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RESEARCH

Social innovation and non-discrimination in the organizations of the vid system in Sonora

Innovación social y no discriminación en las organizaciones del sistema de vid en Sonora

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Abstract

The objective of this research is to show how non-discrimination in the workplace due to pregnancy, constitutes a fundamental element for social innovation and allows progress in processes that lead to the construction of fairer and more equitable organizations. The methodology is based on the application of 14 semi-structured interviews to the same number of table grape exporters. The research design is non-experimental, with a mixed approach; it is intentional and correlational (association). The results reveal that in the table grape system there are organizations that have already implemented social innovation strategies, while there are some that are in the process of being carried out, and others that are just beginning the process. It is concluded that those organizations that present a higher level of non-discrimination in the workplace due to pregnancy, are the ones that have a higher level of social innovation.

Keywords: social innovation, corporate social responsibility, sustainable development, labor discrimination, pregnancy.

JEL Classification: Q01

Resumen

La presente investigación tiene el objetivo de mostrar evidencia referencial y empírica de cómo la no discriminación laboral por motivo de embarazo, constituye un elemento fundamental para la innovación social y permite avanzar en procesos que lleven a la conformación de organizaciones más justas y equitativas. La metodología se fundamenta en la aplicación de 14 entrevistas semiestructuradas a igual número de exportadoras de uva de mesa. El diseño de la investigación es no experimental, con un enfoque mixto; es de tipo intencional y correlacional (asociación). Los resultados revelan que en el sistema de vid de mesa existen organizaciones que ya han implementado estrategias de innovación social, mientras que hay algunas que están en el tránsito de su realización, y otras que apenas inician el proceso. Se concluye que aquellas organizaciones que presentan un mayor nivel de no discriminación

laboral por motivo de embarazo, son las que tienen mayor nivel de innovación social.

Palabras clave: innovación social, responsabilidad social empresarial, desarrollo sustentable, discriminación laboral, embarazo.

Clasificación JEL: Q01

1. Introduction

Currently, table grape system organizations aim to adhere to the business principles of social innovation by adopting practices that are more environmentally friendly and fairer to workers (Zúñiga, 2018). Among these principles is labor non-discrimination, which affects both men and women based solely on their physical appearance or life circumstances (CONAPRED, 2020).

Labor discrimination may occur based on race, nationality, age, political opinion, physical and/or sensory disability, sexual orientation, political affiliation, pregnancy, or motherhood, among others. It is an issue that generates fear among employees or job seekers hoping to join an organization. In Mexico, discrimination based on pregnancy is one of the most prevalent forms of labor discrimination (Didier, 2019).

Discriminatory labor practices against pregnant women are commonly associated with dismissal and pregnancy testing. However, they also include harassment, denial of promotions, reduction in wages, schedule changes without the employee's consent, assigning tasks that endanger the health of the woman and her child, exclusion from training programs, and lack of invitations to work meetings, among others (González, Bárcenas, Díaz & Pérez, 2021).

Managers of table grape system organizations in Sonora have become increasingly aware of the need to move toward social innovation and to promote decent work for both men and women—especially for those women who are pregnant or wish to experience motherhood in the future (Duarte, Dedieu & Schiavi, 2021).

From this commitment arises the objective of the present article: to demonstrate how labor non-discrimination—specifically on the basis of pregnancy—constitutes a key element of social innovation and enables progress toward the development of fairer and more equitable organizations.

This study uses as empirical evidence the table grape exporting organizations of Sonora. The methodology is based on 14 semi-structured interviews with the same number of organizations, selected through a representative sample with a 95% confidence level and a 7.5% margin of error. The results reveal that the organizations with the highest levels of non-discrimination based on pregnancy are also those that show the greatest degree of social innovation.

2. Literature review

1. Social Innovation

The concept of social innovation has been addressed from various disciplinary perspectives and begins with the search for creative and novel ways to meet unmet social needs, or those that have been addressed inadequately or urgently (Franco & Guerra, 2018). The concept is rooted in the introduction of new organizational structures and market-based mechanisms. Such organizations aim to provide sustainable well-being across economic, environmental, and social spheres (Haskell, Bonnedahl & Stål, 2021).

Social innovation is regarded as a transformative strategy that confronts and changes companies, organizations, and institutions within complex and specific contexts. This concept points to deep environmental, economic, and social change that goes beyond governmental norms and policies (Ortega & Marín, 2019). Social innovation must be grounded in changes that improve the cultural, normative, and regulatory structures of society, in order to optimize resources and promote economic and social development (Molina et al., 2019).

Although social innovation could be considered a fundamental and inherent element of the operation of companies, institutions, and organizations, it has recently become a new approach to management and business. It incorporates practices that internalize the ethical principle of sustainable development through its three components: environmental, social, and economic. This allows for the recognition of the interests of various stakeholders while prioritizing environmental preservation and the protection of human health, with the aim of ensuring the well-being of individuals, communities, and future generations (García, 2018).

Social innovation within organizations refers to the set of actions developed with the aim of generating results in three areas—economic, social, and environmental—while meeting the needs of all interested parties (Vargas-Merino, 2021).

2. The Table Grape System in Sonora

The table grape system in Sonora is comprised of approximately 41 organizations, which together cultivate around 17,200 hectares and contribute 89% of the production volume and 95% of exports. Their activities are mainly located in the municipalities of Caborca, Pitiquito, Altar, Hermosillo, Carbó, San Miguel de Horcasitas, Guaymas, and Empalme (Contreras, 2019).

Each year, around 25.4 million boxes of grapes are produced in Sonora, 90% of which are exported, while the rest is destined for the domestic market. Approximately 75% of exported boxes are shipped to the North American market, and the rest to Canada, the United Kingdom, and Australia (Bañuelos, Robles & Aranda, 2019). The average annual economic impact is 9.5 billion pesos, and the industry generates approximately four million wages per season (Herrera et al., 2022).

Sonora was the national leader in grape production in 2017 and 2018 (SAGARHPA, 2018). In 2017, it produced 334,355 tons, representing 80.4% of national production. It generated approximately 485.5 million in foreign currency, as most of the fruit is exported. In 2018, Sonora once again ranked first in national production, reaching 236,831 tons of grapes across different varieties (SAGARHPA, 2018).

Sonora contributes significantly to national grape production; the U.S. market is its main destination. Therefore, organizations in this system must comply with high standards, audits, and certifications (Herrera, Robles & Preciado, 2022).

3. *The Table Grape System, Its Certifications, and Social Innovation*

For the grape-producing and exporting organizations in Sonora, certifications, audits, and labels play an important role in the implementation of social innovation and sustainable development strategies. These mechanisms respond to increasingly aware consumers concerned about the environmental and social issues surrounding the agricultural products they consume (Contreras et al., 2018).

The main certifications, audits, and labels pursued by these organizations include:

i) GlobalG.A.P. (Good Agricultural Practices) and its add-on GRASP (Risk Assessment on Social Practice); ii) Fair Trade; iii) RainForest; iv) Kroger; v) PrimusGFS; vi) SENASICA; vii) México Calidad Suprema (MCS); viii) USDA Organic (U.S. Department of Agriculture); ix) Child Labor-Free Agricultural Company Distinction (DEALTI); x) Responsible Agricultural Company Distinction (DEAR); xi) Ethical Trade Audit for SEDEX Members (SMETA) (Contreras, 2019).

GlobalG.A.P. and GRASP

This certification aims to promote social innovation through sustainable development across its three pillars: environmental, social, and economic. It is based on two starting points: an official guideline endorsed by the U.S. Food and Drug Administration (FDA) and a private international protocol known as GlobalG.A.P. (Good Agricultural Practices). These practices consist of principles, standards, and technical recommendations applicable to the production, processing, and transportation of food, aimed at protecting human health, preserving the environment, and improving the living conditions of workers and their families (Nivelo, Pacheco & Pupo, 2020).

Fair Trade

Fair Trade is a global movement composed of a diverse network of producers, buyers, and organizations that seeks to create a fairer and more equitable trade model that fosters social innovation. It encourages doing what is right for the welfare of families, communities, and the planet. The certifying body supports responsible companies, empowers farmers, protects workers, and promotes environmental care (Fair Trade, 2020).

RainForest Alliance

RainForest Alliance is a member of the International Social and Environmental Accreditation and Labelling Alliance (ISEAL), which promotes social innovation and sustainable development systems in close collaboration with governments, companies, and NGOs to foster improvements and transform various industry sectors (ISEALALLIANCE, 2021).

Kroger

Kroger promotes positive changes within companies

and communities to protect both people and the planet. Through initiatives such as Zero Hunger, Zero Waste, and its Environmental and Social Impact Plan, this certifying body is committed to creating hunger- and waste-free communities, reducing climate impacts, and conserving natural resources—actions aligned with the principles of social innovation (Kroger, 2021).

PrimusGFS

The PrimusGFS standard is based on the Hazard Analysis and Critical Control Points (HACCP) system. It includes the measures that must be taken in agricultural production programs, both in field operations and administrative tasks in facilities. The goal is to encourage producers to assess operational risks and implement controls to ensure food safety and contribute to social innovation and sustainable development (Contreras, 2019).

SENASICA

The National Service for Agro-Alimentary Health, Safety, and Quality (SENASICA) is a decentralized agency of the Secretariat of Agriculture and Rural Development (SADER). It aims to prevent the entry of pests and diseases that may affect the agro-food sector. SENASICA also regulates and promotes certification systems that reduce food contamination risks and improve quality to facilitate national and international trade. These actions align with organizational transformation through mechanisms of social innovation (SENASICA, 2021).

México Calidad Suprema (MCS)

MCS is a certification body that supports the development and competitiveness of agro-food products through a seal that certifies only Mexican foods. From cultivation to packaging, it ensures the highest standards of safety, quality, and health. In collaboration with SENASICA, MCS has developed certification and oversight strategies for good handling practices to guarantee pest- and chemical-free products and to ensure consumer protection—principles aligned with social innovation (Contreras, 2019).

USDA Organic

The USDA Organic certification is based on the National Organic Program (NOP-USDA) of the U.S. Department of Agriculture. This certification is essential for companies wishing to export organic produce to the United States and supports social innovation by certifying quality management (Krüger, 2019). According to USDA, organic standards describe specific requirements that must be verified by an accredited certifying agent before products can be labeled as organic (USDA, 2021).

DEALTI

The Child Labor-Free Agricultural Company Distinction (DEALTI) is a free, voluntary management model issued by the Ministry of Labor and Social Welfare (STPS). It encourages agricultural companies hiring field workers to demonstrate compliance with labor laws, establish policies for child care and protection, implement measures to prevent child labor across all areas and processes, and demonstrate social responsibility practices for child protection. These are mechanisms proposed by social innovation, representing a new face of Corporate Social Responsibility (Vargas-Merino, 2021).

DEAR

The Responsible Agricultural Company Distinction (DEAR) arose from the Comprehensive Care Agreement for Agricultural Workers and reflects the interest of workers, producers, and authorities to transform the agricultural sector. DEAR is based on national and international agreements and guidelines, grouped into eleven key principles covering best practices in labor, social, environmental, infrastructure, and service welfare for workers—requirements consistent with the foundations of social innovation (CONAPESCA, 2017).

SMETA

A social audit is one of the most effective ways to assess working conditions in an organization and ensure transparency across the supply chain and support networks. These audits help brands evaluate their suppliers, show their commitment to human rights, and verify worker health and safety, all

Through the requirements imposed by these certifications, audits, and distinctions—and their integration into the organizations of the Sonoran table grape system—the principles of social innovation are fulfilled. These principles are grounded in the three pillars of sustainable development: environmental, economic, and social. The social dimension specifically addresses issues

of labor non-discrimination based on race, sex, age, public opinion, sexual orientation, political affiliation, physical and/or sensory disability, and pregnancy, among others (Terán, 2019).

4. Pregnancy, an Element of Labor Non-Discrimination for Social Innovation in the Table Grape System

Labor discrimination is an act that generates fear in employees or job applicants attempting to work in an organization. It can occur based on race, nationality, age, public opinion, physical and/or sensory disability, sexual orientation, political affiliation, and pregnancy or maternity, among other factors. Pregnancy-related discrimination is one of the most common forms of labor discrimination in Mexico (Didier, 2019).

Discriminatory labor practices against pregnant women are generally associated with dismissal and requests for pregnancy tests. However, these practices can take many forms, including harassment, denial of promotion, salary reduction, changes to working hours without the employee's consent, denial of basic needs such as bathroom breaks or the ability to sit down, and instructions to perform tasks that could endanger the woman's health or that of her child. Additional examples include exclusion from training programs and work meetings, among others (González, Bárcenas, Díaz & Pérez, 2021).

Managers of organizations in the table grape system have become increasingly aware of the need to move toward social innovation and the ongoing responsibility to promote decent work for both women and men in environments of freedom, equity, and safety—especially for women who are pregnant or who wish to experience motherhood in the future (Duarte, Dedieu & Schiavi, 2021). These managers recognize social innovation as a mechanism to comply with universal standards of social responsibility and sustainable development (Guadarrama, Calderón & Nava, 2018).

Therefore, this article aims to demonstrate how labor non-discrimination based on pregnancy constitutes a fundamental element of social innovation and enables progress in processes that lead to the creation of more just and equitable organizations.

3. Methodological Plan

The proposed methodological framework to determine whether there is a relationship between labor discrimination due to pregnancy and the level of social innovation in the organization begins with a literature review to identify the state of the art (A la Torre, 2019; Contreras, 2019; Morales, 2021).

The observation and evaluation units for this study are 41 table grape export companies located in the municipalities of Hermosillo, Carbó, Caborca, and San Miguel de Horcasitas (Contreras, 2019). The informants—in this case, the managers—are the individuals who will participate in the research and provide the necessary data, as their hierarchical position is directly related to decision-making on labor non-discrimination policies, including pregnancy as one of its key elements (Arias, 2019).

The research design is non-experimental, with a mixed-methods and correlational approach. To determine the sample size, a population of 41 organizations was considered. The sample (n) was estimated based on this population size (N) using the following formula for finite populations:

$$n = \frac{Z^2(N)(p)(q)}{[E^2(N-1)]+[Z^2(p)(q)]}$$

Where "n" is the sample size, "N" is the population size, "Z" is the value corresponding to the desired confidence level, "E" is the estimation error, "p" is the probability of success (i.e., being selected), and "q" is the probability of failure (i.e., not being selected).

By substituting the values into the formula, we obtain:

$$n = \frac{1.96^2\,(41)(0.97)(0.03)}{[0.075^2(41-1)]+[1.96^2(0.97)(0.03)]}$$

Through the semi-structured interview script, information was collected regarding workplace non-discrimination (or discrimination) based on socioeconomic status, public opinion, religion, age, foreign origin, indigenous descent, national origin, gender, physical disability, opportunities for

growth within the organization, access to well-paid positions, general training, training for emerging needs, participation in meetings, and diverse sexual preferences. However, the focus was placed specifically on workplace discrimination due to pregnancy (Terán, 2022).

With the support of the MaxQDA program, the 14 interviews were processed, and the resulting frequencies were exported to the RStudio program for analysis (Kuckartz & Rädiker, 2019; Vargas & Mesa, 2021). The key question explored was: Does the condition of pregnancy influence hiring or promotion decisions?

Regarding certifications and audits linked to social innovation and the three pillars of sustainable development, a review was conducted to create a general table of available data. This allowed for the construction of a specification block aligned with the verification points assessed by each certification and audit. From this, a proportional value was assigned to each certification, contributing to the overall valuation block—that is, the organization's level of social innovation.

Based on this review, a certification assessment mechanism was developed as follows:

A. An Excel spreadsheet was created listing the verification points covered by all certifications across the three main areas of sustainable development.

B. A total of 353 environmental review points were grouped into categories such as: pest, foreign matter, and crop disease control; use and management of chemicals and pesticides; soil management; fertilizer use; water and energy usage; air pollution; flora and fauna protection; waste and hazardous waste management; and greenhouse gas emissions.

C. A total of 584 social review points were grouped into the following categories: protection of workers' rights (social justice); occupational health, safety, and hygiene; education and training; hazard analysis and critical control points (HACCP); food safety and sanitation; organic practices; facility cleanliness and safety conditions; use of protectants and preservatives; and processes for audits, inspections, and monitoring.

D. Twelve economic review points were grouped into two categories:

E. Generalities (e.g., wage levels, payroll frequency, withholdings and deductions);

F. Particularities (e.g., economic capacity to support children's education, acquire or build a home, and pay for services such as electricity, water, and phone).

G. A binary coding system (1 = considered; 0 = not considered) was applied to each certification based on whether it addressed specific points in the environmental, social, and economic categories. Totals were calculated and a proportional value was assigned to each certification according to the number of review points addressed out of the total in each category.

H. A valuation block was compiled. Each organization, based on the certifications it holds, was assigned the respective proportional values. These values were summed to generate a final score indicating the organization's level of advancement toward sustainability.

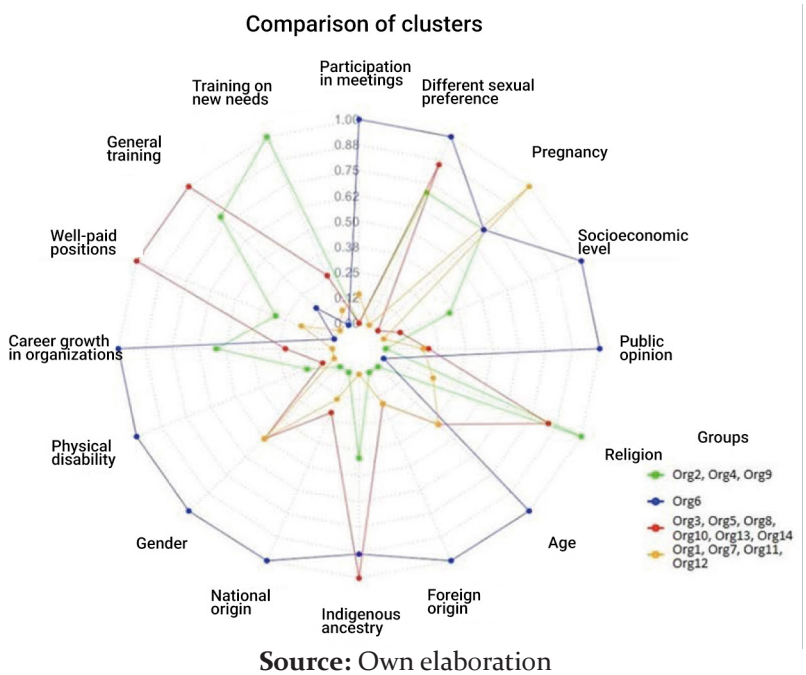
Finally, the data obtained from RStudio—based on responses from the semi-structured interviews—were combined with the results of the certification and audit review (including PrimusGFS, USDA Organic, GlobalG.A.P. and its GRASP add-on, Fair Trade, México Calidad Suprema, SENASICA, SMETA, DEALTI, DEAR, Kroger, and Rainforest Alliance). A Chi-square (X^2) test was then applied to test the hypothesis: "Labor non-discrimination due to pregnancy is related to organizational changes toward social innovation."

4. Results

1. Degree of labor non-discrimination in the "pregnancy" element

The information obtained through MaxQDA and RStudio revealed the formation of four groups developed based on labor non-discrimination criteria, where the element analyzed was "pregnancy." It was determined that values ranging from 0.10 to 0.34 represent a low degree of compliance with labor non-discrimination, while values between 0.35 and 0.74 indicate a medium

Figure.1 Cluster comparison chart by shared characteristics.



Source: Own elaboration

degree, and values within the range of 0.75 to 1.00 represent a high degree.

In Group I, managers 2, 4, and 9 expressed support for the inclusion of minorities and efforts to reduce workplace discrimination. They indicated that strategies to include individuals regardless of age, foreign origin, national origin, sex, or physical disability are still under development. Additionally, they are working to ensure that positions are well-paid and that participation in meetings is equitable. Regarding non-discrimination due to pregnancy, they highlighted the importance of hiring and promoting pregnant women within the organization. They also mentioned efforts to adjust workloads so these women can enjoy the maternity leave to which they are legally entitled, emphasizing the importance of retaining these employees. They confirmed that pregnant women have indeed been hired. The score for the pregnancy variable in this group ranged from 0.35 to 0.74, indicating a medium level.

In Group II, manager 6 voiced strong support for workplace non-discrimination, which was reflected across most variables: sexual preference, socioeconomic status, public opinion, age, foreign origin, indigenous descent, national origin, sex, physical disability, meeting participation, organizational growth, and pregnancy. The manager stated that general management seeks talented individuals, regardless of personal conditions, and confirmed that pregnant women have been hired with the expectation that they contribute to the organization. The pregnancy variable score also fell within the medium range (0.35 to 0.74).

For Group III, managers 3, 5, 8, 10, 13, and 14 expressed general support for the inclusion of all individuals, regardless of physical appearance or life circumstances. However, this was only reflected in certain variables such as sexual preference, religion, indigenous descent, access to well-paid positions, and general training. Concerning pregnancy discrimination, they agreed that it is important to include and promote pregnant women but stressed the need to assess the risks of the roles being applied for, particularly in terms of exposure to extreme weather or agrochemicals. Notably, these managers did not provide concrete examples from their organizations, which negatively impacted their evaluation. As a result, this group obtained a low level score of 0.

In Group IV, managers 1, 7, 11, and 12 stated their support for non-discrimination in the workplace, specifically in relation to sexual preference and age. They noted that acceptance efforts have progressed and that the inclusion of older adults and people with diverse sexual orientations is becoming more normalized. They also mentioned ongoing work on areas like religion, indigenous descent, fair pay,

general training, training for new needs, meeting participation, sex, socioeconomic status, public opinion, physical disability, and opportunities for organizational growth. Regarding pregnancy, these managers indicated that their organizations have formal policies prohibiting pregnancy testing or inquiries during recruitment or promotion processes. They confirmed that pregnant women have been hired and have fully exercised their rights. They emphasized a commitment to providing the necessary tools for a safe and comfortable work environment. This group obtained a high score, ranging from 0.75 to 1.00.

It is also worth noting that 6 of the 14 managers interviewed were women (42.85%), some of whom started as assistants and have grown professionally within the organization—demonstrating career advancement irrespective of pregnancy or maternity.

2. Social Innovation Levels Across Organizations

Table 1 (see Annexes) indicates that organizations 6 and 7 have 10 certifications each. They are followed by organizations 2, 4, 5, 8, and 14, which hold between 5 and 8 certifications. Organizations 1, 3, 9, 10, 11, 12, and 13 have between 2 and 4 certifications.

Based on the proportion scores assigned to each certification (see Table 2 in the Annexes), the final social innovation level was calculated for each organization using a valuation block (see Table 3 in the Annexes). Following Baumgartner and Ebner (2010), organizations scoring: 0 to 0.9 were categorized as low level, 1 to 1.9 as medium level, and 2 to 2.9 as high level.

The results are as follows:

- Organizations 4, 6, and 7 achieved scores between 2 and 2.9, placing them in the high social innovation level category, supported by their extensive certification compliance.
- Organizations 2, 3, 5, 8, 10, 11, 13, and 14 also achieved high scores, between 2 and 2.9, suggesting a strong commitment to social innovation.
- Organizations 1, 9, and 12 scored between 0 and 0.9, indicating a low level, as they are still in the early stages of adopting strategies aligned with social innovation and sustainable development.

3. Association Between Pregnancy-Based Non-Discrimination and Social Innovation Level

The previously defined groupings (I, II, III, IV)—based on non-discrimination variables (with emphasis on pregnancy) processed in RStudio—were integrated with the social innovation valuation data (see Table 3 in the Annexes).

The findings (see Table 4) were as follows:

- Organizations 4, 6, and 7 achieved a high social innovation level, demonstrating extensive compliance with certifications.
- Organizations 2, 3, 5, 8, 10, 12, and 13 showed medium-level compliance.
- Organizations 1, 9, and 11 were placed in the low-level category, indicating the need for further efforts in environmental protection and employee welfare to meet certification standards.

In conclusion, most organizations in Sonora's table grape system are advancing toward social innovation: 11 of the 14 organizations (78%) have either achieved a high level or are actively implementing improvements to reach it. Only three organizations remain at the initial stage.

With regard to non-discrimination due to pregnancy:

- Managers from organizations 2, 4, 6, and 9 (Groups I and II) showed the strongest commitment.
- Managers from organizations 3, 5, 8, 10, 13, and 14 (Group III) demonstrated moderate commitment.
- Managers from organizations 1, 7, 11, and 12 (Group IV) showed a minimal focus on this issue.

Finally, a Pearson Chi-square test of independence was conducted. The test yielded a Chi-square value of 11.132, with 6 degrees of freedom and a p-value of 0.08438. This result rejects the hypothesis of independence, indicating a statistically significant association between the variables: the level of social innovation is dependent on the degree of pregnancy-based non-discrimination within the organization.

5. Discussion

The statements made by managers regarding the importance of hiring and promoting pregnant women within the organization, while ensuring full enjoyment of their legal rights, are consistent with the findings of González et al. (2021). However, Bilo and Tebaldi (2020) note that the United Nations Development Programme (UNDP) and the United Nations Children's Fund (UNICEF) stress the need to assess the risks faced by a pregnant woman and her baby before assigning them to a position, given that some workplace conditions may pose hazards.

Managers' responses concerning the implementation of policies that prohibit requesting pregnancy tests from women during recruitment or promotion processes align with Varas (2022), who emphasizes the need to raise awareness of such discriminatory practices and provide information to eradicate them, thereby fostering fairer and more equitable workplaces. This practice reflects one of the demands made by consumers of this product and is included in the system's certification requirements, in accordance with Contreras (2019) and Terán (2022).

According to Guadarrama et al. (2018), social innovation is directly linked to the principle of sustainable development and the criterion of social responsibility. Furthermore, as noted by Meza et al. (2017) and Baumgartner and Ebner (2010), each organization has a certain level of maturity in this regard. This is consistent with the present findings: organizations that continuously strive to meet certification standards progress through maturity levels ranging from "satisfactory" (low) to "sophisticated" (high).

The Chi-square test confirmed a dependency between the variables "non-discrimination due to pregnancy" and "social innovation," which is consistent with Acosta (2014), who used Pearson's Chi-square values to determine variable dependency in studies with small samples.

6. Conclusions

This study has addressed workplace non-discrimination on the basis of pregnancy with the aim of advancing toward social innovation—a concept closely tied to the principles of sustainable development and social responsibility. The table grape organizations in Sonora can move in this direction by relying on certifications, audits, and quality seals that guarantee care for both the environment and workers throughout all organizational processes.

It is evident that managers who demonstrated a moderate to high inclination toward non-discrimination based on pregnancy (organizations 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, and 13) are either in the process of transitioning toward social innovation or have already achieved a high degree of compliance with this concept. This accounts for 78.57% of the system.

Through the Chi-square test results (value, p, and degrees of freedom), it was concluded that workplace non-discrimination due to pregnancy is related to the level of social innovation among table grape organizations in Sonora.

Regarding the academic field, this article presents an original contribution by establishing a relationship between the concept of social innovation and workplace non-discrimination based on pregnancy. This offers a foundation to better understand the specific challenges faced by the table grape system in the state of Sonora.

With respect to the organizations themselves, this study encourages the elimination of discrimination based on pregnancy—and other grounds—as a means to restructure recruitment, promotion, and participation processes, as well as to reform organizational structures. These changes will help organizations transition toward social innovation and cultivate a renewed organizational culture and improved public image. Moreover, they will contribute to reducing workplace inequalities and promoting balance across organizational roles.

A limitation of this study is that interviews were conducted exclusively with organizational managers. Future research should consider applying the instrument to other hierarchical levels. It is also recommended to design an additional instrument to gather more specific information on recruitment, promotion, and participation processes currently in use within the table grape organizations in Sonora.

This is an exploratory study that serves as a starting point for more in-depth research aimed at fully explaining the behavior of organizations seeking to ensure their transition toward social innovation.

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Annexes

Table 1. Certifications by organization.

Organización	Primus GFS	USDA Organic	Global GAP	Fair Trade	México C.S.	SENASICA	SMETA	DEALTI	DEAR	Kroger	Rain Forest	TOTAL
1	0	0	1	0	0	0	1	0	0	0	0	2
2	1	1	1	1	0	0	1	0	0	0	0	5
3	1	0	0	0	0	1	1	0	0	0	0	3
4	1	1	1	1	0	1	1	1	0	0	0	7
5	0	0	1	0	1	1	0	1	0	0	1	5
6	1	1	1	1	1	1	1	0	1	1	1	10
7	1	1	1	1	1	1	1	1	0	1	1	10
8	1	0	1	1	0	1	1	1	0	0	0	6
9	1	1	1	0	0	0	0	0	0	0	0	3
10	0	0	1	0	0	0	1	0	0	1	0	3
11	1	1	1	0	0	0	1	0	0	0	0	4
12	1	0	0	0	0	0	0	0	0	1	0	2
13	0	0	1	0	0	1	1	0	0	0	0	3
14	1	1	1	1	1	1	0	1	0	0	0	7
TOTAL	7	5	8	5	3	6	7	4	1	2	3	

Source: Own elaboration

Table 2. Proportion corresponding to each certification, audit, and label according to the participation achieved in the three areas of sustainable development.

Certification	Scope of social innovation						Total Proportion
	Environmental		Social		Economic		
	Score	Proportion	Score	Proportion	Score	Proportion	
Primus GFS	58	0.0838	97	0.0958	0	0.0000	0.1796
USDA Organic	119	0.1720	144	0.1422	0	0.0000	0.3141
GlobalGAP	93	0.1344	124	0.1224	0	0.0000	0.2568
Fair Trade	63	0.0910	20	0.0197	6	0.1935	0.3043
México C.S.	140	0.2023	83	0.0819	0	0.0000	0.2842
SENASICA	143	0.2066	100	0.0987	6	0.1935	0.4989
SMETA	33	0.0477	123	0.1214	10	0.3226	0.4917
DEALTI	0	0.0000	44	0.0434	0	0.0000	0.0434
DEAR	0	0.0000	45	0.0444	2	0.0645	0.1089
Kroger	15	0.0217	143	0.1412	3	0.0968	0.2596
Rain Forest	28	0.0405	90	0.0888	4	0.1290	0.2583
TOTAL	692		1013		31		

Source: Own elaboration

Table 3. Proportion corrresponding to each certification, audit, and label.

Organization	Primus GFS	USDA Organic	Global GAP	Fair Trade	Mexico C.S.	SENASICA	SMETA	DEALTI	DEAR	Kroger	Rain Forest	TOTAL
1	0.0000	0.0000	0.2568	0.0000	0.0000	0.0000	0.4917	0.0000	0.0000	0.0000	0.0000	0.7485
2	0.1796	0.3141	0.2568	0.3043	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0548
3	0.1796	0.0000	0.0000	0.0000	0.0000	0.4989	0.4917	0.0000	0.0000	0.0000	0.0000	1.1702
4	0.1796	0.3141	0.2568	0.3043	0.0000	0.4989	0.4917	0.0434	0.0000	0.0000	0.0000	2.0888
5	0.0000	0.0000	0.2568	0.0000	0.2842	0.4989	0.0000	0.0434	0.0000	0.0000	0.2583	1.3416
6	0.1796	0.3141	0.2568	0.3043	0.2842	0.4989	0.4917	0.0000	0.1089	0.2596	0.2583	2.9564
7	0.1796	0.3141	0.2568	0.3043	0.2842	0.4989	0.4917	0.0434	0.0000	0.2596	0.2583	2.8909
8	0.1796	0.0000	0.2568	0.3043	0.0000	0.4989	0.4917	0.0434	0.0000	0.0000	0.0000	1.7747
9	0.1796	0.3141	0.2568	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.7505
10	0.0000	0.0000	0.2568	0.0000	0.0000	0.0000	0.4917	0.0000	0.0000	0.2596	0.0000	1.0081
11	0.1796	0.3141	0.2568	0.0000	0.0000	0.0000	0.4917	0.0000	0.0000	0.0000	0.0000	1.2422
12	0.1796	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2596	0.0000	0.4392
13	0.0000	0.0000	0.2568	0.0000	0.0000	0.4989	0.4917	0.0000	0.0000	0.0000	0.0000	1.2474
14	0.1796	0.3141	0.2568	0.3043	0.2842	0.4989	0.0000	0.0434	0.0000	0.0000	0.0000	1.8813

Source: Own elaboration

Table 4. Social innovation assignment by certifications according to grouping by non-discrimination in employment (Pregnancy)

Groups by non-discrimination in employment (Pregnancy variable)	Level of social innovation (Valuation)		
	Low	Medium	High
A	1	1	1
B	0	0	1
C	0	6	0
D	0	1	1

Source: Own elaboration