

Fiscalización escolar en Chile: evidencia inicial acerca del ajuste normativo de escuelas municipales y particulares subvencionadas

*School inspection in Chile: initial evidence about the regulatory adjustment of
municipal and subsidized private schools*

*Controle escolar no Chile: evidências iniciais sobre o ajuste regulatório das
escolas privadas municipais e subsidiadas*

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Resumen

La promulgación de la Ley 20.529 (2011) representa la consolidación definitiva de las políticas de rendición de cuentas en la educación escolar chilena. Esta política pública no solo incluye instituciones que controlan la gestión y los resultados pedagógicos, sino también instancias de rendición de cuentas de tipo burocrático-legal que fiscalizan la probidad del uso de recursos y el cumplimiento de normas mínimas de funcionamiento. En esta investigación, por tanto, se ofrece evidencia inicial sobre el nivel de ajuste a la normativa de escuelas municipales y particulares subvencionadas en fiscalizaciones oficiadas por la Superintendencia de Educación. En concreto se analizaron datos de 226 escuelas en 1960 fiscalizaciones durante el periodo 2013-2015, y se contrastaron las cantidades de *hallazgos* (contravenciones) registrados en cada uno de los referidos

años para estimar la incidencia de un grupo de variables predictoras sobre la probabilidad de no presentar hallazgos durante fiscalizaciones aplicadas en el último año de ese trienio. Los resultados indican un progresivo y significativo ajuste a la normativa en los dos últimos años estudiados. Asimismo, el número de fiscalizaciones suministradas en los dos primeros años es una variable que favorece el mayor ajuste, mientras que un menor desempeño académico aumenta las probabilidades de presentar hallazgos. Con base en estos datos, se discute la pertinencia de fortalecer instancias de capacitación y fiscalización preventiva, especialmente en escuelas catalogadas de mayor riesgo.

Palabras claves: fiscalización escolar, políticas educativas, rendición de cuentas, sistema de aseguramiento de la calidad, sistema escolar chileno.

Abstract

The enactment of Law No. 20,529 (2011) represents the final consolidation of the accountability policies in Chilean school education. This public policy not only includes institutions that control the management and pedagogical results, but also bureaucratic-legal accountability instances that oversee the probity of the use of resources and compliance with minimum operating standards. This investigation provides initial evidence on the level of adjustment to the regulations of municipal and subsidized private schools in inspection visits officiated by the Superintendency of Education. With this purpose, data from 226 schools in 1960 audits of the 2013-2015 period were analyzed, contrasting the amounts of findings (contraventions) registered in each year and estimating the incidence of a group of predictor variables on the probability of not presenting findings during applied audits in the last year of the triennium. The results indicate a progressive and significant adjustment to the regulations in the last two years studied. Likewise, the number of examinations provided in the first two years is a variable that favors the greatest adjustment, while a lower academic performance increases the probability of presenting findings. Based on the results, the relevance of strengthening instances of training and preventive control is discussed, especially in cataloged schools of greater risk.

Keywords: school supervision, educational policies, accountability, quality assurance system, Chilean school system.

Resumo

A promulgação da Lei 20.529 (2011) representa a consolidação definitiva de responsabilidade política na educação chilena. Esta política pública inclui não só as instituições que controlam os resultados de gestão e de aprendizagem, mas também os casos de prestação de contas tipo burocrático-legal que supervisionam a probidade na utilização de recursos e cumprimento das normas mínimas de funcionamento. Nesta pesquisa, portanto, evidência inicial do nível de adequação às regras de escolas municipais e auditorias privadas subsidiadas oficiavam pela Superintendência de Educação é oferecido. Especificamente escolas 226 os dados foram analisados em 1960 controles durante o período de 2.013-2.015, e as quantidades de constatações (violações) registados em cada um dos anos acima mencionados para estimar a incidência de um conjunto de variáveis de previsão sobre a probabilidade foram contrastadas não apresentam constatações durante as auditorias aplicadas no último ano daquele triênio. Os resultados indicam um ajuste progressivo e significativo às regulamentações nos últimos dois anos estudados. Além disso, o número de auditorias previstas nos dois primeiros anos é uma variável que favorece os mais aptos, enquanto menor desempenho acadêmico aumenta as chances de apresentar resultados. Com base nestes dados, a relevância de instâncias de formação e reforçar o controle preventivo, especialmente nas escolas catalogado maior risco é discutida.

Palavras-chave: controle escolar, políticas educacionais, responsabilização, sistema de garantia de qualidade, sistema escolar chileno.

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Introduction: school supervision as a policy of accountability and research problem

Accountability policies (ROC) - understood as those actions that allow the actors involved in the management of a particular activity to transmit or require information about the use of public resources and the achievement of pre-established goals (Corvalán, 2006) - These are strategies that are currently being used more frequently in various countries to promote improvement in the quality of their school systems (Ball and Maroy, 2009, Darling-Hammond, 2004, 2014, De la Vega, 2015, Fuhrman, 2003 ; Maroy and Voisin, 2013; McMeekin, 2006; Mourshed, Chijioko and Barber, 2012). These policies, due to the variety of conceptions that can arise according to the adaptations made in each context (Maroy, Pons and Dupuy, 2016, Verger and Normand, 2015), can be classified as follows: bureaucratic-legal models, used to verify compliance with regulations that regulate the system; promercado models, which produce performance information so that families choose in a conscious way between different options, and professional models, focused on evaluating the capacities of the professionals who carry out the teaching processes (Darling-Hammond, 2004).

However, in the specific case of Chilean school education, it can be indicated that the enactment of Law 20,529 (2011) of the National Quality Assurance System for Early Childhood, Basic and Secondary Education and its Supervision (SAC) has been focused on the use of ROC policies through an institutional matrix not only to evaluate performance standards and academic results, but also to monitor legal compliance regarding the behavior of schools. In this sense, and although in 2008 the Law of Preferential School Subsidy (SEP) introduced vertical mechanisms of contractualization and accountability for performance, the SAC expanded the use of these tools and increased their consequences, which has consolidated a logic that has served to conceive standardization and pressure as strategies to stimulate and achieve improvement.

In this scenario of institutional guidelines, it is possible to point out that the SAC has arranged elements that represent the different types mentioned, since its policies include pro-market devices, which have been delegated to an institution called Quality Agency, whose objectives are evaluate, classify and publish the performance results of schools. Likewise, bureaucratic-legal aspects are incorporated through the Superintendency of Education, which, in

essence, conducts inspection visits to safeguard compliance with educational regulations and to monitor the probity of the resources transferred to schools as a subsidy. .

Notwithstanding the foregoing, it is important to delve into the elements that give the oversight the character of bureaucratic-legal accountability. Following Corvalán (2006), the concept of accountability has its reference in anglicism accountability, which underlies two meanings for educational policy. The first concerns the process by which the actors communicate or demand information on the resources used to achieve committed objectives, which include not only the academic results, but also those linked to the set of designated resources in financial, human, materials and regulations.

The second meaning of the term, which comes from the act of rendering accounts, concerns the determination of the responsibility of the process in specific actors, which varies according to the design made in school systems, among which "high" accountability approaches are identified. risk "(including sanctions)," low risk "(which do not use punitive consequences and focus on providing information to schools to promote improvement processes), and even systems that complement both approaches (Maroy, Pons and Dupuy, 2016), as the school control processes implemented in Chile.

In effect, Law 20,529 (2011) establishes that the processes of school control are intended not only to verify compliance with legally established educational regulations in order to maintain official recognition and to impetrate the State subsidy, but also to supervise the rendering of accounts. of the use of public resources transferred to schools. According to this legal framework, the educational actors responsible for rendering accounts are the school's supporters or administrators, on whom the consequences or sanctions caused by non-compliance apply, and include admonishments, temporary or definitive deprivation of the subsidy and revocation of the State's official recognition.

All in all, school supervision, as it has been characterized, is linked to legal-bureaucratic accountability, since it is aimed at monitoring the adjustment to legislation enacted to establish operating conditions and the use of public resources. From this observation, it is also important to differentiate the audit from other devices that could be confused with it, since the inspection visits are mainly aimed at verifying the adequacy of the schools to the administrative procedures and the legal requirements defined in the system, that is, they do not focus on aspects related to academic

performance nor do they intervene in the field of pedagogical management. In Chile, academic accountability and promarcado is exercised through the National System of Measurement of Teaching Quality (Simce), while the tasks referred to the assessment and assessment of pedagogical management is done through specialized devices, such as visits of evaluation and orientation of the performance in charge of the Agency of Quality, and the visits of technical supervision carried out by the Provincial Departments of the Ministry of Education.

The relevance that the auditing function can acquire for Chilean school education is understood in the context of the technical debate that originated the SAC. In this regard, Darville and Rodríguez (2007) point out that the original design of the Chilean school model, instituted under a market logic in the 1980s, lacked a system of comprehensive accountability, which implied, among other weaknesses, that the holders did not have the obligation to report on the use of public resources received, which, according to the aforementioned authors, threatened the responsibility of school administrators. This gap in the original regulatory framework, therefore, would justify some of the irregularities documented by the evaluation of policy and academic research, such as fiscal indiscipline in the manipulation of public resources, especially in the municipal sector (Serrano and Berner, 2002) . In addition to this, several studies illustrate that despite the existing prohibitions, many school providers carried out admission processes with selective purposes, which transgressed the regulations and caused student exclusion dynamics (Carrasco, Gutiérrez and Flores, 2017; Godoy, Salazar and Treviño, 2014), hence a low voluntary adherence to the norm.

Likewise, it is necessary to mention that the academic, international and national production has concentrated in a special way on the study of the academic mechanisms or accountability promarcados that analyze the impact of these policies on the pedagogical management and its results, with which results have been found that serve to question their ability to generate proposals for improvement in the field of learning and how they induce performative performances among educational agents (Ball, 2003, Darling-Hammond, 2014, Maroy and Voisin, 2013 Weinstein, Marfán, Horn and Muñoz, 2016). From the latter, it can be inferred that there are few empirical developments about the school control devices applied in Chile through the SAC (Carrasco-Aguilar, Ascorra, López and Álvarez, 2018, Oyarzún and Soto, 2017), and that the different

Typologies of accountability have a unique nature, so it is necessary to analyze them based on their particular objectives and functions.

Due to this, the purpose of this article is to collect exploratory evidence about the school control processes introduced through the SAC, for which an empirical investigation has been carried out, since it has been considered that this may be suitable to contribute to the understanding and improvement of public policies, especially in phases of installation. Specifically, the two objectives have been the following: first, describe the adjustment to the educational regulations of establishments that received audit visits comparing their number of findings in a period of three consecutive years, and, secondly, estimate the predictive capacity of a set of variables of interest (number of visits between 2013 and 2014, and performance category) related to the absence of findings in the last year studied (that is, 2015).

Contextual background

The Education Quality Assurance System

In Chilean school education ¹, the SAC constitutes the formal adoption of accountability policies as a strategy for improvement and regulation of schools that have official recognition (Parcerisa y Falabella, 2017). This policy introduces, in a concrete way, the figure of an evaluating State that advises, supervises, evaluates and sanctions in order to channel schools towards certain quality parameters in terms of operational conditions, school management and academic results (Martinic, 2010).

The contingencies that contributed to the introduction of this policy refer to the criticisms leveled at Chilean school education since the late 1990s, a period in which academics and social movements perceived the stagnation in the results, as well as inequity in the distribution of educational opportunities (Gysling, 2016). These questions suggested that the development of a promarcad school model had brought with it various problems, such as weak control over the use of state resources (Darville and Rodríguez, 2007, Serrano and Berner, 2002), socio-educational hyper-segregation (Valenzuela, Bellei and De los Ríos, 2013) and the limited quality of the school

¹ La funcionalidad del SAC puede ser reinterpretada con base en los cuerpos legales promulgados recientemente, como la *Ley 20.845 de la inclusión escolar* (2015), y la *Ley 21.040 que crea el sistema de educación pública* (2017). En la presente investigación los análisis efectuados se circunscriben a los marcos legales existentes hasta el año 2015.

services provided by the types of schools (Bellei, 2007, Mizala and Romaguera, 1999). To correct these market failures and respond to the social pressure of the secondary school movement of 2006, the government of the time convened an Advisory Council for the Quality of Education composed of academics, politicians and representatives of social groups (Bellei, 2015) . The result of this instance was the Report of the Advisory Council, a document that contained various public policy recommendations that led to a reformulation of the current institutional framework by repealing the Organic Constitutional Law on Education (Law 18,962, 1990), as well as the promulgation of the General Law of Education (Law 20,370, 2009) and the Law of Quality Assurance (Law 20,529, 2011).

These legal frameworks repositioned the role of the State in regulatory functions through a quality control system called SAC, which consists of a matrix of standardized evaluations, inspections and audits that consolidate the path initiated with the SEP Law in 2008 (Gysling, 2016 ; Parcerisa and Falabella, 2017). The institutions required for these purposes included the creation not only of a Quality Agency with the aim of guiding and evaluating the learning achievements and the management processes of the schools, but also of a Superintendence to oversee compliance with legal norms. required for the provision of educational services and the use of subsidies (Law 20,529, 2011). In short, the installation of the SAC provided the State with a series of mechanisms to regulate the school market, which have materialized in the enactment of performance standards, goals of results and legal provisions that schools must follow prescriptively, and whose observance is verified with the constant evaluation, inspection and sanction of non-compliance.

School control in Chile

An aspect that distinguishes the accountability policies implemented through the SAC has to do with the creation of institutions that exercise controls not only on pedagogical management and academic results. Indeed, although before the SAC the school control had a direct antecedent in the Subsidies Unit of the Ministry of Education, the Superintendency has constituted itself in an institution specialized in checking that the supporters and their schools conform behaviorally to the rules that the State has ruled to ensure the functioning of schools, which has significantly increased the sanctioning powers for the purposes of inspection visits.

Specifically, Law 20,529 (2011) establishes that the Superintendency must supervise that the holders of educational establishments comply with current educational regulations and control the legality in the use of financial resources corresponding to state subsidies. This legal mandate was operationalized and published in Exempt Resolution No. 290, which establishes the verification and standardization of findings model (Superintendency of Education, 2013), which typifies the assumptions that give rise to regulatory breaches or findings.², and whose livelihoods are directly related to the norm allegedly transgressed (Superintendency of Education, 2014b).

Accordingly, the auditing entity has specific mechanisms to ensure compliance with the regulations, including inspection visits³ annually scheduled, the systems of accountability of resources and complaints that can be formalized by citizens about possible failures that take place in their schools. Considering that the visits and the findings are key aspects of this study, it is pertinent to emphasize that the visits refer to the formal act in which an auditor goes to a school to verify compliance with some area of educational regulations, while the findings they allude to the contraventions found in the visits, which are the cause of administrative proceedings - or summaries - that could provoke warnings, deprivation of subsidies, revocation of official recognition, among others (Superintendencia de Educación, 2014b).

Methodology

Study type

The present study has been based on a quantitative methodological approach and has been divided into two phases: a descriptive and a predictive phase. In the first one, an attempt was made to estimate the adjustment to the educational regulations by comparing the means of findings of schools audited in three consecutive years (2013, 2014 and 2015), while in the second one we tried

² La normativa educacional tipificada en el modelo de fiscalización incluye el conjunto de requisitos establecidos en la Ley 20.370 (2009) para conservar el reconocimiento oficial, proveer servicios educativos e impetrar subvención, así como las demás normas legales y operacionales básicas que regulan el funcionamiento de un centro escolar. El conjunto de la normativa se detalla en la circular 1: *Establecimientos educacionales subvencionados municipales y particulares* (Superintendencia de Educación, 2014a).

³ Cabe mencionar que luego del año 2015, la Superintendencia implementó un enfoque de resguardo de derechos y fiscalización preventiva, cuyos propósitos son generar procesos de mejoramiento y asegurar derechos consagrados en la normativa. Considerando esto, los datos analizados corresponden a un periodo previo a la aplicación de dicho enfoque. Consiguientemente, es preciso indicar que las visitas pueden ser preventivas, temáticas (focalizadas en un tema puntual de la normativa) e integrales (abordar diversos ámbitos de la normativa).

to determine the predictive capacity of some variables, such as the number of visits applied and the category of performance, for which the probability that a school had or lacked findings in the last year of the triennium was taken into consideration. Parallel to these phases, three hypotheses were postulated:

1. Based on the audit action, the schools present a lower number of findings, with this correlative reduction year after year.
2. The schools that received the most visits during the first two years (2013 and 2014) are less likely to present findings in the last year (2015).
3. The highest probability of findings during 2015 is related to a category of performance, either insufficient or medium low, because they imply a lower management capacity, without other variables such as dependency or socioeconomic group (GSE) having an impact on the dependent variable.

The meaning of these hypotheses is based on the exploratory study of Oyarzún and Soto (2017) on school control processes in Chile, who reported not only a greater adjustment to the educational regulations during the third year of application of this policy in a sample of 95 schools, but also that variables such as the administrative unit and the socioeconomic group did not show significant incidence. In addition, a progressive adjustment of the school units has been assumed, given the prescriptive effects that would characterize the high-risk ROC policies.

Information sources and sample

The source of information corresponded to official records of the Superintendency on inspection visits and findings between 2013, 2014 and 2015, which were obtained through transparency requests for access to public information. The remaining data from this investigation came from public records of other state services in the education sector. This enabled the development of databases on dependency, GSE, performance category, enrollment and geographical location of schools. In this way, a non-probabilistic sample was used for convenience, which, according to Bryman (2012), corresponds to that available based on its accessibility at a given time. In this regard, it is worth noting that although this technique has limitations of generalization, it is recommended for exploratory studies that seek to extract initial conjectures that serve as support for future research.

The sample consisted of 352 schools (181 municipal and 171 private subsidized) belonging to six regions of Chile. This database has a total of 2714 inspection visits and 2042 registered findings. However, in order to provide rigorousness to the study, it was necessary to purge the original database, since the variables used were not present in all cases. In particular, to address the first phase it was required that all the schools in the sample had been audited in each of the years analyzed, a condition that was not observed in the 352 cases of the initial base. Therefore, and in order to make the collected data comparable, it was necessary to identify those schools that received consecutive audits in the years 2013, 2014 and 2015, a situation that was observed in 226 cases. Additionally, and considering the objective of the second phase, it was verified that the predictor and control variables used were found in each of these cases. Tables 1 and 2 describe the sample and the distribution of the variables used.

Tabla 1. Distribución de las 226 escuelas de la muestra por dependencia y ubicación geográfica

Dependencia	Municipales	Particulares subvencionados
	49,6%	50,4%
Ubicación Geográfica	Región Metropolitana	Otras Regiones
	64%	36%

Fuente: Elaboración propia

Tabla 2. Distribución estadística de las variables utilizadas en las 226 escuelas de la muestra

Variables	Municipal	Particular subvencionado	Total muestra
Visitas de fiscalización	54,4%	45,6%	1.960 (Visitas)
Categoría de desempeño			
Insuficiente	32,1%	15,8%	54
Medio bajo	26,8%	17,5%	50
Medio	29,5%	48,2%	88
Alto	11,6%	18,4%	34
Grupo socioeconómico			
Bajo	21,4%	2,6%	27
Medio bajo	49,1%	26,3%	85
Medio	21,4%	44,7%	75
Medio alto – Alto	8%	26,3%	39
Matrícula	Min. 91 – Max. 2.598	Min. 116 – Max. 2.754	Min. 91 – Max. 2.754

Fuente: Elaboración propia

Variables

The variables used, specifically in the second phase of research ⁴, they can be qualified in outcome, predictor and control variables. The first ones refer to the findings ⁵ found in the audits carried out in 2015, which, given the objective of this investigation, were converted into a dummy variable that indicates the presence or absence of findings in a school during that year, while the predictor variables are related to the amount of visits received in the first two years (2013 and 2014) and the performance category obtained by the school in the first official order corresponding to 2016. Finally, the use of a series of control variables was considered, such as administrative unit,

⁴ En esta sección se describen las variables utilizadas en la segunda fase de esta investigación. La primera etapa no contempla el uso de variables en términos de resultado, control o predictoras.

⁵ La variable *hallazgos* se refiere a las transgresiones identificadas en fiscalizaciones que no implican necesariamente sanciones, pues estas dependen de un sumario administrativo que se puede extender por meses luego de las visitas.

GSE, registration and location of the establishments in the sample. Tables 3, 4 and 5 detail their operations:

Tabla 3. Descripción de la variable de resultado utilizada en la segunda fase de la investigación

Variable de resultado	Operacionalización
Hallazgos	Variable <i>dummy</i> : considerando que los datos originales están expresados en términos de cantidad de hallazgos, en esta investigación se construyó una variable constituida de dos categorías, en donde 0 indica “ <i>presencia de hallazgos</i> ” y 1 “ <i>ausencia de hallazgos</i> ” en el año 2015.

Fuente: Elaboración propia

The predictor variables were selected from the hypotheses that guided the investigation. It is important to point out that the use of the performance category was determined to the detriment of the Simce score, since the results of this agency only indicate figures in "gross", while the category is a variable that includes the percentage distribution of students in the learning standards, the other indicators of educational quality and the adjustments by socioeconomic condition. Also, the category of performance has consequences in the context of the SAC. It is also important to consider that in the GSE control variable, the cases corresponding to high GSE were subsumed to the data belonging to the medium high GSE in order to have comparable groups, since they represented an insignificant number of cases (6) in the sample.

Tabla 4. Descripción de las variables predictoras utilizadas en la segunda fase de la investigación

Variables predictoras	Operacionalización
Visitas de fiscalización	Variable <i>numérica discreta</i> : cantidad de visitas de fiscalización recibidas por cada escuela de la muestra en los años 2013-2014 (rango 2-18).
Categoría de desempeño	Variable <i>categorica</i> : incluye las categorías de desempeño insuficiente, medio bajo y medio. La aplicación de esta variable conllevó que la categoría de desempeño alto fuese ocupada como una categoría de referencia. Los datos utilizados corresponden a la clasificación publicada en el año 2016 en base a resultados de 2015.

Fuente: Elaboración propia

Tabla 5. Descripción de las variables de control utilizadas en la segunda fase de la investigación

Variables de control	Operacionalización
Grupo socioeconómico	Variable <i>categorica</i> : incluye los grupos bajo, medio bajo y medio. La aplicación de esta variable conllevó que los grupos medio alto y alto fuesen agrupadas y utilizadas como una categoría de referencia. Los datos corresponden al año 2015.
Dependencia	Variable <i>dummy</i> : se asignó el valor 1 a la dependencia municipal y el valor 0 a la dependencia particular subvencionada.
Matrícula	Variable <i>numérica discreta</i> : cantidad de estudiantes matriculados en cada escuela de la muestra durante el año 2015.
Ubicación geográfica	Variable <i>dummy</i> : se asignó el valor 1 a las escuelas ubicadas a la Región Metropolitana y el valor 0 a las escuelas emplazadas en el resto de las regiones.

Fuente: Elaboración propia

Procedure and strategy of data analysis

To determine the first objective, the number of findings obtained by the 226 schools in the sample was compared. This involved determining the normality of the sample distribution in both the number of findings and visits by means of the nonparametric test of Kolmogórov-Smirnov. The results indicated that the sample lacked a normal distribution. In this context, the relevant alternative is the non-parametric Wilcoxon test for two samples that allows the comparison of groups made up of quantitative variables (Pardo, Ruiz and San Martín, 2010).

Additionally, before making the comparison of means of findings, it was necessary to verify that the number of visits applied in the years studied were equitable, that is, that there were no significant differences between them and that, therefore, the data could be effectively verifiable . To do this, the data were analyzed with the Wilcoxon test, which showed that the number of visits did not show statistically significant differences, so they could be compared to each other. The results of this procedure are shown in Table 6:

Tabla 6. Comparación de cantidad de visitas mediante la prueba de Wilcoxon

Años comparados	1° año M ± SD	2° año M ± SD	Z	p-val
2013 – 2014	2,93 ± 1,565	2,76 ± 1,681	-1,850	,064
2014 – 2015	2,76 ± 1,681	2,99 ± 1,793	-,142	,887
2013 – 2015	2,93 ± 1,565	2,99 ± 1,793	-1,662	,096

*** p-val < 0.01, ** p-val < 0.05

Fuente: Elaboración propia

Subsequently, and taking as reference the second objective, two binary logistic regression models were estimated: one that only included the predictor variables and another that added the control variables. Like other analyzes, the binary logistic regression aims to adequately explain the relationships or interactions between a set of selected variables, although with the particularity that its purpose is to obtain a model or equation to explain the changes of the dependent variable in terms of probability of occurrence (Correa, 2002).

Results

In the first part of this section we present the results that, by comparing means, describe the adjustment to the educational regulations in schools that received audit visits during three consecutive years (2013, 2014 and 2015). Then, through a logistic regression, two models are estimated to analyze the incidence of the predictor variables on the outcome variable. The first formulated model exposes the relationships obtained only by the predictor variables with the outcome variable, while the second incorporates the control variables.

Having explained the above, table 7 offers a comparison between the academic years analyzed based on the variable findings. It should be remembered that in order to guarantee the reliability of the results, it was checked that the amounts of audit visits applied for each year were comparable, that is, that they did not have statistically significant differences. This acquires relevance, since eventual asymmetries in the number of visits could influence a greater or lesser number of findings perceived by the schools, which would distort any inference in the results.

However, the application of the Wilcoxon test confirmed that the findings recorded in the 2013 school year were significantly greater than the amount observed in 2014 and 2015, considering the application of a similar number of visits in the schools studied. In fact, when disaggregating the comparisons made, it was observed that the number of findings is considerably greater in 2013 than in 2014, a difference that increases when comparing the results of 2013 and 2015.

The information collected, on the other hand, showed that there are no significant differences when contrasting the years 2014 and 2015. However, it is feasible to state that since the official implementation of the audit visits in 2013 a trend towards the continued decrease of findings is identified. in the 226 schools in the sample; This means that in the face of systematic exposure to inspection processes, establishments tend to adjust more to the educational regulations.

Tabla 7. Comparación de la cantidad de hallazgos encontrados mediante la prueba de Wilcoxon

Años comparados	1° año M ± SD	2° año M ± SD	Z	p-val
2013 – 2014	3,71 ± 3,892	1,66 ± 1,945	-7,566	,000 ***
2013 – 2015	3,71 ± 3,892	1,34 ± 1,604	-7,956	,000 ***
2014 – 2015	1,66 ± 1,945	1,34 ± 1,604	-1,666	,096

*** p-val < 0.01, ** p-val < 0.05

Fuente: Elaboración propia

As a second result, Table 8 shows the regression analyzes made by model 1 (restricted to the predictor variables) and model 2 (where the control variables are added). Regarding model 1, its global predictive capacity can be classified as moderate or medium, because through the pseudo R2 of Nagelkerke it was determined that 13.8% of the dependent variable is predicted by the predictor variables.

Regarding the relationships between the variables of model 1, the results showed that the number of findings had a positive and significant relationship with the dependent variable, that is, those schools that received the largest number of audits between 2013 and 2014 had 25% more likely not to present findings during 2015 (OR = 1.255, p-val = 0.000).

Likewise, with regard to the performance categories, the regression coefficients (β) indicated that this predictor variable had a significant and inversely proportional relationship with

the dependent variable. Likewise, the observed relationships reached a greater significance for the insufficient and medium-low categories, so that the presence of these affects a reduction in the probability of not presenting findings in 2015. Specifically, in terms of odds ratio, the results they revealed that the insufficient category decreases in 66.5% the opportunities of not presenting findings (OR = 0.335, p-val = 0.020) and in the case of the low average category up to 64.9% (OR = 0.351, p-val = 0.028) .

On the other hand, model 2 served to achieve a greater predictive capacity, since the pseudo R2 could explain 20.2% of the variance of the model, with which it is inferred that the presence of the control variables tends to strengthen the relationships between the variables predictors and results. In this way, and in accordance with what is expected, it can be indicated that the second model allows discarding the incidence of the control variables. In other words, the variables GSE, administrative dependency, enrollment and geographical location are irrelevant to predict the absence of findings or adjustments to the regulations of schools in 2015.

In fact, when analyzing model 2 it was observed that the predictor variables, which previously showed significance, tended to slightly increase their predictive capacity, which consolidates the findings of the first model. Specifically, the results showed that the most audited educational units in the 2013-2014 period were more likely to comply with the regulations and, therefore, not to show findings in 2015; This means that each inspection visit applied in the first two years studied increases by 26% the chances of not presenting findings in the last year reviewed (OR = 1.266, p-val = 0.000).

On the other hand, it was found that when a school was classified in a category of insufficient performance, the probability that the institution lacked audit findings decreased to 77.4% (OR = 0.226, p-val = 0.008). A similar relationship was perceived between the category of low average performance and the outcome variable, although this association reported a lower significance.

Tabla 8. Modelos de regresión logística para predecir la probabilidad de ausencia de hallazgos

Variables	Modelo 1		Modelo 2	
	Coef. β	Odds Ratios	Coef. β	Odds Ratios
Visitas de fiscalización	.227***	1.255	.236***	1.126
Categoría de desempeño ^a				
Insuficiente	-1.093**	.335	-1.487**	.226
Medio bajo	-1.048**	.351	-1.431**	.239
Medio	-.849**	.428	-1.021**	.360
Grupo socioeconómico ^b				
Bajo			1.111	3.036
Medio bajo			.888	2.431
Medio			.219	1.246
Dependencia			.213	1.237
Matrícula			.001	1.001
Ubicación geográfica			-.464	.629
Constante		.000		.000
Nº de casos		226		226
Pseudo R ²		.138		.202

*** p-val < 0.01, ** p-val < 0.05

^a Categoría de referencia *desempeño Alto*. ^b Categoría de referencia GSE Medio Alto y Alto (variable agrupada).

Fuente: Elaboración propia

Finally, it is pertinent to point out that both models presented an adequate degree of adjustment to the data. That is, it was corroborated by the Hosmer-Lemeshow test that there was congruence between the expected results and those actually observed, both in model 1 ($\chi^2 = 10.293$, p-val = 0.173) and in model 2 ($\chi^2 = 9.295$; p-val = 0.318).

In short, the results obtained showed that the sample of 226 schools exposed to inspection visits during three consecutive years had a greater adjustment to the educational regulations in the last two years of the period. This is manifested in a progressive increase of establishments that did not present findings. Likewise, it was corroborated that a variable that influenced the increase in the described adjustment was the number of inspection visits applied to the schools during the first two years. However, it was also identified that positioning in a category of insufficient performance tends to decrease the chances of not having findings in an audit.

Discussion and Conclusions

The results described serve as support to present three preliminary statements about school control in Chile. In the first place, the application of this educational policy would generate an effect consistent with its purposes, since the schools of the sample audited during three consecutive years showed a progressive and significant adjustment to the educational regulations, for which the first hypothesis proposed in This study, since these results are similar to the evidence reported in a previous investigation related to school control processes (Oyarzún and Soto, 2017).

Consistent with the first assertion, the results indicate that a second relevant result has to do with the influence of the inspection visits provided during the first two years of operation of the Superintendency. That is, a greater number of audits in this period seem to have led to an increase in the preparation of the holders, which allowed them to respond better to the auditing entity. To this can be added the low incidence of factors such as socioeconomic composition and the type of administrative dependency of the institutions.

These two first assertions, in summary, would indicate that the formalization and systematic application of a school control model would constitute a sufficient structuring force to articulate the dispositions and behaviors of the educational supporters in order to avoid possible sanctions. This is a matter of precedence, given that the main role of this institution is to ensure compliance with certain minimum conditions and general operating rules that guarantee certain rights linked to education. Even so, it is also worth mentioning that this logic can not be extrapolated to other areas of school education, such as the pedagogical area, which responds to complex processes of different kinds. In this regard, Schön (1986) argues that the pedagogical practice has an uncertain character in its development, so it would be inappropriate to standardize or regulate it through sanctioning systems, as that would limit the creative and reflective capacity of educators in the teaching.

On the other hand, and although the evidence presented is still in its infancy, it can be indicated that this model of ROC could ensure some administrative procedures and legal requirements necessary for the operation of educational providers. This does not mean, of course, that such rationality is fully assimilable to the other activities that take place in an educational space, since the notions of hypervigilance and punishment that characterize this policy could generate harmful effects if they are applied in linked fields of education. directly with teaching and

coexistence, as occurs with the phenomenon of teaching to test used to achieve results in standardized evaluations associated with consequences (Weinstein et al., 2016) or the normative tensions that arise from the attention of conflicts of school coexistence to through services of the same Superintendency that would generate dilemmas between a normative application oriented to "fulfill by fulfilling" and the use of advisory strategies to develop conflict resolution capacities in the communities (Carrasco-Aguilar *et al.*, 2018).

A third statement has to do with the identified relationship between the category of insufficient performance and the lower propensity to comply with the regulations. This result could constitute the indicator of a general deficiency in the level of school management, which would suggest that those schools that exhibit a weak performance before these control mechanisms would have limited institutional capacities to respond to the demands of the school. SAC. In this scenario, the decision to implement preventive visits is timely because it would help to reduce pressure and generate capacities in terms of regulatory adequacy, especially in educational units classified as insufficient. This is based on the idea that the real responsibility occurs when the policy makers and educational actors intervene based on the information provided by the ROC system, feeding back their management to produce better operating conditions (Darling-Hammond, 2014). Otherwise, it is likely that deteriorated organizational environments tend to chronify their problems rather than overcome them permanently.

Finally, and regarding the limitations of this work, it could be pointed out, in the first place, the use of a non-probabilistic sampling that prevented the generalization of results, so in future studies more robust techniques should be sought. Secondly, this research did not consider the differentiated effect of different types of examination visits (eg, comprehensive or thematic). Even so, the results reported in this document can serve as a basis for generating other hypotheses in which not only control groups are incorporated, but also a similar sample is worked on, although over a longer period (eg, five years) so that in this way the stability of the observed patterns can be corroborated or refuted. In fact, it is possible to continue with inquiries that focus on the association between the probability of audit findings and the performance category, especially because of the support requirements that this would imply for schools in this situation. Finally, it should be emphasized that the adjustment to the regulations does not guarantee genuine protection behaviors

over a legal right or a right associated with school education, so mixed research designs must be developed to understand how and in what sense this policy It would be triggering certain behaviors.

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Conceptualización	(Oyarzún/"principal" – Soto/"igual")
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Investigación	(Oyarzún/"principal" – Soto/"que apoya")
Recursos	(Oyarzún/"principal" – Soto/"que apoya")
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Supervisión	(Oyarzún/"principal" – Soto/"que apoya")
Administración de Proyectos	(Oyarzún/"principal" – Soto/"que apoya")
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