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COVID-19 AND ITS IMPACT ON THE EDUCATIONAL PROCESS OF THE FACULTY OF AGRICULTURAL ECONOMICS OF THE AGRARIAN UNIVERSITY OF ECUADOR

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Abstract
The importance of the study lies in establishing the level of incidence of the Covid-19 pandemic in the university academic activity of the Agrarian University of Ecuador, applying the econometric model differences in differences, being a descriptive and experimental study with the participation of teachers and students belonging to the Faculty of Agricultural Economics of the cities of Guayaquil, Milagro and El Triunfo, with data collected in two different times, that is, the virtual academic period and the period of classes in face-to-face mode. As a consequence, students had a greater impact on variables associated with their educational environment, while teachers had a more relevant impact in the field of health. The results obtained underscore the importance of considering the specific context of each dataset.
Keywords: Pandemic, Education, Faculty, Virtual, Difference in Difference

INTRODUCTION

Education has an important role in the emergence of civilizations because it is established as the beginning of the formative process of people, influencing the transformation of their environment. From its beginnings, the development of human society has been linked to education because of its contribution based on the transition and acquisition of knowledge, skills, and beliefs between individuals. (León, 2007)
In recent periods, education has evolved in order to adapt to the needs of the new currents of globalization, implementing methodologies that involve the use of necessary technologies to offer alternatives in the process of continuous learning (Arriaga & Lara, 2023). However, the coupling to the virtual methodology was drastic with the arrival of the Covid-19 pandemic, resistance to change was inevitable, because it represented a challenge to face new events.

The emerging situation caused by the pandemic resulted in the suspension of face-to-face educational activities to make way for virtualization, increasing the pressure when trying to adapt in a short period of time to this new educational approach (González Calvo, et al., 2020). The rapid spread of the virus led to an accelerated reorganization of education systems, in response educational institutions addressed the new needs of students by establishing a new methodology of support for educators (Wright, et al., 2023). For the educational system, it was essential to ensure that students regardless of the level continue their instruction despite the obstacles presented, in the new modality marked by the dependence on technological tools.(Masegosa, 2023)

A student's environment is fundamental to the effectiveness of online education, the conditions involved that start from prepared educators, access to technology, and the self-regulated learning needs and skills of students. Students tend to develop feelings of insecurity and uncertainty in the face of these learning processes, therefore, educators must recognize as they approach their institutional design and interact with students, the actions they can take regarding support at home. Practices such as the organization of courses, connectivity and accessibility of students are considered pillars in educational practice that support student learning in a virtual environment (Johnson, et al., 2023).

During the pandemic, the academic field was exposed to constant changes, the adaptation process became a challenge to be faced (Jeldes, et al., 2023). The factors that university students perceived as crucial when adapting to remote emergency teaching (ERT) are delimited by the resources provided by higher education institutions, the student's capabilities and the cooperation of their peers.

The pedagogical method, the Student Voice for Social Justice, resulted in the achievement of important learning outcomes for students in the areas of self-learning, critical thinking, knowledge generation, cognitive development, and voice expression, performed in an online learning environment due to the restrictions of the Covid-19 virus, likewise the method addresses some of the challenges and concerns highlighted by students around inequality In higher education contexts and difficulties with online learning, although these issues are likely not present in a traditional face-to-face classroom, it is important to demonstrate how versatile it is. (Wong, et al, 2023)

The virtual learning system in a pandemic turns out to be effective and at the same time inefficient (Bahasoan et al., 2020). Effectiveness is associated with the use of digital platforms in an exchange environment, this was evidenced in times of confinement where they were shown to be ideal tools for teaching. However, the inefficiency in the virtual modality is associated with the costs incurred mainly in internet access and the low interest when adapting to these new methodologies. The verification of the effectiveness of the different measures used during the pandemic remains as a basis for future unexpected events (Kosfeld, Mitze, et al., 2021).

In accordance with the criteria described, the reason for the study focuses on carrying out an exhaustive analysis of the social, personal, educational and economic reality of both teachers and students, from the perspective of education in times of pandemic. The results obtained will provide valuable information and provide knowledge that will contribute to education, in a way peculiar to the Educational Institution under study, with answers to problems that arose through this virtual modality. It should be noted that its point of reference are the participants (professor – students) of the Faculty of Agricultural Economics of the Agrarian University of Ecuador.

METHOD

In order to evaluate the impact of Covid-19 on the educational process of the Agrarian University of Ecuador (UAE), participants belonging to the Faculty of Agricultural Economics, from its different campuses Guayaquil, Milagro and El Triunfo, were selected. The descriptive and experimental study had the participation of teachers (98) and students (912), with data collected in two different times, that is, the virtual academic period and the period of classes that took place in the classrooms of the higher education institution.

Board 1 Descriptive analysis of the sample

		Teachers	%	Students	%
Headquarters	Guayaquil	59,2		42,3	
	Miracle	28,6		38,6	
	The Triumph	12,2		19,1	
Gender	Male	46,9		35,5	
	Female	53,1		64,5	

Prepared by authors

Prior to collecting information for data collection, a reliability test was carried out using Cronbach's Alpha indicator, in order to evaluate the reliability and consistency of the instrument (surveys) used.

Board 2 Reliability test

	Cronbach's alpha
Face-to-face learning (EST-PRS)	.951
Virtual Learning (EST-VRT)	.958
Face-to-face teaching (DOC-PRS)	.905
Virtual Teaching (DOC-VRT)	.945

Prepared by authors

Data collection was carried out using the survey instrument, for which they were classified into those aimed at students (learning) and those aimed at teachers (teaching), in two different times, the face-to-face modality and the virtual modality. The questions were oriented to the personal, educational, technological, economic and health aspects of each participant.

The data obtained in this article correspond to time series, since the collection was carried out at two times: confinement and post-confinement. These data are related and have as a reference point the use of the variation of time for the estimation of the effects, when the measure is adapted in different times the impact can be explored from variations between different entities at the same time but also from temporal changes of the variables.

The difference-in-differences (DD) model is an econometric tool of quasi-experimental analysis, based on the measurement of the impact between an observed group affected by the treatment variable and another control group not affected by the variable, for this reason it becomes the most widely used econometric specification to evaluate the effect or impact on a change. In this study, the use of the difference-in-differences (DD) analysis model was chosen, as it is the econometric technique that best adapted to the objective of the study, mainly because differences are established in the education process in the middle of two determined times. (Pérez García & Perez Hernández, 2014)(Vicens Otero, 2008)

With a simplified specification, the difference model is set as follows:

$$Y_i = \alpha + \beta_1 Z_{ig} + \gamma_1 Z_{it} + \delta Z_{igt} + \mu_{it}$$

Where represents the result variable analyzed and the$Y_i \alpha$variable dependent on the individuals of the group as a function of time, igtbeing the pandemic and post-pandemic period, while the error term is shown as $01\mu_{it}$.

The product of the dummy variables is expressed by the $Z_{it}Z_{ig}$binary variable Z_{igt}, adjusting to the specifications of $\beta_1$the variant between before and after the pandemic and $\gamma_1$the variant between the treatment and control groups.

The value of provides the measure of the impact of the Covid-19 pandemic, using the assumptions of the ordinal least squares (MCO) model. The assumption indicates and then the following specification is used:$\delta g = 0{,}1\ t = 0{,}1$

$$\hat{\delta} = (\bar{y}_{g=1,t=1} - \bar{y}_{g=1,t=0}) - (\bar{y}_{g=0,t=1} - \bar{y}_{g=0,t=0})$$

RESULTS

The participants considered in the article are segmented into teachers and students, who at the time of comparison in the established intervals and when applying the treatment, focused on two different scenarios, in which the common factor was learning-teaching based on the existence of a marked impact of the transitive period of the Covid-19 pandemic.

The stipulated analysis has presented results that addressed the areas of study, personal, educational, technological, health and economic data. These demonstrated the existence of an impact between the variables studied.

The pandemic and educational factors: Student focus

Regarding the students participating in the study, it was evident that most of them are in the town of Guayaquil with an age range between 21 and 25 years, represented by 64.5% of the female sex and 35.5% of the male sex. Additionally, it was found that the students reside mostly outside the university campuses.

Based on the results obtained from the difference-in-differences model, they reveal a series of significant data that show how the pandemic had an impact on the various variables (Table 3) linked to education.

In the first instance, in the personal data (Table 4) he demonstrated an adjusted R-squared (0.0083) that explains the variables, in the same way it was found that we found that the post-pandemic period was associated with significant changes in student focus. The variable "post_evento" showed significant coefficients in several factors with respect to the variables executed, the Prob > F (0.0274) indicates a notable effect. The data obtained suggest that students presented adaptability in response to unexpected challenges (confinement).

In the educational field (Table 5), it was stated that the group treated in the post-pandemic scenario presented an important significance in the educational context. Factors such as tutoring by EE5 teachers and the perception of knowledge acquired allow them to face the EE6 work environment showed outstanding coefficients, so it is

assumed that although a changing panorama has been presented, students reconsider and improve the form of interaction within the educational process.

The approach to technological data (Table 6), the time spent on EE10 electronic devices emerged as an influential factor within the analysis. The most relevant coefficients obtained indicate that students manage their time when using their electronic devices and generate an engagement in the virtual learning environment.

In relation to the health data (Table 7), it was found that the EE13 factor that agglomerates the variables Knowledge of Student Insurance UAE - Received medical, psychological or dental help from UAE was significant within the analysis. This suggests that students perceive mental health and well-being as a fundamental component in the educational environment.

Finally, the analysis of the economic sphere (Table 8) shows that the factors linked to the financial situation of the students, represented by the variables Received income – how much they contributed to the household EE14 and Expenditures on health, food, mobility, technology and education EE16 were the most significant. These results underscore the need to consider the existing economic disparities among students.

Overall, the coefficients of the constants were established -.0057878 (D. personal), 1.661412 (D. educational), .0846344 (D technological), .1562814 (D. health), .0292591 (D. economic), these values indicate the level of impact associated with the learning context after a pandemic scenario due to the arrival of Covid-19 to the educational process in the Faculty of Agricultural Economics of the Agrarian University of Ecuador.

The pandemic and educational factors: Teaching approach

The participants made up of teachers are divided into the three campuses of the university, with the town of Guayaquil being the one who ends, more than half of the total educational teaching staff of the Faculty of Agricultural Economics with 59.2%. The number of teachers with respect to their sex varies by 6.2%, with the female sex having the highest representation.

The model of difference in differences in teachers is presented by the data collected from the surveys, which were divided into aspects for better understanding (Table 9). For the data corresponding to personnel (Table 10), they gave a value (0.0021) that explains the significant effect between the variables studied. However, the variables applied in an individuality analysis show significance, this indicates that the model proposed as a whole is useful, but a more detailed analysis is necessary for the underlying relationships.

In an educational context (Table 11), the variables that represented an impact in the pandemic correspond to the average performance of teachers ($p < 0.05$), evidencing their significance in "treatment" demonstrating their high relationship between their established values.

With respect to the data associated with technology at the educational level (Table 12), a significant F-statistic ($F (5, 906) = 2.69$, $p = 0.0140$) was shown, indicating that the set of variables analyzed in this context has an impact on a pandemic scenario. Among the relevant factors is the Ease of access to electronic devices - Received classes through which device ED3 and the Learning Level – teaching-learning methodology ED4. This suggests that the aforementioned influence the preparation of the teacher's learning towards the students.

The health-related aspects (Table 13) for the teacher participants also proved to have a relevance (impact) on the educational process, the variables You or someone close to you tested positive for Covid-19 – Someone close to you died ED13 ($p < 0.05$) in a "treatment" and "post-treatment" analysis. This finding shows that health-related factors drove an impact on the teaching process in the pandemic.

Regarding the economic data (Table 14) they show an R-squared (0.1623) that explains on average 16.23% with respect to the variables. The F-statistic ($F(5, 906) = 2.49$, $p = 0.0219$), indicate that the variables are significant in an overall analysis. In the context of an individual analysis of economic variables, the significance of the variables N. people who contributed to the household ED17 and Expenditures on Health, food, mobilization, technology and education ED18 are highlighted, which shows that economic aspects had an impact on the educational process in times of the Covid-19 pandemic.

CONCLUSION

By applying the difference-in-difference model for the econometric analysis of the variables obtained in the surveys carried out on students and teachers of the Faculty of Agricultural Economics, the existence of a significant relationship between educational processes and the transfer of confinement can be evidenced. The study considered in the time interval of 2021-2022, demonstrating a positive result, that is, on average the increase in the average learning-teaching performance in the educational process due to the transfer of the confinement period, expressed in percentage terms, this translates into a figure above the records of the "post-treatment" group, for the different times during and after the treatment (pandemic).

On the other hand, the student panorama highlights that the data extracted by the surveys once the DD model has been applied, in which the scope of personal data is confirmed, the explanatory power of the model is modest, suggesting that the variables have a limited impact, in the educational field, the model presents a higher adjusted R-squared, indicating that the variables are more relevant in this context. While the participants from

correspondence to teaching show a similar panorama, the field of personal, educational and technological data, in addition to the analysis of this nomenclature, showed an impact in a smaller proportion, amounting to a value of .0134457. The complexity of the factors that influence the analysis of students and teachers during the pandemic can be summarized in the relevance of addressing the factors in a comprehensive way in order to improve the teaching and learning process in a changing educational environment.

In summary, it is concluded that the econometric analysis of differences in differences is a relevant reference in the study of the article, for the analysis of the data obtained by surveys focused on learning and teaching. The results obtained from the proposed model are shown as support in the university educational environment, being able to be of help in new sources of research, as well as providing support in the application of new mechanics that contribute to the approach of improving the educational processes not only of higher education institutions but in all those involved in the education sector.

Annex

Board 3 Var. Student Focus

Personal data	EE1	Age range – n. People – Gender
	EE2	Venue, Conference, Career, Semester
Educational Data	EE3	Percentage of tasks – Learning is according to the Syllabus
	EE4	Learning level – teaching-learning methodology
	EE5	Teacher tutorials – Teacher is ready to clear up any doubts.
	EE6	The knowledge learned allows them to face the work environment
	EE7	Knowledge of virtual teaching and learning platforms – Virtual platform training
Technological data	EE8	He received classes through which device – use of the laboratory to reactivate what he had learned
	EE9	N. people connected to the same network – internet quality
	EE10	N. hours spent on electronic devices – need to bring your laptop into the classroom
Data Health	EE11	You or someone close to you tested positive for Covid-19 – Someone close to you passed away
	EE12	Have a disability
	EE13	Knowledge of UAE Student Insurance - Received medical, psychological or dental help from UAE
Economic data	EE14	Earned income – how much he contributed to the household
	EE15	Where their income came from – n. people who contributed to the household
	EE16	Expenditure on health, food, mobilization, technology and education

Prepared by authors

Board 4 U.S. Personal Data

Source	FF	Mexico City	MS				
Model	20.5238845	5	4.1047769		Number of obs	=	912
Residual	1467.71823	906	1.61999805		F(5, 906)	=	2.53
Total	1488.24212	911	1.63363569		Prob > F	=	0.0274
					R-squared	=	0.0138
					Adj R-squared	=	0.0083
					Root MSE	=	1.2728

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	.1821416	.1137004	1.60	0.110	-.0410051	.4052884
1.post_evento	.3707683	.1203979	3.08	0.002	.1344772	.6070594
treatment#post_evento 1 1	-.3628009	.1702115	-2.13	0.033	-.6968555	-.0287463
EE1	-.0259245	.0211447	-1.23	0.220	-.0674228	.0155738
EE2	.0197412	.0188968	1.04	0.296	-.0173455	.0568279
_Nocs	-.0057878	.1872628	-0.03	0.975	-.3733071	.3617315

Prepared by authors

Board 5 U.S. Education Data

Source	FF	Mexico City	MS		Number of obs	=	912
					F(5, 906)	=	20.62
Model	209.074995	8	26.1343744		Prob > F	=	0.0000
Residual	1144.53742	903	1.26748329		R-squared	=	0.1545
					Adj R-squared	=	0.1470
Total	1353.61241	911	1.48585336		Root MSE	=	1.1258

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	-1.12856	.1515326	-7.45	0.000	-1.425957	-.8311626
1.post_evento	-1.863646	.1536209	-12.13	0.000	-2.165142	-1.562151
treatment#post_evento 1 1	1.115257	.1776249	6.28	0.000	.7666519	1.463863
EE3	-.0192981	.0245213	-0.79	0.431	-.0674234	.0288272
EE4	-.0162612	.0187373	-0.87	0.386	-.0530349	.0205125
EE5	.1846883	.0362566	5.09	0.000	.1135313	.2558453
EE6	-.0836316	.0347225	-2.41	0.016	-.1517778	-.0154854
EE7	.1772841	.0378469	4.68	0.000	.1030059	.2515623
_Nocs	1.661412	.2035718	8.16	0.000	1.261883	2.060941

Prepared by authors

Board 6 Technological data EE

Source	FF	Mexico City	MS		Number of obs	=	912
					F(5, 906)	=	14.53
Model	97.023998	6	16.1706663		Prob > F	=	0.0000
Residual	1007.41497	905	1.11316571		R-squared	=	0.0878
					Adj R-squared	=	0.0818
Total	1104.43897	911	1.21233696		Root MSE	=	1.0551

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	-.1490508	.1389613	-1.07	0.284	-.4217747	.1236731
1.post_evento	-.1081497	.1302419	-0.83	0.407	-.363761	.1474615
treatment#post_evento 1 1	.1359024	.1637426	0.83	0.407	-.1854569	.4572617
EE8	-.0688125	.0242948	-2.83	0.005	-.1164933	-.0211317
EE9	.0239328	.0175385	1.36	0.173	-.0104882	.0583537
EE10	-.1300134	.0141276	-9.20	0.000	-.1577401	-.1022868
_Nocs	.0846344	.1835747	0.46	0.645	-.2756472	.444916

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Board 7 EE Health Data

Source	FF	Mexico City	MS		Number of obs	=	912
					F(5, 906)	=	49.18
Model	256.695336	6	42.782556		Prob > F	=	0.0000
Residual	787.244403	905	.869883318		R-squared	=	0.2459
					Adj R-squared	=	0.2409
Total	1104.43897	911	1.14592727		Root MSE	=	.93268

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	.1640961	.1228851	1.34	0.182	-.0770768	.4052691
1.post_evento	.2521061	.115131	2.19	0.029	.0261513	.4780609
treatment#post_evento 1 1	-.2379666	.1448278	-1.64	0.101	-.5222041	.0462708
EE11	-.0096513	.0247764	-0.39	0.697	-.0582773	.0389746

EE12	-.0191687	.0155065	-1.24	0.217	-.0496016	.0112641
EE13	-.1733559	.0102047	-16.99	0.000	-.1933835	-.1533283
_Nocs	.1562814	.1620868	0.96	0.335	-.1618284	.4743911

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Board 8 Economic data US

Source	FF	Mexico City	MS				
Model	31.6055719	6	5.26759531		Number of obs	=	912
Residual	1382.03236	905	1.52710758		F(5, 906)	=	3.45
Total	1413.63793	911	1.55174306		Prob > F	=	0.0022
					R-squared	=	0.0224
					Adj R-squared	=	0.0159
					Root MSE	=	1.2358

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	-.1498837	.16276	-0.92	0.357	-.4693146	.1695472
1.post_evento	.0613503	.1524115	0.40	0.687	-.2377708	.3604713
treatment#post_evento 1 1	.2696729	.1919519	1.40	0.160	-.1070497	.6463956
EE14	-.0029741	.0229525	-0.13	0.897	-.0480205	.0420723
EE15	.002261	.0205303	0.11	0.912	-.0380316	.0425536
EE16	-.0561564	.0172236	-3.26	0.001	-.0899592	-.0223535
_Nocs	.0292591	.2169423	0.13	0.893	-.3965093	.4550276

Prepared by authors

Board 9 Var. Teaching Approach

Personal data	ED1	Age range – n. People – Gender
	ED2	Headquarters – Housing data
Educational Data	ED3	Methodology taught – What is taught is according to the Syllabus
	ED4	Learning level – teaching-learning methodology
	ED5	Devices and platforms used to deliver classes
	ED6	Relationship with the student in classes – Tutoring modality
	ED7	Knowledge of virtual teaching and learning platforms – Virtual platform training
	ED8	The knowledge imparted allows the student to face the work environment
Technological data	ED9	Ease of access to electronic devices - I received classes through which device
	ED10	Internet Quality – Internet access within the Institution
	ED11	N. hours spent on electronic devices – need to bring your laptop into the classroom
	ED12	How many electronic devices have the power to teach the classes
Data Health	ED13	You or someone close to you tested positive for Covid-19 – Someone close to you passed away
	ED14	Have a disability
Economic data	ED15	What is your monthly income
	ED16	His only economic activity is from the Institution with the position of teacher - He had some other source of income
	ED17	N. people who contributed to the household
	ED18	Expenditure on health, food, mobilization, technology and education

Prepared by authors

Board 10 ED Personal Data

Source	FF	Mexico City	MS				
Model	24.2237034	5	4.84474068		Number of obs	=	98
Residual	108.698841	92	1.18150914		F(5, 906)	=	4.10
Total	132.922544	97	1.37033551		Prob > F	=	0.0021
					R-squared	=	0.1822
					Adj R-squared	=	0.1378
					Root MSE	=	1.087

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	.1754283	.3341462	0.53	0.601	-.4882149	.8390716
1.post_evento	-.194495	.6486571	-0.30	0.765	-1.482784	1.093794
treatment#post_evento 1 1	.0841053	.7338353	0.11	0.909	-1.373355	1.541566
ED1	.0009104	.0035396	0.26	0.798	-.0061196	.0079403
ED2	-.344278	.076303	-4.51	0.000	-.4958224	-.1927336
_Nocs	-.344278	.3380895	1.03	0.305	-.3229922	1.019958

Prepared by authors

Board 11 ED Education Data

Source	FF	Mexico City	MS		Number of obs	=	98
					F(5, 906)	=	2.38
Model	22.7209852	9	2.52455391		Prob > F	=	0.0182
Residual	93.1534573	88	1.05856201		R-squared	=	0.1961
					Adj R-squared	=	0.1139
Total	115.874442	97	1.19458188		Root MSE	=	1.0289

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	.6009657	.3221219	1.87	0.065	-.0391839	1.241115
1.post_evento	-.1703169	.6319061	-0.27	0.788	-1.426097	1.085464
treatment#post_evento 1 1	-.6826419	.7286133	-0.94	0.351	-2.130608	.765324
ED3	.0527008	.0683298	0.77	0.443	-.0830903	.1884919
ED4	.0403019	.0727556	0.55	0.581	-.1042846	.1848883
ED5	-.0188528	.0816388	-0.23	0.818	-.1810929	.1433872
ED6	-.0360549	.0942079	-0.38	0.703	-.2232733	.1511635
ED7	.0134457	.003448	3.90	0.000	.0065936	.0202978
ED8	.0260436	.1006839	0.26	0.796	-.1740445	.2261317
_Nocs	-1.115267	.3235475	-3.45	0.001	-1.75825	-.4722842

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Board 12 ED Technology Data

Source	FF	Mexico City	MS		Number of obs	=	98
					F(5, 906)	=	2.69
Model	19.1134213	7	2.73048876		Prob > F	=	0.0140
Residual	91.2080096	90	1.01342233		R-squared	=	0.1733
					Adj R-squared	=	0.1089
Total	110.321431	97	1.13733434		Root MSE	=	1.0067

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	.0889089	.3112271	0.29	0.776	-.5293981	.7072158
1.post_evento	.7796299	.6355668	1.23	0.223	-.4830345	2.042294
treatment#post_evento 1 1	-.7796055	.7218587	-1.08	0.283	-2.213704	.6544928
ED9	-.0257663	.0794482	-0.32	0.746	-.183604	.1320714
ED10	-.0608636	.0943531	-0.65	0.521	-.2483125	.1265854
ED11	.0094669	.0032655	2.90	0.005	.0029793	.0159544
ED12	.1705105	.0651881	2.62	0.010	.0410031	.300018
_Nocs	-1.052108	.3211917	-3.28	0.001	-1.690211	-.4140042

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Board 13 ED Health Data

Source	FF	Mexico City	MS		Number of obs	=	98
					F(5, 906)	=	22.77
Model	427.276774	5	85.4553548		Prob > F	=	0.0000
Residual	345.347944	92	3.753782		R-squared	=	0.5530
					Adj R-squared	=	0.5287
Total	772.624717	97	7.96520327		Root MSE	=	1.9375

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	1.649779	.6103271	2.70	0.008	.4376169	2.861942
1.post_evento	8.137517	1.320064	6.16	0.000	5.515756	10.75928
treatment#post_evento 1 1	-9.445749	1.359499	-6.95	0.000	-12.14583	-6.745667
ED13	.9816668	.214852	4.57	0.000	.5549522	1.408381
ED14	-.0011611	.0063639	-0.18	0.856	-.0138004	.0114782
_Nocs	.76739	.6086096	1.26	0.211	-.4413612	1.976141

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Board 14 ED Economic Data

Source	FF	Mexico City	MS		Number of obs	=	98
					F(5, 906)	=	2.49
Model	18.6182479	7	2.65974969		Prob > F	=	0.0219
Residual	96.0748763	90	1.06749863		R-squared	=	0.1623
					Adj R-squared	=	0.0972
Total	114.693124	97	1.18240334		Root MSE	=	1.0332

DP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
1.Treatment	.0648408	.3199283	0.20	0.840	-.5707525	.7004341
1.post_evento	.0761813	.6231004	0.12	0.903	-1.161716	1.314079
treatment#post_evento 1 1	-.2518301	.7006702	-0.36	0.720	-1.643834	1.140173
ED15	-.0227835	.0658147	-0.35	0.730	-.153536	.1079689
ED16	.0237546	.0940822	0.25	0.801	-.1631561	.2106652
ED17	.0050633	.0033587	1.51	0.135	-.0016093	.0117359
ED18	.1917096	.0483212	3.97	0.000	.0957112	.287708
_Nocs	-.6198944	.3241957	-1.91	0.059	-1.263966	.0241769

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