan's (2020) study. Lean, according to academics, may improve worker safety. Empirical proof is insufficient to establish a connection. In order to show how lean manufacturing and worker safety are related, the 5S lean methodology was applied in this study.

Growing demand for energy, chemicals, commodities, and food as a result of global economic and social development has led to the expansion and complexity of processing facilities. Because of this, there are now additional risks and dangers that need to be mitigated beyond just financial gains. These days, occupational health and safety (OHS) is a concern for businesses. Companies work toward best practices by recognizing risks and improving OHS. Many businesses are aware that an effective OHS system must include a risk assessment to avoid penalties, boost individual

Joint Commission sentinel incidents in healthcare are frequently caused by a breakdown in communication. The Veterans Health Administration National Center for Patient Safety developed Clinical Team Training (CTT) to advance patient safety, communication, and cooperation (Schwartz et al., 2018). CTT employs CRM strategies. The cultural shift and widespread implementation of CRM are partly responsible for the aviation industry's stellar safety record. This article focuses on standardizing interprofessional, CRM-based training to enhance communication, cooperation, and patient safety. The safety atmosphere was evaluated both before and after CTT using the Teamwork and Safety atmosphere Questionnaire. From baseline to 12 months, 11 of the 27 survey items had statistically significant increases. It is important to regularly workout in order to maintain positive effects (Schwartz et al., 2018).

1.3 Relationship between Safety and Productivity

According to Li et al. (2017), work happiness is one of the management topics that has received the most attention because researchers want to discover what factors increase employee productivity. By examining employee attitude and behavior at work, researchers can comprehend the relationship between employee performance and those factors. Global competition has

intensified as a result of innovative technology, forcing business managers to keep their staff content in order to avoid more losses. According to studies, a variety of factors influence employee productivity, such as safety and teamwork.

Team performance and safety may be influenced by productivity. Additionally, positive emotional states boost happiness. There is minimal research on this impact on work teams. Knowing that psychological safety and teamwork engagement together increase team happiness may aid managers in fostering high levels of safety and engagement, increasing team satisfaction.

Numerous traits have been used by researchers to describe work safety and teamwork. It is a joyful emotional reaction to a job or work experience. Workers will be happy in their jobs if their work yields beneficial consequences. Employees that are very pleased express positive feelings about their position, responsibility, or work. To do their tasks effectively, employees need the leader's support and motivation. The leader must create environments that raise employee morale in order to effectively lead. It aims to provide employees with a sense of appreciation, trust, and motivation to accomplish educational objectives (Bachtari et al., 2020).

According to Costa et al. (2016), work safety and teamwork are related. Teams with members who like, care deeply about, and are completely absorbed in their work are more likely to experience other positive feelings, which results in satisfaction with their teams, work products, and work process (such as the team's strategy).

Work safeness has been the subject of several studies. Work safeness is influenced by organizational support. The perception of organizational support increases job safeness and teamwork by assuring workers of on-going support. Employees who receive financial aid are more fulfilled, happy, and self-actualized. According to several studies, there is a positive correlation between life safeness and perceived organizational support, with work satisfaction serving as the mediating factor (Bachtari et al., 2018).

The safety of the workplace has an impact on employee engagement. The study looked at how workplace safety and health regulations affected productivity and morale among steel-producing companies in Rwanda. Randomly, 229 respondents from the intended audience were picked. Data were gathered via questionnaires, interviewing protocols, and firsthand observation. The majority of employees, according to the poll, are aware of workplace safety issues. Despite being aware of the hazards to their occupational health and safety, many workers choose not to wear PPE because it is too hot. According to the research, employee dedication and performance are significantly impacted by workplace health and safety. This study suggests that management provides PPE and employee insurance to lessen workplace accidents and injuries.

The impact of team work engagement (TWE) on team satisfaction with and without psychological safety is investigated in a study. Data were gathered through lab experiments and a survey of actual corporate teams. According to the study, teams with high TWE and high psychological safety would be happier than teams with low TWE or low psychological safety. According to the study, TWE boosts team satisfaction (Gaspar, 2016). TWE has little effect on team satisfaction when psychological safety is high.

In their study, Morgan et al. (2021) looked at how employee productivity and the administration of health and safety policies in industrial firms in Nigeria. A descriptive survey and a quantitative analysis were both used in the study. A questionnaire was distributed to 950 respondents at Nigerian industrial companies for the study. For data analysis, descriptive statistics were used, and multiple regression was carried out to test hypotheses at the 0.05 level.

We showed that job satisfaction has a moderating effect on managing health and safety policies and employee productivity using the Sobel test and Med Graph. The findings showed that hazard prevention and management procedures increase worker productivity. Risk assessments increase employee output (Morgan et al., 2021). Employee productivity and safety policy management are mediated by job satisfaction. To improve health and safety policy management, manufacturing companies should minimize risks, take steps to control them, and provide accurate risk assessments.

Organizational commitment and job performance have been well studied in the West, but little study has been done in non-western countries. This study's objective is to investigate the impact of organizational commitment on work performance through job satisfaction. 547 Vietnamese workers were questioned for the study (Loan, 2020). As a result, when organizational commitment was reduced, job satisfaction decreased and vice versa, increasing both work performance and organizational commitment. The connection between organizational commitment and job performance was significantly reduced when work satisfaction was included in the model, indicating a mediation role. According to the statistics, a positive correlation between organizational dedication and work performance may not always convert into an employer's job success (Loan, 2020). Success comes from raising organizational commitment and improving work satisfaction.

In research by Rakic and Zivkovic (2019), 386 participants were polled, and the findings showed that employee happiness had a significant influence on productivity growth. The importance of motivation in management was emphasized, as it helps to accomplish certain objectives and goals based on employee happiness.

Dahlke, Stahlke, and Rassa (2017) looked at how teamwork improved healthcare delivery and job satisfaction. One way to deliver safe, efficient, patient-centered care and improve patient outcomes is via successful teamwork built on respect, listening, trust, and shared goals. Despite having different opinions on team members, effective teamwork enhanced healthcare workers' commitment to caring for the elderly and job happiness. Adaptability, a range of skill levels, diversity in the team's membership, and knowledge of how leadership may promote cooperation are all necessary for successful team growth.

A mood or action that motivates someone to engage in a task or activity to the fullest extent feasible is known as motivation. People who lack motivation detest their jobs. Individuals feel content in their jobs (Rasmi et al., 2017). Depending on his value system, each person's level of enjoyment varies. The more closely the apparent action matches the person's preferences, the more he enjoys it. Understanding both internal and external motivators is essential. According to Larkin-Perkins (2017), in order to improve employee retention, workforce stability, organizational and economic growth, and job satisfaction costs, company leaders must be aware of the aspects that boost extrinsic (hygiene or maintenance) job happiness. Leon and Marcu (2016) found that leaders that foster trust in the relationship between followers and encourage effort would have more contented and devoted workers.

Synthesis

This definition emphasizes two key points: First, while safety culture is about good safety attitudes, it is also about good safety management established by organizations; and second, good safety culture means assigning the attention warranted by its significance. Wiegmann et al. (2022) defined safety culture as "that assembly of characteristics and attitudes in organizations and individuals, which establishes that, as an overriding priority, safety issues receive the attention warranted by their significance." This presented the concept of safety culture as it related to both organizations and individuals, but it did not provide a link between safety culture and measures of safety productivity. Thus, in this study, the focus on how teamwork and safeness related to the productivity of an employee in the pottery manufacturing workplace was put emphasis.

Figure 1. *Conceptual Framework of the Study*

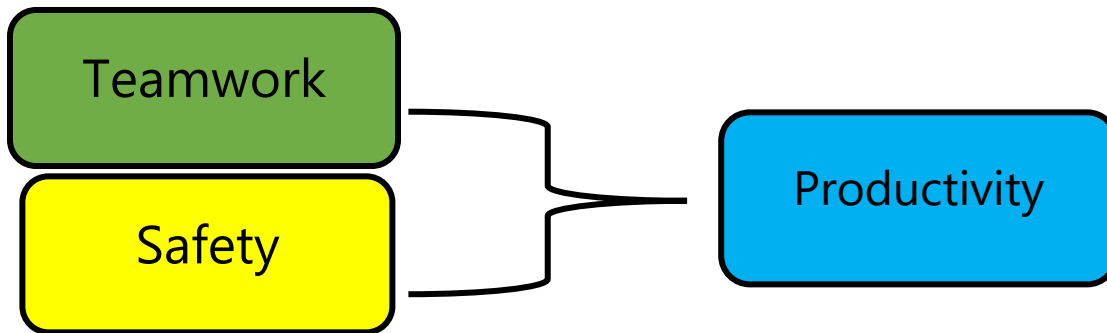


Figure 1 above shows the connections between teamwork and safety (independent variables) and productivity (dependent variable). Productivity is typically referred to as the ratio of output to input. Productivity is a quantitative or statistically weighted measure of how efficient a given set of objectives are. It, therefore, connotes efficiency within a defined effectiveness context. There are many factors that affect the productivity of employees, work to improve productivity in organizations has been in progress for a long time, and many methods have been applied to improve productivity. The substitution of machinery for people has been a major area of activity for improving productivity; the introduction of more capacity may restrict the flexibility of operations and impede opportunities to adapt to changing market conditions; in effect, the use of this method is gradually declining, and this is why firms are looking for alternatives (Flin et al., 2020).

Improving methods of teamwork and safeness have greatly influenced and still influences productivity, but this is not without some discernible shortcomings which, if not presently manifesting, may be felt in the near future. An unproductive practice includes work that contributes little or nothing to the achievement of enterprise objectives. Poor quality work is among the unproductive practices. A safe and teamwork environment, therefore, has over the years been seen as the hob of increased employee productivity.

1.4 Statement of the Problem

The paper dealt with improving working conditions considering productivity, safety, and teamwork in a pottery processing/manufacturing workplace. Specifically, it sought answers to the following:

- What is the profile of the respondents in terms of the following factors:
 - age;
 - sex;
 - area assignment; and
 - Years in service?
- What is the level of employee performance evaluation in terms of:
 - Production;
 - Safety; and
 - Teamwork?
- Is there a significant relationship between the level of employees' performance evaluation in terms of safety and teamwork to their productivity?
- Is there a significant difference in the level of employee performance evaluation when grouped according to profile?
- Based on the findings, what training programs can be crafted to improve the working conditions in a pottery processing/manufacturing workplace?

1.5 Hypotheses of the Study

The research questions mentioned in the study, therefore, led to the formulation of these hypothetical statements.

H_{01} : There is no significant relationship between the level of employees' performance evaluation in terms of safety and teamwork to their productivity.

H_{02} : There is no significant difference in the level of employees' performance evaluation when grouped according to profile.

1.6 Methods and Techniques

This study used the descriptive method of research to analyze the subject and be able to attain the objective of this research. This descriptive method used a survey questionnaire to address the research questions. This was accomplished by providing explanations and definitions of the items being examined during the collection of data and other important information. In this method, the authentic meanings of the data collected will be presented from the perspective of the objectives of the study.

1.7 Population and Sample of the Study

A sample size of 200 respondents was drawn from the population of a certain company. However, only 138 respondents were able to answer the survey questionnaire due to the unavailability of respondents during the administration of the survey. The questionnaires were distributed to the employees. Purposive sampling was applied to select respondents based on the criteria that the respondent is an employee in a pottery manufacturing workplace. Convenience Sampling was also applied to choose respondents among employees based on their ability and willingness to answer the questionnaire. The inclusion criteria for the respondents were their current employment in the manufacturing company, legal age, sufficient work experience of at least one year, and field expertise in pottery. Exclusion criteria include office workers, employees who are on leave, newly hired employees, and those who are working part-time, if any.

1.8 Instruments of the Study

In gathering the data needed for the study, the researcher utilized a survey questionnaire composed of four parts: the demographic profile, productivity, safety, and teamwork. The demographic profile includes the respondent's age, gender, area of assignment, and years of experience in the pottery manufacturing company. The productivity scale, on the other hand, is composed of 17 items, safety - 11 items, and teamwork - 10 items using a Likert scale from 1 – strongly disagree through 5 – strongly agree. The survey questionnaire was validated by three authorities in the field of manufacturing, research and human resources, and education to ensure that the instrument gathered the needed and authentic data and information. Certainly, these validators were directly connected to the university and the company – participants to avoid subjectivity.

One validator was a former professor of the researcher at the university. Another was the company's HR Manager, and the third validator was the President/CEO of the said company. The constructive comments and suggestions of the three validators were considered in the final revision of the survey questionnaire. Finally, pilot testing was conducted on a group of respondents not included in the actual administration of the survey questionnaire to determine the level of reliability. This pretesting was conducted to identify the difficulties and constraints that the respondent may encounter in the course of filling out the survey questionnaire

prior to its final administration. Some modifications and suggestions were considered based on the results of the pretesting activity. Furthermore, the researcher attained a 0.94 result from the Cronbach Alpha that ensures the internal validity of the instruments.

1.9 Data Gathering Procedure

The researcher provided a set of validated and pre-tested research instruments in order to collect the data needed for the study. Before the dissemination of the research instrument, it needed to be validated by professionals first. The validated and pre-tested research instrument was presented in a face-to-face setting among the selected employees of the Art of Clay Manufacturing, Inc. Along with the distribution of the validated and pre-tested research instrument was the distribution of cover letters as well as letters of consent to the respondents. After the collection of data, tallying and analyzing were made in order to attain the objective and hypotheses of the study.

1.6 Data Processing and Statistical Treatment

Quantitative data analysis was applied in the study. The researcher used a questionnaire in order to gather first-hand information from the respondents. Before the copies of the questionnaires were distributed to the respondents, the researcher sought the permission of the company’s HR Manager and CEO/President, with the approval of the Graduate School Dean of LCUP.

Analysis and interpretation of data were made next after all needed data was gathered. One by one, these data were analyzed and evaluated by the researcher. The statistical treatment helped in the proper interpretation of the results. The researcher used percentages in presenting the results of the survey. To be able to get the percentage, the computation was the number of items divided by the total number of participants multiplied by one hundred ($n \div N \times 100 = P\%$).

Mean identified the average of the sum of the observed values divided by the number of observations; Likert Scale critically analyzed the different options of pottery worker- respondents; T-Test and ANOVA was utilized for testing significant difference on various factor to consider in identifying the level of performance of the employees in terms of production, safety, and teamwork. The correlation was also used to determine if there is a significant relationship between safety and teamwork, to productivity.

The scale and range used in the study were Likert scales.

Scale	Range	Verbal Interpretation
1	1.00 – 1.49	Strongly Disagree
2	1.50 – 2.49	Disagree
3	2.50 – 3.49	Neither agree nor disagree
4	3.50 – 4.49	Agree
5	4.50 – 5.00	Strongly Agree

1.7 Ethical Considerations

The researcher carefully considered the following ethical considerations to safeguard the moral and legal rights of the respondents. All data and other information received from the study were acknowledged and presented accurately. All these were ensured in considering the important ethical considerations in conducting a study, according to Greetham (2019).

Privacy and Confidentiality. The researcher guaranteed that the information that was provided by the participants was unidentifiable by anybody other than the researcher. She also ensured that information was presented with privacy and confidentiality. In addition, the participants were informed that the data would be presented to the research panellists without disclosing their identities. Lastly, they were also informed that the study may be published in several journals.

Autonomy. The researcher guaranteed that the respondents’ contribution was completely voluntary and that they may withdraw from the conduct of the study at any time. From here, there was no further collection or analysis of data, and all existing data from them was removed.

Informed Consent. All respondents received a consent letter explaining some of the key elements of this study and what was expected of them as participants. The consent form was supplied with the letter that participants signed confirming their participation in the study.

Voluntary participation in the research is important. Additionally, if they choose to, participants are free to leave the research at any time. Furthermore, the researcher was obligated to remove participants from participating in the study if (1) they failed to

attend the orientation, (2) they did not complete the questionnaires required for them to answer, (3) failed to meet the deadline of submission, (4) are not cooperative with the researcher.

Finally, it is imperative that researchers adhere to Republic Act 10173 or the Data Privacy Act of 2012 in the Philippines in order to protect the respondents and the information they have provided in the conduct of the research paper. The researcher used codes for the participants' names while conducting the study to protect their privacy.

2. Presentation, Analysis, and Interpretation of Data

Table 1 presents the socio-demographic profile of the respondents in terms of their age, gender, area of assignment, and years of service in the company. Based on the collected data in terms of age, most of them were between 26 to 30 years old (32 or 23.20%). The data reveals that there is a diversity in age groups which means that variation in age indicates different ideas across all age brackets. It is in accordance with the statement of Hakim (2018) that the workforce is becoming more age diverse and that people of different age groups working together will be common across many manufacturing industries.

As to sex, the data reported that 50.7% of the employees were female, which is slightly higher than male employees, who comprise 49.3% of the total population. The study by Boiney (2020) stated that gender is among the characteristics associated with diversity and is known to influence team behaviors in the workplace. This may be partly due to findings by theorists that men's relationships tend to be defined by role and status, while women tend to value relationships based on communication and understanding.

Furthermore, 64 or 33.3% of the employees were assigned to production, which has the highest number of manpower in terms of area of designation. Lastly, the majority of the employees, or 65.9%, are working for the pottery with years in service of 5 years or less, while the remaining 34.1 % have already rendered 6 to 10 years of service in the said pottery processing.

Table 1. Respondents' Profile

Profile	Categories	Frequency	Percentage
Age	21 to 25 years old	22	15.9
	26 to 30 years old	32	23.2
	31 to 35 years old	23	16.7
	36 to 40 years old	23	16.7
	41 to 45 years old	20	14.5
	46 to 50 years old	12	8.7
	51 years old and above	6	4.3
	Total	138	100
Sex	Male	68	49.3
	Female	70	50.7
	Total	138	100
Area of Assignment	Accounting	3	2.2
	Admin Operations	2	1.4
	Human Resources/Admin	10	7.2
	Loading	6	4.3
	Operations	3	2.2
	Operations/admin	1	.7
	Packaging	5	3.6
	Packaging/end line	3	2.2
	Packaging/Loading	2	1.4
	PPC	7	5.1
	Production	46	33.3
	Purchasing	1	.7
	Quality Control	9	6.5
	R & D	12	8.7
	Shipping	2	1.4
	TSG	9	6.5
	WET	16	11.6
WET Production	1	.7	
Total	138	100	
Years of Service	Less than 5 years	91	65.9
	6 to 10 years	47	34.1
	Total	138	100

Table 2 presents the mean score and descriptive interpretation of the level of performance evaluation of the employees in terms of production. As can be observed from the analysis of data in Table 2, the employees strongly agreed that they make sure that they stand for quality produced pottery by an average of 4.54 which also implies; a willingness to adapt to changes pertaining to company policies and rules (4.52); willing to assist others if needed (4.55); use tools and resources effectively with care and safety (4.59); and willing to improve their skills for work (4.68).

Moreover, they agreed that they make sure to submit their outputs on time (4.49); go to work on time (4.43); make initiatives in suggesting new designs for pottery at work (4.20); show very good work ethics and collaborative effort with co-workers (4.49); willing to do extended work assignments as to production(4.40); work well with peers(4.42), feel inspired and have the enthusiasm to work well (4.41), communicate well with peers and provide inputs as to work when needed (4.38). They also strongly agreed that they could work with less supervision (4.25); think strategically in solving problems arrived in pottery produced (4.18); have the eagerness to improve their output so as to fit the quality of the company (4.48); and go out of their way to suggest possible creative designs to improve outputs (4.29).

Overall, the data revealed an average of 4.42 which indicates that the employees agree that they are taking necessary actions to improve their level of performance in terms of productivity. The employees' job performance level in terms of productivity is interpreted as a result of the cumulative effect of the monetary and non-monetary contributions made by workers to the accomplishment of the organization's objectives, as stated in the study of Fonkeng (2018).

Table 2. Employees' Level of Performance in terms of Production

Statement	Mean	Interpretation
1. I make sure I stand for quality output produced pottery.	4.54	Strongly Agree
2. I make sure to submit my outputs on time.	4.49	Agree
3. I make sure I go to work on time.	4.43	Agree
4. I make initiatives in suggesting designs for pottery at work.	4.21	Agree
5. I have very good work ethics and show good collaborative effort with co-workers.	4.49	Agree
6. I am willing to do and extended work assignments as to production.	4.40	Agree
7. I work well with peers.	4.42	Agree
8. I am willing to adapt to changes pertaining to company policies and rules.	4.52	Strongly Agree
9. I feel inspired and I have enthusiasm to work well.	4.41	Agree
10. I communicate well with peers and provide inputs as to work when needed.	4.38	Agree
11. I am willing to assist others if needed.	4.55	Strongly Agree
12. I work with less supervision.	4.25	Agree
13. I think strategically in solving problems arrived in pottery produced.	4.18	Agree
14. I have eagerness to improve my output as to fit the quality of the company.	4.48	Agree
15. I go out of my way to suggest possible creative designs or improve my output.	4.29	Agree
16. I use tools and resources effectively and with care and safety.	4.59	Strongly Agree
17. I am willing to improve my skills for work.	4.68	Strongly Agree
Average Mean	4.42	Agree

Legend: Strongly Agree- 4.50 – 5.0, Agree – 3.50 – 4.50, Neutral – 2.50 – 3.49, Disagree – 1.50 – 2.49, Strongly Disagree – 1.0 – 1.49

Table 3 presents the mean score and descriptive interpretation of the level of performance evaluation of the employees in terms of safety. The employees strongly agreed that safety at work should be a priority of their organization by, an average of 4.53, and in line with this, health and safety training has been provided (4.54), and they are always reminded to practice safety at work (4.56). Additionally, the employees agreed that they are aware of the company's safety plan (4.47), security items are updated and passed all safety standards (4.43), security cameras are installed (4.44), and security personnel managing the working premises 24 – 7(4.49).

Likewise, employees also agreed that they are given a walk-through on the safety measures (4.32); safety initiatives are updated (4.36), can easily voice any security concerns (4.33), and external consultants and experts update employees with safety practices and protocols (4.37).

Overall, an average of 4.44 indicates that the employees agreed that both the company and employees are doing their part to provide and maintain a safe and conducive working environment. It is equivalent to good performance in terms of maintaining safety which is aligned with the idea that efforts to reduce workplace injuries and illnesses need the involvement of management (Ilyas et al., 2021). This suggests that the organization’s management has the leadership and is committed to adopting safety as they practiced this in pottery manufacturing since the implementation of health and safety measures needs a leadership attitude and commitment by the management.

Table 3. Employees’ Level of Performance in terms of Safety.

Statement	Mean	Interpretation
1. I am aware of my company’s safety plans.	4.47	Agree
2. There are security cameras installed on the premises.	4.44	Agree
3. All security items are updated and meet all safety standards.	4.43	Agree
4. There are security personnel managing the premises 24- 7.	4.49	Agree
5. My safety at work should be the priority for my organization.	4.53	Strongly Agree
6. I have been provided with the health and safety training.	4.54	Strongly Agree
7. I was given a walk- through on the safety measures.	4.32	Agree
8. Employees can easily voice any security concerns.	4.33	Agree
9. The organization safety initiatives are updated and conveyed to employees.	4.36	Agree
10. External consultants and experts update us with safety practices and protocols.	4.37	Agree
11. I am always reminded to practice safety at work.	4.56	Strongly Agree
Average Mean	4.44	Agree

Legend: Strongly Agree- 4.50 – 5.0, Agree – 3.50 – 4.50, Neutral – 2.50 – 3.49, Disagree – 1.50 – 2.49, Strongly Disagree – 1.0 – 1.49

Table 4 presents the mean score and descriptive interpretation of the level of performance evaluation of the employees in terms of teamwork. The mean score of the statements pertaining to teamwork indicates that employees agreed that they have absolute clarity about their role in a team (4.30); there is an effective mechanism to monitor workplace and workers (4.33); the company encourages teamwork (4.33); there is an accountability on decisions made by team members (4.27); there is a fair distribution of assigned task (4.11); sufficient effort is made to get their opinion and ideas (4.22); working with co-workers inspires them to do their best on their respective designation or area of assignment (4.35); changes on the role of the member are communicated effectively (4.26); there is a proper and transparent communication within the company and team of workers (4.13); make sure on helping the company reach its goals by playing their role on the company effectively (4.46).

All indicators of employees’ performance in terms of teamwork yielded a result of agree, which means that there is still a possibility to improve teamwork in the organization. This requires accountability, intense communication, concentration on duties, and response, according to Arifin and Mahmud (2021).

Overall, an average of 4.23 indicates that the employees agreed that they are collaboratively working together to reach a common goal and maintain a sense of teamwork in pottery processing/manufacturing. This result may be associated with the concept of Wang (2018) that teamwork becomes a standard for different organizations for teamwork results in a smooth functioning organization.

Table 4. Employees’ Level of Performance in terms of Teamwork.

Statement	Mean	Interpretation
1. Team members have absolute clarity about their role in a team.	4.30	Agree
2. There is an effective mechanism to monitor work place and workers	4.33	Agree
3. My company encourages teamwork.	4.33	Agree
4. Team members are held accountable for the decisions on problems they make.	4.27	Agree
5. Task assigned is distributed fairly.	4.11	Agree
6. Sufficient effort is made to get the opinion and ideas of employees.	4.22	Agree
7. Working with co- workers inspires me to do my best.	4.35	Agree
8. When the role within the company changes, it is communicated effectively.	4.26	Agree
9. Communication within the company and team of workers is transparent.	4.13	Agree
10. We make sure our work helps the company reach its goals.	4.46	Agree
Average Mean	4.23	Agree

Legend: Strongly Agree- 4.50 – 5.0, Agree – 3.50 – 4.50, Neutral – 2.50 – 3.49, Disagree – 1.50 – 2.49, Strongly Disagree – 1.0 – 1.49

Table 5 presents the significant relationship between the level of employees' performance evaluation in terms of safety and teamwork to their productivity. Based on the findings, teamwork (0.750, 0.000) and safety (0.690, 0.000) showed a significant positive relationship with productivity, which implies that the higher the level of teamwork and safety, the greater the level of productivity of the employees and vice versa.

Team work and safety influenced productivity. There is minimal research on this impact on work teams and safety and their relation to productivity. Knowing that safety and teamwork engagement together increase team productivity may aid companies in fostering high levels of safety and engagement, increasing team productivity. Numerous traits have been used by researchers to describe work safety and teamwork. Workers will be productive in their jobs if their work yields beneficial consequences. Employees that are very pleased express positive feelings about their position, responsibility, or work. To do their tasks effectively, employees need the leader's support and the company's assurance of safeness. The company must create environments that raise employee morale in order to lead effectively. It aims to provide employees with a sense of appreciation, trust, and motivation to accomplish educational objectives and become more productive towards work (Bachtiaret al., 2020).

Table 5. *A significant relationship between the level of employees' performance evaluation in terms of safety and teamwork to their productivity*

Independent Variables	r-value	p-value	Decision	Interpretation
Teamwork	.750**	0.000	Accept Ha	Significant
Safety	.690**	0.000	Accept Ha	Significant

Dependent Variable: Productivity

** Correlation is significant at the 0.01 level (2-tailed).

Table 6 shows the Composite table of the significant difference in the assessment of employees' performance when grouped according to age profile using One-Way ANOVA. Based on the data gathered, the computed p-value, 0.525 (production), is greater than the level of significance of 0.05, which suggests that the null hypothesis should be accepted and indicates that there is no significant difference in the performance level in terms of productions between employees coming from different age category.

Likewise, the computed p – value of 0.288 is also greater than the level of significance, which also indicates that there is no significant difference in the performance level in terms of safety between employees coming from different age categories.

On the contrary, a computed p – value of 0.007(teamwork), which is less than 0.05, suggests that it should reject the null hypothesis, which implies that there is a significant difference in the performance level in terms of teamwork between employees coming from different age category. This means that different age category has different views and evaluation when it comes to teamwork which was supported by the idea of Costa et al. (2016), which shows the link between job engagement and satisfaction where teams whose members share enjoyment, passion, and absorption in their job are likely to share other good emotions, which leads to satisfaction with their teams, work outcomes, and work process (for example, the team's strategy).

Table 6. Significant difference in the assessment of employee performance when grouped according to age

Indicators	f-value	p-value	Decision	Interpretation
Production	0.862	0.525	Accept Ho	Not Significant
Safety	1.245	0.288	Accept Ho	Not Significant
Teamwork	3.089	0.007	Reject Ho	Significant

*Significant at 0.05 level

Table 7 shows the Composite table of the significant difference in the assessment of employee performance when grouped according to gender profile using a t-test. The collected data revealed a computed p – value of 0.044 (Production), which is less than the level of significance of 0.05, which suggest that the null hypothesis should be rejected and indicates that there is a significant difference on the performance level in terms of production between male and female employees. This means that gender is one of the significant factors when it comes to identifying the performance level of employees, as mentioned by Boiney (2020)

On the other end, a computed p – value of 0.215 and 0.688 for safety and teamwork, respectively, are both greater than the level of significance of 0.05, which suggests accepting the null hypothesis. This indicates that there is no significant difference in the performance level in terms of safety and teamwork between male and female employees. This was supported in the study of Aryal et al. (2017), which posited that performance levels in terms of safety and teamwork do not show a significant difference when grouped according to their sex.

Table 7. A significant difference in the assessment of employee performance when grouped according to gender

Indicators	f-value	p-value	Decision	Interpretation
Production	-2.037	0.044	Reject Ho	Significant
Safety	-1.245	0.215	Accept Ho	Not Significant
Teamwork	0.403	0.688	Accept Ho	Not Significant

*Significant at 0.05 level

Table 8 presents the composite table of the significant difference in the assessment of employee performance when grouped according to the area of assignment profile using One-Way ANOVA. The computed p – value of 0.773 (Production), 0.958 (Safety), and 0.204 (Teamwork) are all greater than the level of significance of 0.05, which implies that the null hypothesis should be accepted, which means that there is no significant difference in the performance level of employees in terms of Production, Safety and Teamwork between employees coming from a different area of assignment. This is supported by the study of Grailey et al. (2021), that area of assignment has a significant contribution or effect towards the productivity of an individual in a work place. But, it was also found in different studies that the area of assignment does not contribute to the effectiveness of safety and teamwork (Ilayas et al., 2021).

Table 8. Significant difference in the assessment of employee performance when grouped according to the area of assignment

Indicators	f-value	p-value	Decision	Interpretation
Production	0.724	0.773	Accept Ho	Significant
Safety	0.480	0.958	Accept Ho	Not Significant
Teamwork	1.299	0.204	Accept Ho	Not Significant

*Significant at 0.05 level

Table 9 displays the composite table of the significant difference in the assessment of employee performance when grouped according to the year of service profile using One-Way ANOVA. The gathered data revealed the following computed p – value of 0.458 (Production), 0.7388 (Safety), and 0.379 (Teamwork) are all greater than the level of significance of 0.05. This implies that the null hypothesis should be accepted and that there is no significant difference in the performance level of employees in terms of Production, Safety and Teamwork between employees having different lengths of service in pottery manufacturing. This is supported by the study of Grailey et al. (2021), that years in the service have a significant contribution or effect towards the productivity of an individual in a work place. But, it was also found in a different study that years in the service do not contribute to the effectiveness of safety and teamwork (Ilayas et al., 2021).

Table 9. Significant difference in the assessment of employee performance when grouped according to years in the service

Indicators	f-value	p-value	Decision	Interpretation
Production	0.553	0.458	Accept Ho	Significant
Safety	0.122	0.738	Accept Ho	Not Significant
Teamwork	0.780	0.379	Accept Ho	Not Significant

*Significant at 0.05 level

Workers play an important role in improving the workplace conditions of a company, so training that promote and improve the knowledge and skills of employees are necessary for the company. Furthermore, it is believed that in many companies, the presence of teamwork in an organization and a safe working environment may improve working conditions, leading to a more productive workforce. In accordance with this idea, a skill development program is hereby proposed for Art of Clay, Inc.

Objectives:

At the end of the said program, the employees are expected to improve their own skill sets and act as a support system for their co-employees. Develop a sense of teamwork by sharing new ideas on strategies and design for pottery work, maintaining safety conditions by reminding each other to practice safety protocols within the workplace, and improving productivity by practising the idea of teamwork and observing safety protocols.

Table 10. *Safety and Teamwork Enhancement Program to Uplift Productivity (STEP – UP)*

Key Results Area (KRA)	Activity	Objectives	Key Persons	Budget	Expected Outcome
Safety	Orientation on the safety procedures and hazards usually encountered by the pottery workers	To orient the employees on safety protocols and procedures	Pottery Workers Safety Officers	P15, 000	Employees practice safety procedures to minimize Hazards.
	Procurement and maintenance of Safety Equipment	To maintain safety on the working area of the employees by acquiring new safety equipment	Management Safety Officers	P100, 000	New Safety Equipment
	Buddy System for safety concerns	To establish a buddy system where workers constantly remind their partners on safety procedure.	Pottery Workers	N/A	Buddy System on Employees

Teamwork	Team Building	To improve teamwork and collaboration among employees	Company Administrators Employees	P50, 000	Team Building Project
	Team Performance	To promote sense of healthy competition among the teams and improve teamwork and work efficiency of employees	Company Administrators Employees	N/A	Team Performance and Evaluation
Productivity	Middle Level Skills Development Training	To require employees to attend skills development training to improve their productivity in pottery processing	Employees	P40, 000	Improved skills, teamwork and safety resulting to productivity.
	Crafting Employees Performance Evaluation	To assess the level of productivity of the employees and basis for improvement.	Management	N/A	Employees Performance Evaluation Sheet

This paper intends to examine employees’ performance in pottery manufacturing in terms of productivity, safety, and teamwork in order to improve working conditions in the said industry. This determined the profile of the respondents in terms of age; sex; area assignment; and years in service. It also identified the level of employee performance evaluation in terms of Production, Safety, and Teamwork. And finally, identify the significant relationship between the level of employees’ performance evaluation in terms of safety and teamwork to their productivity and the significant difference in the level of employee performance evaluation when grouped according to profile. Which, in turn, developed a training program that can be crafted to improve the working conditions in a pottery processing/manufacturing workplace.

A descriptive research design was utilized to assess the level of performance of employees in pottery manufacturing. The data was then collected through questionnaires and interpreted using appropriate statistical tools and procedures. Validation procedures and approval for ethical considerations for this research paper were also sought by the researcher. And hence, the succeeding pages presented the summary of findings, conclusions, and recommendations drawn from the collected and analyzed data.

3. Summary of Findings

The major findings of the study are as follows.

Q1. What is the Profile of the respondents in terms of age, sex, area of assignment and years in service?

A1. Most of the respondents, or 23.2%, are between the ages of 26 to 30 years old, but there is only a slight difference in the different age brackets, having 16.7% of the population between the ages of 31 to 35 years old the same with the ages 36 to 40 years old followed by 15.9% coming from the ages between 21 to 25 years old. A lower percentage of 8.7% are between 46 to 50

years old, and 4.3% are above 50 years old. In terms of gender, the employees are almost equally divided, having 50.7% female employees and 49.3% male employees. Furthermore, one – third of the employees are coming from production, which is the biggest area of designation in terms of manpower. Lastly, the majority of the employees or 65.9%, have less than 5 years in service, while the remaining 34.1% have 6 – 10 years in service for the said company.

Q2. What is the level of employee performance evaluation in terms of production, safety and teamwork?

A2. The employees' performance in terms of safety (4.44) registered the highest performance, followed by productivity (4.42), while teamwork records the lowest performance with an average of 4.23

Q3. Is there a significant relationship between the levels of employees' performance evaluation in terms of safety and teamwork to their productivity?

A3. As to the significant relationship between the level of employees' performance evaluation in terms of safety and teamwork to their productivity, it was found that teamwork (0.750, 0.000) and safety (0.690, 0.000) showed a positive significant relationship between productivity which implies that the higher the level of teamwork and safety the greater the level of productivity of the employees and vice versa.

Q4. Is there a significant difference in the level of employees' performance evaluation when grouped according to profile?

A4. In terms of the significant difference in the assessment of employees' performance when grouped according to age, it was revealed that production and safety have no significant difference in the performance level in terms of production between employees coming from different age categories. On the contrary, it was posited that there is a significant difference in the performance level in terms of teamwork between employees coming from different age categories. This means that different age category has different views and evaluation when it comes to teamwork.

As to gender, it was found that there is a significant difference in the performance level in terms of production between male and female employees. On the other end, it was determined that there is no significant difference in the performance level in terms of safety and teamwork between male and female employees. In terms of the significant difference in the assessment of employee performance when grouped according to the area of assignment, findings revealed that the computed p – value of 0.773 (Production), 0.958 (Safety), and 0.204 (Teamwork) have no significant difference between employees coming from a different area of assignment.

Finally, as to year of service, data revealed the following computed p – value of 0.458 (Production), 0.7388 (Safety), and 0.379 (Teamwork) are all greater than the level of significance of 0.05. This implies that there is no significant difference in the performance level of employees in terms of Production, Safety and Teamwork between employees having different lengths of service in pottery manufacturing.

Q5. Based on the findings, what training programs can be crafted to improve the working conditions in a pottery processing/manufacturing workplace?

A5. Based on the findings, this study developed training programs that can be used by manufacturing companies to improve the working conditions in a pottery processing/manufacturing workplace (see Table 10)

4. Conclusions

Based on the findings of the study, the following conclusions were drawn;

The employees in the pottery manufacturing were young, and most of them had less than 5 years of experience or service, which indicates that mentoring might be needed for those who are new or inexperienced in a different area of designation. Furthermore, there is an almost equal number of male and female employees, which may indicate an equal opportunity for both genders on the nature of the job.

The area of production has the highest number of employees under them; thus, the focus on this area shall be greater, especially in terms of training and manpower development.

The employees' performance in terms of safety registered the highest performance, followed by productivity, while teamwork recorded the lowest performance. Findings also revealed that employees agreed that they are taking the necessary actions to improve their level of performance in terms of teamwork.

Findings revealed that there is a positive significant relationship between the level of employees' performance evaluation in terms of safety and teamwork to their productivity which implies that the higher the level of teamwork and safety, the greater the level of productivity of the employees and vice versa.

It was also revealed that there is a significant difference in the performance level of employees in terms of teamwork when the age profile is considered. Thus, there is a different level of teamwork across different age brackets which means that age is significant in identifying whether an employee will be collaboratively working with his or her co-workers. The results of the study also unravel that there is a significant difference in the performance of the employees in terms of production between male and female employees. This indicates that gender is a significant factor in identifying the performance of an employee in terms of production. This also suggests that an assessment of the needs of a specific role in pottery processing should be considered.

4.1 Recommendations

The findings and conclusion of the study have led to the following recommendations, which are hereby suggested.

Aside from age, gender, area of assignment, and years in the service, this study suggests using more demographic characteristics to explore more about production, safety, and teamwork in relation to respondents' profiles.

It was found that respondents strongly agreed towards their evaluation of productivity, safety, and teamwork. Thus, this study suggests having a qualitative study to unearth the reason behind their perceptions towards productivity, safety, and teamwork.

Assessment for the needs of specific roles in the company may be considered since a significant difference in the performance level in terms of production between male and female employees was observed.

Also, this study suggests using the developed training programs to improve the working conditions in a pottery processing/manufacturing workplace on the basis of productivity, safety, and teamwork.

Employees personally equipped themselves with new skills, techniques and strategies to improve their productivity and sense of teamwork by joining middle-level skills training provided by different agencies such as TESDA and DOLE.

Funding: This research received no external funding.

Conflicts of Interest: The authors declare no conflict of interest.

Publisher's Note: All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers.

References

- [1] Abdulla, J., Djebarni R and Mellahi K. (2021). Determinants of job satisfaction in the UAE:
- [2] Ahmed, A., Alkahtani, M., El-Tamimi, A. M., Kaid, H., & Abidi, M. H. (2021). Developing a Model for Safety Risk Assessment under Uncertainty for the Manufacturing Industry: A Case Study of Pole Factory Hazards in Riyadh, Saudi Arabia. *Mathematical Problems in Engineering*, 2021.
- [3] Al-bouwarthan (2020). Assessing the effectiveness of health and safety practices at AngloGold Ashanti Company, Obuasi Mine (Doctoral dissertation, Kwame Nkrumah University of Science and Technology).
- [4] Aswathappa (2021). Effective safety and health management policy for improved performance of organizations in Africa. *International Journal of Business and Management*, 6(3), 159-165.
- [5] Arifin, N. R., & Mahmud, S. N. D. (2021). A Systematic Literature Review of Design Thinking Application in STEM Integration. *Creative Education*, 12(7), 1558-1571.
- [6] Aryal, A., Sarier, Y., & Uysal, S. (2017). The Effect of School Principals' Leadership Styles on Teachers' Organizational Commitment and Job Satisfaction. *Educational sciences: Theory and practice*, 13(2), 806-811.
- [7] Bacon, N. & Blyton, P. (2016) The Antecedents of Training Activity in British Small and Medium – Sized Enterprises, *Work, Employment and Society*, 749-773
- [8] Bernarto, I., Bachtiar, D., Sudibjo, N., Suryawan, I. N., Purwanto, A., & Asbari, M. (2020). Effect of transformational leadership perceived organizational support, job satisfaction toward life satisfaction: Evidence from Indonesian teachers.
- [9] Boiney, L (2020). On Gender Impacts Virtual Work teams., <https://gbr.pepperdine.edu/2010/08/gender-impacts-virtual-work-teams/>
- [10] Brown, K. A., Willis, P. G., & Prussia, G. E. (2020). Predicting safe employee behavior in the steel industry: Development and test of a sociotechnical model. *Journal of Operations Management*, 18(4), 445-465.
- [11] Costa, C. J., Ferreira, E., Bento, F., & Aparicio, M. (2016). Enterprise resource planning adoption and satisfaction determinants. *Computers in Human Behavior*, 63, 659-671.
- [12] Crowley, F., & Doran, J. (2020). COVID-19, occupational social distancing and remote working potential: An occupation, sector and regional perspective. *Regional Science Policy & Practice*, 12(6), 1211-1234.
- [13] Dahlke, S., & Stahlke, S. (2017). The influence of teamwork on healthcare workers' job satisfaction and desire to provide quality care. *Innovation in Aging*, 1(suppl_1), 567-567.
- [14] Davison, C. (2020). Stock returns, leverage, and the COVID-19 pandemic. *Leverage and the COVID-19 Pandemic* (June 15, 2020).

- [15] Dingel, J. I., & Neiman, B. (2020). How many jobs can be done at home? *Journal of Public Economics*, 189, 104235.
- [16] Ezam, Q. (2018). Role of motivation on employee job satisfaction: Comparative analysis for income group. Conference paper. Paper presented at Asia International Multidisciplinary Conference. Retrieved from <https://www.futureacademy.org.uk/doi:10.15405/epsbs.2018.05.78>
- [17] Fonkeng, C. (2018). Effects of job-stress on employee performance in an enterprise: A microfinance institution in Cameroon.
- [18] Froebel, P. & Marchington, M. (2005) Teamwork Structures and Worker Perception: A Cross National Study in Pharmaceuticals, *International Journal of Human Resource Management*. 256-276
- [19] Gaspar, R. C. (2016). The impact of teamwork engagement on team satisfaction and the role of psychological safety as a moderator (Doctoral dissertation).
- [20] Gomez, C. (2017). The Impact of Leadership Style on Performance", www.bizfluent.com<https://bizfluent.com/info-7790214-impact-leadership-style-performance.html>
- [21] Grailey, K. E., Murray, E., Reader, T., & Brett, S. J. (2021). The presence and potential impact of psychological safety in the healthcare setting: an evidence synthesis. *BMC health services research*, 21(1), 1-15.
- [22] Gunaseelan, V., & Gerald, L. A. (2017). Study on safety management system of manufacturing industry. *International Research Journal of Engineering and Technology (IRJET)*, 4(12), 788-790.
- [23] Hakim, B.L. (2018). On Influence Employee's Empowerment, Teamwork and on Job <https://doi.org/10.1108/00483481111095555>.
- [24] Ilyas, M., Awasinombu, A. H., & Masri, M. (2021). The Effect of Work Discipline, Teamwork and Occupational Health and Safety on Employee Satisfaction of UPTD Pengelolaan Sampah Dinas Lingkungan Hidup Bombana District. *International Journal of Management and Education in Human Development*, 1(04), 041-051.
- [25] Jalal H dan Pri R (2016). Examining the effect of employee empowerment, Team Work and Employee Training on Job Satisfaction. 272-822. Elsevier. Ltd. Social and Behavioral Science.
- [26] Jilcha, K., & Kitaw, D. (2016). A LITERATURE REVIEW ON GLOBAL OCCUPATIONAL SAFETY AND HEALTH PRACTICE & ACCIDENTS SEVERITY. *International Journal for Quality Research*, 10(2).
- [27] Judge TA, Kammeyer-Mueller JD, Weiss HM (2017). Job attitudes, job satisfaction, and job affect A century of continuity and of change. *Journal of Applied Psychology*, 102(3): 356-374
- [28] Kokubun, K., Ino, Y., & Ishimura, K. (2020). Social capital and resilience make an employee cooperate with coronavirus measures and lower his/her turnover intention. arXiv preprint arXiv:2007.07963.
- [29] Kularathna, W. K. H. U., & Perera, G. D. N. (2016). The impact of safety and health on job satisfaction in selected branches of utility service supply organization in western province north in Sri Lanka. 3rd International HRM Conference.
- [30] Larkin-Perkins, B. (2017). Employee job satisfaction and employees' voluntary turnover intentions (VTIs) (Order No. 10634374). Available from Dissertations & Theses @ Walden University. (1961195536). Retrieved from <https://ezp.waldenulibrary.org>
- [31] Leon, R., & Marcu, L. M. (2016). Social media platforms as a tool for sharing emotions. A Perspective upon the National Security Agencies. *Management Dynamics In The Knowledge Economy*, 4(1), 141-152. Retrieved from <http://www.managementdynamics.ro>
- [32] Linz, S.J. and Semykina A. (2020). What makes workers happy? Anticipated rewards and
- [33] Loan, L. (2020). The influence of organizational commitment on employees' job performance: The mediating role of job satisfaction. *Management Science Letters*, 10(14), 3307-3312.
- [34] Madanat, H.G., (2018). Level of effectiveness of human resource management practices.
- [35] Manikandan K. (2017), occupational heat stress impacts on health and productivity in steel industry in Southern India, *Safety and health at work*, Vol. 8
- [36] Morgan M O., Winifred E, Christian A, Emmanuel E. O and Paul N (2021). The mediating effect of job satisfaction on health and safety policy management and employee productivity in manufacturing firms. *Problems and Perspectives in Management*, 19(2), 104-117. doi:10.21511/ppm.19(2).2021.09
- [37] Morgan M O., Emu, W., Amadi, C., Okon, E., & Njama, P. (2021). The mediating effect of job satisfaction on health and safety policy management and employee productivity in manufacturing firms.
- [38] Nurabadi, A. A., Nurabadi, A., Sucipto, S., & Gunawan, I. (2019). Informal Supervision Model "Managing by Walking About" in Improving Quality of Learning. In 5th International Conference on Education and Technology (ICET 2019). Atlantis Press.
- [39] Panggiki, A. C., Lumanauw, B., & Lumintang, G. G. (2017). Pengaruh Kompensasi, Kerjasama Tim Dan Kepuasan Kerja Terhadap Kinerja Karyawan Pada Ajb Bumiputera 1912 Cabang Sam Ratulangi. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 5(3).
- [40] Prasad, J. S., Muthukumar, P., Desai, F., Basu, D. N., & Rahman, M. M. (2019). A critical review of high-temperature reversible thermochemical energy storage systems. *Applied Energy*, 254, 113733.
- [41] Rakić, T., & Živković, S. (2019). The Influence of Employee Satisfaction on Safety and Productivity. *Facta Universitatis, Series: Working and Living Environmental Protection*, 117-126.
- [42] Rakić, T & Živković, S. (2019). The influence of employee satisfaction on safety and productivity. *Facta Universitatis, Series: Working and Living Environmental Protection*. 117. 10.22190/FUWLEP1902117R.
- [43] Rasmi, R., Amrullah, A., & Sumardi, S. (2017). Compensation and motivation affect employees' job satisfaction. *Hasanuddin Economics and Business Review*, 1(2), 162-167. doi:10.26487/hebr.v1i2.1188
- [44] Rassa, M. (2017). Afghanistan public health facilities staffs' job satisfaction and factors affecting the job satisfaction. *International Journal of Advanced Research*, 5, 975-989. Research (09725814), 15(2), 101-110.
- [45] Reddy, K.S. and B.G.V.P. Madhav (2018). Open Access is a study on the impact of employee satisfaction on the quality and profitability of organizations. 1(1): 7-11.
- [46] Schwartz, M. E., Welsh, D. E., Paull, D. E., Knowles, R. S., DeLeeuw, L. D., Hemphill, R. R., ... & Sculli, G. L. (2018). The effects of crew resource management on teamwork and safety climate at Veterans Health Administration facilities. *Journal of Healthcare Risk Management*, 38(1), 17-37.

-
- [47] Smith, R. A., & Somers, J. (2016). MBA in education leadership: A model for developing an interdisciplinary principal preparation program. *Journal of Planning and Changing*, 47(1/2), 3-20.
- [48] Standifer, R. L., & Lester, S. W. (2020). Actual versus perceived generational differences in the preferred working context: an empirical study. *Journal of Intergenerational Relationships*, 18(1), 48-70.
- [49] Tambay, A. (2018). The mediating role of psychological contract in the effect of occupational health and safety practices on organizational commitment: A research in the cement sector (Doctoral dissertation, Selcuk University Social Sciences Institute).
- [50] Tatar, A. (2020). Impact of Job Satisfaction on Organizational Commitment.
- [51] Taufek, F. H. B. M., Zulkifle, Z. B., & Kadir, S. Z. B. A. (2016). Safety and health practices and injury management in the manufacturing industry. *Procedia economics and finance*, 35, 705-712.
- [52] Umugwaneza, C., Nkechi, I. E., & Mugabe, J. B. (2019). Effect of Workplace Safety and Health Practices on Employee Commitment and Performance in Steel Manufacturing Companies in Rwanda.
- [53] Wang, P., Z. Luand Sun J. (2018). Influential effects of intrinsic-extrinsic incentive factors on management performance in new
- [54] Yang, X., & Wang, W. (2018). Exploring the determinants of job satisfaction of civil servants in Beijing, China. *Public Personnel Management*, 42(4), 566-587.
- [55] Yang, Y. (2019). Principals' transformational leadership in school improvement. *International Journal of Educational Management*.