

# Modeling educational quality perception in the Covid-19 era

## Modelando la percepción de calidad educativa en la era del Covid-19

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### Abstract

Roughly speaking, educational neoliberalism is a process of management, production, and administration of quality indicators in which Higher Education Institutions focus their interest when distributing financial resources. In this sense, the study of educational neoliberalism is necessary to reveal the work culture that prevails in public universities. The objective of this work was to establish the reliability, validity, and contrast of an instrument that measures a model of correlations between four indicators –institutionalism, isomorphism, credentialism, and patrimonialism– tracked in the literature review. A cross-sectional and exploratory study was carried out with a non-probabilistic sample selection of 100 students, teachers, and administrators of an HEI in central Mexico. From a structural model, correlations were found between the four factors reviewed in the specialized literature. Research lines are noted concerning factors that explain the incidence of neoliberalism in leadership and the formation of professional knowledge networks.

**Keywords:** Neoliberalism, institutionalism, isomorphism, credentialism, patrimonialism.

### Resumen

*En términos generales, el neoliberalismo educativo es un proceso de gestión, producción y administración de indicadores de calidad en el que las instituciones de educación superior centran su interés al distribuir recursos financieros. En este sentido, el estudio del neoliberalismo educativo es necesario para revelar la cultura de trabajo que prevalece en universidades públicas. El objetivo de este trabajo fue establecer la fiabilidad, validez y contraste de un instrumento que mide un modelo de correlaciones entre cuatro indicadores –institutionalismo, isomorfismo, credencialismo y patrimonialismo– abordados en las revisiones de literatura. Se llevó a cabo un estudio transversal y exploratorio con una muestra no probabilística de 100 estudiantes, profesores y administradores de una IES en el centro de México. A partir de un modelo estructural, se encontraron correlaciones entre los cuatro factores revisados en la literatura especializada. Se señalan líneas de investigación referente a factores que explican la incidencia del neoliberalismo en el liderazgo y la formación de redes de conocimiento profesional.*

**Palabras Clave:** Neoliberalismo, institucionalismo, isomorfismo, credencialismo, patrimonialismo.

## Introduction

As of June 2021, the pandemic has generated more underreported than documented deaths (WHO, 2021). Three and a half million are recognized, but the same additional amount is deducted from the differences between average deaths and excess deaths. In this sense, mitigation and containment policies have focused on distancing and confinement rather than on detection tests, treatment, and immunization (PAHO, 2021). In Mexico, 300 thousand cases are counted, but a surplus of another 400 billion is observed, adding a total of 700 thousand deaths related to Covid-19 (INEGI, 2020). In this way, the transition from the traditional classroom to the electronic whiteboard involves the management of the quality of processes and products (OECD, 2021). Tertiary education as an indicator of educational quality reflects a greater labor supply for qualified jobs that require special-

ization in knowledge and skills (see Figure 1).

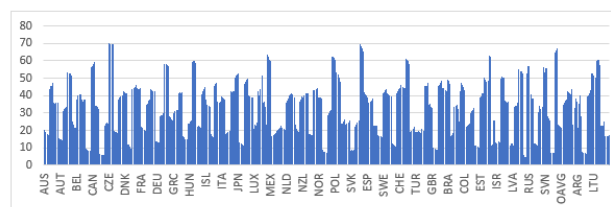


Fig. 1. Adult education level

Note: Elaborated with data OECD (2021)

In a general sense, neoliberalism is a policy of financing and evaluation of the quality of processes and products derived from the guidelines of international organizations, such as

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The World Bank or the International Monetary Fund, towards the governments of developed and emerging countries in their decentralization of the State's rectory and the consequent administration by objectives. In this sense, the merit scheme supposes a competition for resources in which the most favored are those legitimizing an investment or competing for public funds based on their achievements (García, 2005).

In an educational sense, neoliberalism translates into programs and strategies for the production and reproduction of knowledge based on the development requirements of each country, state, or nation (Sanchez et al., 2020). These are investment modalities adjusted to objectives, tasks, and goals in which human capital is the predominant factor. In this way, intellectual, technological, and social capital converge in Higher Education Institutions (HEIs) and for-profit organizations, often in strategic alliances (García, 2006).

Precisely, the theory of institutionalism proposes that, in the desire to render and make the objectives and achievements transparent, the HEIs delimit their objectives, plans, strategies, and capitals to educational policies with an evaluative sense of the quality of their processes and products, essentially accreditation and certification (García, 2011). It is institutionalism that becomes an isomorphism when the majority of HEIs adjust their criteria and quality processes to the financing and evaluation policies of higher education based on indicators such as the increase in enrollment, terminal efficiency, the citation of investigations, or the merit contest to obtain places (García, 2012). Based on the governing institutionalism of the quality of processes and products and the guiding isomorphism of quality indicators, underlying credentialism is characterized by the substantial increase in admission and graduation of students at the higher level as an instrument of accountability and obtaining public financing (García et al., 2012).

However, the concentration of educational evaluation, accreditation, and certification towards institutionalism, isomorphism, and credentialism only highlights the patrimonialism in which HEIs are immersed by limiting their merits to the entry and exit of students without considering scientific production or technology, not even professional training or academic production of books and magazines, dissemination and citation of knowledge (García et al., 2014). In this sense, patrimonialism is materialized at the discretion of the leaders concerning the hiring of teachers, administrators, and other workers. Or, the allocation of budgets to followers that legitimize their stay and permanence (García et al., 2015).

Aguilar et al., (2016) showed that educational institutionalism is exacerbated to the extent that HEIs seek certifica-

tion and accreditation, but once established it is replaced by patrimonialism that consists of defining places and hourly charges based on in the contest of merits, but not in a sense of production of knowledge but rather in terms of the degree of students (Aguilar et al., 2018). This is how the entry and exit of students are defined by an educational policy of mass communication that would be based on the proliferation of private education and the reduction of financing for public education (Bergés, 2010).

Carreon et al (2016) argue that I s smart IES are those that fit your objectives and goals to the task of credentialism, but especially those who adjust their accomplishments by establishing partnerships with organizations into internships, service, and professional training. This is how neoliberalism in its educational sense is institutional and isomorphic but also credential and patrimonial when the accreditation and certification process has been obtained and a new evaluation cycle is in sight, reproducing neoliberalism in HEIs (Biagini and Fernández, 2014).

Carreon et al., (2014) interpreted as conventional the discourses and narratives of those who carry out the management of professional practices and social service in for-profit organizations, which have signed collaboration agreements with HEIs. Within the framework of vocational training, the teachers in charge of training students for employment to enter the labor market develop vertical and unilateral rather than horizontal and bidirectional arguments. Institutionalism, isomorphism, credentialism, and patrimonialism are indicators of a neoliberal process that have been questioned by the theory of human capital and the theory of leadership (García et al., 2016).

The theory of human capital, mainly intellectual capital, suggests that motivation to achieve and achieve objectives is established from the effort in information processing, considering achievement as a reward and recognition that will encourage new purposes and generate capacities for carrying out achievement-oriented tasks (Lara, 2012). In this sense, leadership theory warns that vertical and unilateral worldviews are reproduced when institutional structures are preserved based on an isomorphic, credentials, and patrimonial logic. It is an authoritarian culture that enhances the differences between those who make decisions and those who follow the leaders (Pérez et al., 2016).

In contrast, when transformational leadership emerges, openness to change and the values of tolerance, respect, and fairness proliferate with the differences between leaders and followers (García, 2019). It is an inclusive process in which the production of knowledge is structured based on the formation of knowledge networks and the professional training of students who learn the theory in the classroom and

put it into practice. In both traditional and transformational leadership processes, the perceptions understood as expectations of the future based on past experiences and present resources are a psychological process from which it is possible to observe the degree of neoliberalism of an HEI (Fierro et al., 2018). In this way, the level of institutionalism, isomorphism, credentialism, and perceived patrimonialism is a parameter that allows inferring the degree of educational neoliberalism that prevails in an institution.

Do the theoretical dependency relationships between the indicators –institutionalism, isomorphism, credentialism, and patrimonialism– of the educational neoliberal perception adjust to the estimated data?

The answer to this question is: the concepts reviewed in the literature can be observed through the measurement of the perceptions that the respondents present (Espinoza et al., 2020). The adjustment of the theoretical dimensions to the empirical factors will reveal the degree of educational neoliberalism that prevails in the HEI under study (Garcia et al., 2016). By virtue of the fact that educational neoliberalism is diverse and multifactorial, the study of the perceptions of HEIs regarding institutionalism, isomorphism, credentialism, and patrimonialism is different from the factors observed in the contrast. empirical evidence of their dependency relationship trajectories.

**Method**

**Design.** A non-experimental, cross-sectional, and exploratory study was carried out.

**Sample.** A non-probabilistic selection was carried out of 100 students, teachers, and administrators of an Institution of Higher Education of the State of Mexico, affiliated to the National Association of Faculties and Schools of Accounting and Administration (ANFECA) corresponding to its area number five - State from Mexico, Puebla, Hidalgo, Morelos, Tlaxcala–.

**Instrument.** Carreon’s Perception of Neoliberalism Scale (2015) was used, which includes 16 items related to institutionalism - quality expectations in processes and products derived from educational policies -, isomorphism - cost and benefit expectations derived from educational quality guidelines. -, patrimonialism –expectations of goods and resources derived from educational political guidelines– and credentialism –expectations of promotions derived from academic meritocracy–. They include five response options ranging from “not likely” to “very likely.”

**Procedure.** Before applying the instrument, respondents were informed about the objective of the study, as well as

the guarantee of confidentiality of personal data. The information was processed in the Statistical Package for Social Sciences (SPSS). Reliability was estimated with Cronbach’s alpha parameter, adequacy with the KMO statistic, sphericity with Bartlett’s test, validity with factorial weight, adjustment with chi-square, GFI, and CFI, as well as the residual with RMSEA.

**Results**

The instrument obtained discrete reliability (alpha = 0.788), the subscales of institutionalism (alpha = 0.731), isomorphism (alpha = 0.734), patrimonialism (alpha = 0.774), and credentialism (alpha = 0.746) also obtained sufficient internal consistency (see Table 1).

Tabla. 1. Descriptive instrument

| R   | M    | SD   | F1   | F2   | F3   | F4   |
|-----|------|------|------|------|------|------|
| r1  | 4,35 | 1,23 | 5,46 |      |      |      |
| r2  | 4,32 | 1,43 | 6,50 |      |      |      |
| r3  | 4,12 | 1,09 | 6,52 |      |      |      |
| r4  | 4,39 | 1,56 | 6,71 |      |      |      |
| r5  | 4,56 | 1,21 |      | 4,35 |      |      |
| r6  | 4,76 | 1,81 |      | 5,23 |      |      |
| r7  | 4,63 | 1,83 |      | 5,09 |      |      |
| r8  | 4,21 | 1,92 |      | 6,32 |      |      |
| r9  | 4,87 | 1,32 |      |      | 4,76 |      |
| r10 | 4,56 | 1,43 |      |      | 4,90 |      |
| r11 | 4,03 | 1,54 |      |      | 5,43 |      |
| r12 | 4,32 | 1,09 |      |      | 4,76 |      |
| r13 | 4,35 | 1,43 |      |      |      | 6,71 |
| r14 | 4,67 | 1,21 |      |      |      | 6,21 |
| r15 | 4,58 | 1,43 |      |      |      | 6,93 |
| r16 | 4,52 | 1,62 |      |      |      | 6,24 |

Note: Elaborated with data study; extraction method: main components with varimax rotation. Suitability and sphericity  $\chi^2 = 347.31$  (47gl)  $p = 0.000$ ; KMO = 0.891. F1 = Institutionalism (35% of the total variance explained), F2 = Isomorphism (30% of the variance explained), F3 = Patrimonialism (25% of the total variance explained), and F4 = Credentialism (10% of the total variance explained). Alpha values remove the item. Five answer options 0 = “not at all agree” to 4 = “strongly agree”. In the case of validity, previous adequacy and sphericity  $\chi^2 = 347.31$  (47gl)  $p = 0.000$ ; KMO = 0.891, four factors were configured; institutionalism (35% of the total explained variance), isomorphism (30% of the total explained variance), patrimonialism (25% of the total explained variance) and credentialism (10% of the total explained variance).

Each of the factors correlated positively and significantly with each other, but with values close to zero that evidence the absence of multicollinearity. Reliability, validity, and correlation requirements for contrasting theoretical models for weighted structures allowed the establishment of trajectories of dependency relationships (see Table 2).

Tabla. 2. relations between factors

|    | M     | SD    | F1    | F2    | F3    | F4    | F1    | F2    | F3    | F4    |
|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| F1 | 24,31 | 14,32 | 1,000 |       |       |       | 1,892 | 4,35  | 5,47  | 6,51  |
| F2 | 23,25 | 15,46 | 6,21  | 1,000 |       |       |       | 1,876 | 6,45  | 5,40  |
| F3 | 24,35 | 10,32 | 4,39  | 5,62  | 1,000 |       |       |       | 1,654 | 6,78  |
| F4 | 29,43 | 14,36 | 5,47  | 6,10  | 4,78  | 1,000 |       |       |       | 1,809 |

Note: Elaborated with data study; M = Mean, SD = Standard Deviation, F1 = Institucionalism, F2 = Isomorphism, F3 = Patrimonialism, F4 = Credencialism; \* p < .01; \*\* P < .001; \*\*\* p < .0001

Regarding the modeling, we proceeded to estimate the structure of axes, relationships, and trajectories between the factors and indicators in order to be able to observe the sequence of institutionalism towards isomorphism, patrimonialism, and credentialism as indicators of a phenomenon that the literature identifies as governance. academic. It is a process in which the actors generate habitus of conflict, negotiation, and co-responsibility. That is, when faced with a problem that affects the parties involved, they must establish trust provisions towards their interlocutors to generate expectations of agreements and responsibility (see Figure 2).

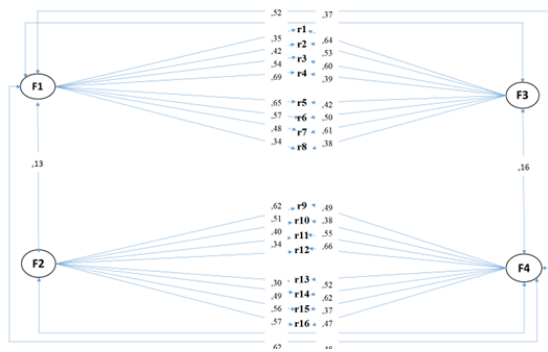


Fig. 2. Structural equation modeling

Note: Elaborated with data study; F1 = Institucionalism, F2 = Isomorphism, F3 = Patrimonialism, F4 = Credencialism; ← formative, → reflective, ↔ covariation

The adjustment parameters and residual2 = 351.21 (26gl) p = 0.091; GFI = 0.995; CFI = 0.985; RMSEA = 0.005ev-

idence the acceptance of the null hypothesis regarding the adjustment of the theoretical relationships between indicators and factors to the estimated results.

### Discussion

The contribution of this work to the state of theoretical, conceptual, and empirical knowledge lies in the establishment of validity, reliability, and the contracting of an instrument that measures an explanatory model of educational neoliberalism.

However, the type of non-experimental study and the type of non-probabilistic sample selection limit the results of the study to the surveyed sample.

In relation to the study by García et al., (2011) where they established that the main effect of educational neoliberalism in HEIs is the intensive use of ICTs, accentuating digital exclusion, the present work has shown that educational neoliberalism is more It is a conglomerate of four factors –institutionalism, isomorphism, credentialism and patrimonialism– in which minimal dependency relationships prevail, which suggest the inclusion of other factors indicative of educational neoliberalism.

Regarding the work of García et al., (2014) in which the authoritarian work climate was related to vertical and unilateral leadership communication, the present study has established that patrimonialism is concomitant with the differences between leaders and followers at the time to reflect its institutionalism.

Regarding the work of García et al., (2015) where they established transformational leadership as a determinant of the formation of knowledge networks and the student’s labor insertion, in this research it has been discovered that patrimonialism not only emerges after that institutionalism, isomorphism and credentialism are established, but it would also be linked to traditional leadership: unidirectional and vertical.

Finally, regarding the investigation by García, Carreón, and Quintero (2016) in which the managing personality was linked to educational institutionalism, the present work has highlighted that this institutional factor, being associated with isomorphism and credentialism, constitutes a system of neoliberal management.

Based on this discussion with the state of knowledge, it is recommended: 1 ) to carry out an experimental study with a random sample selection to establish the incidence of educational neoliberalism in professional training; 2 ) to contrast a model of trajectories of dependency relationships between the variables used in the state of knowledge and the

factors weighted in the present work, as well as the inclusion of other variables such as sexism that would reflect the differences between leaders and followers in work cultures Authorities and vertical-unidirectional communication: 3) intervention in the knowledge management, production and administration system as an indicator of educational neoliberalism.

## Conclusión

The perceived educational quality is a central axis in the public agenda of the State in the face of the pandemic. The present work has shown that it is a structure of four factors that reflect the impact of a pandemic in the transition from the traditional classroom to the virtual classroom. In this sense, the literature concerning the state of affairs suggests that the actors involved carry out a defense of their interests in the face of the coexistence of both instances of teaching and learning. In other words, the impact of confinement and social distancing on learning in the virtual classroom would reflect the restructuring of the dissociative links between the parties involved. The implications for the policies of deconfinement and return to the traditional classroom suppose governance between teachers, students, and administrators. It is about the establishment of provisions for conflict, negotiation, and consensus observable in discourses regarding the differences between the traditional classroom and the virtual classroom.

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