

ORIGINAL ARTICLE

## Internal control and administrative management of Agrupamiento de Comunicaciones “José Olaya” - Arequipa, 2020 - 2021

### ABSTRACT

The purpose of the study was to determine the relationship between internal control and administrative management in Agrupamiento de Comunicaciones “José Olaya” during the period 2020-2021, in order to establish a model that prevents possible threats and contributes to the achievement of objectives by public entities. In addition, it sought to raise awareness among the participating personnel and emphasize the benefits of having a well-organized internal control system, as well as to evaluate its performance and understand its relationship with the administrative sphere. The research was based on a basic quantitative approach, with a non-experimental design that describes and correlates variables. A survey was used to collect data from a sample of 169 individuals, randomly selected from a population of 302 individuals. The sample included both military personnel (officers, technicians, non-commissioned officers, and enlisted personnel) and civilian personnel. A questionnaire consisting of 41 items for the variable “internal control” and 13 items for the variable “administrative management” was used. The results obtained, when contrasting the hypothesis by means of Spearman’s Rho correlation coefficient, yielded a value of 0.819, which showed a very strong positive correlation between both variables.

**Keywords:** Internal control; Administrative management; Agrupamiento de Comunicaciones “José Olaya”; COSO framework.

**Julio Hernan Santa Cruz Zavaleta**

hernansantacruz959@gmail.com

ORCID: <https://orcid.org/0000-0003-3792-4605>

Ejercito del Perú, Centro de Estudios Estratégicos del Ejercito del Perú. Lima, Peru

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## **INTRODUCTION**

In a context characterized by constant and diverse changes in different areas, measurement emerges as an essential factor for both public and private management. This principle, mentioned by Neuman (2023), emphasizes the importance of measurement according to the theory by Peter Drucker, who stated that “Lo que no se puede medir no se puede controlar; lo que no se puede controlar no se puede gestionar; lo que no se puede gestionar no se puede mejorar” [what cannot be measured cannot be controlled; what cannot be controlled cannot be managed; what cannot be managed cannot be improved] (par.1). This statement highlights the importance of the research on internal control and administrative management at Agrupamiento de Comunicaciones “José Olaya” in Arequipa, whose potential and impact on society is focused on the following aspects: By improving both internal control and administrative management in a public entity, where transparency in processes and decisions is promoted, society’s trust in government institutions is strengthened; in addition, effective internal control and adequate administrative management can prevent cases of corruption by establishing oversight and control mechanisms that reduce the risk of embezzlement and improper practices, thus contributing to efficiency in the use of public resources and ensuring that they are optimally allocated to essential services and programs. Similarly, sound public administration and effective internal control can improve the quality and efficiency of public services provided to society, which has a direct impact on the well-being and satisfaction of the public.

The specific objective of the study is to establish the relationship between internal control and administrative management in Agrupamiento de Comunicaciones “José Olaya” during the aforementioned period. It seeks to analyze how strengthening internal control can affect the efficiency and transparency of the administrative management of the institution, with the aim of preventing possible threats and improving organizational management. As mentioned by Torres Aranda (2018), administrative management and internal control are closely related, and strengthening this

relationship can contribute significantly to improving organizational management.

According to Güemes (2019), cited by Pérez Corrales and Barbarán Mozo (2021), the global health challenge caused by the COVID-19 pandemic in 2020 revealed deficiencies in public management that affected different sectors of the State and forced companies to adapt and reinvent themselves. In addition, the weaknesses in the management of public organizations in Latin America are due to the lack of careful control by public officials, which prevents the achievement of objectives oriented to the service of society. To address these shortcomings, states are strengthening mechanisms to manage resources more effectively and reduce social problems. The Armed Forces have not been immune to this situation, especially Agrupamiento de Comunicaciones “José Olaya” –Analysis Unit–where an inefficient management of logistics is noted, with challenges in control procedures, risk diagnosis, data management and communication.

In such regard, it is imperative to understand the nature of two variables: on the one hand, internal control, an essential concept in the management of organizations, based on different theories that emphasize its importance and effective application. According to Elizalde-Marín (2018), internal control can be analyzed from two perspectives: a traditional one, which focuses on the organizational plan and methods to protect the assets of an organization, and a contemporary one, which considers it as an integral management process that ensures the effectiveness of processes and the achievement of objectives. Coopers and Lybrand (1997) also point out that internal control, led by management and human resources, is a critical system for the success of any organization. Its primary objective is to provide reasonable assurance in three areas: the achievement of the organization’s objectives and purposes; the accuracy, completeness, and transparency of financial information; and compliance with all applicable laws and regulations. This approach emphasizes the importance of key components such as the control environment, risk assessment, control activities, information and communication, and monitoring.

In relation to the theories that support internal control, Mantilla and Blanco (2005), cited by Rivas Márquez (2011), mention that in modern times it has become a crucial mechanism to protect the interests of management in an increasingly competitive business environment. Three generations of models stand out in relation to this variable: empirical measures; legal, strategic, and managerial approach, which reflect evolution; and adaptation of internal control to organizational needs. These theories and approaches support the importance of this mechanism as a key element in organizational management by providing tools and conceptual frameworks for its effective implementation and its contribution to efficiency and transparency in any organization.

Administrative management, according to Next\_U (2022), is defined as an essential process in any organization that involves planning, organizing, directing, and controlling resources to achieve the entity's objectives. According to Salguero Barba and García Salguero (2018), the theories that support it seek to promote efficient administration, analyzing how organizations acquire and use their resources to meet goals and obtain benefits. This process involves setting goals, planning strategies and policies in a logical and orderly manner to meet plans and deadlines. In addition, Medina Macias and Avila Vida (2002) mention the Scientific Management Theory (SMT) proposed by Frederick W. Taylor, focused on the application of fundamental principles to improve efficiency in human activities, including organizational management; and the Administrative Management Theory developed by Henri Fayol, which highlights the basic functions to achieve efficiency in an organization. Fayol and Taylor (1997) identify six groups of operations that must be managed in any company. These theories offer conceptual frameworks and fundamental principles for administrative management, helping organizations to structure their processes, make effective decisions, and achieve their objectives efficiently. Quiroa (2020) emphasizes that implementing administrative management achieves objectives such as maximizing processes to improve performance, improving monitoring and internal control for more accurate evaluation, as well as facilitating effective work to achieve goals, and offering better products and services

through innovative technologies that optimize tasks and processes.

The International Organization of Supreme Audit Institutions (INTOSAI, 2022), in relation to internal control as a normative body, approved the standards for internal control guidelines applicable to all government institutions, with the intention of guaranteeing a "reasonable" level of security in the sector. Also, in a press release, SERVIR's Deputy Head of Communications and Institutional Image (2019) noted that the Autoridad Nacional del Servicio Civil, in collaboration with the Contraloría General de la República, is implementing internal control training programs to optimize the delivery of public services and address potential acts of corruption. Emphasis is placed on the magnitude of the economic losses generated by this endemic evil in various entities between 2019 and 2020, which exceeded PEN 23,297 million. This, compared to 2020, during the global health crisis, where a worrying situation was identified in the goods and services sector.

The model of the Committee of Sponsoring Organizations of the Tradeway Commission (COSO, 2013) is an internationally recognized framework for internal control management, which establishes five basic elements: control environment, risk assessment, control activities, information and communication, and supervision. It also highlights that the application of this model not only has a positive impact on society by strengthening the credibility of government agencies, but also contributes to enhancing the effectiveness of control standards and administrative management in the staff of public servants.

This research is relevant in the current context, where the integrity and efficiency of public institutions are essential to ensure the proper use of resources and prevent possible irregularities; moreover, the results obtained can generate significant benefits for several stakeholders. In the first place, the military and civilian entities of Agrupamiento de Comunicaciones "José Olaya" will directly benefit from the identification of areas for improvement in their internal processes, which will allow them to implement changes to strengthen their operational efficiency and prevent possible risks

or irregularities. On the other hand, the military and civilian personnel of the institution will benefit from having more transparent, efficient, and secure internal processes, improving their working environment, increasing trust in the organization, and ensuring better management of available resources. At the societal level, the promotion of transparency, efficiency, and integrity in a key public institution will benefit society in general by building trust in government institutions, particularly those of the Armed Forces, by preventing instances of corruption, and by ensuring the proper use of public resources for the benefit of the community. Finally, other researchers and academics in the field of administration and management will be able to benefit from the findings of this research as a reference for future studies, thus contributing to the advancement of knowledge in this area and the development of new research.

The relevant literature on this issue highlights the importance of managerial leadership and its impact on administrative management. According to Vásquez Torres (2022), transformational and participative leadership is directly correlated with effective administrative management: it is paramount to have leaders who are committed to the mission of the institution in order to improve administrative management in public institutions. COSO (2013) also points out that internal control is fundamental to identify and mitigate risks, design effective controls, and continuously monitor the corresponding system, highlighting the need to implement measures that strengthen confidence in public institutions and promote transparency in processes. This model proposes to define key components of internal control that are essential to mitigate risks and improve organizational management.

A relevant controversy on this topic may arise from the diversity of methodological approaches used in research on internal control and administrative management. The choice of methodological approach can influence the interpretation of the results and possible recommendations derived from the study, generating debates on the validity and applicability of the conclusions.

In such regard, weaknesses in logistics management and internal control have been identified in the unit of analysis, where the lack of integrity, risk assessment, control activities, information and communication, as well as supervision, negatively affect the development of the organization, generating problems of corruption and financial instability. This would be the focus of the study of this research, highlighting problems such as non-compliance with control measures, high staff turnover, and lack of monitoring of continuous improvement, a situation that hinders the normal operation of the organization, causing problems of corruption, financial instability, and poor management.

The justification for this specific study is strengthened by considering that it fills an existing gap or responds to an unmet need in the context of Agrupamiento de Comunicaciones “José Olaya” during the period 2020-2021. By addressing the relationship between internal control and administrative management in this entity, it seeks to fill a relevant knowledge gap to improve operational efficiency, prevent possible risks, and promote transparency in public management; also, the research has the potential to fill knowledge gaps by providing new insights on the impact of internal control and administrative management on organizational effectiveness, the application of internal control models in public entities and the use of statistical tools for data analysis in the organizational context studied, thus contributing to the optimization of processes, the prevention of irregularities and the achievement of institutional objectives.

Several national and international authors such as Santillana Condori (2022), Fernández Estela (2021), Paredes Arizapana (2019), Menezes Paucar (2019), Torres Aranda (2018), and Morales Cano (2018) have reached the same conclusion about the correlation between both variables, concluding that good internal control leads to adequate administrative management.

## **METHODS**

This research adopted a basic quantitative approach, with a descriptive level and a non-experimental design, based on the hypothetico-deductive method. The scope of the study



was transversal or transactional, seeking correlations between the variables Internal Control (1) and Administrative Management (2) in order to explain, verify, predict and control facts by identifying their real causes. The first variable has 5 dimensions with 41 items, while the second has 4 dimensions with 13 items. The questionnaire was the instrument used for data collection, which was validated by means of a pilot survey given to 36 participants with similar characteristics to the study population, being selected the Artillery Group "Francisco Bolognesi" to access the information, after authorization by means of informed consent.

Regarding the results, they showed a high level of reliability, with McDonald's Omega and Cronbach's Alpha of 0.975 and 0.973 analyzed on 41 items, respectively, for the variable Internal Control, and 0.950 and 0.952 for the variable Administrative Management, analyzed on 13 items, respectively; this indicates a "very high" reliability. SPSS version 23 and the Jamovi application were used for the analysis. In addition, in the questionnaire used, the answers were classified according to the intensity of the appreciation of the event, from 1, very low, to 5, very high.

The content validation (internal consistency) was carried out by three experts: Dr. Hugo Jorge Bernabé Moreno, Dr. Luis Alzamora de los Godos Urcia, and Dr. Jorge Anastasio Pedro Páucar Luna, who followed the criteria of pertinence, importance, and clarity, demonstrating its applicability.

The research considered a population of 302 individuals, including officers, technicians, sub-officers, volunteers, and civilian personnel. Inclusion and exclusion parameters were established, taking into account the availability of the participants during the data collection period, as well as special circumstances such as the COVID-19 pandemic and displacements due to social conflicts, assignments or leaves of absence. Likewise, stratified probability sampling was used, following the guidelines established by Colombia's Departamento Administrativo Nacional de Estadística (DANE, 2008), to ensure the representativeness of the sample, which consisted of 169 workers. To obtain the sample, the finite population statistic was applied, with

a confidence level of 95% and an error margin of 5%. The results obtained are expected to reflect the target population in a generalized manner.

On the other hand, the importance of persistent follow-up to increase the response rate is emphasized. The application of the questionnaire focuses on the evaluation of deficient administrative management controls through the perception of military and civilian personnel. It is mentioned that, in view of the COVID-19 pandemic, it was decided to collect the information through a virtual self-administered questionnaire, in compliance with the measures established by the Peruvian Government regarding restrictions on the grouping of persons, according to Executive Order No. 010-2022-PCM (2022), published in the Official Gazette El Peruano. The techniques used to process the data are also described, using the software SPSS version 23, Jamovi and Microsoft Excel 2016, as indicated by Estadística con Joaquín (2021). These tools were used to perform both descriptive and inferential statistical analyses, as well as to create graphical representations of the results.

Consequently, this study provided empirical evidence on the deficiencies in the administrative management of Agrupamiento de Comunicaciones "José Olaya", and recommended measures for improvement. In summary, the theoretical and conceptual foundations were established, as well as the key methodological decisions, including the quantitative approach, the type and design of research, and the detailed description of the research sample.

## RESULTS

In the analysis of all the variables and dimensions, descriptive and inferential statistics were applied to the data pooled in three levels: low, medium, and high, in order to centralize or group the data as a technical statistical procedure. After summarizing the figures in a simple and clear way with frequency tables for their interpretation, the normality test was performed for both variables, which showed that they did not present a normal distribution. Consequently, it was decided to use a non-parametric statistical approach, such as Spearman's Rho  $\rho$ , since the sample was

greater than 50 individuals. According to Re-quant-Alvarez *et al.* (2018), this coefficient is used to evaluate the relationship between variables on the ordinal scale. In addition, this coefficient quantifies the degree of agreement between the ranges assigned to the values of the variables studied. The following results were obtained:

Table 1 shows, in relation to the first variable Internal Control, that 55.6% of the participants perceived that the control mechanisms within the Agrupamiento de Comunicaciones “José Olaya” were presented in a regular or average manner. On the other hand, 32% stated that they were high, while 12.4% stated that they were inadequate or low. Likewise, in relation to the second variable, administrative management, it was noted that while 52.7% of those interviewed recognized that management in the Agrupamiento de Comunicaciones “José Olaya” was regular or average, 34.9% indicated that it was high, while 12.4% considered it unsatisfactory or poor.

On the one hand, the categories of central tendency, skewness and kurtosis are determined. According to Habiaspensado (2021), descriptive statistics are procedures that show the main aspects of the sample data without the need to infer the population. Measures of central tendency such as mean, median, mode, and the measure of dispersion such as standard deviation are calculated. With respect to the mean, the average response for both the first variable and the second variable is 2.2, which indicates that the internal control and administrative management measures are considered to be of medium level, respectively.

For the median, the sample of individuals has a central position, where the measures of internal control and administrative management are given as similar or average. For the mode, the result was the value of 2, which represents the most frequent response value, which represents the average level in the measures of internal control and administrative management, respectively.

However, with respect to the measure of dispersion, such as the standard deviation, the results were 0.639 and 0.652 for the first and second variables, respectively, where a slight variability of the first variable with respect to the second is visualized, since it tends to approach zero. See Table 2.

According to VariaBless Pss (2024), skewness is defined as the summary numbers that indicate the shape of the data distribution; with respect to kurtosis, it refers to the tailedness of the histogram of the variable under study. Accordingly, Figure 1 shows that the variable Internal Control is slightly distributed and skewed to the left or negative ( $As = -0.195$ ); similarly, Figure 2 shows the variable Administrative Management, which is distributed to the left or negative ( $As = -0.263$ ). With regard to the analysis of kurtosis, it can be seen that variable Internal Control shows a negative kurtosis ( $C = -0.622$ ), which is a platykurtic distribution (flattened distribution), or the data are distributed both to the right and to the left with regard to the mean; similarly, the variable Administrative Management displays a negative value or kurtosis ( $C = -0.708$ ).

As for the inferential analysis, the two variables were first evaluated to determine if

**Table 1**

Frequency table using ranks as characteristics of internal control and administrative management at Agrupamiento de Comunicaciones “José Olaya” 2020-2021 (pooled data)

Category	Variable: Internal control		Variable: Administration management	
	Frequency	Percentage	Frequency	Percentage
Low	21.0	12.4	21.0	12.4
Medium	94.0	55.6	89.0	52.7
High	54.0	32.0	59.0	34.9
Total	169.0	100.0	169.0	100.0

Note. Own preparation, 2024.

they followed a normal distribution. This procedure is applicable to quantitative variables when the sample size exceeds 50 ( $n = 169$  individuals), as mentioned by Romero (2016). In this sense, the Kolmogorov-Smirnov test was used, with a significance level (margin of error) set at  $\leq 0.05$ . The results of the SPSS application yielded a Z-statistic of 0.102 and 0.130 for the two variables, respectively, with a statistical significance value (bilateral asymptotic sig.) of  $p = 0.000$ . This p-value corresponds to a margin of error  $\leq 0.05$ , which leads to the rejection

of the null hypothesis ( $H_0$ ) and the acceptance of the alternative hypothesis ( $H_a$ ), indicating that the data do not have a normal distribution and that it is appropriate to use non-parametric tests for hypothesis testing, using Spearman's Rho coefficient for this purpose.

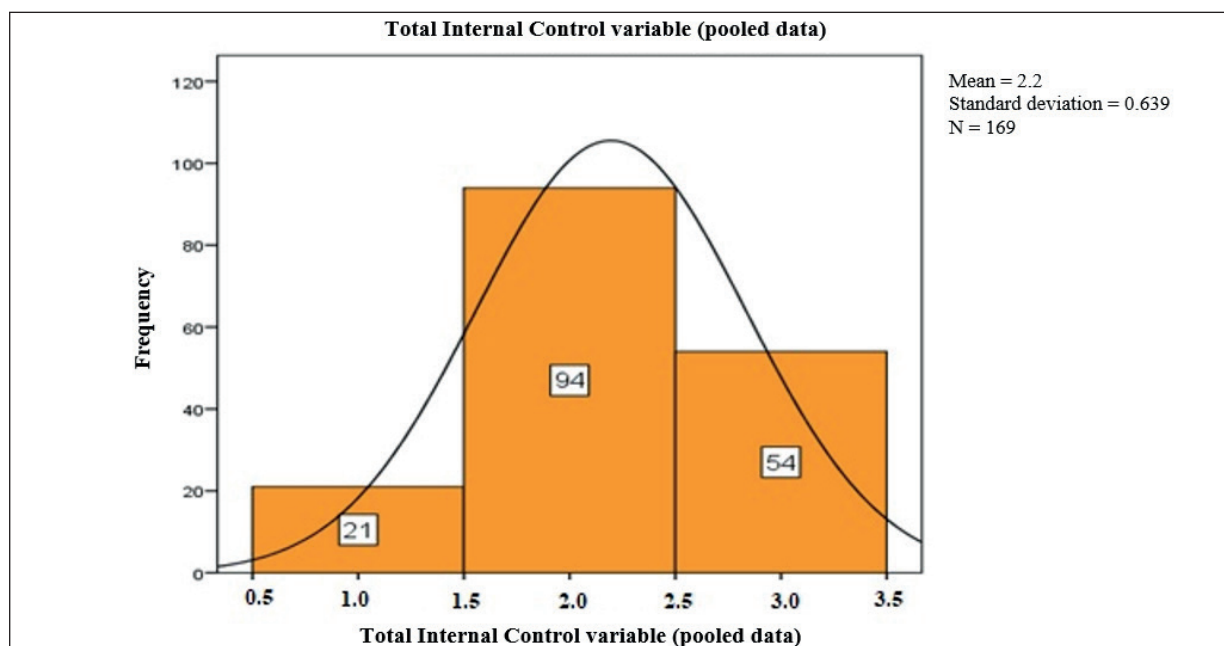
In Table 3, in order to determine the behavior of each variable with respect to the others in each dimension, the analysis of contingency tables—also known as crossed tables or bivariate double entry tables—was carried out,

**Table 2**  
Measures of central tendency and dispersion of the data of the variables internal control and administrative management in Agrupamiento de Comunicaciones "José Olaya"

Measures		Total, Va CI (pooled)	Total, Va GA (pooled)
N	Valid	169.0	169.0
	Lost	0.0	0.0
Mean ( $\bar{x}$ )		2.2	2.022
Median ( $M_c$ )		2.0	2.0
Mode ( $M_o$ )		2.0	2.0
Standard deviation		0.639	0.652
Skewness		-0.195	-0.263
Kurtosis (C)		-0.622	-0.708

Note. Own preparation, 2024.

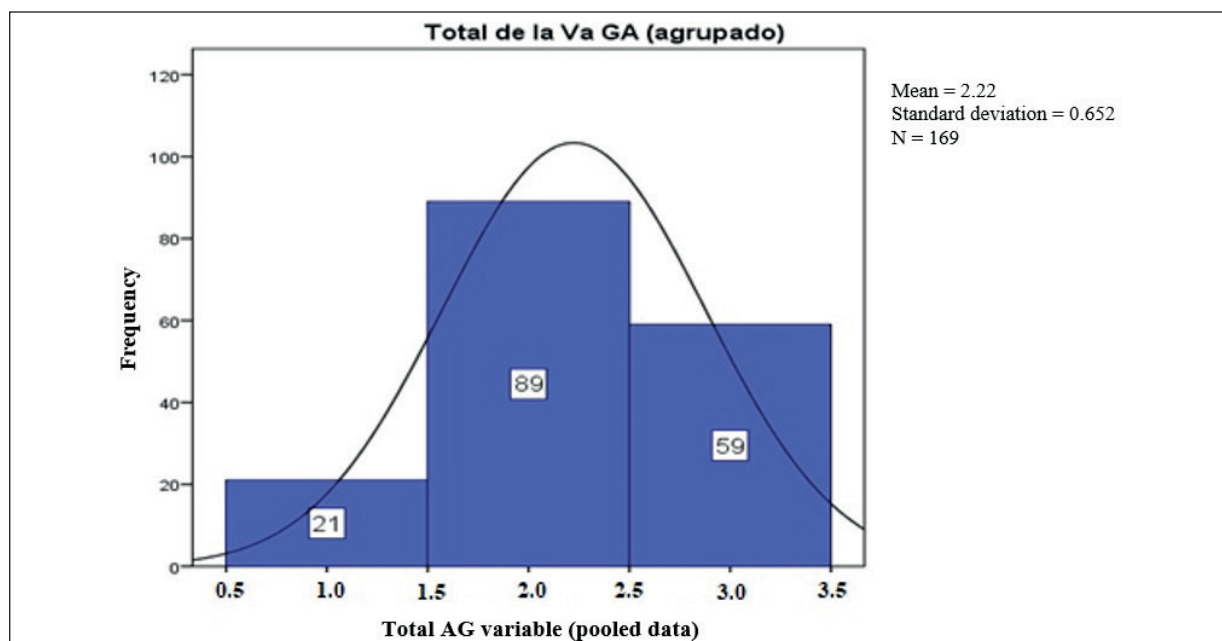
**Figure 1**  
Skewness and kurtosis of the variable Internal Control (pooled data)



Note. Own preparation, 2024.

**Figure 2**

Skewness and kurtosis of the variable administrative management (pooled data).



Note. Own preparation, 2024.

**Table 3**

Contingency table between internal control and administrative management of the Agrupamiento de Comunicaciones "José Olaya" 2020-2021 (pooled data)

		Tot_V2_Administrative_Management_(pooled_data)			Total
		Low	Medium	High	
Total CI Va (pooled)	Low	9.5%	3.0%		12.4%
	Medium	3.0%	45.6%	7.1%	55.6%
	High		4.1%	27.8%	32.0%
Total		12.4%	52.7%	34.9%	100.0%

Note. Own preparation, 2024.

where it was noted that 3.0% of all personnel of Agrupamiento de Comunicaciones "José Olaya" indicated having medium or moderate internal control measures, and also having low and imperceptible administrative management measures. On the other hand, 45.6% of all personnel interviewed mentioned the existence of internal control measures, sometimes, in the entity, and stated that they have no measures or that these are imperceptible in administrative management.

The Spearman's Rho coefficient ( $r$ ) was used to determine the correlation or degree of relationship between internal control and administrative management. The results showed an  $r = 0.819$  and, as indicated by Iberoamericana

(2014), using the contrast by ranks fell in the positive range from +0.76 to +0.90, reflecting a very strong degree of relationship or positive correlation between these two variables with a positive correlation. Consequently, the results obtained from SPSS indicate that the p-value is 0.000, which is less than 0.05. Therefore, the null hypothesis ( $H_0$ ) is rejected and the alternative hypothesis ( $H_a$ ) is accepted, which means that there is a correlation between internal control and administrative management. According to Reguant-Álvarez *et al.* (2018), when:

el coeficiente de correlación oscila entre -1 y +1, donde el valor 0 indica que no existe asociación lineal entre las dos



variables en estudio; y en la medida que se acerca a los extremos -1 y +1, la relación es más fuerte. [The correlation coefficient ranges from -1 to +1, where a value of 0 indicates that there is no linear relationship between the two variables being studied, as it approaches the extremes of -1 and +1, the relationship becomes stronger.] (p. 55)

These results, in line with what was pointed out by IberoAmericana (2014), were obtained for each of the specific objectives, so Spearman's Rho had significant values in the range of +0.51 to +0.75, with a significant positive correlation determined for the control environment dimension, with  $r = 0.727$ ; risk assessment dimension, with  $r = 0.648$ ; control activities dimension, with  $r = 0.752$ ; information and communication activities dimension, with  $r = 0.753$ , respectively, with the exception of the last dimension supervision, with  $r = 0.837$ , considered in the established range of +0.76 to +0.90, in which it turned out to have a very strong positive correlation.

In general, in all the dimensions of internal control, a very strong relationship was found between all of them, where it can be concluded that the greater the internal control, the better the administrative management.

## DISCUSSION

The present research dealt with the analysis of the variables of internal control and administrative management in Agrupamiento de Comunicaciones "José Olaya" during the period 2020-2021. This section contrasts the results with the background studied through the application of descriptive and inferential statistical tests, providing valuable information on the perception of the personnel in relation to these two critical variables for the proper functioning of the entity. First, normality tests were applied to both variables, which revealed that they did not follow a normal distribution, supporting the choice to use nonparametric statistical tests, specifically Spearman's Rho correlation coefficient, following the recommendations of Reguant-Álvarez *et al.* (2018).

Several aspects are addressed that can be compared with previous studies to identify

similarities and differences. First, when analyzing the perceptions of employees regarding internal control and administrative management, it is noted that more than half of the respondents perceive these areas in a medium or average manner. This perception is similar to previous studies, such as those of Santillana Condori (2022) and Meneses Paucar (2019), which also highlighted the importance of staff perception in the effectiveness of these areas. However, a difference is found in the implementation of the measures, where it is revealed that a significant percentage of employees experience moderate or medium internal control measures, while perceiving low or imperceptible administrative management. This discrepancy could be due to the lack of effective communication between both areas, as suggested by Torres Aranda (2018), which could negatively affect the overall effectiveness of the organization. Therefore, the comparison with previous studies highlights the importance of improving coordination and communication between internal control and administrative management to achieve more effective implementation of measures and ensure the operational effectiveness of the entity.

With regard to the relationship of the first specific objective, which establishes the relationship between the internal control environment and administrative management, it can be seen that the results are in line with Fernández Estela (2021) and Paredes Arizapana (2019), who suggest that, since there is a moderate positive correlation between these two variables, a more effective control environment driven by the administration will be achieved, which will allow the entity to improve its administrative management. In general, it is concluded that the internal control environment in the audited entity was inadequate.

With regard to the second specific objective, which seeks to establish the link between internal control risk assessment and administrative management, the results are in line with what Paredes Arizapana (2019) mentions. According to the author, if there is a positive correlation between these two variables, the risk assessment will be more effective and efficient, which will lead the administration to better administrative management. In general, it

is stated that the company does not carry out risk assessments sufficiently and it is suggested that they be carried out periodically in order to achieve more effective management.

The third specific objective, which aims to determine the relationship between internal control activities and administrative management, provides results that are consistent with those raised by Paredes Arizapana (2019). This author points out that there is a positive direct relationship between these two variables, which indicates that the greater the number of control activities that include the updating of policies, procedures, processes, and mechanisms to achieve the goals of the institution, the more efficient the administrative management processes will be. This is particularly important given that the institution's staff does not manage to develop them adequately.

The fourth specific objective, which seeks to determine the relationship between internal control information and communication activities and administrative management, provides results consistent with the position of Paredes Arizapana (2019). This author indicates that there is a direct positive relationship between these two variables, as long as there are more information and communication activities, especially communication and information channels that cover all areas of the entity and reach users in a timely manner with the intention of achieving the established objectives, the administrative management processes will be more effective and efficient.

The fifth and last specific objective seeks to determine the relationship between internal control supervisory activities and administrative management, and its results are consistent with what is supported by Fernández Estela (2021) and Paredes Arizapana (2019); these authors claim that, when there is a direct and positive relationship between the variables and more supervisory and control activities are carried out efficiently and effectively to achieve the objectives of the entity, the administrative management processes will be more effective.

The results of this research suggest that improving internal control at Agrupamiento de Comunicaciones "José Olaya" can have a positive impact on administrative management,

since both provide a solid foundation for future actions and decisions aimed at strengthening both areas, which in turn would contribute to the overall productivity and effectiveness of the entity.

It is also worth mentioning that, in order to improve the validity and relevance of the results and to guide further research in the area of internal control and administrative management in public entities such as Agrupamiento de Comunicaciones "José Olaya", it is essential to explicitly address the limitations of the study and to provide recommendations for future research. Limitations to consider include sample size, temporal scope, response bias, and methodological limitations, while suggestions for future research include expanding the sample, conducting longitudinal studies, incorporating qualitative analysis, and allowing for international comparisons. These actions will not only strengthen the quality of the findings, but will also guide the development of subsequent research in this specific area.

## **CONCLUSIONS**

The results obtained from the analysis carried out in Agrupamiento de Comunicaciones "José Olaya" during the period 2020-2021 revealed a very strong positive correlation between the variables, providing a deeper understanding of the organization dynamics. This was due to the descriptive and inferential statistical analyses, which supported the choice of using non-parametric tests, such as Spearman's Rho coefficient, due to the lack of normality in the variables of interest.

Practical implications and concrete recommendations for strengthening these areas in the organization were derived from the present study. Based on the results, which showed a very strong positive correlation between internal control and administrative management, it is suggested that the organization implement specific measures to improve coordination and communication between the two departments. One concrete action would be to establish regular meetings between those responsible for internal control and those responsible for administrative management in order to align strategies and objectives. In addition, given the importance of staff training and

specialization, it is recommended to develop training programs on integrity, ethics, and organizational values to strengthen the internal culture. Furthermore, given the importance of monitoring and following up on the recommendations of the control staff, it is proposed to establish a continuous monitoring system to ensure the effective implementation of the proposed measures. These specific actions, based on the results of the study, could significantly contribute to strengthen the internal control and administrative management in Agrupamiento de Comunicaciones "José Olaya" and improve its operational efficiency in the future, as detailed below.

Regarding the general objective, it is noted that the presence of weak or minimally implemented internal control measures leads to greater risk in the efficient use of resources, resulting in unsatisfactory administrative management for internal and external users.

Regarding the specific objectives, the first one highlights that the lack of integrity, ethical values, management philosophy, and personnel management can weaken any actions due to the lack of training and specialization, as well as the lack of qualified professionals.

The second one shows that non-compliance with the recommendations of the risk assessment reports, together with the inefficiency caused by high personnel turnover in different positions, may have a negative impact on the organization.

The third specific objective states that easy access to resources, files and information systems requires adequate automation and protection to ensure their security.

The fourth specific objective states that the lack of clear communication channels suggests the need to implement transparent and effective measures for their ultimate transmission.

The fifth specific objective states that the absence of monitoring, follow-up, and action on the recommendations of control staff can increase the risk of fraud and other irregularities.

As such, results suggest that improving internal control could have a positive impact on administrative management, thus providing a

solid basis for future initiatives aimed at strengthening both areas and contributing significantly to the overall performance of the entity. Therefore, it is recommended that measures be implemented to strengthen both internal control and administrative management.

Finally, in order to formulate hypotheses that refer to a real social situation, as in the case of Agrupamiento de Comunicaciones "José Olaya", statements can be proposed that are verifiable through research and that relate to specific aspects of administrative management and internal control in this entity. The hypotheses presented for future studies include the expectation of a positive correlation between the effective implementation of internal control measures and the perception of efficient administrative management; the training of personnel in internal control will have a positive impact on the understanding of processes and the adoption of good practices; the influence of organizational culture on the effectiveness of internal control measures and the quality of administrative management; the positive impact of the acceptance of innovative technologies on process efficiency and decision making; and the contribution of effective communication and active participation of personnel to the successful implementation of internal control measures. These hypotheses seek to explore in detail the relationship between internal control and administrative management in the specific context of Agrupamiento de Comunicaciones "José Olaya", allowing an empirical analysis of how different factors can influence organizational effectiveness and the satisfaction of internal and external users.

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#### **Conflict of interest**

The author has no conflicts of interest to disclose.

#### **Author contributions**

Julio Hernan Santa Cruz Zavaleta (lead author): research, writing (original draft, review, and editing).