

# Standardized Attendance Information System for Philippine Air Force Civilian Human Resource

EMIL BERNARD V ACUÑA

*Institute of Graduate Studies/Philippine State College of Aeronautics*

***Abstract-*** *This study aimed to evaluate and improve the attendance and productivity monitoring system of the Philippine Air Force Civilian Human Resource (PAF CivHR) through a standardized attendance information system. A descriptive quantitative method was used, and probability sampling was conducted on the participants, with informed consent and confidentiality upheld. Data were analyzed using statistical tests, such as descriptive statistics and Kruskal Wallis. The study addressed the following problems: the demographic profiles of the participants, the level of agreement for attendance and productivity, the effectiveness of the current program, challenges faced by the program, and proposed solutions. The findings can be generalized to the entire population of PAF CivHR personnel, and the results can provide valuable insights for the PAF in enhancing their attendance and productivity monitoring system. The study's results showed that the current attendance and productivity monitoring system faced several challenges, including technical difficulties, inadequate support, and insufficient training, which impacted its effectiveness. Additionally, the study revealed that most employees were dissatisfied with the current system and that there was a significant correlation between employee satisfaction and productivity.*

***Indexed Terms-*** *Attendance, Competency Level, Performance, Productivity*

## I. INTRODUCTION

A Daily Time Record (DTR) was a document used by Philippine Air Force (PAF) Civilian Human Resources' (CivHR) to record the time they arrived and departed from work, as well as the time spent on lunch and other breaks. It was used to track attendance and calculate the amount of time worked, which was used to determine a CivHR's pay and benefits. It typically included the CivHR's name, the date, the

hours worked, and approved overtime or absences. Employers could use electronic or paper-based systems to maintain DTRs, and some companies used time and attendance software that automated the process of tracking and recording CivHR hours. A mandatory document had to be filled out and submitted daily. In addition, it served as a record of a CivHR's attendance and punctuality, which was necessary for performance evaluations and other HR-related processes. DTRs were also crucial for compliance with labor laws and regulations and for tracking CivHR productivity.

A DTR was important for PAF because it allowed management to track CivHR's attendance and punctuality. This information could be used to ensure that CivHRs were meeting their work schedule requirements and to identify any attendance or punctuality issues that needed to be addressed. Additionally, a DTR could be used to calculate CivHR pay, including overtime and other benefits, and to ensure compliance with labor laws and regulations. A DTR was essential for managing and evaluating CivHR performance and ensuring that CivHRs were compensated fairly for their time.

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II. PROCEDURE

Research Design

Based on the data that was gathered, a descriptive quantitative method was utilized in the study. The researchers efficiently collected data from a large sample of employees, which allowed for generating statistically significant findings that could be generalized to the population of government employees. Standardized data collection procedures and techniques were used in the quantitative methods. This information was necessary for generating accurate and trustworthy results.

Population and Sampling

using quantitative methods allowed statistical analysis to uncover patterns and relationships in the data, providing valuable insights into government employees' daily time records. The findings of this study were based on the analysis of the data collected through surveys and statistical analysis of the responses. The researchers used statistical tests, such as descriptive statistics and Kruskal Wallis, to analyze the data and draw conclusions.

The study participants were PAF Civilian Human Resource personnel from various offices. As of February 2023, the Philippine Air Force's population was 1262 personnel. Due to time constraints and the present pandemic, the researchers used probability sampling, precisely the random sampling technique, to select the sample population.

Data Gathering Procedure

Due to pandemic situation the data gathering procedure of this study was through online platforms. The survey included four (4) offices, each with at least ten (10) participants. The majority of the participants were from administrative departments with rank-and-file positions. The sample population was selected to ensure the study's findings could be generalized to the entire PAF Civilian Human Resource personnel population.

To select participants, the researchers briefly explained the study's purpose and objectives, emphasizing the confidentiality of the responses. Informed consent was obtained from each participant before the survey was administered. The survey was

conducted online, and the participants were given a specific deadline to submit their responses.

The selection of the sample population through probability sampling ensured that the study's findings could be generalized to the entire PAF Civilian Human Resource personnel population. Using the random sampling technique further enhanced the validity of the study's results. Additionally, upholding ethical standards in research involves obtaining informed consent from the participants and ensuring that their responses remain confidential.

Statistical Treatment of Data

The research utilized several methods to treat, analyze, and calculate the relationship between variables. Firstly, the frequency distribution method was used to organize and analyze the data by displaying the number of participants in each group. This allowed for the determination of probabilities based on standard deviations. The weighted mean/average method was employed to assess the participants' information and understanding, considering factors such as classification, evaluation, and noticeable differences. The Likert scale, a commonly used survey method, measured responses regarding attendance, productivity, and program effectiveness, with scores and averages calculated using the four-point scale. The nonparametric Kruskal-Wallis H-Test was used to identify significant differences between groups on a dependent variable. Lastly, ranking was used to establish the relationship between objects in a set.

III. RESULTS

Table 1

OVERALL SUMMARY OF MEAN, STANDARD DEVIATION AND RANK DISTRIBUTION OF THE PARTICIPANTS' LEVEL OF AGREEMENT IN DETERMINING THE ATTENDANCE AND PRODUCTIVITY OF PHILIPPINE AIR FORCE CIVHR

VARIABLES	Mean	Standard Deviation	Rank	Verbal Interpretation
1. Punctuality	3.08	0.712	2	Agree
2. Performance	3.13	0.765	1	Agree
3. Communication and Collaboration	3.02	0.906	3	Agree
Average Weighted Mean	3.08	0.705		Agree

Table 1 presents an overall summary of the mean, standard deviation, and rank distribution of the participant's level of agreement in determining the attendance and productivity of the Philippine Air Force CIVHR. The variables considered are Punctuality, Performance, Communication, and Collaboration.

The results show that the participants agreed that performance is the most critical factor in determining the attendance and productivity of PAF CIVHR, with a mean score of 3.13 and a standard deviation of 0.765, ranking first among the three variables. Punctuality also received a favorable rating, with a mean score of 3.08 and a standard deviation of 0.712, ranking second. Communication and collaboration obtained a mean score of 3.02 and a standard deviation of 0.906, ranking third among the variables.

These results suggest that PAF CIVHR should focus on maintaining and improving employees' job performance to enhance attendance and productivity. Furthermore, the organization should also prioritize punctuality in the workplace as it is deemed necessary by the participants. Improving communication and collaboration among team members is also vital in enhancing the productivity and efficiency of PAF CIVHR.

**Table 2**  
**KRUSKAL WALLIS H-TEST RESULTS ON THE LEVEL OF AGREEMENT IN DETERMINING THE ATTENDANCE AND PRODUCTIVITY OF PHILIPPINE AIR FORCE CIVHR WHEN GROUPED ACCORDING TO DEMOGRAPHIC PROFILE**

Statistical Treatment	Age	Years in Service	Position/ Designation	Salary Grade	Office (HPAF)
Kruskal Wallis H	7.42	9.70	2.92	0.97	0.78
Degrees of Freedom	3	4	2	1	3
P-value	0.060	0.046	0.233	0.324	0.862

Table 2 presents the results of the Kruskal Wallis H-Test on the level of agreement in determining the attendance and productivity of the Philippine Air Force CIVHR when grouped according to demographic profile. The Kruskal Wallis H-Test is a statistical method that does not require any assumptions about the distribution of the data and is commonly used to assess whether there are notable

differences between two or more groups concerning an independent variable.

The results showed that there was no significant difference in the level of agreement when grouped according to age (p-value=0.060), position/designation (p-value=0.233), salary grade (p-value=0.324), and office (HPAF) (p-value=0.862). However, there was a significant difference in the level of agreement when grouped according to years in service (p-value=0.046).

These results suggest that years in service impact the level of agreement in determining the attendance and productivity of the Philippine Air Force CIVHR. The findings indicate the need for customized policies, training, and development programs that consider age and years in service to enhance employee productivity and attendance.

**Table 3**  
**OVERALL SUMMARY OF MEAN, STANDARD DEVIATION AND RANK DISTRIBUTION OF THE PARTICIPANTS' LEVEL OF EFFECTIVENESS OF THE CURRENT PROGRAM IN MAINTAINING THE ATTENDANCE AND PRODUCTIVITY OF PHILIPPINE AIR FORCE CIVHR**

VARIABLES	Mean	Standard Deviation	Rank	Verbal Interpretation
1. Punctuality	2.77	0.793	2	Effective
2. Performance	2.69	0.805	3	Effective
3. Communication and Collaboration	2.87	0.847	1	Effective
<b>Average Weighted Mean</b>	<b>2.78</b>	<b>0.815</b>		<b>Effective</b>

Table 3 presents an overall summary of the mean, standard deviation, rank distribution, and verbal interpretation of the participants' level of effectiveness of the current program in maintaining attendance and productivity in the Philippine Air Force CIVHR. All variables' average weighted mean score was 2.78, interpreted as effective.

Based on the results, communication, and collaboration received the highest mean score of 2.87, followed by punctuality, with a mean score of 2.77, and performance, with a mean score of 2.69. The standard deviation for all variables ranged from 0.793

to 0.847, indicating moderate variation in the participants' responses.

These results suggest that the current program in Philippine Air Force CIVHR effectively maintains attendance and productivity, particularly in terms of communication and collaboration, punctuality, and performance. These findings imply that the current program's strategies, policies, and procedures are working well in promoting and maintaining the attendance and productivity of the employees. However, there may still be some areas for improvement, particularly in addressing the underlying causes of performance issues and effectively using resources.

**Table 4**  
**MEAN AND RANK DISTRIBUTION OF THE PARTICIPANTS' CHALLENGES FACE BY THE CURRENT PROGRAM IN MAINTAINING ATTENDANCE AND PRODUCTIVITY OF PAF CIVHR**

Challenges	HSSG	OA-2	OA-8	OAF	Mean	Rank	Interpretation
1. The current program is fair and unbiased in measuring attendance and productivity.	2.80	2.50	2.90	2.70	2.73	4	Agree
2. Employee productivity is a challenge for the existing program.	3.00	3.20	2.60	2.50	2.83	1	Agree
3. The current program does not provide sufficient support and resources to enhance employee attendance.	2.80	2.80	2.50	2.70	2.70	5.5	Agree
4. The current program does not offer enough tools and support to increase worker productivity.	2.80	2.50	2.50	2.30	2.52	10	Agree
5. The current program provides fewer incentives for employees to maintain high attendance and productivity levels.	3.00	2.70	2.40	2.40	2.70	5.5	Agree
6. The current program is difficult to understand and follow.	2.50	2.90	2.90	2.30	2.65	8	Agree
7. The current program is able to identify and address challenges faced by employees in maintaining attendance and productivity levels.	2.80	2.80	2.90	2.50	2.75	2.5	Agree
8. The current program provides less opportunity for employee training and development to improve their skills and knowledge.	2.90	2.20	2.90	2.40	2.60	9	Agree
9. The current program has a less positive impact on employee morale and job satisfaction.	2.80	2.90	2.70	2.60	2.75	2.5	Agree
10. Overall, the current program faces challenges in maintaining attendance among its employees.	2.60	2.70	2.80	2.60	2.67	7	Agree
<b>Average Weighted Mean</b>	<b>2.80</b>	<b>2.72</b>	<b>2.74</b>	<b>2.50</b>	<b>2.69</b>		<b>Agree</b>

Table 4 indicates that the second-ranked challenge, with a mean score of 2.75, is the less positive impact of the program on employee morale and job satisfaction. This data suggests the program must improve employee satisfaction and motivation to enhance attendance and productivity.

The participants also perceived that the program provides fewer incentives for employees to maintain

high attendance and productivity levels (ranked 5th with a mean score of 2.70) and does not offer enough training and development opportunities to improve employee skills and knowledge (ranked 9th with a mean score of 2.60).

The participants perceived that the current program is fair and unbiased in measuring attendance and productivity (ranked 4th with a mean score of 2.73). However, they needed to provide more support and resources to enhance employee attendance (ranked 5.5th with a mean score of 2.70). The program is also challenging to understand and follow (ranked 8th with a mean score of 2.65) and needs help maintaining attendance among its employees (ranked 7th with a mean score of 2.67).

The implications of these findings suggest that the program needs to focus on improving employee productivity, providing incentives for maintaining high attendance and productivity levels and offering sufficient training and development opportunities. The program must also improve its impact on employee morale and job satisfaction and provide more support and resources to enhance attendance.

**Table 5**  
**Suitability of the Proposed Strategic Model**

Themes	Codes
Employee Empowerment	Let offices check attendance, assess CivHR needs by unit, educate employees on the program
Technological Solutions	Integrated system for tracking attendance, biometric attendance (fingerprint, face recognition), online attendance app, automated attendance tracking
Work Arrangement	WFH scheme promotion, strict compliance with FWA, work transparency
Rewards and Recognition	Incentives, rewards and recognition for punctual Employees, RNR
Program Reassessment	Reassessing the current program, revising the system to benefit both members and organization
Time Management	Employee responsibility, managing time efficiently, being on time
Other Factors	Mental and physical health of employees

The most frequently mentioned solution is to empower employees by letting offices check attendance, assessing CivHR needs by unit, and educating employees on the program. This theme suggests that employees should be given more responsibility and involvement in the attendance monitoring process.

The second most frequently mentioned theme is technological solutions, which include an integrated system for tracking attendance, biometric attendance

(fingerprint, face recognition), online attendance app, and automated attendance tracking. This finding suggests that the current manual system may not be effective and that the introduction of technological solutions could improve attendance monitoring.

The third most frequently mentioned theme is work arrangement, which includes promoting the WFH scheme, strict compliance with FWA, and work transparency. This theme suggests that the current work arrangement may not be suitable for some employees and that changes must be made to improve attendance and productivity.

The fourth most frequently mentioned theme is rewards and recognition, which includes incentives, rewards and recognition for punctual employees, and RNR. This theme suggests that employees should be incentivized to maintain good attendance and that recognition and rewards can be effective motivators. The fifth most frequently mentioned theme is program reassessment, which includes reassessing the current program and revising the system to benefit both members and the organization. This theme suggests that the current program may not be effective and that changes need to be made to improve attendance and productivity.

The sixth most frequently mentioned theme is time management, which includes employee responsibility, managing time efficiently, and being on time. This theme suggests that employees should take more responsibility for their attendance and develop time management skills.

Lastly, participants mentioned employees' mental and physical health as another factor affecting attendance and productivity. This theme suggests that employees' well-being should be considered when monitoring attendance and productivity.

The implications of these findings suggest that there is a need for a comprehensive and integrated approach to improving the attendance and productivity of PAF CivHR. This approach should include employee empowerment, technological solutions, work arrangement, rewards and recognition, program reassessment, time management, and consideration of other mental and physical health factors.

Implementing these solutions may require changes in policies, processes, and systems and training and education for employees and management.

## CONCLUSION

1. The findings suggest that the PAF has a relatively young workforce in a clerical position, with most participants in the 21-30 age group and had less than a year in the service.
2. PAF CivHR employees perceive their attendance and productivity positively and consider themselves punctual, productive, and effective in communication and collaboration. This information suggests that they have a good work ethic and understand the importance of these factors in the workplace.
3. According to the perceptions of PAF CivHR employees, the current program for maintaining their attendance and productivity is effective, as indicated by high mean scores for all three levels of agreement. The program is believed to successfully maintain their punctuality, performance, and communication and collaboration skills, meeting their expectations for effectiveness.
4. Although the current program effectively maintains attendance and productivity levels, challenges such as employee productivity and lack of support, tools, and incentives still need to be addressed. Addressing these challenges can improve the program's effectiveness, organizational performance, and employee satisfaction.
5. The attendance and productivity program in the Philippine Air Force CIVHR faces challenges such as the lack of support and resources, difficulty understanding and following the program, inadequate provision of tools and support, and limited incentives for high attendance and productivity. Despite these challenges, the program remains effective and positively impacts employee morale and job satisfaction. Reassessing the program and considering employees' mental and physical health is essential for ensuring its success.

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