Research Article

BIOMEDICAL Journal of Scientific & Technical Research

ISSN: 2574 -1241

DOI: 10.26717/BJSTR.2023.52.008218

Meta-Analysis of Human Capital in the Literature from 2020 to 2023

Cruz García Lirios[1]*, Jaime Lemus Tlapale[2] and Enrique Martínez Muñoz[3]

[1]*Universidad Autónoma de la Ciudad de México, Mexico*

[2]*Universidad Autónoma de Tlaxcala, Mexico*

[3]*Universidad Autónoma del Estado de Hidalgo, Mexico*

***Corresponding author:** Cruz García Lirios, Department Economy, University of Sonora, Mexico

ARTICLE INFO

Received: August 08, 2023

Published: August 15, 2023

Citation: Cruz García Lirios, Jaime Lemus Tlapale and Enrique Martínez Muñoz. Meta-Analysis of Human Capital in the Literature from 2020 to 2023. Biomed J Sci & Tech Res 52(2)-2023. BJSTR. MS.ID.008218.

ABSTRACT

The pandemic, being contained and mitigated by distancing and confinement policies, limited the formation of human capital in the face-to-face classroom. Based on this assumption, the objective of this study was to observe the training models of human capital in different scenarios in the COVID-19 era. A meta-analysis of reflective effects was carried out with a sample of abstracts published in the literature from 2020 to 2023, considering international databases and repositories. The heterogeneity hypothesis was contrasted, which was not rejected, but the extension of the study to other samples and risk propensity scenarios is recommended.

Keywords: COVID-19; Formative Model; Human Capital; Metanalysis; Reflective Model

Introduction

Until April 2023, the pandemic has impacted the formation of human capital through biosafety policies (Garcia, et al. [1]). Based on risk prevention, human capital is immersed in academic, professional, and labor training from the virtual classroom with transition to the face-to-face classroom. In this way, the teaching and learning of skills, abilities and knowledge has been reported in the literature from 2020 to 2023 as a preventive measure against accidents and diseases related to the new coronavirus SARS CoV-2 and variants of the disease COVID-19. Therefore, the systematic review and meta-analysis of the formation of human capital during the pandemic is essential to open the discussion on the impact of anti-COVID-19 policies (Najera, et al. [2]). Specifically, the relationship between biosafety strategies and the formation of intellectual capital in an immersive, hybrid or face-to-face environment is relevant. Since human capital is the guiding axis of the value of an organization or institution, intellectual capital is important for the management, production, and transfer of knowledge in the face of a risk scenario. However, systematic reviews deal with the performance of human capital and the factors that inhibit its productivity, such as the stigma of those who are exposed to risks of contagion, illness, or death from COVID-19 (Sanchez, et al. [3]). In addition, the literature does not establish a distinction between academic, professional, and labor training when establishing the random effects of the factors that inhibit or enhance the formation of human capital. Another important aspect is the distinction between forming human capital, which consists of teaching and learning values, norms, and capacities in the face of stable scenarios, but not in the face of risks, contingencies, or threats, as is the case with intellectual capital (Lirios, et al. [4]).

In this way, the literature highlights biosafety as the guiding principle of organizations and institutions that manage, produce or transfer talent. However, the literature considers the formation of hu-

man capital in stable situations to be equivalent to the formation of intellectual capital in risk scenarios (Carreon, et al. [5]). For their part, specialized studies on the formation of intangible assets highlight talent management in risk scenarios, but the production and transfer of knowledge are raised in stable contexts. Only the works related to the formation of intellectual capital highlight the imponderables of management, production, and transfer in the appropriation of talents. The literature that explains the formation of human capital is structured in sociocultural, socioeconomic, socio educational and socio digital paradigms. The sociocultural perspective warns of the emergence of norms, values and beliefs related to anti-COVID-19 policies focused on the biosecurity of confinement and distancing (Guillen, et al. [6]). In this model, training is gestated from premises and heuristics for risk prevention. This is the case of phrases such as: "When it's your turn, even if you take it off. When it's not your turn, even if you wear it." The explanation of why students, professionals, and workers were exposed to the pandemic lies in the fact that they assumed the premise or heuristic as valid. From the socioeconomic perspective, the impact of the health crisis on the training of talents supposes selection filters by competences, abilities, dispositions, or knowledge based on the investment in the training process (Carreon, et al. [7]). Thus, performance data mining reflects significant differences between developed and emerging countries. Even in the same country, the literature distinguishes between social strata in order to demonstrate the asymmetric impact of the pandemic on institutions.

However, sociocultural, and socioeconomic perspectives seem to ignore the link between academic, professional, and Labor training (Martinez, et al. [8]). It is the socio-educational approach that tries to assume that the pandemic affected educational systems, institutions, the classroom and learning styles. From the sociocultural approach, the interrelation between teachers and students is established as a means for the dissemination of heuristics. From the socioeconomic point of view, the teacher-student relationship is a consequence of access to a quality educational system. It is from the socio-educational offer where the differences between systems, platforms and classrooms are analysed based on risk exposure. Precisely, exposure to risks is the factor that seems to establish sociocultural, socioeconomic, and socio-educational differences, although such a situation can be avoided if there is access to updated and specialized information on infections, diseases, and deaths from COVID-19 (Molina, et al. [9]). Unlike the socio-educational perspective, which only notices differences based on risks, the socio-digital perspective indicates that open science on the topic of COVID-19 allowed for qualified training. Even though open science to the subject of the pandemic opened the discussion on biosafety, the open access policy seems to derive from a sociocultural premise: "exceptional measures for risk situations" (Garcia, et al. [10]). Even the value of knowledge related to COVID-19 was disseminated based on contributions rather than editorial interests. The objective of the study lies in the meta-analysis of the findings concerning the formation of human capital in exceptional situations, considering a review of the literature published from 2020 to 2023.

Are there significant differences between the theoretical structure of the impact of biosafety policies on the formation of human capital with respect to the meta-analysis of homogeneous random effects?

The explanatory paradigms of the impact of biosafety policies on the formation of human capital indicate:

1. The heuristics determined the exposure to risks of infections, diseases and deaths that inhibited the formation of human capital.
2. The economic strata revealed asymmetric effects between the confinement and distancing policies regarding their school, professional, and work performance.
3. The risks defined the teaching and learning of human capital in the virtual classroom.
4. The surrounding information in the media and socio-digital networks affected the formation of human capital mediated by exposure to risks.

Method

Design. Documentary work was carried out with a selection of sources indexed to international repositories such as Scopus and WoS, considering the keywords of "specification" and "intellectual capital" in the period from 2020 to 2023. A search for summaries was carried out in order to subtract the indicators of intellectual capital, considering equations. Then, once the indicators of empathy, trust, commitment, entrepreneurship, productivity, competitiveness, innovation, satisfaction and happiness were selected, experts on the subject rated these indicators in order of importance, being 10 of greater importance and 0 of zero or no some importance Data were processed in the statistical analysis package for social sciences version 20.0 Percentages, contingencies, and proportions were estimated to establish risk thresholds in decision-making regarding intellectual capital indicators.

Results

The values that explain the impact of pandemic containment and mitigation policies on the formation of human capital in the virtual classroom. Random effects consistent with the sociocultural version of risk exposure are observed. That is, the level of human capital formation was established from models that reflect the contingent situation, as well as the diversification of the formation of intellectual capital. In some studies, training is related to entrepreneurship and in others to expectations in the face of the health crisis. Significant differences are observed between the findings reported in the literature from 2020 to 2023 with respect to the random effects meta-analysis (Figure 1). In other words, the literature seems to show that the for-

mation of human capital was generated from expectations and dispositions oriented towards entrepreneurship as a central response to the confinement and distancing of people. However, the meta-analysis of the findings reported in the literature from 2020 to 2023 warns that the random effects are asymmetric in terms of the impact of anti-pandemic policies regarding the formation of human capital in the virtual classroom.

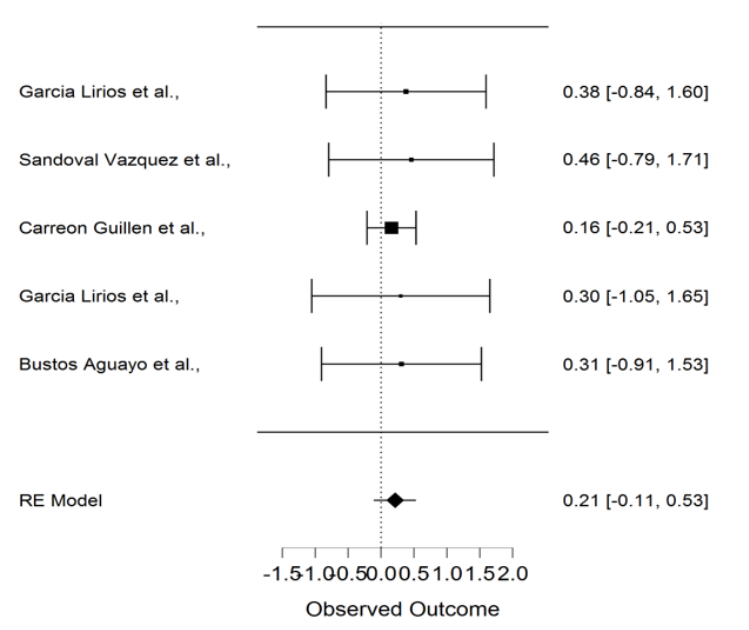

Figure 1: Forest plot.

Discussion

The contribution of this work to the state of the art lies in the establishment of the homogeneous random effects of anti-COVID-19 policies (confinement and distancing) on the formation of human capital in the virtual classroom (Rincon, et al. [11]). The significant differences found between the findings reported in the selected literature indicate that the policies had an asymmetric impact on the institutions or organizations that train human capital. It is recommended to extend the study to the face-to-face classroom in order to be able to anticipate the impact of anti-health crisis policies on the training of talents. In relation to other meta-analyses related to the formation of human capital where the learning of skills, competencies, knowledge, and dispositions prevail as reflective factors, the present work suggests that the health crisis reoriented these factors towards risk expectations and entrepreneurial strategies (Bustos, et al. [12]). Therefore, a study on the dependency relationships between expectations and risk exposure will open the discussion on the relevance of confinement and distancing of people in their civic, academic, professional, or work training. Regarding the sociocultural approach that proposes heuristics as determinants of the formation of intellectual capital, the present study indicates that it is rather public policies that are built based on these sociocultural premises (Guillen [13]). In this sense, the impact of political strategies on academic, civic, professional, or labor training is measured by socioeconomic, socio-educational, and socio-digital factors. This is the case of Mexico where a policy of confinement and flexible distancing prevailed, justifying the volume of infected, sick, and dead from COVID-19 circumscribed to a training process. Lines of study concerning the construction of public policies in risk scenarios and their impact on the formation of human capital will open the discussion on an agenda of strategies to reduce the incidence of politics in academic, professional or labor training.

Regarding the socioeconomic version that highlights the same income asymmetries regarding exposure to risks derived from training, the present study considers that this assumption is correct if it is assumed as an expectation that will affect risky behaviour. Future research concerning the transition from expectation to risk behaviour will test the socioeconomic hypothesis (Liros, et al. [14]). Risk exposure is contemplated by the socio-educational approach, but the present work indicates that more than mere exposure, it is the intention of exposure that would be determined by risk expectations (Lirios, et al. [15]). In this sense, the socio-educational hypothesis can be demonstrated as long as the formation of human capital takes place in an observable scenario of differentiation between levels of risk exposure expectations. Regarding the socio digital premise of access to infor-

mation for risk exposure or conduct decisions, this meta-analysis suggests that the socio digital media and networks mediate the impact of risk communication policies rather than confinement and distancing strategies (Hernandez, et al. [16]). Therefore, it is necessary to differentiate levels of propaganda, counterpropaganda, and anti-propaganda to be able to differentiate the random effects on audiences, militancy, adherents or sympathizers to a regime, its opposition or civil society.

Conclusion

The objective of this study was to establish the homogeneous random effects in the literature related to training models of human capital in the face of the health crisis [17-21]. A structure was found where the work of Carreon Guillen (2022) influenced more than the other studies in the decision not to reject the hypothesis of heterogeneity and asymmetry between the findings analysed. In relation to the paradigms, the amplification of the study is recommended in order to test the corresponding hypotheses.

References

1. Garcia LC, Mora FDJV, Guillén JCGC, Miranda MB, Valdés JH, et al. (2023) Modelo factorial mediador de gobernanza sanitaria en la era de la COVID-19. Journal of Neuroscience and Public Health 3(1): 331-339.
2. Nájera MJ, Aguayo JMB, Guillén JC, Lirios CG (2020) La percepción de riesgo en estudiantes universitarios ante la propagación del coronavirus SARS-COV-2 y la enfermedad COVID-19. Revista de Psicología de la Universidad Autónoma del Estado de México 9(17): 94-107.
3. Sánchez Sánchez A, Espinoza Morales F, Quiroz Campas CY, Sandoval Vázquez FR, Carreón Guillen J, et al. (2022) Metaanálisis de las percepciones de riesgos laborales en la era COVID-19 13(1): 312-326.
4. Lirios CG, Sánchez JAG, Gracia TJH, Guillén JC, Morales FE, et al. (2021) Contraste de un modelo de los determinantes de la estancia turística en la era covid-19: implicaciones para la bioseguridad. Turismo y patrimonio (16): 11-20.
5. Carreón-Guillén J, Aguayo JMB, Nájera MJ, Hernández Valdés J, Sánchez-Sánchez A, et al. (2020) Coffee entrepreneurship during Covid-19. Publicaciones e Investigación 14(1).
6. Guillen JC (2021) Modelling intellectual capital in the Covid-19 era. Turkish Journal of Computer and Mathematics Education (TURCOMAT) 12(13): 5497-5506.
7. Carreón-Guillén J, Bustos-Aguayo JM, Bermúdez-Ruíz G, Espinoza Morales F, García Lirios C, et al. (2020) Actitudes hacia la pandemia ocasionada por el coronavirus SARS-COV-2 y la COVID-19 Invurnus 15(2): 12-16.
8. Martìnez-Muñoz E, Quintero Soto ML, Carreón Guillén J, Zallas Esquer LA, Garcìa-Lirios C, et al. (2021) Modelling Self-Care in the COVID-19 Era. Teikyo Medical Journal 44(3): 741-752.
9. Molina Ruiz HD, García Munguía M, García Vargas MDLE, Carreón-Guillén J, Garcí Lirios C, et al. (2020) Una aproximación estadística al comportamiento de brote de COVID-19 en la China continental. TEPEXI Boletín Científico de La Escuela Superior Tepeji Del Río 7(14): 6-16.
10. García Lirios C, Bolivar Mojica E, Blaness Ugarte A, Coronado Rincón O, Molina González M, et al. (2021) CONTRASTE UN MODELO DE VIOLENCIA DOMÉSTICA EN LA ERA DEL COVID-19. Revista De Investigación Académica Sin Frontera: División De Ciencias Económicas Y Sociales, 35(14): 13.
11. Rincón OC, González MDRM, Mojica EB, Guillén JC, Lirios CG, et al. (2022) Estrategia de gobernanza para consensuar las expectativas de estudiantes de una universidad pública para regresar a clases interrumpidas por la pandemia. Revista de la facultad de Derecho y Ciencias Políticas 52(136): 319-338.
12. Bustos-Aguayo JM, Bermúdez-Ruíz G, Juarez-Najera M, Espinoza-Morales F, García-Lirios C, et al. (2021) Modelling Sustainable Entrepreneurship in The Covid-19 Era. Journal of Social Transformation and Regional Development, 3(2): 23-34.
13. Guillén JC, Ruíz GB, Sánchez AS, Morales FE, Lirios CG, et al. (2021) Contrastación de un modelo de gestión del conocimiento en la era Covid-19. Integración Académica en Psicología 9(26): 10.
14. Lirios CG, Guillén JC, Aguayo JMB, Valdés JH (2020) Percepción del emprendimiento caficultor en la región Huasteca, centro de México. Revista Activos 18(1): 235-266.
15. Lirios CG, Guillén JC, Sánchez AS, Muñoz BM (2022) Modelado de espacialidad, habitus y capacidades en la era Covid-19. Revista de Investigación Académica sin Frontera (37): 23.
16. Hernández Valdés J, Sánchez Sánchez A, García Lirios FEM, Guillén JC, et al. (2022) Review of Cooperative health in the COVID-19 era. J Clinical Medical Reviews and Reports 4(1): 1-11.
17. Bustos Aguayo JM, Juárez Nájera M, García Lirios C (2022) Review of entrepreneurship in the COVID-19 era. Revista Ingenio 19(1): 60-66.
18. Carreón-Guillén J, Bustos-Aguayo JM, Sandoval Vázquez FR, Juárez-Nájera M, García-Lirios C, et al. (2022) Gobernanza en la era COVID -19: Expectativas sobre los servicios de agua. FIGEMPA: Investigación Y Desarrollo 14(2): 68-80.
19. García Lirios C, Garza Sánchez JA, Hernández Gracia TJ, Carreón Guillén J, Espinoza Morales F, et al. (2021) Contrast of a model of the determinants of tourist stay in the covid-19 era: implications for biosafety.
20. García Lirios C, Juárez Nájera F, Bustos Aguayo JM, Juárez Nájera M, Juárez Nájera FR, et al. (2022) Perceptions about Entrepreneurship in the COVID-19 Era. Razón Crítica (12).
21. Sandoval Vázquez F, Juárez Nájera M, Bustos Aguayo J, García Lirios C (2022) Modelo confirmatorio de expectativas ambientales en la era COVID-19. Revista De Investigación Académica Sin Frontera: División De Ciencias Económicas Y Sociales 37(15).

ISSN: 2574-1241

DOI: 10.26717/BJSTR.2023.52.008218

Cruz García Lirios. Biomed J Sci & Tech Res

Submission Link: https://biomedres.us/submit-manuscript.php