






ORIGINAL

Empowerment as a driver of job performance: evidence from the literature and theoretical perspectives

El empowerment como motor del desempeño laboral: evidencia de la literatura y perspectivas teóricas

Henry Diego Adrianzen Olaya¹, María Roxana Ávila Atocha¹, Gustavo Ernesto Zarate Ruiz¹ , Brian Andree Meneses Claudio¹  

¹Universidad Tecnológica del Perú. Lima, Perú.

Cite as: Olaya HDA, Atocha MRÁ, Ruiz GEZ, Claudio BAM. Empowerment as a driver of job performance: evidence from the literature and theoretical perspectives. Health Leadership and Quality of Life 2022;1:11-11. <https://doi.org/10.56294/hl202211>.

Submitted: 04-06-2022

Revised: 01-08-2022

Accepted: 29-09-2022

Published: 30-09-2022

Editor: Dra. Mileydis Cruz Quevedo 

ABSTRACT

Empowerment has emerged as a central concept in contemporary business management, highlighting its ability to improve job performance and promote a more satisfying work environment. This study presents a comprehensive review of the national and international literature on empowerment and its influence on job performance. A positive correlation between employee empowerment and job performance is identified, highlighting the importance of autonomous delegation of responsibility and the ability to make decisions. In addition, the relevance of soft skills, such as effective communication and teamwork, in the successful implementation of empowerment is highlighted. Both intrinsic and extrinsic motivation are highlighted as playing a crucial role in job performance, and the importance of considering both individual and organizational aspects in the implementation of effective empowerment strategies is pointed out. In summary, this study highlights the positive impact of empowerment on job performance and suggests that its proper implementation can lead to greater organizational success and growth.

Keywords: Empowerment; Job Performance; Autonomy; Responsibility; Soft Skills; Intrinsic Motivation; Extrinsic Motivation; Effective Communication; Teamwork; Job Satisfaction.

RESUMEN

El empowerment ha surgido como un concepto central en la gestión empresarial contemporánea, destacando su capacidad para mejorar el desempeño laboral y promover un entorno de trabajo más satisfactorio. Este estudio presenta una revisión exhaustiva de la literatura nacional e internacional sobre el empowerment y su influencia en el rendimiento laboral. Se identifica una correlación positiva entre el empowerment de los empleados y su desempeño laboral, destacando la importancia de la delegación de responsabilidad autónoma y la capacidad de tomar decisiones. Además, se subraya la relevancia de las habilidades blandas, como la comunicación efectiva y el trabajo en equipo, en la implementación exitosa del empowerment. Se destaca que tanto la motivación intrínseca como la extrínseca desempeñan un papel crucial en el rendimiento laboral, y se señala la importancia de considerar tanto los aspectos individuales como los organizacionales en la implementación de estrategias de empowerment efectivas. En resumen, este estudio resalta el impacto positivo del empowerment en el desempeño laboral y sugiere que su implementación adecuada puede conducir a un mayor éxito y crecimiento organizacional.

Palabras claves: Empowerment; Desempeño Laboral; Autonomía; Responsabilidad; Habilidades Blandas; Motivación Intrínseca; Motivación Extrínseca; Comunicación Efectiva; Trabajo En Equipo; Satisfacción Laboral.

INTRODUCTION

In recent decades, empowerment has become a central theme in business management and organizational research. The ability to empower workers by providing them autonomy, responsibility, and the opportunity to make decisions has been recognized as a critical factor in improving job performance and promoting a more satisfying work environment.^(1,2,3,4) In this article, a comprehensive exploration of the dimensions of empowerment and its impact on job performance, both nationally and internationally, is carried out.^(5,6)

In this article, we seek to know the factors that are similar to our study variables, that is to say, to know the previous studies on this subject, deepening the connection that companies should have concerning employee performance and empowerment.^(7,8,9) Training empowered workers and helping them develop their soft skills is productive for our organization. For them, we have made an exhaustive compilation of information from reliable sources such as Scopus and Redalyc Alicia, among others. Both nationally and internationally.⁽¹⁰⁾

DEVELOPMENT

International background

Silva et al. (2020) indicate in their recent study that the main objective of studying the relationships between empowering and being more creative is essential to point out that the budget is helpful in a company because we must involve our collaborators. For them, empowerment will allow them to develop efficiently. His study is exploratory and quantitative; he asked a series of questions to 638 managers belonging to the Brazilian Association of Information Technology Organizations. Employees may perceive the budget's usefulness as more freedom rather than more significant restrictions.⁽¹¹⁾ This is related to the fact that the higher level of budget utility supports promoting self-motivation and self-control. The workforce can grasp much higher ranges of collected profits; empowerment allows them to break paradigms and take on challenges and responsibilities, making employees motivated and self-reliant problem solvers without having a boss.⁽¹²⁾

On the other hand, Orgambidez and Almeida (2020), in their study published in the *International Journal of Nursing Studies* (United Kingdom), point out a link between empowerment and pleasure at work. The researcher's objective was to study the link between structural empowerment and job strain, and the approach was quantitative. The type of design is cross-sectional; the questionnaire instrument was used for data collection. The results obtained between the structural empowerment, stress, and pleasure of the collaborators, the consequences between the collaborators at the level of the structural empowerment diminishes the stress. As a result, we will obtain the satisfaction of our collaborators. They conclude that the development of correct empowerment in companies dedicated to health care significantly impacts the reduction of work stress.⁽¹³⁾ This situation is reflected in a positive increase in the indicators of job satisfaction. They also add that the use of empowerment as a strategy to improve work performance is an emerging trend worldwide that managers should consider for the benefit of collaborators who seek to give the best of themselves in the organization. As a result of the research developed, we can highlight if there is a parallel similarity with autonomous responsibility, empowerment, and performance skills in their activities.⁽¹⁴⁾

Ruiz, León, and García (2020) indicate that the objective of the study is to empower employees so that they can have the power and autonomy to increase in a valuable way and optimize their work, which will allow them to commit themselves to the company, the approach is quantitative. The result obtained from the study generates security, empowerment, the contribution of the collaborators, the increase and improvement of their work, and the obligation to the company, which increases the pleasure and the obligations that the collaborators have. This pleasure of the workers increases the fruit of their labor; empowerment enhances their abilities to develop their activities. It is concluded that the responsibilities that exist in the organization allow our collaborators to be faithful and committed to the company; the empowerment planning allows us to have empowered, committed, and satisfied collaborators faithfully committed to the company, which is essential. The contribution of this research is to consider the contribution of workers to give them the power through strategies to continue growing in the business world.⁽¹⁵⁾

Peiró, Bayona, Caballer, and Di Fabio (2020), in their research article published for the *Official Journal of the International Society for the Study of Individual Differences*, argue that the objective of the research is to take into account the characteristics of work that influence work performance". In that sense, they detail that a particular work activity positively transcends the work activity at a motivational level in front of the work. The study is fundamental, with data collected through surveys on a sample of 841 collaborators. The methodology was a quantitative approach. The statistical tool of coefficients with ordinary least squares regression was used to determine the quantification of the conclusions. It is concluded that the research reveals that employees' personal preferences significantly influence their work performance.⁽¹⁶⁾ The contribution is that we can see that this research has similarities with the research in progress since the importance of the motivation dimension of the work performance variable is evidenced.

Shah et al. (2019) mention us in their research on the Islamabad Territory of Pakistan. The fundamental objective is to have the collaborators happy and satisfied in their work center, establish a straight connection

in the psychological field, and empower and satisfy workers and their pact with their company; the approach is quantitative. The result obtained from the study between psychology and empowerment is that the collaborator's commitment to the organization, therefore, has an impact on the development and performance of organizations; in conclusion, to achieve greater effectiveness, productivity, and growth in our company, we must first worry about our employees, that they feel comfortable and identified with the organization, we must highlight this and commit ourselves so that human talent is empowered. The contribution of this work will allow us to continue with the strategies towards our collaborators, which are the most important; they are the engine and central axis to continue flooding national and international markets.⁽¹⁷⁾

Similarly, Hewagama, Boxall, Cheung, and Hutchison (2019), in their research published for the *International Journal of Hospitality Management* (Sri Lanka), indicate that proper human talent management improves job satisfaction by empowering employees and minimizing the number of mistakes made in the front line of hotel work. The information was collected through surveys under the modality of using dyadic data for employees and managers. The research aims to improve the productivity of functions, the pleasure of the work they develop, and the empowerment that the collaborators have. The approach is quantitative; the research was correlational, causal, and transversal. The results show a significant incidence between the labor autonomy of the organization's supervisors and the labor function that the collaborators perform.⁽¹⁸⁾

It is concluded that there is an isomorphism between the cited research and the present research within the framework of the autonomous responsibility dimension of the empowerment variable and the knowledge competencies and performance dimension in their activities. The study's contribution is that we must consider the usefulness of our collaborators and the contribution they provide us, which is essential for the human talent we have in the company because, without them, it will not be possible to continue expanding. Therefore, we must recognize their work and dedication, allowing us to continue growing daily.⁽¹⁹⁾

Aimacaña *et al.* (2017) mention in their thesis that the objective is to transcend the companies' empowerment and obligations through studies conducted to know how committed the collaborators are to the organization or the company. The non-experimental quantitative research approach, with a descriptive scope and employing the survey technique using a Likert scale, the population studied consisted of 33 workers, 25 technicians, and eight administrative staff of the INPLASTICO industry. The contribution of this work will allow the company to apply strategies related to empowerment to the workers, achieving high levels of productivity and autonomy of their work, and reducing failures or errors within the work area. On the other hand, the bosses need to be trained in empowerment issues to influence the collaborators to achieve personal or organizational success, but this will only be based on their work in joint integration, favoring improvements in development.

National background

Oliva (2022) indicates in his research that the objective of Empowerment with motivational job satisfaction is in the Los Olivos district's paint industry collaborators this year. It had a quantitative approach, with a basic typology, descriptive, correlational, and non-experimental design, carried out with a sample of 100 workers. The technique used was a series of questions where two questionnaires with closed questions were used. Finally, the data obtained from the study showed a positive and direct similarity between Empowerment and Work Motivation. Our research work's main contribution is that the pharmaceutical company can motivate its workers to offer optimal service to customers during their workday and always have fluid and transparent communication; they must be empowered and feel satisfied with what they do.

Tapia (2021) mentions in his thesis, *Empowerment and Job Satisfaction in the Regional Directorate of Education Callao, 2021*. It had a quantitative, cross-sectional, and correlational study and a non-experimental design. Two hundred collaborators were included, and 132 were chosen for the sample. A 5-point Likert scale (Strongly Disagree - Strongly Agree) was used. It is shown that Empowerment gives them power and autonomy so that they feel like owners of their work. Implementing techniques and instruments will help fundamentally reduce the degrees of error in the positions or tasks assigned to each worker. Torres *et al.* (2021), in their research on the emotional capacity and motivation at work of health professionals in a hospital, aim to establish a connection between the soft skills and the performance of the collaborators of this hospital in the city of Pucallpa, who should be able to take on challenges that arise in the performance of their work activities.

The quantitative approach methodology used was a cross-sectional descriptive model. With a sample of 125 individuals, 70 women, and 55 men, 84 people, equivalent to 67 %, have medium emotional intelligence, and 35 people, equal to 28 %, have high emotional intelligence. Among them, 4,6 %, which would be six collaborators, have low emotional intelligence. 13 people, equal to 10,4 %, have a deficit concerning work performance, 24 collaborators, which is equivalent to 19,2 %, who have extraordinary performance, and finally, 88 health professionals, 70,4 reflect a correct work performance. According to the count, their work performance is due to our health professionals' soft skills. It is of utmost importance because we are referring to health experts who care for and provide services to others - it is worth the redundancy. It is concluded, according to the study executed, with a 95 % confidence level and 55 % error, which shows the connection between the variables and the degree

of satisfaction of professionals in the development of their work, which should be empowered both emotionally and psychologically, the contribution to our pharmaceutical company is that we must follow specific standards and imitate the good practices evidenced in this research for the progress of our organization.⁽²⁰⁾ Saldarriaga (2020) The research's objective is to identify the direct relationship between Empowerment and confidence in the work of workers of an entity of the state of Piura 2019.

The work developed under a quantitative, correlational, non-experimental, and cross-sectional approach was applied to 89 collaborators. The results showed that there is a similarity between Empowerment and trust in the work of workers. The contribution of this research to our work is that Empowerment will help managers and workers improve, develop, and have better skills to perform better in their jobs so they can have different types of responsibilities. In addition, work commitment and Empowerment are part of one's own achieving that the company can meet its objectives; the most important thing is to achieve workers' commitment to their work and the entity and have a good close relationship with their subordinates.⁽²¹⁾

Montoya et al. (2019) mention that the essential objective of our research is to relate the work environment with the power to innovate, which will empower us and increase the productivity and quality work of our collaborators (King, de Chermont, west, Dawson & hebl, 2007). The research approach is qualitative; the results obtained are favorable and reliable; the Cronbach's scale shows us that the values are above the proposed values of 0,7; at the same time, the variance values are also above 0,5, making our work more reliable. 5, which makes our work optimal. We conclude that the research is essential to take into account that organizations should not only worry about the work performance of their workers but also about making employees develop and take their innovative ideas; they are free and autonomous, i.e., are empowered, as various studies show us the value, and that gives our human talent if we allow them to make decisions, which are empowered employees. The contribution of research is that it allows us to worry about the working environment of our employees, allows them to be empowered workers, lets them make their own decisions, and allows them to be autonomous.

León J. (2018) mentions in his thesis the importance of Organizational Empowerment and Knowledge Management in teachers of UPN - Lima center headquarters. It is of a quantitative approach, of a correlational type, and with a non-experimental design. The work also included 198 teachers, applying a scale methodology on organizational Empowerment by Spreitzer, G.M. and the knowledge management inventory by Alonso Pérez-Soltero. Therefore, it is essential to have a high promise of corporate responsibility, which empowers all possible means to have knowledge management. Providing Empowerment to teachers will favor the administration of knowledge and impact the growth of people capable of realizing their autonomy for their work and function.

Theoretical aspects

Empowerment

Griffin (2011) "Empowerment is delegating self-sufficiency to employees so that they can employ their own goals and make their own decisions within the organization" (p. 524).

Gorostegui (2018) indicates that "empowerment is the position that belongs to each worker where they have autonomous responsibility, make their own decisions, and have integral responsibility" (p. 111).

Empowerment is the result of strengthening the capabilities of both teams and individuals. This will help to have more precise objectives to create a more pleasant environment with creativity and innovation. Delegation is not only learning for oneself. This type of delegation should be implemented for all, considering the importance of communication, which will imply that all employees have the same level of decision-making (Wilson, 2000, p. 17). (Wilson, 2000, p. 17).

Finally, empowerment is the motivation that every worker needs to perform his work more efficiently, depending on the type of leader that can be assigned to him, helping him to make better decisions.

For the authors Faya et al. (2018), Autonomous responsibility for the worker is essential because it reduces the burden of work stress. A clear example of autonomy would be that their bosses let them use their work methodologies without altering the given functions, participate in the improvements for the company where their ideas and improvements are taken into account by their bosses, and their opinions are respected for the decisions of the company and that they are taken into account for the improvement in their work area.

Zapata et al. (2016). "Mentions that to be able to act in the face of a problem, each worker must make their own decisions by identifying and solving problems within the company immediately, propose alternative solutions to various problems where the bosses allow them to take important solutions within their work area and the most important is that bosses and managers decentralize decision making where the bosses choose to give power to make their own decisions so that they feel empowered having authority in decision making within their work area" (pp. 38-39).

Schneider (2010) mentions that today, many companies have to have comprehensive responsibility for quality standards and internal and external commitment to suppliers, customers, and other stakeholders, that the company implements biosafety protocols, and that distributors comply with quality standards. That is why many

companies share a quality responsibility with workers to have quality products to impact customers positively.

Job performance

Bautista et al. (2020). Job performance results from their competencies by knowledge, skills, and motivation to perform a task or function, expecting positive results for the company (p. 114).

According to the Webscolar portal (2014), Competence by knowledge is considered an ability to learn, acquire, and guide their learning during their life path; in general, it is to learn new knowledge and skills. That is why we have three types of capacity to achieve more competent in knowledge: techno-scientific thinking is based on interpreting and understanding the information that helps us to give complex solutions, and the most important thing is to take as a reference the knowledge of the bosses, second the learning capacity what attributes is in learning new skills within the company to be able to improve job performance and be better people; finally knowledge management is to transmit knowledge information to help in job performance and strengthen the skills of collaborators.⁽²²⁾

According to the University of the Americas and the Caribbean (2021), "soft skills are those competencies that each person possesses to develop effective communication and intrapersonal relationships such as prioritizing and managing multiple tasks, ability to handle diverse or adverse situations, working in a work team, leadership ability, taking initiative, assertive communication, the desire to learn and adapt to different changes, while hard skills are those factors related to technical knowledge that are acquired in the process of professional training such as having technical knowledge, ability to provide solutions to complex problems and being an analytical person."

Cruz et al. (2009). "Companies require their workers to be motivated, so two types of motivation are used. Intrinsic motivation values more for factors specific to each worker or person, such as being satisfied working in the company, feeling happy doing the job, having freedom at work, working with autonomy, having confidence in what one does, and achieving everything proposed. On the other hand, extrinsic motivation is about being able to motivate them in terms of their knowledge and achievements, such as the company giving them a promotion and discount, their bosses rewarding them, correcting them individually, being competent, their boss showing interest in their professional growth, etc."

CONCLUSIONS

Several significant conclusions can be drawn after analyzing national and international studies and precedents. First, it is confirmed that empowerment, understood as the delegation of autonomous responsibility and decision-making by employees, positively affects job performance. This autonomy fosters motivation, satisfaction, and creativity at work.

In addition, the importance of soft skills and employee commitment is highlighted in the context of empowerment. Effective communication, teamwork, and adaptability are essential to maximize the benefits of empowerment. Intrinsic motivation is also found to play a crucial role in improving job performance, and extrinsic rewards can complement this process.

In summary, this article underlines the relevance of empowerment as a tool to boost job performance. It highlights the need to consider individual and organizational aspects in implementing effective empowerment strategies. Worker empowerment benefits employees in terms of satisfaction and commitment and can lead to tremendous organizational success and growth.

REFERENCES

1. Gabini SM. Potenciales predictores del rendimiento laboral: Una exploración empírica. Tesis. Universidad Nacional de La Plata, 2018. <https://doi.org/10.35537/10915/65394>.
2. Cabezas Ramos CB, Brito Aguilar JG. La Gestión del Talento Humano para un Rendimiento Laboral Efectivo. Polo del Conocimiento: Revista científico - profesional 2021;6:742-61.
3. Maldonado CO, González RS, Díaz KM, Maldonado CO, González RS, Díaz KM. Tensiones del trabajo docente en un contexto gerencialista: una revisión de literatura sobre el caso chileno. Educação UFSM 2019;44. <https://doi.org/10.5902/1984644434888>.
4. Peñaherrera-Patiño D, Flores-Poveda J, Pincay-Sancán D, Vargas-Ramírez P. Esquema de alineamiento estratégico: Una perspectiva teórica desde la consultoría empresarial y la gerencia aplicada. //Strategic alignment scheme: A theoretical perspective from business consulting and applied management. CIENCIA UNEMI 2018;11:41-56. <https://doi.org/10.29076/issn.2528-7737vol11iss28.2018pp41-56p>.
5. Jiménez DS, Celis PBM, Morales DA, Tello FC. La importancia del clima y cultura organizacional para la

atención en instituciones de salud. *Universidad y Sociedad* 2020;12:53-60.

6. Bustamante-Ubilla MA, Lapo-Maza M del C, Grandón-Avenida ML. Creación de un cuestionario de clima organizacional para hospitales de alta complejidad, Chile. *Revista Gerencia y Políticas de Salud* 2016;15:126-41. <https://doi.org/10.11144/Javeriana.rgyys15-30.ccco>.

7. Pérez AMS. Clima organizacional en salud pública. Consideraciones generales. *Correo Científico Médico* 2004;83.

8. Segredo Pérez AM. Instrumento para la evaluación del clima organizacional en salud. *Rev cub salud pública* 2017;43:57-67.

9. Martínez Cortes E, Molina Rodríguez JF, Parada Toro IM, Martínez Cortes E, Molina Rodríguez JF, Parada Toro IM. Clima Organizacional: estudio de caso en un Centro de Salud del primer nivel de atención Morelos México. *Horizonte sanitario* 2019;18:347-56. <https://doi.org/10.19136/hs.a18n3.3197>.

10. Fajardo Aguilar GM, Almache Delgado VJ, Olaya Santos HK, Fajardo Aguilar GM, Almache Delgado VJ, Olaya Santos HK. Clima organizacional en las instituciones de salud desde una perspectiva teórica. *Revista Científica UISRAEL* 2020;7:153-64. <https://doi.org/10.35290/rcui.v7n1.2020.200>.

11. Ortiz-Campillo L, Ortiz-Ospino LE, Coronell-Cuadrado RD, Hamburger-Madrid K, Orozco-Acosta E. Incidencia del clima organizacional en la productividad laboral en instituciones prestadoras de servicios de salud (IPS): un estudio correlacional. Incidence of organizational climate on labor productivity in institutions providing health services (IPS): a correlational study 2019.

12. Segredo Pérez AM, García Milian AJ, López Puig P, León Cabrera P, Perdomo Victoria I, Segredo Pérez AM, et al. Comunicación organizacional como dimensión necesaria para medir el clima en las organizaciones en salud pública. *Horizonte sanitario* 2017;16:28-37. <https://doi.org/10.19136/hs.v16i1.1256>.

13. Hernández Gracia TJ, Duana Avila D, Polo Jiménez SD, Hernández Gracia TJ, Duana Avila D, Polo Jiménez SD. Clima organizacional y liderazgo en un instituto de salud pública mexicano. *Revista Cubana de Salud Pública* 2021;47.

14. Condor C, Omar H. La gestión de la comunicación interna y el clima organizacional en el sector público. *Comuni@cción* 2018;9:25-34.

15. Díaz FPA, Hermosilla MJL, Pérez RAR, U MAB. Percepción del clima organizacional en atención primaria de salud en la región del Maule, Chile. *Empresarial* 2019;13:13-21. <https://doi.org/10.23878/empr.v13i1.146>.

16. Justo MM, Zelaya MO, Hauche RA, Galvagno LGG. Niveles de Rendimiento y Satisfacción Laboral, en trabajadores en diferentes modalidades en una muestra Argentina: Rendimiento y Satisfacción Laboral. *Uaricha, Revista de Psicología* 2023;21:32-44.

17. Cuadrado Navarro VA. PLANEACIÓN ESTRÁTEGICA UNIVERSITARIA: UNA REVISIÓN DE LOS OBJETIVOS ESTRATÉGICOS DE LAS UNIVERSIDADES DE BARRANQUILLA 2020.

18. Rodríguez Albor G, Rodríguez Vidal V, Valladares Leòn F. PERSPECTIVAS EMPRESARIALES LAS ORGANIZACIONES FRENTE AL CONTEXTO GLOBAL Y LOCAL. RODRÍGUEZ VIDAL VÍCTOR, RODRÍGUEZ ALBOR GUSTAVO, VALLADARES LEÓN FRANCISCO; 2023.

19. Cuevas-Contreras. T, Díaz-Solano BH. Innovación, Competitividad y Desarrollo / . Sello Editorial Universidad Autónoma del Caribe,; 2021.

20. Consuegra Machado JR, Sanabria Landazábal NJ, Sánchez Puerta DA, Franklin IC, Benavides Pava D, Acosta-Prado JC. Competitividad y derechos de propiedad intelectual / . Sello Editorial Universidad Autónoma del Caribe.; 2018.

21. Badillo de la Cruz J, Carrascal Molina L. Responsabilidad Social: Un compromiso de las universidades, como organización para un desarrollo sostenible / . Thesis. Universidad Autónoma del Caribe., 2018.

22. Rodríguez Albor G, Sanabria Landazábal NJ, Barrientos Oradini NP. Innovation and the digital world: Influence of agile structures and intelectual capital /. Sello Editorial Universidad Autónoma del Caribe, Universidad Miguel de Cervantes.; 2020.

FINANCING

No external financing.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest.

AUTHORSHIP CONTRIBUTION

Conceptualization: Henry Diego Adrianzen Olaya, María Roxana Ávila Atocha, Gustavo Ernesto Zarate Ruiz, Brian Andree Meneses Claudio.

Investigation: Henry Diego Adrianzen Olaya, María Roxana Ávila Atocha, Gustavo Ernesto Zarate Ruiz, Brian Andree Meneses Claudio.

Methodology: Henry Diego Adrianzen Olaya, María Roxana Ávila Atocha, Gustavo Ernesto Zarate Ruiz, Brian Andree Meneses Claudio.

Writing - original draft: Henry Diego Adrianzen Olaya, María Roxana Ávila Atocha, Gustavo Ernesto Zarate Ruiz, Brian Andree Meneses Claudio.

Writing - review and editing: Henry Diego Adrianzen Olaya, María Roxana Ávila Atocha, Gustavo Ernesto Zarate Ruiz, Brian Andree Meneses Claudio.