
Article

Exploring citizen participation in fiscal control: insights from Manizales, Colombia

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Abstract. The objective of this study is to identify the fundamental determinants of citizen participation within the framework of the "Let's Take Control" initiative, implemented by the General Comptroller's Office of Manizales Municipality during 2020-2021, with a specific focus on fostering public participation in Fiscal Control. Utilizing a two-stage mixed-method methodology, the research encompasses surveys administered to citizen observers, municipal officials, and the general population, followed by a descriptive exploratory analysis. Subsequent to data collection, a series of statistical analyses is conducted, including chi-square and ANOVA tests, along with Ordinary Least Squares Linear Regression. Additionally, a Generalized Linear Model (GLM) is estimated. The findings unequivocally demonstrate a positive impact on citizen participation facilitated by the "Let's Take Control" strategy. Furthermore, positive correlations emerge between participation frequency and variables such as invitations to participation exercises, age groups of participants, and their socio-economic strata within events organized by the General Comptroller's Office of Manizales Municipality-Colombia.

Keywords: public strategy; citizen participation; fiscal control; government

JEL classification: H11; H83; D72; D83

1. Introduction

Citizen participation is a fundamental right that allows citizens to become involved in social affairs and contribute to the decision-making process. In Colombia, the Political Constitution¹ establishes mechanisms for citizen participation in the exercise of their sovereignty, which include voting, plebiscite, referendum, popular consultation, open town hall meetings, legislative initiative, and revocation of mandate. These mechanisms of citizen participation are essential for democracy and have been discussed, constructed, and used in many democracies in response to the crisis of representation.

Fiscal Control is a fundamental mechanism for ensuring transparency in public management and the protection of the State's assets. In Colombia, this control is exercised through the General

¹ See Constitución Política de Colombia (2023).

Comptroller's Office of the Republic and Territorial Comptroller's Offices², as well as through Social Control, in which the community plays a fundamental role. Law 850 of 2003 regulates citizen observer committees as mechanisms of democratic representation that allow citizens and community organizations to monitor public management at all levels and areas where public resources are used. The intersection of Citizen Control and Fiscal Control is Participatory Fiscal Control, which seeks the care of public goods and resources. According to Eberhardt (2015), in the set of Western democracies, mechanisms of citizen participation such as the popular initiative, the public consultation, the public hearing, and the participatory budget have been incorporated in response to the loss of credibility of both the rulers elected through the popular vote and regarding the functioning of traditional representative bodies. Lerner, J. (2017) and Hong and Cho (2018) suggest that the implementation of participatory budgeting can contribute to improving equity in resource allocation, albeit it may be less effective than bureaucratic decision-making in achieving public objectives.

The Law 850 of 2003 regulates citizen oversight as democratic representation mechanisms that allow citizens and community organizations to monitor public management at all levels and areas where public resources are used. The intersection of Citizen Oversight and Fiscal Control is Participatory Fiscal Control, which seeks to ensure the care of public assets and resources. According to Diaz et al. (2003), in Colombia, the fiscal control model defined by the Constitution of 1991 has been applied, in which departments and municipalities have autonomy for the organization and selection of their respective comptrollers. However, from the author's perspective, instead of improving the fiscal control system, politicking and political patronage have deteriorated its quality. The study conducted by Galais, Navarro, and Fontcuberta (2013), emphasizes that the quality of participatory processes or experiences is often a multidimensional phenomenon. It is observed that the levels of this quality vary among dimensions and that these dimensions are differently related to various aspects of the context in which they take place.

This study aims to analyze the role of municipal comptroller's offices in Colombia and demonstrate the importance of linking citizen participation and Information and Communication Technologies (ICT) to achieve greater transparency and effectiveness in the fiscal management of public resources. Citizen participation in Fiscal Control is essential to guarantee the protection of public assets and permanent monitoring of public resources, and ICT can be a valuable tool to promote participation and transparency in public management. This article analyzes the results of the "Let's Take Control" strategy implemented by the General Comptroller's Office of the Municipality of Manizales during the period 2020-2021, in terms of citizen participation in Fiscal Control. To achieve this objective, a mixed methodology was used, consisting of two stages. In the first stage, a survey was applied to citizen watchdogs, officials of the central administration of the municipality, and citizens in general, followed by a descriptive exploratory analysis. In the second stage, the collected information was consolidated, and a statistical analysis was performed that included chi-square and ANOVA tests, as well as the estimation of a generalized linear model (GLM).

² See Contraloría General de la Republica (2023).

The results indicated a positive influence of citizen participation in Fiscal Control through the "Let's Take Control" strategy. Additionally, evidence was found that being invited to citizen participation exercises, age range, and socioeconomic stratum of participants are significantly related to the frequency of participation in events called by the General Comptroller's Office of the Municipality of Manizales. In Colombia, Fiscal Control is essential to ensure transparency in public management and the protection of the State's heritage. Citizen participation in Fiscal Control is a manifestation of the principle of participatory democracy, and citizen participation mechanisms have been discussed, built, and used in many democracies in response to civic disaffection.

In conclusion, it is imperative to underscore that this study offers indispensable insights into the specific context of Manizales, with a keen focus on the dynamics of citizen participation and fiscal control. Such a targeted approach will undoubtedly enhance the depth and contextual understanding for readers vested in these participatory processes. For policy-makers, this study stands as a valuable resource, weaving vital connections between theory and regulations concerning citizen involvement within the realm of public administration.

Boasting a considerable social significance, this study tackles critical issues such as institutional trust and the battle against social exclusion. Not only does it pinpoint challenges and institutional barriers surrounding citizen participation, but it also puts forth tangible solutions and recommendations, with the implementation of participatory budgeting standing out prominently. These proposals hold the potential to reshape the current landscape and nurture a positive societal transformation, ultimately reshaping the citizen's role in public governance and concurrently igniting change from a governmental vantage point.

It is important to note that recent developments regarding the determinants of citizen participation focus on: i. Factors explaining citizens' participation in budgetary processes; or ii. The effects resulting from patterns of participation. This study primarily focuses on the first perspective, following a conceptual framework very similar to that established by Ríos, Benito, and Bastida (2017) and Manes-Rossi et al. (2023). Both studies examine the driving or determining factors of citizen participation. In our case, these driving factors are framed within the "Let's Take Control" strategy. Additionally, we analyze the relationships between these driving or determining factors, which include the spaces provided and the calls made by the Comptroller's Office to encourage citizen participation, as well as the socio-economic characteristics of the population.

The main findings of the research provide valuable contributions to the theory of citizen participation. These include the influence of educational level and socioeconomic stratum on participation, the relationship between geographic location and willingness to participate, civic motivation for reporting corruption, the effectiveness of technology-based participation strategies, the need to strengthen participation as an integral part of public management, and the importance of understanding who participates and why. Collectively, these findings enrich our understanding of how to foster more effective and meaningful citizen participation in public decision-making. This research article is structured as follows: in the first section, a literature review is presented, highlighting the importance of citizen participation in public management and fiscal control as the articulating analytical category, followed by the methodology section, emphasizing the methods, variables, data, and instruments applied. The results and discussion section are presented next, followed by the conclusions of the study in the final section.

2. Literature review

The importance of the concept of citizen participation has aroused significant interest in both political and academic circles, and this interest has its roots in different historical moments and geographical contexts. In contemporary Europe and North America, this interest has been largely driven by the pursuit of the welfare state³. In contrast, in Latin America, the focus has been largely on the discontent generated by exclusion and the lack of representation in political decision-making. This critical approach is evident in the words of Hengstenberg (1999), who criticize political parties for their limited capacity to channel citizen demands.

Therefore, the relevance of citizen participation in public administration has been extensively researched in academic literature. Arnstein's (1969) "ladder" of citizen participation, ranging from manipulation to citizen control, provides a framework illustrating different levels of involvement in decision-making in public management. In a similar context, the debate presented by Crosby, Kelly, and Schaefer (1986) offers an intriguing perspective on forms of participation, introducing the concept of "maximum feasible participation." In their studies, a call for citizen participation is made in the United States, with an emphasis on the fact that most participatory programs focus on intervention at the local administrative level, neglecting broader political agendas, such as those at the national level.

An important study for the objectives of the present research is the research conducted by Aguirre (2021). In this case study, the implementation process of participatory budgeting in the district of Villa El Salvador (Peru) between 2000 and early 2002 is examined. This participatory initiative in Villa El Salvador serves as an exercise in constructing inclusive environments. The study particularly delves into the experience and service outcomes that the residents of Villa El Salvador had regarding the participatory budget for the years 2000-2002, highlighting the necessary interaction with organizations and public officials. Seven valuable lessons are extracted for those interested in promoting citizen participation, including the coordination of participation and accountability, the use of citizen recognition as an incentive, attention to implementation processes, the creation of conditions for organizational learning, the institutionalization of changes, the minimization of competitive processes, and the promotion of commitment from elected officials.

If we consider the possibility that dynamics similar to a principal-agent relationship may arise in the relationship between government and citizens in terms of information availability, we can also recognize the existence of power relations between both parties. These power relations are constructed in the social structure, as Castells (2013) points out through spatiotemporal formations that operate at both local and global levels. In this context, communication networks acquire immense social power, especially those with a high degree of interconnectivity due to recent technological innovations.

³ In the literature review, we have sought to recognize the diverse traditions of citizen participation worldwide, with a particular emphasis on northern and southern countries. Overall, empirical research in this field barely considers such diversity, especially in Europe and North America. The reason behind this is that in these regions, participatory tradition has a more entrenched history and has developed very identity-centric approaches.

According to Rowe and Frewer (2004), assessing the benefits of participation is challenging, given that there are relatively few cases where the effectiveness of participatory exercises has been systematically examined. This situation contrasts with the abundance of studies that approach the subject subjectively. However, there is a common denominator among these studies, which is to highlight the potential of citizen participation as an empowerment tool, in addition to its contribution to improving the efficiency and effectiveness of government management in public administration.

In this line, Gaventa (2006) emphasizes the potential of participation as a catalyst for empowerment and social transformation, requiring the identification of areas of influence and innovative forms of civic participation. In the context of participatory budgeting in European nations, Sintomer, Herzberg, and Röcke (2012) emphasize the crucial role of citizen engagement, as it enhances transparency, accountability, and the legitimacy of democratic processes. Furthermore, Baiocchi and Ganuza (2014) argue that participation should go beyond the mere efficiency of services, aiming to empower individuals. Ramos and Reyes (2005) maintain that citizen participation, through civil organizations and society in general, is primarily characterized in by local entities, within the context, for example, of Mexican federal states.

Alternatively, Ríos, Benito, and Bastida (2017) focus on identifying the socio-economic, institutional, and political factors that promote public participation in the central government budgetary process within a context that encompasses 93 countries. The results obtained indicate that Internet penetration, population diversity, government financial situation, and budget transparency are key determinants of the opportunities for public participation in this process. On the other hand, Faúndez and Arancibia (2022) present an innovative model of citizen participation institutionalized in public bodies. Using the Analytic Hierarchy Process methodology, they examine critical factors for a successful implementation of participation. This model addresses fundamental criteria such as leadership, normative scope, team commitment, and management culture, offering a comprehensive approach to promote effective citizen engagement. To further enrich the literature review on citizen participation, governance, and public management, prominent sources such as Draude, Börzel, and Risse (2018), as well as Bovens, Goodin, and Schillemans (2021), are recommended. These sources delve into the interactive dynamics between citizen participation and effective governance.

Delving deeper into the literature review, we highlight the key contributions of these studies. Gonçalves (2014) conducts a comprehensive analysis of the effects of participatory budgeting on municipal expenditures and infant mortality in Brazil, emphasizing the fundamental importance of citizen participation in the budgetary decision-making process. On the other hand, Schneider and Busse (2019) provide a meticulous review of empirical findings related to the implementation of participatory budgeting in Germany, underscoring its relevance and adaptability in a European context. Montambeault (2016) explores the various pathways followed by participatory citizens in the context of participatory budgeting in Brazil, investigating how this practice significantly contributes to the formation of an active citizenship. Furthermore, Coleman and Cardoso Sampaio (2017) conduct thorough research into the sustainability of this democratic innovation through the study of electronic participatory budgets in Belo Horizonte, identifying both the challenges it faces and the opportunities offered by electronic participation. Together, these research studies provide a comprehensive understanding of the impacts and prospects of participatory budgeting in different contexts.

Now, these studies connect with the findings of García (2009) regarding participatory fiscal control in Colombia. The collaboration between government entities and citizens, facilitated by the General Comptroller's Office, strengthens oversight mechanisms. Despite identifying possible fiscal responsibilities through citizen complaints integrated into audits, comprehensive citizen supervision of public management is still in its early stages. In turn, participatory fiscal control promotes a more effective use of public resources and leads to greater community trust in the entities responsible for fiscal control in the country (García Mejía, 2015).

Therefore, it can be accepted that fiscal control and citizen participation are integral components of effective public management. Citizen participation contributes to uncovering corruption, while Arnstein's theory suggests that increasing citizen participation in fiscal control processes can be beneficial. The proposal for a National Fiscal Control System, in line with the ideas of Ochoa and Charris (2003), seeks to promote fair supervision.

The evolution of citizen participation throughout history is crucial for shaping constitutional and fiscal oversight processes. In this regard, Chavez and Niño (2018) delve into participatory fiscal control in Montería, revealing various forms of citizen participation. This case study aims to analyze the historical journey of citizen participation, as well as address the importance of the legacy of citizen participation from past generations. On the other hand, Montero (2021), as a local precedent, relates fiscal control to the principles of the social and solidarity economy, establishing a conceptual framework between these categories of analysis. This study specifically examines participatory fiscal control in Manizales, based on a comprehensive review of Colombia's territorial fiscal control system.

Sánchez-Torres et al (2006) categorizes problems to propose improvements to territorial fiscal control, emphasizing a strong trend towards the development of activities related to the promotion and implementation of citizen participation mechanisms to address citizen demands. However, as highlighted by Gómez and Pinzón (2012), there are significant gaps in Territorial Comptrollerships in terms of strategies and even results regarding citizen participation exercises. They also explore the relevance of complementary tools in Colombian participatory fiscal control. These contributions align with contemporary Public Administration and participatory practices. Cardenas et al. (2013) raises relevant questions about the effectiveness of the General Comptroller's participatory fiscal control strategies. García Mejía (2015) emphasizes the importance of knowledge in the effectiveness of participatory fiscal control, emphasizing perspectives in the search for effective governance in the city of Manizales.

Based on the promotion of civic education aimed at fostering direct participation in fiscal control, the proposal by Liendo and de las Nieves (2021) presents a theoretical-practical approach that underscores the crucial importance of citizen training in the context of public management control, specifically within the Comptroller's Office of Sucre, state of Aragua, Venezuela. This article addresses the imperative need to involve citizens in the auditing process, focusing specifically on the execution of works and the provision of public services within their own communities. The fundamental purpose of this research is to raise awareness among Comptroller's Office officials regarding the relevance of citizen participation in fiscal control of public management. Additionally, the aim is to motivate the general public to actively participate and develop the necessary technical skills to effectively contribute to fiscal control conducted by Comptroller's Offices. This scientific

article seeks to provide a solid theoretical and practical framework supporting the importance of citizen education in the realm of fiscal control, thereby promoting the construction of a more engaged and empowered society in the oversight and improvement of public management.

The studies reviewed up to this point in this state-of-the-art aim to emphasize the central role of citizen participation in public administration. It is concluded that it is essential to promote democracy, empowerment, and transformative change in local social structures, which require greater representation in control and oversight bodies. Furthermore, it goes beyond the mere importance of citizen participation in physically supervising government efficiency, focusing on promoting an engaged and active citizenry in transparent and inclusive government exercises.

3. Methods

This research employs a mixed-method design, utilizing a cross-sectional approach and Short-term longitudinal analysis for monitoring the participation indicators of the 'Take Control' strategy, covering the strategy period from Q1 2020 to Q4 2021, aligned with Legislative Act 04 of 2019 and the municipal administration's timeline from 2020 to 2023. It is worth noting that the data used for model estimation follows a cross-sectional approach. The study is empirically analytical with an explanatory scope, aiming to identify institutional determinants influencing citizen participation in social and fiscal control. The examination revolves around management indicators from the Contraloría de Manizales.

Methodologically, the study outlines the initiation and execution of the "Let's Take Control and Monitor the Proper Use of Public Resources" strategy during 2020-2021. This is based on quarterly reports from the office of citizen participation to the auditor general of the republic, forming the longitudinal aspect of the study. Information analysis begins with a descriptive and analytical assessment using primary data collection. An instrument validated by experts characterizes key stakeholders in the "Let's Take Control" strategy. These stakeholders are central to analyzing the determinants of citizen participation within this public management approach. Subsequently, variables' behavior is examined, considering both the literature and the strategy itself. Notably, this methodological design addresses initial research information needs and strives to minimize bias while upholding anonymity and interpretational rigor principles.

The majority of literature on the outcomes of participatory fiscal control has primarily taken a descriptive-analytical approach. This study stands out as one of the few that makes an empirical effort to analyze the results of participatory fiscal control. However, within the conceptual framework of citizen participation, empirical studies are more common. Notably, the work by Theocharis and Van Deth (2018) employs various statistical inference methods, such as logistic regressions, to analyze different mechanisms of political participation.

It is crucial to note that Theocharis and Van Deth's (2018) work underscores the limited presence of instruments for measuring newer forms of participation in large-scale surveys. These surveys consistently identify and measure political participation solely through established repertoires. Consequently, the present study aims to address this gap by designing and implementing

an expert-validated instrument. This instrument seeks to collect maximum objective information from a previously unstudied sample, enabling the discovery of valuable latent information regarding the relationship between the described variables (Variables, Data, and Information Sources).

3.1 Variables, data, and information sources

The study focuses on officials from the General Comptroller's Office of the Municipality of Manizales, as well as citizen oversight groups and the general public participating in the activities of the Comptroller's Office.

As Pimienta, Gulfo, and Suarez (2021) indicate, the construction of a social rule of law is grounded in practical citizen experiences. Therefore, these actors contribute a significant perspective based on their knowledge and experiences to carry out the present research. Obtaining opinions regarding the subjects of control is of utmost importance, as they are the ones audited and for whom the reports are intended.

In accordance with the research question, it is important to highlight that, for the purposes of this study, effects on differentiated groups are not considered, and the explained variance for such groups is not decomposed. This is because, from both the study's perspective and that of the Oversight Body, citizens, officials, and employees are considered subjects of control, forming part of a broader category of individuals under study.

Due to the population's diversity and asymmetry, a convenience sampling approach is chosen. This decision is supported by limited citizen tracing and the study's alignment with the "Let's Take Control" strategy. To mitigate selection bias, systematic sampling is used, involving regular interval selection from the population list. Randomization is introduced during participant selection, resulting in a sample of 48 individuals, including citizen overseers and control subjects. Ethical standards are upheld, with informed consent obtained and data protection regulations followed. In accordance with the research question, it is emphasized that, for the purposes of this study, effects on differentiated groups are not considered, and the explained variance for such groups is not decomposed. This is because, both from the study's perspective and that of the Oversight Body, citizens, officials, and employees are regarded as subjects of control, forming part of a broader category of individuals under study.

The data include discrete quantitative information, quarterly aggregated, and coded polytomous qualitative data using ordinal Likert scales. The study covers the period from Q1 2020 to Q4 2021, aligned with Legislative Act 04 of 2019 and the municipal administration's timeline from 2020 to 2023. Methods involve descriptive analysis, ANOVA estimations, and generalized linear models (GLM). Data sources encompass primary survey data, secondary data from official websites, and Comptroller's Office's Facebook platforms, such as the Integrated System of Audits-Mission SIA and the Citizen Attention System.

3.2 ANOVA estimation

ANOVA models are highly valuable for this study due to the presence of categorical predictor variables with distinct classification levels. Each subject was assessed using a primary data collection tool, and the target response variable in the initial model is "the number of times they have participated in citizen participation exercises organized by the Comptroller's Office of Manizales city." This response variable is numerical, and the primary goal is to examine the mean across different levels or categories of explanatory variables.

Beyond comparing various groups, there's also a focus on numerically quantifying these differences through such estimation. Given the nature of the observations, employing this type of model is crucial for achieving the research objective. In essence, ANOVA models are indispensable for comprehensively analyzing the collected data and deriving robust conclusions from this study. The general representation is presented below:

$$y_{ij} = \mu + \beta_i G_j + \varepsilon_{ij} \quad [1]$$

μ is a constant, and β_i for $i=1, \dots, G$, are independently distributed random variables across their different levels or categories. For this model, it is verified that $E[y_{ij}] = \mu$ and the variance of y_{ij} denoted by $\sigma_y^2 = \sigma_{\beta}^2 + \sigma^2$ where $\sigma_{\beta}^2, \sigma^2$ are components of the variance. This is why the model is referred to as the variance components model. It's worth noting that the main difference from regression models is that in this case, we do not model the entire observed response, but rather the observed mean of the set of observations for each level of the factor.

3.3 Generalized Linear Model (GLM) estimation

In this model, it is assumed that the dependent variable is linearly related to the set of predictor variables. This model is particularly useful as it is an extension of linear models that allow for the use of non-normal distributions. The model fit is achieved using the maximum likelihood method.

The single equation linear model is defined as:

$$y_i = x_i \beta + u_i, \quad [2]$$

where y_i and u_i are scalars and x_i and β are column vectors, for this model, it is verified that: $E[u_i] = 0$, The residuals of the model are independent from each other. The relationship between the dependent variable and the independent variables is linear in the predictor space: $Y_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} + \dots + \beta_k x_{ki} + u_i$. Where Y_i is the dependent variable, $x_{i(1)}, x_{i(2)}, \dots, x_{i(k)}$ are the independent variables, $\beta_0, \beta_1, \beta_2, \dots, \beta_k$ are the coefficients of the model, and u_i is the random error. The variance of the dependent variable is constant at all values of the independent variables (homoscedasticity): $\text{Var}(Y) = \sigma^2$, where σ^2 is a constant that represents the variance of the dependent variable. The errors of the dependent variable are independent and identically distributed: $u_i \sim \text{i.i.d. } N(0, \sigma^2)$, i.i.d. means "independent and identically distributed. And the link

function of the model is determined by: $\mu = E[Y] = \beta_1 x_1 + \dots + \beta_k x_k$, According to Müller (2004) the resulting estimator β has an asymptotic normal distribution. For further reading on GLM we refer to Dunn, P. K., and Smyth, G. K. (2018).

3.4 Citizen participation in the Municipality of Manizales

The Citizen Participation Office of the General Comptroller's Office of the Municipality of Manizales carried out training and citizen control activities with citizen watchdogs, officials and employees of control subjects, student auditors, and the general public between 2020 and 2021, following the schedule presented in Table 1.

Table 1. Schedule of citizen participation activities of the Manizales Comptroller's Office.

Management carried out by the Citizen Participation Office, implementing the "Let's take control" strategy.	
2020	2021
Promotion of social control and participatory fiscal control to raise awareness among young people in educational institutions in Manizales.	Training in crimes against the Public Administration
Information about the processes carried out by the Comptroller's Office through Political Control debates.	Introduction to audit processes
Information on the processes carried out by the Office of the Comptroller through Political Control debates.	Contractual analysis in audited processes
Fiscal control and citizen participation mechanisms.	Consulting for public and private entities
mechanisms of citizen participation	First departmental meeting of student Comptrollers and Deputy Comptrollers
Observe SIA Platform	General structure of the Special Jurisdiction for Peace
Common errors in fiscal management.	Principles and elements of an audit with an INTOSAI approach
Integrated Planning and Management Model (MIPG)	Social control and transparency law
Appropriation of state contracting processes by student governments.	Work table with Ombudsmen and Student Comptrollers
Analysis of Institutional Performance Index results.	Verification of public discourse and misinformation
General aspects of the audit process.	Design of strategies to continue the student controllers' program
Public Procurement	Launch of the project monitoring mental health policy in educational institutions
General information on the application of Decree 806 of 2020 for the Legal Defense of public entities.	Control route, space for dialogue, training for the citizens of Vereda la Cabaña
The Role of the Comptroller General of the Republic in Citizen Participation	Reform to the general disciplinary code and its implications.

Exploring citizen participation in fiscal control

Management carried out by the Citizen Participation Office, implementing the "Let's take control" strategy.

2020	2021
Transparency and access to information	Social control in the public procurement process
Network of citizen oversight	Information as a mechanism for citizen oversight from the media
Linking in the week of citizen participation	Biocultural Manizales, process of social control and citizen participation
Function of the Comptroller	Environmental Social Control from public entities
Procedure for supervision and interventions	Citizen Participation and Social Control
Meeting with municipal representatives: fiscal control and the most common errors in fiscal management.	Products strategic alliance with the UAM
Role of the AGR in fiscal control	Public accounting regime
Effective social control in times of covid19	Cultural event "Pact for participation
Constitutional mechanisms in social control.	Promotion of social control with young people of Saint Pius X
Virtual updating day practical aspects for the formulation of projects.	General aspects of the Manizales Comptroller's Office with young people from the Cyprus Institute
Objectives of Sustainable Development and Control of legality of manifest emergencies	
Dialogue with citizens on the management of the Manizales Comptroller's Office	

4. Results and discussion

To assess the extent of knowledge and involvement in participatory fiscal control, a survey was conducted (see Appendix 1). This instrument was administered to citizen monitors, officials from control entities, and the general public, resulting in 48 completed surveys. The findings from the surveys are depicted in Figure 1. Notably, 25% of the 48 respondents fall within the 25 to 34 age group. This aligns with the education-related query, where 29% of participants possess higher education degrees at the undergraduate level. Conversely, 21% of respondents are aged between 18 and 24, with a predominance of primary education qualifications. In Figure 2, it is apparent that 40% of respondents belong to socioeconomic stratum four (4) in the city of Manizales, with 33% residing in the Atardeceres commune. These outcomes underscore the significance of citizen participation in shaping public policies. As Escobar (2017) emphasizes, the advancements in State modernization across Latin America underscore the imperative of involving civil society as a pivotal player in this trajectory.

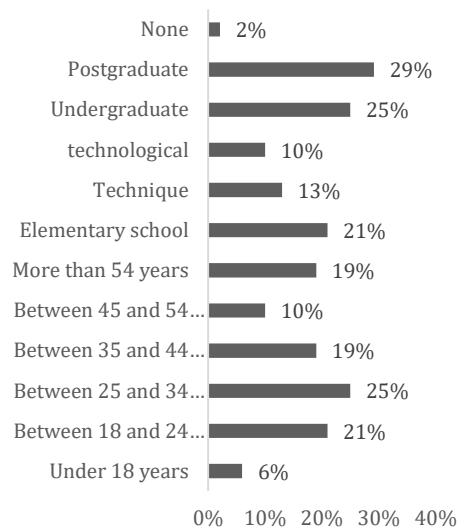


Figure 1. Age range and level of education.

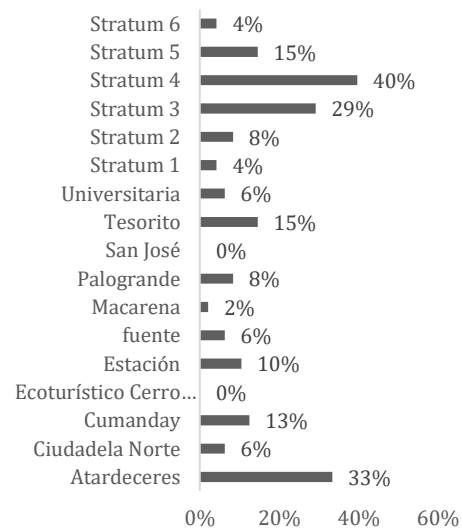


Figure 2. Commune of residence and socioeconomic stratum.

Throughout this study, reference is made to the ideas put forth by Arnstein (1969), and this work contributes to the field of knowledge by presenting a more comprehensive model of partnership compared to the one proposed by the aforementioned author. This marks a new starting point for the emerging dialogue on the interaction between local government and community groups, aimed at the next generation of planners and scholars. This contribution prompts a profound reflection on the need to more dynamically promote initiatives that foster equitable citizen participation, advocating for the establishment of long-term "partnerships" with local community groups.

For participation to become an instrument of development, empowerment, and social equity, it is crucial to be meaningful and authentic, involving all stakeholders and differentiating but synchronizing their roles across various educational realms. This extends beyond the classroom, encompassing both educational policy and formal and informal education. Torres (2001) emphasizes that education is not confined to schooling, and the necessary learnings for life, work, participation, and full citizenship cannot be limited to a specific life stage. The learning process commences at birth and extends throughout life, transcending school institutions to encompass a wide array of institutions, modalities, relationships, and practices. Thus, education, the educational community, and educational policy prove to be much broader entities than their school-based counterparts, revealing a more holistic and dynamic landscape.

Consequently, this is how the budget, as a mechanism of political decision-making according to Nebot (2001), serves as the document that accurately reflects the economic and social priorities of the government. This instrument translates governmental policies and commitments into decisions that determine how resources will be obtained and where they will be spent. Therefore, it is the concrete tool through which governments implement action plans and programs aimed at addressing the needs of citizens, defining their quality of life. Consequently, it becomes the means by which society can exercise control over the government's management of public resources.

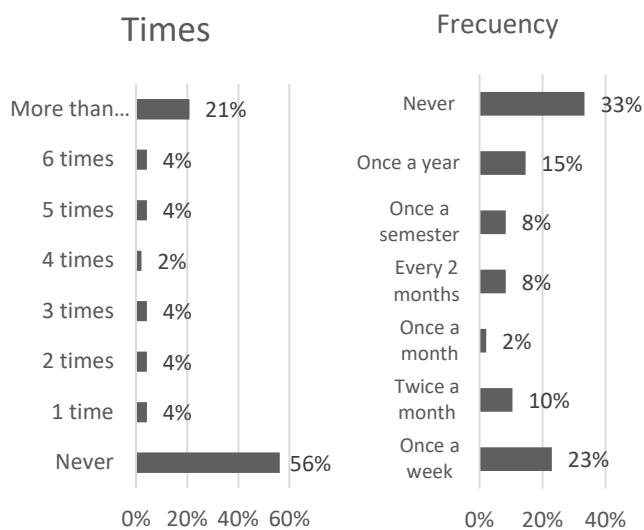


Figure 3: Times (a) and frequency (b) of participation.

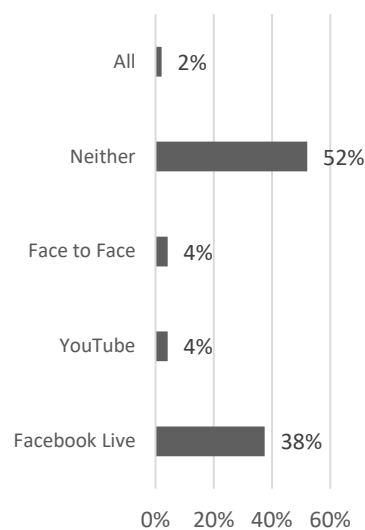


Figure 4: Participation in the control strategy, and channels of participation.

Within this context, participatory budgeting is described as a direct-democracy approach to decision-making in resource allocation (Calabrese, Williams & Gupta, 2020). In this regard, Calabrese, Williams & Gupta (2020) highlight that participatory budgeting can be an interesting policy device, where fiscal allocation may result in increased funding for projects, albeit at lower amounts. Based on this analysis, the present research suggests not only advancing participatory control but also considering mechanisms for participatory budget allocation. While the latter is not the main focus of this work, it represents a promising direction for future research.

Figure 3 shows the number of times and the frequency with which the subjects have participated in the activities convened by the comptroller’s office. It is highlighted that 21% have participated more than once in total, but at the same time, 56% have never participated. Similarly, in terms of frequency, the response ‘never’ also predominates with 33%, followed by ‘at least once a week’ with 23%, and ‘at least once a year’ with 15%. This response raises uncertainties, especially considering the efforts this entity has made to involve citizens in state decisions. Traditionally, the municipality has been perceived from a purely technical-administrative standpoint, sidelining considerations of social underpinnings and political dynamics. Similarly, figure four shows the means by which people have participated in the ‘Take Control’ strategy of the General Comptroller’s Office of the municipality of Manizales. It is highlighted that Facebook Live stands out with 38%.

Figure 6 provides valuable insights into the extent of familiarity respondents from Manizales have with control agencies nationwide. Impressively, over 60% of participants demonstrated a comprehensive understanding of all control agencies, showcasing a notable level of awareness on this matter. Turning to Figure 7, which delves into the motivations behind reporting instances of corrupt practices, a significant 69% of respondents viewed it as a civic duty to expose such misconduct to the appropriate authorities.

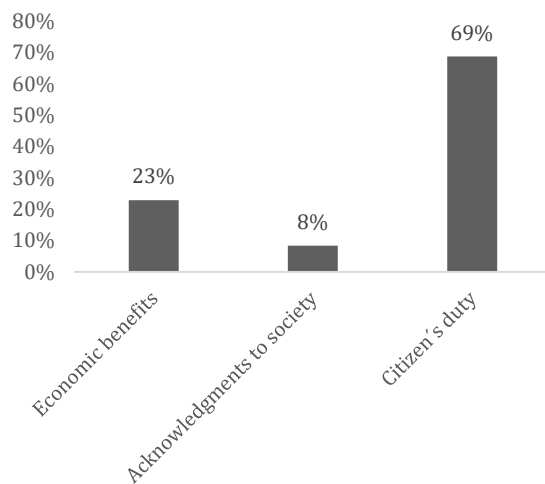


Figure 6. Reasons that motivate the allegations of corruption.

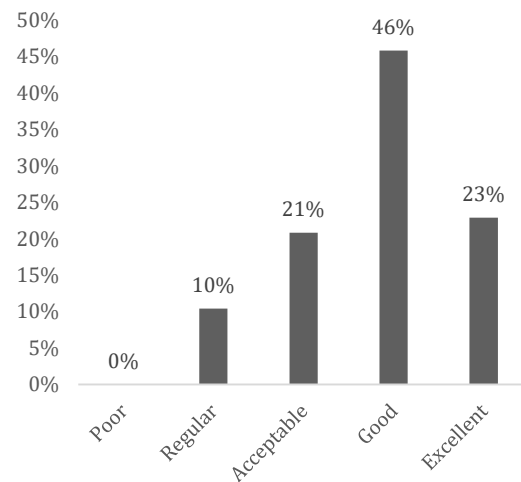


Figure 7. Perception of the work carried out by the General Comptroller's Office of the Municipality of Manizales.

This alignment of viewpoints in Figure 7 finds support in Cardona et al (2020) emphasize the relationship between institutions and economic development from the perspective of Sen's (2000) approaches. In this case, to achieve true results of economic freedom, it is important to enhance political freedoms and guarantees of transparency. Thus, the 'Take Control' strategy contributes to the achievement of these objectives in the context of the municipality of the city of Manizales.

In this section, the statistical analyses of the information collected through the perception and knowledge survey on participatory fiscal control in the city of Manizales are shown. First, descriptive statistics of the variables are presented, followed by statistical tests of the relationship between the implementation of the Let's Take Control strategy and monitoring of the proper use of public resources with the determined citizen participation variables, and finally, the estimated models are presented.

ANOVA test between variables

For the association test between variables, the basis is the ANOVA analysis. According to the study by Dagnino (2014), this ANOVA test⁴, which stands for Analysis of Variance, was developed by Ronald Aylmer Fisher (1890-1962) and allows measuring the statistical significance of the differences

⁴ It's important to note that ANOVA assumes that the data follow a normal distribution and that the samples are independent. Additionally, ANOVA is based on comparing the variance between groups with the variance within groups. If the variability between groups is much greater than the variability within groups, it is likely that a significant association exists between the independent variable and the dependent variable.

between the means of the groups determined in the dependent variable "number of times they have participated in activities called by the General Comptroller's Office of the Municipality of Manizales" for the dichotomous and polychotomous qualitative variables that have been constructed from the applied information collection instrument.

The equations corresponding to the estimation of ANOVA 1 and ANOVA 2 models presented in Table 2 are for ANOVA 1: $Times_participaded_i = c + stratum_i + summoned_i + u_i$.

And, for ANOVA 2: $Times_participaded_i = c + comptroller's\ office\ participation_i + Let's\ take\ control\ participation_i + u_i$. Tables 2 and 3 present the estimated coefficients and statistical results.

Table 2. ANOVA 1

	Number of Obs: 48		R-squared: 0.5999		
	Root MSE: 501.159		Adj R-Squared:0.5414		
	Partial SS	df	MS	F	Prob>F
Model	1544.2205***	6	257.37009	10.25	0.0000
Dep: times participated in citizen participation activities					
Socioeconomic stratum	338.90565**	5	67.781129	2.70	0.0338
Have you been summoned to the events held at the Comptroller General of the municipality of Manizales	905.16805***	1	905.16805	36.04	0.0000
Residual	1029.7586	41	25.116064		
Total	2573.9792	47	54.765514		

Source: Own calculations. Data collection instrument. **Note:** *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Above Table 2 there is a summary of the underlying regression. The model was fit on 48 observations, and the root mean squared error (Root MSE) is 501. The R2 for the model is 0.5999, and the adjusted R2 is 0.5414. The first line of the table summarizes the model. The sum of squares (Partial SS) for the model is 1544.22 with 6 degrees of freedom (df). The corresponding F statistic is 10.25 and has a significance level of 0.000. Thus, the model appears to be significant at the 0.0001% level and a confidence level of 99%.

Table 3 includes a summary of the underlying regression. The model was fit on 47 observations, and the root mean squared error (Root MSE) is 4.40. The R2 for the model is 0.6591, and the adjusted R2 is 0.6176. The first line of the table summarizes the model. The sum of squares (Partial SS) for the model is 1535.31 with 5 degrees of freedom (df). The corresponding F statistic is 15.86 and has a significance level of 0.000. Thus, the model appears to be significant at the 0.0001% level and a confidence level of 99%.

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Table 3. ANOVA 2

	Number of Obs: 47 Root MSE: 4.40056	R-squared: 0.6591 Adj R Squared: 0.6176			
	Partial SS	df	MS	F	Prob>F
Model	1535.3133***	5	307.06266	15.86	0.000
Dep: times participated in citizen participation activities					
Have you participated in the citizen events organized by the General Comptroller's Office of the municipality of Manizales?	142.78901***	1	142.78901	7.37	0.009
Have you participated in the "Take Control" strategy of the General Comptroller's Office of the municipality of Manizales?	98.807531**	1	98.807531	5.10	0.029
What is your perception of the work carried out by the General Comptroller's Office of the municipality of Manizales?	103.21083	3	34.403609	1.78	0.166
Residual	793.9633	41	19.364959		
Total	2573.9792	46	50.636448		

Source: Own calculations. Data collection instrument. **Note:** *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Appendix 2 at the end of the document presents the correlation matrix. Specifically, this matrix reveals that the number of times individuals have participated in citizen participation events scheduled by the controller's office correlates positively and significantly, with a confidence level of 99%, with age range. Conversely, it correlates negatively and significantly, with the same confidence level, with participation frequency, knowledge about citizen participation processes, participation in social networks, knowledge about the "Take Control" strategy, and socioeconomic stratum, with a confidence level of 90%.

These findings suggest that participating a certain number of times may lead to a decrease in interest in participating. Furthermore, contrary to intuition, better socioeconomic conditions and greater awareness of citizen participation mechanisms negatively correlate with participation frequency. This highlights intriguing cultural aspects that warrant deeper investigation.

It is worth noting that participation in the "Take Control" strategy negatively and significantly correlates, with a confidence level of 99%, with age range and educational level. However, it shows a positive and significant correlation, at the same confidence level, with participation in social networks, knowledge about citizen participation, and socioeconomic stratum. This may indicate a positive relationship with the process of embracing citizen participation mechanisms through the public strategy "Take Control." It is interesting to observe, from a gender perspective, that considering gender (male or female) bears no relevance to the set of variables under analysis. This implies that, at least in Manizales, the gender variable is not significant in relation to citizen participation processes.

It's worth noting that certain counterintuitive relationships will be the subject of analysis in future research. For the time being, in estimating the GLM model, statistically robust and most

relevant relationships have been considered to fulfill the objective set forth in this research article.

The outcomes of the Generalized Linear Model (GLM) analysis (Table 4) indicate a decline in citizen participation prompted by the General Comptroller's Office in Manizales. The coefficients in the GLM reflect how independent variables relate to the dependent variable, factoring in other predictors within the model. These coefficients reveal the size and direction of the impact that independent variables exert on the dependent variable—here, the citizen participation spurred by the General Comptroller's Office in the municipality of Manizales, while accounting for other variables in the model.

It's crucial to recognize that the coefficient's interpretation hinges on the type of variable being modeled. For categorical variables, the coefficient signifies the difference in the dependent variable between the reference category and the modeled category. Specifically, a negative coefficient in a GLM with a categorical independent variable indicates that the response variable decreases on average when transitioning from the reference category to the corresponding category, keeping other variables constant.

Hence, in our context of modeling citizen participation prompted by the General Comptroller's Office in the municipality of Manizales based on educational level, socioeconomic stratum, attendance at the office's events, and awareness of participatory fiscal control, the findings reveal that at higher socioeconomic strata and educational levels, the average frequency of citizen participation called by the comptroller's office decreases by -10.01 and -8.9, respectively. Intriguingly, contrary to expectations, higher cultural backgrounds and socioeconomic statuses do not promote citizen participation. This could be attributed to time limitations imposed by work commitments for individuals with advanced education and greater socioeconomic standing.

According to the results of the GLM model, a robustness test has been conducted, which involves estimating a linear regression model with heteroskedasticity-robust errors to decompose the effect of being in each socioeconomic stratum on the frequency of participation in citizen events for fiscal control. Thus, regarding the model predicting the frequency of participation in citizen participation activities for fiscal control based on socioeconomic stratum, the results suggest that as the socioeconomic stratum increases, the negative coefficient becomes more pronounced and statistically significant. This finding is observed with a 95% confidence level for strata 2, 3, and 5, and a 99% confidence level for strata 1, 4, and 6. Notably, the negative coefficient reaches its maximum absolute value in socioeconomic stratum five. This reflects how as socioeconomic status rises, participation in citizen fiscal control activities tends to decrease.

In summary, the results support an inverse relationship between socioeconomic stratum and participation in citizen fiscal control activities. As individuals belong to higher socioeconomic strata, they are less likely to actively participate in these activities (see the estimation results in Table 5).

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Table 4. Generalized Linear Model – GLM- 2

Generalized linear models		No. Of Obs:	48	Residual df:	42
Optimization: ML					
Iteration 0: log likelihood:					
-143.59486					
Scale parameter: 26.5432					
Deviance:	1114.814219	(1/df)	26.5432		
		Deviance:			
Pearson	1114.814219	(1/df)	26.5432		
		Pearson:			
Log likelihood:	-143.5948585	AIC:	6.233119		
		BIC:	952.2238		

	Coef.	OIM Std. Err.	z	P> z	[95% Conf. Interval]	
Dep: times participated in citizen participation activities						
Have you been summoned to the events	-7.611135***	2.452402	-3.10	0.002	-12.41776 -2.804514	
Education level	-8.903197**	3.913082	-2.28	0.028	-16.80583 -1.000568	
Stratum socioeconomic	-10.01808**	3.828666	-2.62	0.012	-17.75023 -2.285937	
Do you know what is participatory fiscal control	-13.34252***	4.111532	-3.25	0.002	-21.64593 -5.039117	
_cons	20***	3.543731	5.64	0.000	12.84329 27.15671	

Source: Own calculations. Data collection instrument. **Note:** *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Table 5. Least squares linear regression

Dep var: How many times have you participated in citizen participation activities
Indep var: Socioeconomic stratum

	SS	df	MS	Number of Obs:	48
Model	1544.2205	6	257.370088	F (6,41)	10.25
Residual	1029.75864	41	25.1160643	Prob>F	0.0000
Total	2573.97917	47	54.7655142	R-squares:	0.5999
				Adj R-Squares:	0.5414

Socioeconomic stratum	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
Stratum 1	-1288706***	4.488201	-2.87	0.006	-21.95117 -3.822957
Stratum 2	-8.903197**	3.913082	-2.28	0.028	-16.80583 -1.000568
Stratum 3	-10.01808**	3.828666	-2.62	0.012	-17.75023 -2.285937
Stratum 4	-13.34252***	4.111532	-3.25	0.002	-21.64593 -5.039117
Stratum 5	-13.42471**	5.069212	-2.65	0.011	-23.66219 -3.187228
Stratum 6	-9.150583***	1.524263	-6.00	0.000	-12.22889 -6.072271
_cons	20***	3.543731	5.64	0.000	12.84329 27.15671

Source: Own calculations. Data collection instrument. **Note:** *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

The Pearson chi-square test was applied, a non-parametric test that measures the discrepancy between an observed distribution and a theoretical one, indicating the degree of dependence between two variables. Finally, is established the following the hypothesis:

H1: The "Let's Take Control" strategy developed by the General Comptroller's Office of the Municipality of Manizales, utilizing participation mechanisms based on Information and Communication Technologies (ICTs), has positively influenced the outcomes of citizen participation that engages in social control over fiscal management during the period 2020-2021.

Null H1: The "Let's Take Control" strategy developed by the General Comptroller's Office of the Municipality of Manizales, utilizing participation mechanisms based on Information and Communication Technologies (ICTs), has negatively influenced the outcomes of citizen participation that engages in social control over fiscal management during the period 2020-2021.

The Cramer's V test is also applied, which is calculated from the Pearson chi-square test and the sample size. It is a normalized form of the chi-square statistic that considers the size of the contingency table. The interpretation of the Cramer's V coefficient is similar to that of the correlation coefficient. A value close to zero indicates that there is no association between the two categorical variables, while a value close to 1 indicates a strong association between the two categorical variables. See Table 6. Interpretation of effect size, below.

Table 6. Interpretation of effect size

Effect size (ES)	Interpretation
$ES \leq 0.2$	The result is weak. Although the result is statistically significant, the fields are only weakly associated."
$0.2 < ES \leq 0.6$	The result is moderate. The fields are moderately associated
$ES > 0.6$	The result is strong. The fields are strongly associated

Source: IBM (2023)

According to the result of the Cramér's V coefficient, which is equal to 0.54 (see Table 7), a moderate association can be inferred between the place of residence and participation in civic events organized by the Municipal Comptroller's Office of Manizales. This finding indicates that both variables are significantly linked in the city of Manizales, suggesting that geographical location influences citizens' willingness to participate in the initiatives of the Municipal Comptroller's Office. For more detailed information, it is recommended to refer to Table 7.

Table 7. Chi-square test for 'municipality of residence and participation in the citizen events of the Municipal Comptroller's Office of Manizales.

χ^2 Test	Value
Number of observations	47
χ^2 - Pearson	14,14
Average	0,078
Cramér's V:	0,54

To verify and confirm the hypothesis of this study, we conducted a chi-square test (χ^2) between two variables: the neighborhood of residence and participation in citizen events organized by the General Comptroller's Office of the Municipality of Manizales. The null hypothesis (H_0) stated that there is no association between the neighborhood of residence and participation in these events (see Table 7). The results of the analysis yielded an χ^2 value of 14.14 with a corresponding probability (pr) of 0.078. As the chosen significance level was $\alpha = 0.5$, and since the obtained p-value is lower than this significance level, we reject the null hypothesis. This leads us to conclude that there is indeed a relationship between a citizen's neighborhood of residence and their participation in the events organized by the General Comptroller's Office of the Municipality of Manizales. Based on the information collected through the survey, we find that a citizen's neighborhood of residence significantly influences their participation in the activities organized by the control entity.

An analysis was carried out to ascertain the extent of association between the variables of educational level and participation in citizen events organized by the General Comptroller's Office of the Municipality of Manizales. This perspective was gleaned from inputs provided by citizen oversight groups, officials responsible for the Comptroller's control subjects, and the general public. The null hypothesis posited that no association exists between these variables. However, the findings have shown that this null hypothesis was rejected with a significance level of 1%. Instead, the alternative hypothesis was accepted, indicating a connection between the educational level of citizens in Manizales and their active involvement in the activities orchestrated by the Comptroller's Office. It is worth noting that while there is an association between the mentioned variables, education level, and participation in events organized by the Comptroller's Office, this relationship is inverse, as can be further confirmed in the results of the model in Table 4.

Building upon the aforementioned outcomes, the General Comptroller's Office of the Municipality of Manizales possesses the requisite tools to empower citizens in participating effectively and efficiently in the mission of ensuring proficient and timely participatory fiscal oversight over the utilization and surveillance of public resources managed by territorial entities. As stipulated by Law 134 of 1994, "Administrative participation as a right of individuals. Participation in administrative management shall be exercised by private individuals and civil organizations in accordance with the terms of the Constitution, and those established by law which develop the final clause of Article 103 of the Political Constitution and establish the regulatory procedures required for this purpose, the requirements to be met, the definition of the decisions and matters subject to participation, as well as their exceptions and the entities in which these procedures shall operate" (p. 26).

To effectively and efficiently manage public resources, it becomes imperative to engage citizens as watchdogs and stimulate their participation in territorial fiscal control. This not only optimizes the utilization of public resources but also rebuilds citizens' trust and reinforces the fulfillment of the fundamental purposes of the State. Therefore, citizen participation is necessary to enhance budget transparency (Ríos, Benito, and Bastida, 2017)

In the context of the municipality of Manizales, the challenges of insufficient citizen participation and the weakening of community organizations stand as significant roadblocks to achieving transformation and progress within the city. While new roles founded on values like coexistence and respect for diversity are advocated for, the responsibility often falls upon leaders who exploit the situation for their personal gain. These findings align with a study conducted in the municipality of Monteria, as noted by Chávez and Niño (2018). A potential remedy for restoring citizens' trust and fostering democracy and participation could involve the infusion of fresh paradigms into public administration via participatory budgeting within the Municipality of Manizales. Such an approach could facilitate the planning of city projects that address prevailing challenges and enable the inclusion of communities in all matters pertaining to public and political affairs. Alternatively, and from a prospective standpoint, Hong and Cho (2018) suggest that the implementation of participatory budgeting can contribute to improving equity in resource allocation, albeit it may be less effective than bureaucratic decision-making in achieving public objectives. The authors propose the 'social pressure hypothesis' as an explanation, contending that the influence of social pressure during discussions in public forums can lead participating citizens to make decisions geared towards resource redistribution.

The Manizales General Comptroller's Office has instituted strategies aimed at facilitating the participation of all citizens, as evidenced by the roster of activities carried out in 2020 and 2021. Nonetheless, there appears to be a sense of apathy among citizens towards engaging with the initiatives emanating from the oversight body. The lack of commitment on the part of citizens to actively drive change in their surroundings represents one of the primary hurdles to effective participatory fiscal control. Often, citizens demand changes and outcomes from territorial entities without exerting any concerted effort themselves. To cultivate a more robust and direct involvement of communities in matters of mutual interest, the proposition of a public administration tool tailored to the context of Manizales is warranted. Through such a mechanism, heightened participation of city residents in the planning and execution of city projects with tangible societal benefits could be achieved.

In conclusion, our research underscores the significance of carefully considering who participates, in what context, and for whose benefit. These considerations become even more crucial when considering how changes in preferences, customs, and traditions can impact citizens' willingness to engage, whether directly or indirectly.

Furthermore, it is imperative to acknowledge that the "Let's Take Control" strategy goes beyond traditional methods of participation. The digital age, particularly social media networks, has proven to be an effective tool in fostering interaction between public administration and citizens. This approach aligns with the predictions of Coleman and Blumler (2009), who foresaw the Internet's potential to enhance public communication and enrich democracy. Achieving such a vision, including

the implementation of the "Let's Take Control" strategy, requires imaginative and proactive policy formulation. Dvir, Liu and Vedlitz (2023) highlights the significant role of citizen participation in government policies, whose effects vary depending on three distinct modes of citizen participation: policy endorsement, co-production, and co-investment. In the case of the "Let's Take Control" strategy, the mode aligns with policy endorsement. However, this aspect is a deeper field of analysis that deserves closer attention in future research. Ultimately, our findings highlight the need for informed and active participation in the public sphere, enriching democracy and shaping a more engaged and participatory future.

5. Conclusions

Current research in the field of citizen fiscal participation primarily focuses on the factors that explain citizens' involvement in budgetary processes. This study primarily emphasizes the first perspective. This study was conducted to verify the hypothesis of whether there is a relationship between the district where a citizen resides and their participation in the civic events of the Municipality of Manizales' Office of the Comptroller General. The results obtained through the chi-square test indicate that the null hypothesis is rejected, which means that there is a relationship between both variables. It is concluded that the district where a citizen resides conditions their participation in the activities of the Comptroller's Office in Manizales.

The findings suggest that participating a certain number of times may lead to a decrease in interest in participating. Furthermore, contrary to intuition, better socioeconomic conditions and greater awareness of citizen participation mechanisms negatively correlate with participation frequency. This highlights intriguing cultural aspects that warrant deeper investigation.

Additionally, the degree of association between the level of education and citizen participation in the events of the Municipality of Manizales' Office of the Comptroller General was evaluated. The results indicate that the null hypothesis is rejected and the alternative hypothesis is accepted, demonstrating that the level of education influences citizen participation in the activities of the Comptroller's Office. Given these findings, it is crucial to invest in awareness and sensitization regarding citizen participation strategies and initiatives. The aim is to promote the benefits and positive externalities that stem from them, such as increased civic empowerment, greater transparency in public administration, and consequently, a better understanding of the workings of the public sector. These aspects contribute to an enhancement of institutional quality.

Depending on the knowledge of public servants and the general public, the effectiveness of citizen participation tools in participatory fiscal control will vary. Thus, it is necessary to delve deeper into the characteristics of each tool, including their scope, limitations, and the appropriate time to use them. Citizen participation mechanisms are more than just a legal tool; they are society's best allies in facing inconsistencies and irregularities in the proper use of public resources, which are ultimately executed by different public entities, as well as some private sector entities that manage state resources.

There are several factors that influence the lack of citizen participation, including leadership and citizens' knowledge, which enable them to exercise social control over participatory fiscal

control. One of the factors that prevent citizens from developing social control is corruption, which is associated with the poor functioning of planning and control systems. Community participation and control lead to efficient results in the audit processes developed by the Municipality of Manizales' Office of the Comptroller General, activated and executed by community expressions of dissatisfaction with the management and use of public resources, which must ultimately seek common benefits that positively impact the entire municipality. Additionally, these resources must be executed efficiently and timely.

The results obtained from the application of the instrument indicate that the Citizen Participation Office of the Comptroller's Office in Manizales has shown commendable management and effectiveness in its activities during the 2020-2021 period. The office demonstrated its commitment by promptly receiving and addressing complaints within the legal timeframes established by Law 1755 of 2015. Furthermore, they delivered audit reports that provided responses to the requests made by the city of Manizales.

These achievements highlight the importance of strengthening the regulatory framework governing participatory fiscal control. It is crucial for the government to prioritize and enhance this tool to ensure that each of the mission objectives is accomplished in collaboration with the administrations of territorial entities, always working hand in hand with the community. By reinforcing the regulatory framework and emphasizing participatory fiscal control, the government can foster transparency, accountability, and citizen participation. This approach will contribute to more effective public administration and ultimately lead to better outcomes for the city of Manizales and its residents.

References

- Aguirre, F.J. (2021). Participación ciudadana en la gestión municipal para crear entornos incluyentes: Caso del presupuesto participativo en Perú, Villa El Salvador 2000-2002 y años recientes. *Revista e-RUA*, 13(26), 12. <https://rua.uv.mx/index.php/rua/article/viewFile/136/111>
- Arnstein, S.R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216-224. <https://doi.org/10.1080/01944366908977225>
- Baiocchi, G., & Ganuza, E. (2014). Participatory budgeting as if emancipation mattered. *Politics and Society*, 42(1), 81-110. <https://doi.org/10.1177/0032329213512978>
- Bovens, M., Goodin, R.E., & Schillemans, T. (2014). *The Oxford handbook public accountability*. Oxford handbooks. <https://repository.essex.ac.uk/11939/>
- Calabrese, T., Williams, D., & Gupta, A. (2020). Does participatory budgeting alter public spending? Evidence from New York City. *Administration and Society*, 52(9), 1382-1409. <https://doi.org/10.1177/0095399720912548>
- Cárdenas Corredor, L.A., Saleh Alba, R.A., & Sierra Cuervo, E.A. (2013). Auditorias articuladas, una herramienta de control fiscal participativo. Retrieved from: <https://hdl.handle.net/10901/6982>
- Cardona-Arenas, C.D., Osorio-Barreto, D., & Sotelo-Zemanate, D.Y. (2020). Desempeño de las subregiones del departamento del Cauca y su contribución al desarrollo territorial (2015-2017). *Revista Facultad de Ciencias Económicas: Investigación y Reflexión*, 28(2), 161-179. <https://doi.org/10.18359/rfce.4645>
- Castells, M. (2013). *Comunicación y poder*. Siglo XXI Editores México.
- Chavez Ricardo, L.G., & Niño Rodríguez, L.F. (2018). Control fiscal participativo en el municipio de Montería. Retrieved from <https://repository.unad.edu.co/handle/10596/21018>

- Coleman, S., & Blumler, J.G. (2009). *The Internet and democratic citizenship: theory, practice, and policy*. Cambridge University Press. <https://cir.nii.ac.jp/crid/1361137045896774912>
- Coleman, S., & Cardoso Sampaio, R. (2017). Sustaining a democratic innovation: a study of three e-participatory budgets in Belo Horizonte. *Information, Communication and Society*, 20(5), 754-769. <https://doi.org/10.1080/1369118X.2016.1203971>
- Constitución Política de Colombia. (2023). Artículo 2. Retrieved from <http://www.constitucioncolombia.com/titulo-1/capitulo-0/articulo-2>
- Contraloría General de la República. (2023). Participación Ciudadana. Estrategias en el Control Fiscal Participativo.
- Crosby, N., Kelly, J.M., & Schaefer, P. (1986). Citizens panels: A new approach to citizen participation. *Public administration review*, 170-178. <https://doi.org/10.2307/976169>
- Dagnino, J. (2014). Análisis de varianza. *Revista Chilena de Anestesia*, 43(43), 306-310.
- Díaz, H.O., Rebellón, S.C., Cifuentes, J.C.A., Solano, J.A., Mora, J.J., Correa, G.A.S., ... (2003). Propuesta de un modelo de control fiscal para el Estado colombiano: El sistema de control fiscal nacional. *Foro «Hacia un Control Fiscal Orientado a Resultados*, 7, 13. <http://www.scielo.org.co/pdf/eg/v19n89/v19n89a01.pdf>
- Draude, A., Börzel, T.A., & Risse, T. (2018). *The Oxford Handbook of Governance and Limited Statehood* (Online ed.). Oxford Academic. Retrieved April 5, 2018. <https://doi.org/10.1093/oxfordhb/9780198797203.001.0001>
- Dunn, P.K., & Smyth, G.K. (2018). *Generalized linear models with examples in R* (Vol. 53). New York: Springer.
- Dvir, R., Liu, X., & Vedlitz, A. (2023). Exploring public participation modes in government: The case of infrastructure policies. *Public Management Review*, 1-22.
- Eberhardt, M.L. (2015). Democracias representativas en crisis. Democracia participativa y mecanismos de participación ciudadana como opción. *Araucaria. Revista Iberoamericana de Filosofía, Política y Humanidades*, 17(33). <https://doi.org/10.12795/araucaria.2015.i33.04>
- Faúndez, R., Arancibia, S., & Delamaza, G. (2022). Criterios determinantes de la institucionalización de la participación ciudadana en organismos públicos: Una propuesta de modelo. *Gestión y Política Pública*, 31(2), 35-61. <https://doi.org/10.60583/gypv.v31i2.1256>
- Galais, C., Navarro, C.J., & Fontcuberta, P. (2013). La calidad de los procesos participativos locales: Indicadores y factores explicativos contextuales. El caso de Andalucía. *Revista Española de Ciencia Política*, (32), 65-87.
- García Mejía, M.Y. (2015). El Control Fiscal Participativo: una estrategia para la eficaz administración territorial en Colombia. Retrieved from <http://hdl.handle.net/10654/6407>
- Gaventa, J. (2006). Finding the spaces for change: A power analysis. *IDS Bulletin*, 37(6), 23-33. <https://doi.org/10.1111/j.1759-5436.2006.tb00320.x>
- Gómez García, D.I., & Carrero Sáenz, O.R. (2009). Revisión del concepto sobre control fiscal participativo en la Contraloría General de la República. Retrieved from https://ciencia.lasalle.edu.co/contaduria_publica/497/
- Gómez, E.C., & Pinzón Maldonado, H. (2012). Responsabilidad fiscal en Colombia. *Prolegómenos. Derechos y Valores*, 15(29), 173-188. <http://www.redalyc.org/articulo.oa?id=87625419011>
- Gonçalves, S. (2014). The effects of participatory budgeting on municipal expenditures and infant mortality in Brazil. *World Development*, 53, 94-110. <https://doi.org/10.1016/j.worlddev.2013.01.009>
- Hengstenberg, P. (1999). *Sociedad civil en América Latina: representación de intereses y gobernabilidad*. Editorial Nueva Sociedad.
- Hong, S. (2015). Citizen participation in budgeting: A trade-off between knowledge and inclusiveness? *Public Administration Review*, 75(4), 572-582. <https://doi.org/10.1111/puar.12377>
- Hong, S., and Cho, B. S. (2018). Citizen participation and the redistribution of public goods. *Public administration*, 96(3), 481-496. <https://doi.org/10.1111/padm.12521>
- Lerner, J. (2017). Conclusion: Time for participatory budgeting to grow up. *New Political Science*, 39(1), 156-160. <https://doi.org/10.1080/07393148.2017.1278860>
- Liendo, C., and de las Nieves, Y. (2021). Formación Ciudadana para la Participación Directa en el Control Fiscal. *Luz* 20(4), 133-141.
- Manes-Rossi, F., Brusca, I., Orelli, R.L., Lorson, P.C., & Hausteine, E. (2023). Features and drivers of citizen participation: Insights from participatory budgeting in three European cities. *Public Management Review*, 25(2), 201-223. <https://doi.org/10.1080/14719037.2021.1963821>
- Montambeault, F. (2016). Participatory citizenship in the making? The multiple citizenship trajectories of participatory budgeting participants in Brazil. *Journal of Civil Society*, 12(3), 282-298. <https://doi.org/10.1080/17448689.2016.1213508>
- Montero, R. (2021). La fiscalidad participativa y la economía social y solidaria. *Revista de Derecho Fiscal*, 19, 89-108. Universidad Externado de Colombia. <https://doi.org/10.18601/16926722.n19.04>

- Nebot, C.P. (2001). Gobiernos locales: participación ciudadana en el proceso presupuestario. *Gestión y Análisis de Políticas Públicas*, 161-172. <https://doi.org/10.24965/gapp.vi22.286>
- Ochoa Díaz, H., & Charris Rebellón, S. (2003). Propuesta de un modelo de control fiscal para el estado colombiano: El sistema de control fiscal nacional. *Estudios gerenciales*, 19(89), 13-42. https://www.icesi.edu.co/revistas/index.php/estudios_gerenciales/article/view/121
- Pimienta, J.L.R., Gulfo, Y.E.C., & Suarez, A.D. (2021). Participación ciudadana en el sistema de seguridad social en salud en Colombia. *Revista de Ciencias Sociales (Ve)*, 27(1), 230-240. <https://www.redalyc.org/articulo.oa?id=28065533018>
- Ramos, J.M., & Reyes, M. (2015). GOBIERNOS LOCALES Y PARTICIPACIÓN CIUDADANA: HACIA UN ENFOQUE DE GESTIÓN ESTRATÉGICA ASOCIADA. *Espiral Estudios Sobre Estado Y Sociedad*, 12(34). Recuperado a partir de <http://espiral.cucsh.udg.mx/index.php/EEES/article/view/1601>
- Ríos, A.M., Benito, B., & Bastida, F. (2017). Factors explaining public participation in the central government budget process. *Australian Journal of Public Administration*, 76(1), 48-64. <https://doi.org/10.1111/1467-8500.12197>
- Rowe, G., & Frewer, L.J. (2004). Evaluating public-participation exercises: a research agenda. *Science, technology, and human values*, 29(4), 512-556. <https://doi.org/10.1177/0162243903259197>
- Sánchez-Torres, C.A., López Obregón, C., Peña González, E., & Aldana Arévalo, D. (2006). Control Fiscal Territorial Diagnóstico y Perspectivas. *Estudios Socio jurídicos*, 8 , 44 <http://www.redalyc.org/articulo.oa?id=73380204>
- Schneider, S. H., & Busse, S. (2019). Participatory budgeting in Germany—A review of empirical findings. *International Journal of Public Administration*, 42(3), 259-273. <https://doi.org/10.1080/01900692.2018.1426601>
- Sen, A. (2000). *Desarrollo y libertad*. Barcelona: Planeta.
- Sintomer, Y., Herzberg, C., Röcke, A., & Allegretti, G. (2012). Transnational models of citizen participation: The case of participatory budgeting. *Journal of Public Deliberation*, 8(2), Article-9. <https://hdl.handle.net/10316/41034>
- Theocharis, Y., & Van Deth, J.W. (2018). The continuous expansion of citizen participation: A new taxonomy. *European political science review*, 10(1), 139-163. <https://doi.org/10.1017/S1755773916000230>
- Torres, R.M. (2001). Participación ciudadana y educación. Una mirada amplia y, 20, 24-25 Segunda Reunión de Ministros de Educación del Consejo Interamericano para el Desarrollo Integral -CIDI (Punta del Este, Uruguay, 24-25 Septiembre, 2001)

APPENDIX 1. Primary Information Collection Instrument

Title: Unraveling the Factors Driving Citizen Participation in Fiscal Control: Lessons from the City of Manizales – Colombia

This survey is part of a research project with the aim of understanding and identifying the conceptions that citizens of Manizales have regarding participatory fiscal control. The information you provide will be confidential, and only authorized individuals will have the right to handle it.

1. SURVEY

Age range: _

- a) Under 18 years old.
- b) Between 18 and 24 years old.
- c) Between 25 and 34 years.
- d) Between 35 and 44 years.
- e) Between 45 and 54 years.
- f) More than 54.

Education level:

- a) basic primary.
- b) basic secondary.
- c) Technique.
- d) Technological.
- e) Undergraduate.
- f) Graduate.
- g) None.

Commune where you reside:

- a) Atardeceres.
- b) Ciudadela del norte
- c) Cumanday.
- d) Ecotourstico Cerro de Oro.
- e) La estación.
- f) La fuente
- g) La Macarena.
- h) Palo grande.
- i) San José.
- j) Tesorito
- k) Universitaria

Socioeconomic stratum:

- a) Stratum 1.
- b) Stratum 2.
- c) Stratum 3.
- d) Stratum 4.
- e) Stratum 5.
- f) Stratum 6.

Mark with an (x) as appropriate:

Sex: Female ____ Male _____ Other _____

Have you been summoned to the events held at the Comptroller General of the municipality of Manizales?

Have you participated in the citizen events of the Comptroller General of the municipality of Manizales?

How many times have you participated in citizen participation activities convened by the Comptroller General of the municipality of Manizales?

Number of times you have participated: _____

How often do you participate in citizen participation activities convened by the General Comptroller of the Manizales municipality?

- a) 1 time per week.
- b) 2 times a month.
- c) 1 time a month.
- d) Every 2 months.
- e) 1 time every semester.
- f) 1 time a year.

Are you familiar with the "Let's take control" strategy of the Comptroller General of the municipality of Manizales? YES __ NO__

Have you participated in the "Let's take control" strategy of the Comptroller General of the municipality of Manizales? YES __ NO__

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By what means have you participated in the "Let's take control" strategy of the Comptroller General of the municipality of Manizales?

- a) Facebook Live.
- b) YouTube
- c) face-to-face

Do you know what is participatory fiscal control is? YES ___ NO___

Do you know the mechanisms for citizen participation? YES ___ NO___

Which is it?

- a) Vote.
- b) Plebiscite.
- c) Referendum
- d) Referendum.
- e) Town meeting.
- f) legislative initiative
- g) Revocation of the mandate.

Do you know what are the control or regulatory bodies are? YES ___ NO___

Which is it?

- a) Comptroller General of the Republic.
- b) Territorial controllers.
- c) Office of the Attorney General of the Nation.
- d) Ombudsman.
- e) District and municipal ombudsman.
- f) General Audit Office of the Republic.

Do you know, what are citizen oversights? YES ___ NO___

Have you participated in any citizen oversight? YES ___ NO___

Which of the following reasons do you consider to be the main one for NOT reporting acts of corruption?

- a) For fear of reprisals against him.
- b) Because they are indifferent to the situation.
- c) Because they receive benefits from such behaviors.
- d) Because they don't believe in control entities.

19. Which of the following reasons motivate the denunciations of acts of corruption?

- a) Economic benefits.
- b) Recognition before society.
- c) Citizen duty.

We respectfully request that you answer the following question by marking an X, based on the rating scale:

20. What is your perception of the work carried out by the Comptroller General of the municipality of Manizales?

- 1: poor
- 2: regular
- 3: Acceptable
- 4: good
- 5: excellent

Descriptive statistics

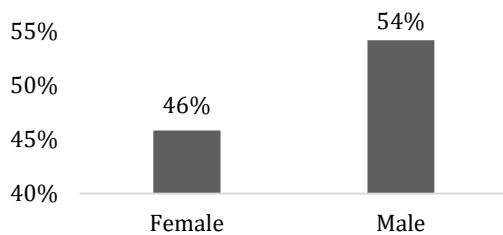


Figure A.1. Sex

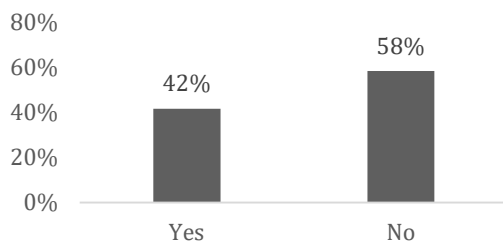


Figure A.2. Question 6. ¿ Have you been summoned to the events held at the General Comptroller's Office of the Municipality of Manizales?

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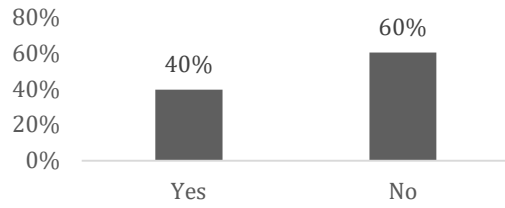


Figure A.3. Question 7. ¿Have you participated in the citizens' events of the General Comptroller's Office of the Municipality of Manizales?

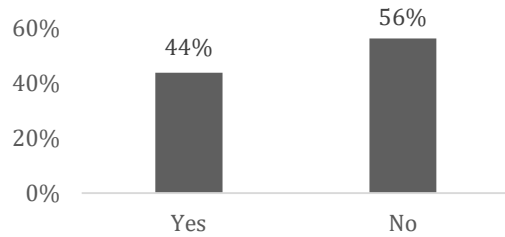


Figure A.4 Question 10. ¿Do you know the strategy implemented by the General Comptroller's Office of the Municipality of Manizales?

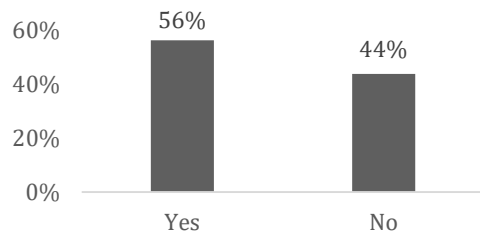


Figure A.5: Question 13. ¿Do you know what Participation in Fiscal Control?

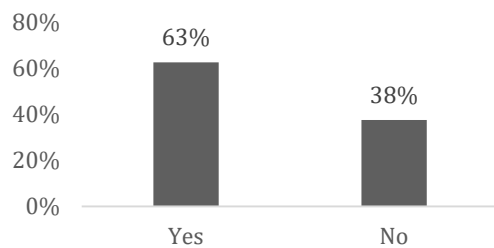


Figure A.6: Question 16. ¿Do you know what citizen-veedurias are?

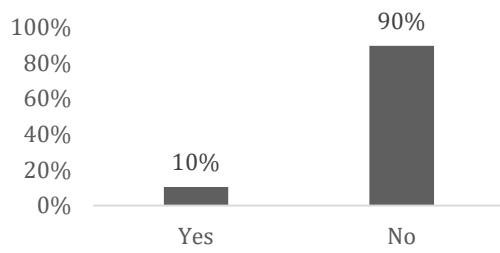


Figure A.7. Question 17. ¿Have you participated in any Citizen's oversight?

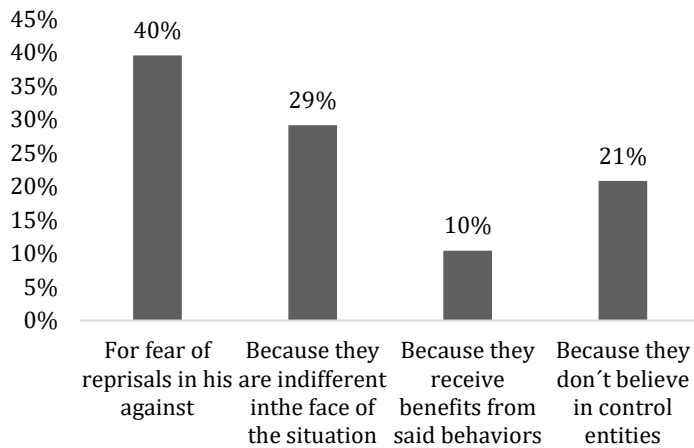


Figure A.8. Question 18. ¿Which of the following reasons do you consider to be the main one for NOT reporting acts of corruption?

APPENDIX 2. Correlation matrix

Variable	age range	Education_level	Commune	Stratum	Sex	Summoned	Participated	times participated	participation_frequency	Let's take control participation	Social media participation	knowledge about citizen participation	Knowledge about Mechanism	Knowledge about citizen oversights	Times citizen oversights	Denunciations corruption motivation	Comptroller General function perception	Knowledge about	
age range	1																		
Education_level	0.260**	1																	
Commune	-0.267**	-0.245*	1																
Stratum	0.160	0.12	-0.184	1															
Sex	-0.078	-0.115	0.056	0.001	1														
Summoned	-0.399***	-0.485***	0.090	0.036	-0.099	1													
Participated	-0.419***	-0.471***	0.107	-0.068	-0.146	0.871***	1												
times participated	0.406***	0.365***	-0.155	-0.261*	0.088	-0.684***	-0.751***	1											
participation_frequency	-0.315**	-0.477***	0.246*	-0.016	0.010	0.518***	0.545***	-0.516***	1										
Let's take control participation	-0.379***	-0.474***	0.129	0.119	-0.157	0.788***	0.826***	-0.762***	0.586***	1									
Social_media_participation	-0.136	-0.323**	-0.161	0.211	-0.071	0.620***	0.620***	-0.581***	0.476***	0.768***	1								
knowledge about citizen participation	-0.200	-0.520***	-0.002	0.045	-0.272*	0.740***	0.708***	-0.554***	0.359**	0.646***	0.606***	1							
Knowledge about Mechanism	-0.036	-0.030	0.040	0.026	0.186	0.100	0.006	-0.004	0.127	-0.006	0.037	0.003	1						
Knowledge about citizen oversights	-0.400***	-0.169	0.229	0.076	-0.306**	0.124	0.148	-0.262*	0.126	0.389***	0.291**	0.140	-0.181	1					
Times citizen oversights	0.085	-0.283**	-0.003	0.075	0.091	0.419**	0.438***	-0.382**	0.352**	0.335**	0.116	0.320**	0.194	-0.252*	1				
Denunciations corruption motivation	-0.055	0.021	-0.320**	-0.270*	-0.152	-0.044	-0.120	0.230	-0.074	-0.172	-0.120	0.018	0.085	-0.197	-0.064	1			
Comptroller General function perception	0.249*	0.023	-0.236	0.287**	0.117	-0.298**	-0.340***	0.212	-0.128	-0.225	-0.136	-0.271*	0.043	0.076	-0.084	0.004	1		
Knowledge about Let's take control" strategy	-0.434***	-0.553***	0.168	0.022	-0.221	-0.788***	0.832***	-671***	0.492***	0.840***	0.634***	0.687***	0.019	0.466***	0.261*	-0.083	-0.259*	1	