

<https://doi.org/10.23913/ride.v14i28.1873>

Scientific articles

Evaluación de habilidades blandas para mejora en el servicio de las pequeñas y medianas empresa turísticas

Evaluation of soft skills to improve the service of tourism small and medium enterprises

Avaliação de soft skills para melhorar o atendimento de pequenas e médias empresas turísticas

Carolina Ruiz de Chávez Alfaro

Instituto Politécnico Nacional, México

cruizdechavez13@gmail.com

<https://orcid.org/0000-0002-7432-3107>

Jesús Antonio Álvarez Cedillo

Instituto Politécnico Nacional, México

jaalvarez@ipn.mx

<https://orcid.org/0000-0003-0823-4621>

Nashielly Yarzabal Coronel

Instituto Politécnico Nacional, México

nyarzabal@ipn.mx

<https://orcid.org/0000-0003-2945-8069>

Resumen

Las habilidades blandas pueden ser el detonante para potenciar a las empresas mediante la prestación de servicios de calidad o experiencias satisfactorias, para lo cual los proveedores deben involucrar habilidades emocionales y sociales para alcanzar la satisfacción de los clientes. Por ende, en el presente trabajo se llevó a cabo un análisis de pequeñas y medianas empresas (pymes) turísticas para intentar comprender sus necesidades, de modo que puedan convertirse en empresas adaptables y competitivas, en especial a raíz de la pandemia por covid-19. Para ello, se diseñó una investigación cualitativa basada en la teoría fundamentada



mediante la revisión de artículos, y se aplicó la codificación con el *software* Taggette. Los resultados demuestran la importancia de que el turismo fortalezca el servicio y la atención al cliente para generar experiencias memorables y contribuir a la preservación del patrimonio natural, cultural y paisajístico, elementos vitales para mantener la sostenibilidad territorial y el crecimiento de la zona. Asimismo, se evidencian deficiencias en la formación y desarrollo de quienes ofrecen este servicio, pues carecen del conocimiento y las habilidades específicas necesarias para este sector.

Palabras clave: habilidades blandas, capacidades técnicas, servicio de calidad, pequeñas y medianas empresas, turismo, sustentabilidad.

Abstract

Soft Skills can be the trigger to empower companies through providing quality services or satisfactory experiences. Service providers must engage emotional and social skills to achieve customer satisfaction. Tourism is an important economic activity in Mexico due to its contribution to the Gross Domestic Product. The analysis of tourism small and medium enterprises (SMEs) was carried out to know the needs to achieve adaptable and competitive companies. The tourism sector and especially SMEs need to make changes arising from the COVID 19 pandemic. In this study, qualitative research was carried out based on the grounded theory with the review of articles and the coding was applied using the Taggette software. To identify growth needs, an approach was made to SMEs within this tourism sector. As a result of this research, it has been emphasized how tourism should strengthen customer service and attention to generate memorable experiences and help preserve the natural, cultural, landscape heritage, which are vital to maintain territorial sustainability as well as the growth of area. The deficiencies in the training and development of those who offer this service are shown, since they lack the knowledge and skills that they must have specifically for this sector; Therefore, this research focuses on the analysis of the soft skills necessary to provide a quality service.

Keywords: Soft skill, technical capacities, quality service, small and medium enterprises, tourism, and sustainability.

Resumo

As soft skills podem ser o gatilho para capacitar as empresas, fornecendo serviços de qualidade ou experiências satisfatórias, para as quais os fornecedores devem envolver competências emocionais e sociais para alcançar a satisfação do cliente. Portanto, neste trabalho foi realizada uma análise às pequenas e médias empresas turísticas (PME) para tentar compreender as suas necessidades, para que possam tornar-se empresas adaptáveis e competitivas, especialmente em consequência da pandemia de covid-19. Para tanto, desenhou-se uma pesquisa qualitativa baseada na teoria fundamentada nos dados, por meio da revisão de artigos, e a codificação foi aplicada com o software Tagette. Os resultados demonstram a importância do turismo reforçar o serviço e a atenção ao cliente para gerar experiências memoráveis e contribuir para a preservação do patrimônio natural, cultural e paisagístico, elementos vitais para manter a sustentabilidade territorial e o crescimento da área. Da mesma forma, são evidentes as deficiências na formação e desenvolvimento de quem oferece este serviço, uma vez que carecem de conhecimentos e competências específicas necessárias para este sector.

Palavras-chave: soft skills, capacidades técnicas, qualidade de serviço, pequenas e médias empresas, turismo, sustentabilidade.

Reception date: June 2023

Acceptance Date: March 2024

Introduction

After the manufacturing and automotive industries, tourism is one of the most important economic activities in Mexico, contributing at least 8.7% of the gross domestic product (National Institute of Statistics, Geography and Informatics [Inegi], December 18, 2019) . In fact, over the years, tourism has contributed to the development and growth of localities, municipalities and states. For this reason, both the federal and state governments have implemented various strategies to promote the strengthening of this sector. However, most of the programs are aimed at large companies, which has left tourism SMEs with insufficient attention in terms of developing strategies for their development in said market, which is why an approach was carried out. with SMEs in this sector to identify their growth needs.

Tourism is an activity especially susceptible to changes due to alterations in the environment where it takes place. Since it is a social and economic activity, various factors can influence this sector, such as political changes, the environment and social conditions.



An example of this was the covid-19 pandemic, which made tourism one of the most affected sectors due to the cessation of multiple activities. According to the World Tourism Organization (UNWTO) (2021), globally, tourist movement decreased by at least 75% compared to the previous year, resulting in a loss of millions of dollars.

This situation generated the need for authorities to design strategies to reactivate activity through new operating modalities, while companies had to adopt a new stance in the face of changes. (Sanchez-Valdés, Nava-Rogel, & Delgado-Cruz, 2021) In fact, according to the UNWTO (2021), currently it is preferred outdoor tourism, specialized and personalized to avoid interaction with large groups of people and avoid crowds.

Theoretical framework

With these new realities, SMEs in the tourism sector have had to adopt new ways of operating to comply with the health measures implemented in each state and in the country. In this regard, the UNWTO Secretary expressed:

This crisis gives us the opportunity to rethink what the tourism sector should be like and its contribution to people and the planet; the opportunity that, when rebuilt, the sector is better, more sustainable, inclusive and resilient, and that the benefits of tourism are widely and fairly shared (UNWTO, 2021, para. 1).

Now, as part of the change, it is essential to understand the importance of quality within an organization. Although each person may have different perceptions about this term and its application, defining the concept clearly will allow us to understand its importance and will serve as a precursor for organizations to be competitive.

Quality, therefore, can be defined as the properties or set of elements that add value to a good or service by satisfying the customer's needs (Duque Oliva, 2005). Various ways of measuring product quality are presented in the literature, and based on this measurement, decisions are made to improve in order to satisfy customer demands. On this matter, Alcalde San Miguel (2019) points out the following :

Today we are committed to the concept of total quality management, in which quality not only corresponds to the product, but also to the human teams that make up the organization partners, shareholder customer services, internal company services, relationship with suppliers, conservation of natural resources, attention to society (p. 3).

In tangible products, quality measurement can be more objective, as it focuses directly on physical aspects that can be improved. However, in services, being intangible, this process is more complex because the perception of each client can be influenced by many aspects that are outside the scope of the provider. Therefore, the measurement of service quality must consider different variables for its evaluation and measurement (Mora Contreras, 2011; Zepeda-Hurtado *et al.*, 2018).

Based on this analysis, it can be stated that customer satisfaction is the best indicator to determine if the service offered is meeting these expectations. Therefore, your responses are crucial, since, in general, satisfaction is an emotional reaction that involves the expectations and behaviors of the individual.

In addition, it is important to understand that service quality has specific characteristics that must be met to be evaluated, which include that it is intangible (it cannot be touched, seen, smelled or tasted until it is acquired), inseparable (the service occurs when same time that the client experiences it), variable (depends on external and internal factors) and perishable (occurs at a specific time and the experience cannot be repeated). Therefore, the profile of the client to whom the service is directed must be known to identify the factors that must be taken care of during its provision. Otherwise, you run the risk of generating a negative experience that will impact people's perception.

Within the emotions and behavior of customers, dissatisfaction can manifest itself in different elements of the service or in the entire service provided. Therefore, in order to meet customer expectations, suppliers must foster emotional and social skills (known as *soft skills*) that contribute to customer satisfaction (Martínez, 2021).

Soft skills refer to the set of personal skills and psychosocial capabilities that facilitate problem solving, decision making, as well as effective communication and empathy in daily life and at work (Rivas García *et al.*, 2019). In recent years, these have acquired considerable relevance in the training of professionals in all industries, since they not only contribute to job performance, but also to the personal sphere (Fuentes *et al.*, 2021). In fact, it has been recognized that these are essential for the success of staff development within a company, as well as for improving the work environment and organizational management (Espinoza Mina and Gallegos Barzola, 2020; Redondo Marín *et al.*, 2019). In other words, and unlike technical capabilities or hard skills, which refer to specific technical knowledge that helps carry out activities, soft skills focus on aspects more related to behavior and interpersonal interaction.

Another difference between these is that the former are usually acquired through formal education (schools or universities, as well as through specialized courses or training), while the latter are a process of constant development in each individual and can be cultivated in various ways, contexts and environments, such as at work, in extracurricular activities, at home, among others (Solares, 2019).

Methodology

The qualitative research approach is defined as one that produces results and discoveries in which statistical procedures or other means of quantification are not used (Foucault, 1999). This, in addition, implies a rational, and not mathematical, reinterpretation, with the purpose of identifying key words, concepts and relationships in the raw data and then organizing them in a theoretical scheme (Alveiro Restrepo-Ochoa, 2013). These qualitative methods are used in specific areas of knowledge, whether little explored or well known, with the aim of obtaining new knowledge (Shen *et al.* , 2020) through its three main components: data, procedures and reports.

Now, in line with the purpose of this study, the methodology used to analyze the data was the grounded theory proposed by Glaser and Strauss (1967) and described by Campo-Redondo and Labarca Reverol (2009) (figure 1).

Figure 1. Grounded theory proposed by Glaser and Strauss (1967)



For Glaser and Strauss, grounded theory is a research method in which theory emerges from systematically collected data. That is, it is the data that helps generate a theory to analyze the environments or phenomena under study.

In this research, a bibliographic review of 50 related articles was carried out, obtained from indexes such as JCR, Scopus and Conacyt . For analysis and coding, the *software was used* Taggutte (Roy *et al.* , 2009). This methodology proposes to analyze the data to then identify the outstanding results on the topic investigated with the aim of discovering emerging trends.

Depending on the *software* used, information is organized into nodes and hierarchies that create topologies, making it easy to identify keywords, properties, and create categories. Furthermore, coding is performed using the constant comparison technique when finding new connections. This *software* is able to establish these topologies, keywords and properties to contribute to the development of a new theory. In effect, Taggutte provides a “saturation” of the elements and categories of the study, which makes it possible to identify which elements are saturated and which are not. Figure 2 shows the frequency of words according to the data entered for this study.

Figure 2. Word cloud created with Taggutte



Source: self made

The cloud presents the frequency of the elements. The words with greater saturation are highlighted by the font size, which results in a graphic image of the topic of study.

Instruments used

Within the context of grounded theory, reference is made to the tools and techniques used to collect and analyze data. Some of the instruments used in this research were the following:

- Semi-structured interviews: Open-ended questions were asked to allow participants to express their experiences and perspectives in detail.
- Theoretical sampling was carried out, which involved the selection of participants based on their relevance to the phenomenon under study. This helped us develop additional theories through coding and collected data.
- Constant Comparative Analysis: Data were analyzed continuously to identify emerging patterns and categories emerged in the coding, which was open, axial, and selective.
- Triangulation: It was carried out by combining various data sources, such as interviews, observations and documents to reinforce the validity of the conclusions.
- Literature review: It was carried out after data collection and analysis to avoid preconceived influences. Specifically, journals indexed in JCR, Scopus and Conacyt were reviewed .

These instruments served to develop the new theory and to achieve a deeper understanding of the phenomenon studied. Flexibility and the ability to adapt as data was collected were our main features.

Results

Based on the analysis and conceptualization of soft skills, it has been found that these are relevant for development in both the professional and academic fields. In fact, the absence of soft skills limits the interaction between people, work teams and organizations, which affects job performance by not complementing technical capabilities. Furthermore, it restricts the professional growth of each individual and decreases the quality of the work offered within the company, thus validating the importance of identifying the soft skills necessary for the activity in development and carrying out their measurement.

The measurement of soft and hard skills differs considerably, as various methodologies have been developed to assess and quantify skills that involve emotions or perceptions of other people's behavior. In this sense, the evaluation of technical knowledge is more practical, which makes it easier to identify areas for improvement or the necessary



training compared to soft skills. However, many companies prioritize the development of technical skills over personal skills, although both are important for the overall growth and development of the company (Gómez-Gamero, 2019; OECD, 2017).

Now, based on the literature review, the main skills that are considered necessary have been identified:

Table 1. Literature review

	Classification	Guys	Author
<i>Skills</i>	Interpersonal skills	Assertive communication Negotiation Trust Cooperation Empathy	Redondo Marín <i>et al.</i> (2019)
	Cognitive habilyties	Problem solving, decision making, critical thinking, self-assessment, analysis and understanding of consequences	
	Emotional control skills	Stress and frustration tolerance	
	Soft skills	Listening, questioning skills, presentation, self-confidence and influence	Fuentes <i>et al.</i> (2021)
	Complex thinking skills	Analysis, Synthesis, Criticism	Zepeda- Hurtado <i>et al.</i> (2019)
	Communication skills	Reading, oral and written expression	
	Soft skills	Leadership, Teamwork	

	Soft skills	Teamwork, Problem solving skills, Effective time management, Change management, Stress management, Leadership, Effective communication, Active listening, Empathy	IDB (2017)
	Soft skills	Leadership Teamwork Communication	Espinoza Mina and Gallegos Barzola (2020)

Source: self made

In this research, the data collected and analyzed provide the basis for decision-making in relation to the needs of SME companies in the tourism sector. Furthermore, to enrich, share and confirm the findings, interviews were carried out with participants from the tourism sector with the aim of achieving a comprehensive understanding of the research.

Discussion

In the tourism sector, service quality is essential for the development of the services offered. In this sense, the need to develop skills that improve tourists' experiences has been recognized, as well as to specialize in the service offered and implement skills that contribute to the achievement of objectives within tourism (Rivas García et al., 2019).

However, in Mexico there are few programs dedicated to the quality of tourism services, which results in little training for the development of quality and competitiveness in the sector. As a result of this, an analysis of the soft skills required at management levels within the tourism sector was carried out, and some of the most significant were found to be leadership, motivation, teamwork, conflict resolution and decision making. These skills, initially intended for managerial or leadership levels, have also been identified as essential for middle and operational managers within the tourism activity due to the interaction with people, hence the importance of their development (Carhuancho Mendoza *et al.* , 2019).

It is recognized, therefore, that quality certifications and access to any certification within SMEs dedicated to this sector are useful for the positioning of the company. In fact, it can be argued that with government support these companies can become more competitive.

Government support, together with the participation of society in tourism activity, motivates SMEs to achieve a higher level of quality of services. This generates a chain of growth within the company, since improving quality increases competitiveness and achieves better positioning in the market, which benefits society in general (Araya-Fernández and Garita-González, 2019).

Finally, it should be noted that although tourism experiences may vary depending on the activities carried out, these are mainly divided into lodging services, restaurants, transportation and travel agencies. Therefore, although programs often focus on quality in general, there are few specific certifications for tourism services in particular.

Conclusions

This research managed to compile and analyze articles related to the services of tourism SMEs, which made it possible to classify soft skills based on what was mentioned by each author. In this sense, the processing of the information was carried out in accordance with the proposed methodology, and the result of the data processing through the *software* Taguette allowed us to establish the most relevant information of the analysis.

Likewise, feedback with sector participants was valuable in conducting a comprehensive assessment of the urgent needs of the sector. In conclusion, it was determined that it is necessary to develop soft skills at both a managerial and operational level within the tourism sector to provide the service expected by clients.

Future lines of research

The academy's commitment to society consists of offering solutions to its priority problems. For this reason, it is considered beneficial to strengthen the line of research on soft skills of tourism SMEs personnel with the aim of empowering companies in this sector and, therefore, contributing to the country's GDP. Specifically, future research could focus on designing an action model and developing strategies to improve customer service.

Thanks

We appreciate the facilities granted to carry out this work to the National Council of Science and Technology (Conacyt), to the National Polytechnic Institute (IPN), to the Secretariat of Research and Postgraduate Studies (SIP) with the projects SIP 20210388 and SIP 20231541. Likewise, to the Interdisciplinary Unit of Engineering and Social and Administrative Sciences, and to the Center for Research and Development of Digital Technology. In addition, to the Program to Stimulate the Performance of Researchers (EDI), to the Commission for the Operation and Promotion of Academic Activities of the National Polytechnic Institute (COFAA) and to the Master's Degree in SMEs of UPIICSA.

References

- Alcalde San Miguel, P. (2019). *Calidad Fundamentos,herramientas y gestion de la calidad para PYMES*. Asturias, España: Ediciones Paraninfo, S.A.
- Alveiro Restrepo-Ochoa, D. (2013). La teoría fundamentada como metodología para la integración del análisis procesual y estructural en la investigación de las representaciones sociales. *CES Psicología*, 6(1),122-133. <https://www.redalyc.org/articulo.oa?id=423539419008>
- Araya-Fernández, E. y Garita-González, G. (2019). Propuesta para el fortalecimiento de habilidades blandas y complementarias, y su impacto en el currículo TIC desde una perspectiva laboral, profesional y de gestión académica. *Revista Electrónica Calidad en la Educación Superior*, 10(2). <http://dx.doi.org/10.22458/caes.v10i2.1907>
- Campo-Redondo, M. y Labarca Reverol, C. (2009). La teoría fundamentada en el estudio empírico de las representaciones sociales: un caso sobre el rol orientador del docente. *Opción*, 25(60), 41-54.
- Carhuancho Mendoza, I. M., Sicheri Monteverde, L. G., Nolzco Labajos, F. A. y De la Torre Tejada, J. A. (2019). Estandarización del cuestionario para medir las habilidades gerenciales en el sector turismo (HGT). *Innova Research Journal*, 4(3). <https://doi.org/10.33890/innova.v4.n3.2019.1013>.
- Chiavenato, I. (2007). *Administración de recursos humanos. El capital humano de las organizaciones*. Mc Graw Hill.
- Conexión Intal (s. f). *La importancia de las habilidades blandas en las PYMES*. <https://conexionintal.iadb.org/2017/09/01/la-importancia-de-las-habilidades-blandas-en-las-pymes/>



- Duque Oliva, E. J. (2005). Revisión del concepto de calidad del servicio y sus modelos de medición. *Innovar*, 15(25), 64-80.
- Espinoza Mina, M. A. y Gallegos Barzola, D. (2020). Habilidades blandas en la educación y la empresa: mapeo sistemático. <https://doi.org/10.35290/rcui.v7n2.2020.245>
- Foucault, M. (1999). *Obras esenciales*. Paidós.
- Fuentes, G. Y., Moreno-Murcia, L. M., Rincón-Tellez, D. C. y Silva-García, M. B. (2021). Evaluación de las habilidades blandas en la educación superior. *Formación Universitaria*, 14(4), 49-60.
- Glaser, B. G. and Strauss, A. L. (1967). *The discovery of grounded theory: strategies for qualitative research*. Aldine de Gruyter.
- Gómez-Gamero, M. E. (2019). Las habilidades blandas competencias para el nuevo milenio. *DIVULGARE Boletín Científico de la Escuela Superior de Actopan*, 6(11).
- Guerra-Báez, S. P. (2019). Una revisión panorámica al entrenamiento de las habilidades blandas en estudiantes universitarios. *Psicol. Esc. Educ.*, 23. <https://doi.org/10.1590/2175-35392019016464>
- Instituto Nacional de Estadística Geografía e Informática (Inegi) (18 de diciembre de 2019). *Producto interno bruto turístico*. <https://www.inegi.org.mx/temas/turismosat/>
- Kiryakova, T., Kyurova, V. and Chankova, Y. (2019). Soft Skills for Sustainable Development in Tourism: The Bulgarian Experience. *European Journal of Sustainable Development*, 8(2), 57. <https://doi.org/10.14207/ejsd.2019.v8n2p57>
- Martínez, L. A. (2021). Conceptos y características del turismo rural. Programa de apoyo a la microempresa rural en América Latina y el Caribe (PROMER). <http://www.promer.cl/getdoc.php?docid=343>
- Maya, M. D. y Serrano Orellana, B. S. (2016). Desarrollo de soft skills: una alternativa a la escasez de talento humano. *INNOVA Research Journal*, 1(12), 59-76 <https://doi.org/10.33890/innova.v1.12.2016.81>
- Mora Contreras, C. E. (2011). La calidad del servicio y la satisfacción del consumidor. *Revista Brasileira de Marketing*, 10(2), 146-162. <http://www.redalyc.org/articulo.oa?id=471747525008>
- OCDE (2017). *Diagnóstico de la OCDE sobre la estrategia de competencias, destrezas y habilidades de México*. <https://www.oecd.org/mexico/Diagnostico-de-la-OCDE-sobre-la-Estrategia-de-Competencias-Destrezas-y-Habilidades-de-Mexico-Resumen-Ejecutivo.pdf>

- Organización Mundial del Turismo (OMT) (2021). *Programa Nacional de Turismo 2001-2006*. México.
- Ortega Goodspeed, T. O. (2016). *Desenredando la conversación sobre habilidades blandas*. Banco de Desarrollo de América Latina. <https://www.thedialogue.org/wp-content/uploads/2016/05/Soft-Skills-InDesign-Spanish-v4.pdf>
- Prada, M., Rucci, G. y Urzúa, S. (2019). *Training, Soft Skills and Productivity: Evidence from a Field Experiment in Retail*. IDB. <http://dx.doi.org/10.18235/0001714>
- Redondo Marín, M. P., Pulido Guerrero, E. G., Jiménez Ruiz, L. K. y Olivella López, G. (2019). Estrategias cognitivas y estilos de aprendizaje en estudiantes de básica secundaria. *Revista de Estilos de Aprendizaje*, 12(23), 30–49. <http://revistaestilosdeaprendizaje.com/article/view/1209>
- Rivas García, R. M., Cardoso, E. O. y Cortés, J. A. (2019). Propuesta de las competencias profesionales en turismo desde el enfoque del empleador. *RIDE. Revista Iberoamericana para la Investigación y el Desarrollo Educativo*, 9(18). <https://doi.org/10.23913/ride.v9i18.418>
- Rodríguez Góngora, G. Y., Escamilla Quintal, M. D. y Centeno Ley, M. G. (2017). Habilidades gerenciales en sistemas de gestión de la calidad en empresas turísticas. *NovaRua*, 8(14) <https://doi.org/10.20983/Novarua.2017.14.4>
- Roy, C., Cordy, J. and Koschke, R. (2009). Comparison and evaluation of code clone detection techniques and tools: A qualitative approach. *Science of Computer Programming*, 74(7), 470-495. <https://doi.org/10.1016/j.scico.2009.02.007>
- Sanchez-Valdes, A., Cruz, A., & Rogel, R. M. (2021). Motivaciones de empresas turísticas para certificarse en calidad. Evidencia empírica en el Estado de México. *Revista Venezolana de Gerencia: RVG*, 2021, 26(93), 349-369.
- Shen, M., Yang, C., Wu, C., Huang, H., Lin, Y., Shyu, Y. and Chung, S. (2020). Resuming Normal Life as a Family Caregiver During Drip-Like Recovery of Older Persons with Cognitive Impairment Recovering from Hip Surgery: A Grounded Theory. *Journal of Nursing Scholarship*, 52(3), 250-260.
- Solares, P. (2019). *Competencias, conocimientos, habilidades y actitudes*. <https://sg.com.mx/revista/45/competencias-conocimientos-habilidades-y-actitudes>
- UNWTO. (2021). *COVID-19 Respuesta Guiar la recuperación del turismo*. ONU, ONU Turismo es un organismo especializado de las Naciones Unidas, España. Obtenido de <https://www.unwto.org/es/turismo-covid-19>

Zepeda-Hurtado, H., Cardoso-Espinosa, E. O. y Rey-Benguría, C. (2018). El desarrollo de habilidades blandas en la formación de ingenieros. *Científica*, 23(1), 61-67.
https://www.redalyc.org/jatsRepo/614/61458265007/html/index.html#redalyc_61458265007_ref1

Contribution Role	Definition (just put the name of the author)
Conceptualization	Jesus Antonio Alvarez Cedillo Nashielly Yarzabal Coronel "equal"
Methodology	Jesus Antonio Alvarez Cedillo
Software	Jesus Antonio Alvarez Cedillo Carolina Ruiz de Chávez Alfaro "same"
Validation	Jesús Antonio Álvarez Cedillo "main" Carolina Ruiz de Chávez Alfaro
Formal Analysis	Carolina Ruiz de Chávez Alfaro
Investigation	Carolina Ruiz de Chávez Alfaro "same" Nashielly Yarzabal Coronel
Resources	Nashielly Yarzabal Coronel
Data curation	Carolina Ruiz de Chávez Alfaro
Writing - Preparation of the original draft	Carolina Ruiz de Chávez Alfaro "same" Nashielly Yarzabal Coronel
Writing - Review and editing	Carolina Ruiz de Chávez Alfaro "same" Nashielly Yarzabal Coronel
Display	Jesus Antonio Alvarez Cedillo
Supervision	Nashielly Yarzabal Coronel
Project management	Jesus Antonio Alvarez Cedillo
Fund acquisition	Jesús Antonio Álvarez Cedillo "same" Nashielly Yarzabal Coronel