

Effects Of Local Ordinance Implementation On The Mental Health Of Unauthorized Street Vendors In Pagadian City, Philippines

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Abstract: *This study examines the effects of local ordinance implementation on the mental health of unauthorized street vendors in Pagadian City, with a particular focus on stress and anxiety levels. Employing a descriptive quantitative research design, data were collected from 135 street vendors using a structured survey questionnaire. The findings indicate that street vendors experience a moderate degree of stress, primarily driven by financial instability, restricted income opportunities, and apprehension over enforcement measures. The greatest stress was reported in relation to the persistent pressure to earn a livelihood despite regulatory constraints, while the highest anxiety was associated with the inability to meet daily household expenses. Statistical analysis using the Chi-square test revealed a significant relationship between awareness of local ordinances and stress levels, suggesting that increased awareness may contribute to heightened stress among vendors. However, no significant relationship was found between ordinance awareness and anxiety levels, although respondents with partial awareness exhibited slightly higher anxiety, possibly due to confusion or misinformation. These results underscore the need for inclusive policy frameworks, accessible mental health support services, and targeted financial literacy initiatives to promote the well-being and resilience of informal sector workers.*

Keywords: *Unauthorized street vendors, Mental health, Stress, Anxiety, Local ordinance implementation, Informal economy, Policy impact, Psychosocial support.*

1. Introduction

Street vending constitutes a vital component of the informal economy in many developing countries, providing income and employment for individuals who often lack access to stable, formal-sector work (Bromley, 2000; Roever & Skinner, 2016). In the Philippines, street vendors are an integral part of urban life, supplying affordable goods and services to diverse communities while sustaining their own households through self-employment. However, the operations of unauthorized street vendors frequently clash with local ordinances designed to regulate the use of public spaces and maintain urban order.

In Pagadian City, local government units have enacted ordinances intended to uphold public order, safety, and cleanliness in busy areas such as markets, parks, and transportation terminals. While these measures serve legitimate urban governance objectives, their enforcement often leads to the displacement, penalization, or harassment of street vendors who rely on daily sales for survival. Consequently, vendors face heightened economic vulnerability, instability, and uncertainty regarding their livelihoods.

Globally, restrictive urban policies and regulatory frameworks have been shown to generate profound psychosocial consequences for informal workers. Roever and Skinner (2016) argue that forced evictions, confiscation of goods, and harassment by authorities can lead to elevated levels of stress, anxiety, and depression among street vendors, exacerbating the precarity inherent in informal work. The Philippine Urban Poor Commission (2020) similarly noted that urban clearance programs and sidewalk ordinances frequently result in the marginalization of street vendors, often without adequate alternative livelihood options or social protection.

While considerable attention has been given to the economic implications of local ordinances for informal workers, limited empirical research exists on their mental health impacts, particularly within the context of smaller urban centers like Pagadian City. Existing studies, such as Palatino's (2018) examination of urban policies in Metro Manila, have documented cases of depression, emotional distress, and chronic anxiety among street vendors exposed to repeated enforcement actions. However, the experiences of street vendors in provincial cities remain underexplored, leaving a critical gap in understanding the localized impacts of urban regulatory practices on mental well-being.

This study seeks to address this research gap by examining the effects of local ordinance implementation on the mental health of unauthorized street vendors in Pagadian City, with particular focus on stress and anxiety levels. By investigating how

awareness and enforcement of local policies shape vendors' psychological states, the study aims to shed light on the complex interplay between urban governance and mental health outcomes for informal workers. The findings are expected to contribute to the broader discourse on inclusive urban policy, social welfare, and mental health support, emphasizing the need for balanced approaches that protect public order while safeguarding the well-being of economically marginalized populations.

1.1. Statement of the Problem

This study aims to determine the effect of local ordinance implementation on the mental health of unlicensed street vendors in Pagadian City. Specifically, this study sought to answer the following questions:

- 1.1.1. What is the socio-demographic profile of the respondents in terms of age, sex, location of stall, types of street food sold, number of years in street vending, income, and highest educational attainment?
- 1.1.2. What is the level of awareness of the respondents in the existing ordinances?
- 1.1.3. What is the level of Mental health issues of street vendors in terms of stress and anxiety?
- 1.1.4. Is there a significant relationship between the level of awareness of ordinance and mental health?

2. Objectives

This study aimed to examine the impact of local ordinance implementation on the mental health of unauthorized street vendors in Pagadian City. Specifically, it sought to:

- 2.1. Determine the levels of stress and anxiety experienced by unauthorized street vendors in Pagadian City.
- 2.2. Identify the primary factors contributing to stress and anxiety among these vendors in relation to local ordinance enforcement.
- 2.3. Assess the relationship between street vendors' awareness of local ordinances and their reported stress levels.
- 2.4. Examine the relationship between street vendors' awareness of local ordinances and their reported anxiety levels.
- 2.5. Provide evidence-based insights to inform local policymakers, social welfare agencies, and community stakeholders on strategies to mitigate the adverse mental health effects of regulatory enforcement on informal workers.

3. Methods

This study utilized a descriptive quantitative research design, which is appropriate for systematically describing the characteristics of a given population and examining relationships between variables without manipulating them (Creswell, 2014). Descriptive quantitative research enables the researcher to collect numerical data, summarize observable trends, and draw statistical inferences about the levels of stress and anxiety experienced by unauthorized street vendors in Pagadian City in relation to their awareness of local ordinance implementation.

This design was selected to provide a clear, objective, and measurable understanding of the psychosocial effects of local regulatory measures on an economically vulnerable population. By employing this approach, the study aims to generate empirical evidence that can inform policy decisions and community interventions.

The study was conducted in Pagadian City, Zamboanga del Sur, focusing on areas with a high concentration of unauthorized street vending activities, such as public markets, parks, and transportation terminals. The respondents consisted of 135 unauthorized street vendors operating within the city's jurisdiction.

A purposive sampling technique was employed to select participants who met the inclusion criteria: (1) street vendors without legal permits or licenses to operate, (2) currently engaged in street vending within the city's regulated public spaces, and (3) willing to participate voluntarily in the study.

The primary research instrument utilized in this study was a structured survey questionnaire, which was carefully designed to gather quantitative and descriptive data aligned with the research objectives. The questionnaire was organized into two major sections.

The first section collected the socio-demographic profile of the respondents, including age, sex, civil status, educational attainment, income level, years of vending experience, and vending location. This section also assessed the respondents' level of awareness of local ordinances that affected unauthorized street vending. Awareness was measured using a set of 13 custom-formulated statements based on the provisions of existing local policies in Pagadian City, such as the "*Peddling, Soliciting, and Itinerant Merchant Regulation Ordinance of 2020.*" The researchers rated the respondents' awareness using a simple categorical scale: "Aware" and "Slightly Aware."

In this study, the Depression, Anxiety, and Stress Scale – 21 Items (DASS-21) was utilized as the primary research instrument to measure the levels of anxiety and stress among the respondents. The DASS-21 is a widely used, reliable, and valid self-report questionnaire designed to assess the negative emotional states of depression, anxiety, and stress (Lovibond & Lovibond, 1995). However, this study only caters the level of stress and anxiety of the respondents.

The DASS-21 is a short-form version of the original 42-item DASS (DASS-42), developed by Lovibond and Lovibond (1995), and retains the same three-factor structure. It comprises 21 items, with seven items allocated to each subscale. Respondents are asked to indicate the extent to which each statement applied to them over the past week using a 4-point Likert scale ranging from 0 (Did not apply to me at all) to 3 (Applied to me very much or most of the time) (Lovibond & Lovibond, 1995).

Descriptive statistical methods, including frequency distributions, means, and standard deviations, were used to summarize the socio-demographic characteristics and the levels of stress and anxiety. A Chi-square test of independence was employed to examine the relationship between vendors' awareness of local ordinances and their reported stress and anxiety levels. Data were processed and analyzed using statistical software to ensure accuracy and reliability.

4. Results and Discussions

This chapter presents the analysis and interpretation of the data gathered from the foregoing study, which aimed to determine the characteristics of the unlicensed street vendors in Pagadian City who participated in the study.

Table 1. Socio-Demographic Profile of Respondents

Socio-Demographic Profile	Count	Percentage
Sex	135	100.0%
Female	66	48.9%
Male	68	50.4%
No response	1	0.7%
Age Group	135	100.0%
15 - 20 years old	3	2.2%
21- 25 years old	10	7.4%
26 -30 years old	40	29.6%
31 - 35 years old	36	26.7%
36 - 40 years old	29	21.5%
41 years old and above	17	12.6%
Educational Attainment	135	100.0%
College Graduate	1	0.7%
College Level	31	23%
Elementary Graduate	7	5.2%
Elementary Level	6	4.4%
High School Graduate	58	43%
High School Level	27	20%
Vocational	4	3%
No response	1	0.7%

Table 1 shows the socio-demographic profile of the 135 unauthorized street vendors surveyed in Pagadian City, providing meaningful insight into the vulnerable population most likely to be affected by local ordinance implementation. The nearly equal gender distribution—50.4% male and 48.9% female, with only 0.7% preferring not to disclose—suggests that street vending is a gender-inclusive economic activity. This aligns with Chen's (2012) assertion that informal employment, particularly street vending, is accessible to both men and women and is vital in supporting

diverse households in urban areas. Regarding age, most vendors fall within the economically active age range, with 29.6% aged 26–30, 26.7% aged 31–35, and 21.5% aged 36–40. These figures highlight that street vending is a primary livelihood option for individuals in their prime working years. This observation reinforces Chen's (2012) conclusion that informal employment absorbs those excluded from formal labor markets, especially in developing contexts where stable jobs may be scarce.

The education profile of the respondents further supports this connection. Most (43%) are high school graduates, while many have not completed higher education. Only one respondent (0.7%) holds a college degree, indicating that the street vending sector predominantly comprises individuals with limited formal education. Chen (2012) notes that low educational attainment is a common feature among informal workers, as they often face substantial barriers to formal employment, including skill mismatch and lack of access to professional networks. These constraints compel many to enter informal livelihoods such as street vending, which requires little capital, has fewer bureaucratic requirements, and offers immediate income.

Thus, the socio-demographic characteristics observed in the Pagadian City survey are consistent with global patterns of informal labor described in the literature. Chen (2012) framework helps contextualize the profile of unauthorized street vendors as a reflection of systemic exclusion from formal economic opportunities. These vendors—many of whom are of working age, minimally educated, and equally divided by gender—are not simply choosing street vending; they are often driven to it by necessity. As such, understanding their demographic profile is essential not only for identifying who is most affected by local ordinances and anticipating how these regulations could affect their mental health and socioeconomic stability.

Table 2. Street Vending Information

Street Vending Information	Count	Percentage
Stall Location	135	100.00%
Balangasan	14	10.40%
Dumagoc	6	4.40%
Gatas	6	4.40%
Kawit	11	8.10%
Lumbia	6	4.40%
San Francisco	16	11.90%
San Jose	13	9.60%
San Pedro	10	7.40%
Santiago	12	8.90%
Sta. Lucia	28	20.70%
Sta. Maria	5	3.70%
Sto. Niño	8	5.90%
Number of Years Vending	135	100.00%
1 -2 years	54	40%
3 - 4 years	40	29.60%
5- 6 years	7	5.20%
Below 1 year	31	23%
No response	3	2.20%
Monthly Income	135	100.00%
Php 1,001.00 - Php 3,000.00	78	57.80%
Php 3,001 - Php 5,000.00	24	17.80%
Php 500.00- Php 1,000.00	25	18.50%
No response	8	5.90%
Reliance on street vending for livelihood	135	100.00%
Yes	117	86.70%
No	18	13.30%
Receiving financial or government assistance	135	100.00%
Yes	82	60.70%
No	53	39.30%
Having another source of income		
No	117	86.70%
Yes	18	13.30%
Bao-Bao Driver	2	11.10%
Construction	2	11.10%
Fish Vendor	1	5.60%
Labandera	1	5.60%
Labor	1	5.60%
Manicurists	2	11.10%
Online business/selling	1	5.60%

Sari-sari store	3	16.70%
Selling non-food items like cloth	1	5.60%
Tricycle driver	2	11.10%

Table 2 presents the street vending information provided by the respondents and offers a clearer view of the working environment and economic realities experienced by unauthorized street vendors in Pagadian City. Regarding stall location, the highest concentration of vendors was recorded in Sta. Lucia, which accounted for 20.7% of respondents. Other significant areas included San Francisco (11.9%), Balangasan (10.4%), and San Jose (9.6%), indicating that vending activity is distributed across various barangays, with several hotspots for informal trade. Locations such as Santiago (8.9%), Kawit (8.1%), and San Pedro (7.4%) also hosted a notable number of vendors, while fewer respondents reported vending in Sto. Niño (5.9%), Dumagoc, Gatas, and Lumbia (each at 4.4%), and Sta. Maria (3.7%). This spread shows how informal vending has become an embedded aspect of local microeconomies in multiple neighborhoods, often in residential or highly trafficked commercial areas.

The length of time engaged in street vending varied among respondents, with a significant proportion (40%) reporting they have been vending for 1 to 2 years, followed by 29.6% who have done so for 3 to 4 years. Notably, 23% have been in the trade for less than one year, suggesting a relatively recent entry of some vendors into the informal sector—possibly driven by pandemic-related job losses or economic downturns. A smaller group (5.2%) had been vending for 5 to 6 years, and a few did not disclose this information (2.2%). These figures highlight the transitory nature of many vendors’ engagement in this livelihood, with a considerable portion relatively new to the trade.

Regarding monthly income, a majority (57.8%) of the respondents earned between Php 1,001.00 and Php 3,000.00, while 18.5% reported earning even less— between Php 500.00 and Php 1,000.00. Another 17.8% had slightly higher earnings in Php 3,001.00 to Php 5,000.00. These income levels reflect the precarious financial condition of most street vendors, with the majority falling well below the national poverty threshold. The data underscores the importance of vending as a source of subsistence, even if it provides only minimal earnings.

Despite the high dependence on street vending, only 13.3% of respondents reported having another source of income, further emphasizing their economic vulnerability. The few who had supplementary livelihoods were engaged in low-income occupations such as being sari-sari store owners (16.7%), manicurists (11.1%), bao-bao or tricycle drivers (11.1%), construction workers (11.1%), labanderas (5.6%), online sellers (5.6%), and other minor trades. These alternative sources, while helpful, are neither sufficient nor stable, further cementing their reliance on vending as their primary economic activity.

The profile of unauthorized street vendors reveals a highly vulnerable population concentrated in various urban barangays, earning meager incomes and largely dependent on vending for survival. Many have entered the trade recently, possibly due to worsening economic conditions, and very few have alternative income sources. While some receive government aid, a significant number remain unsupported, which may exacerbate their exposure to mental health risks, especially when local ordinances threaten their ability to continue vending. The detailed profile of unauthorized street vendors in Pagadian City highlights their economic vulnerability and dependence on informal livelihoods. This situation reflects broader patterns observed among street vendors in the Philippines.

A study by Solidum (2023) found that street vendors often have limited access to formal employment due to a lack of skills and training. Many vendors earn daily incomes of ₱500 or less and have been vending for several years, underscoring the precarious nature of their economic activities.

Similarly, research by Recio (2019) emphasizes that street vendors frequently resort to self-help strategies, such as informal savings schemes and borrowing from loan sharks, to sustain their businesses. These practices, while providing short-term relief, often lead to cycles of debt and financial instability.

These findings align with the broader literature on the economic stress faced by informal workers. Research suggests that street vendors often experience high levels of stress related to financial instability, lack of job security, and the unpredictability of their income (Gupta & Sharma, 2020).

The data on anxiety levels among unauthorized street vendors in Pagadian City reveals significant psychological distress, with all six items related to anxiety showing "High Anxiety Level" scores. The overall average anxiety score is 2.632, which indicates These findings align with the situation in Pagadian City, where many vendors have recently entered the trade, possibly due to economic downturns, and rely heavily on vending as their primary source of income. The limited access to government assistance further compounds their challenges, highlighting the need for inclusive policies that address the unique needs of informal workers.

Table 3. Level of awareness of the street vendors related to the existing ordinances that affect unauthorized street vending.

Statement Indicators	Aware	Slightly Aware	Unaware	No Response	Total	Average	Remarks
I have been informed about the ordinances on "Peddling, Soliciting and Itinerant Merchant Regulation Ordinance of 2020".	50	82	1	2	135	2.33	Slightly Aware
I understand the process of obtaining a legal vending permit.	54	77	2	2	135	2.36	Slightly Aware
I understand the penalties or consequences of violating these ordinances.	53	80	0	2	135	2.36	Slightly Aware
Complying with local ordinances improves the public image of street vendors.	51	82	0	2	135	2.35	Slightly Aware
The local ordinances are fair and reasonable for street vendors.	56	73	4	2	135	2.36	Slightly Aware
I know the designated vending areas in Pagadian City, as mentioned in the ordinance.	41	88	4	2	135	2.24	Slightly Aware
I am aware that unauthorized street vending affects traffic, sanitation, and public safety.	58	74	0	3	135	2.39	Slightly Aware
I am conscious that strict enforcement of vending laws benefits the public.	60	72	0	3	135	2.4	Slightly Aware
I am aware that authorities have the right to remove vendors without permits.	60	70	1	4	135	2.38	Slightly Aware
I am aware that paying for permits is a good investment for a street vendor like me.	53	80	0	2	135	2.36	Slightly Aware
I am informed that strict enforcement of vending laws benefits the public.	48	85	0	2	135	2.33	Slightly Aware
I am aware of any benefits of registering my business with the government.	48	84	0	3	135	2.31	Slightly Aware
I know the consequences of vending without legal permits.	57	74	2	2	135	2.38	Slightly Aware
Average						2.35	Slightly Aware

Legend: 1.00 – 1.49 (Very Low) 1.50 – 2.49 (Low) 2.50 – 3.49 (Moderate) 3.50 – 4.49 (High) 4.50 – 5.00 (Very High)

The findings indicate that unauthorized street vendors in Pagadian City have a generally low to moderate level of awareness about local regulations affecting their livelihood. Across 13 awareness indicators, the overall average rating was 2.35,

corresponding to "Slightly Aware." While most respondents have heard of the ordinances and related issues, their understanding may be superficial or incomplete.

Most respondents indicated they were "Slightly Aware" of specific policies, including the "Peddling, Soliciting and Itinerant Merchant Regulation Ordinance of 2020," where 82 135 respondents claimed slight awareness, and only 50 reported full awareness. This trend of slight awareness was consistent across almost all items. For instance, 77 vendors were slightly aware of obtaining a legal vending permit, while 54 were fully aware. Similarly, 80 respondents were slightly aware of the penalties for violations, compared to 53 who were fully informed.

The statements relating to broader implications of ordinance compliance—such as improving the public image of vendors, fairness of the law, and impacts on traffic and sanitation—were also met with mostly slight awareness, with complete awareness levels hovering around 48 to 60 respondents per item. Notably, 58 to 60 respondents showed full awareness of statements tied to enforcement and its benefits to the public, indicating slightly greater clarity on enforcement-related themes. However, knowledge about the designated vending areas was relatively lower, with only 41 respondents fully aware and four unaware, suggesting a knowledge gap in location-specific provisions.

Similarly, awareness regarding the benefits of registering a business and paying for permits as a good investment remained at the "Slightly Aware" level, with only 48 to 53 respondents fully informed. Even awareness about the consequences of vending without legal permits, a crucial aspect of compliance, did not exceed a mean rating beyond 2.38.

The results presented in Table 3 demonstrate that unauthorized street vendors in Pagadian City have a generally low to moderate level of awareness of existing ordinances that regulate street vending activities. With an overall mean rating of 2.35, categorized as "Slightly Aware," the data suggest that most respondents have only a surface-level understanding of the laws affecting their daily livelihoods. This lack of depth in awareness is consistent with Roever and Skinner (2016), who noted that informal workers, including street vendors, often encounter barriers to accessing regulatory information, especially when it is not communicated in accessible or practical ways.

Specifically, many respondents reported only slight awareness of the "Peddling, Soliciting and Itinerant Merchant Regulation Ordinance of 2020"—with 82 out of 135 vendors slightly aware and only 50 fully aware. Similar patterns emerged across other indicators: 77 were slightly aware of securing legal vending permits, while 54 were fully aware. Likewise, 80 were slightly aware of penalties for ordinance violations, while 53 were fully informed. This reflects a common gap in informal economies, where legal processes are perceived as inaccessible or irrelevant due to systemic exclusion (Lyons & Snoxell, 2005).

On broader ordinance implications such as public image improvement, sanitation, traffic management, and perceived fairness of the law, awareness remained slight to moderate. Only 48 to 60 respondents expressed full awareness, with a slightly higher awareness of enforcement-related themes. This may be attributed to direct interactions with law enforcement, which often serves as the primary, albeit negative, point of contact with the formal system (Brown et al., 2010).

However, awareness of designated vending areas was especially low. Only 41 respondents reported full awareness, and 4 admitted complete unawareness. This knowledge gap is concerning as it directly affects vendors' ability to comply with local rules and avoid punitive action. As noted by Skinner (2008), limited spatial awareness of permitted vending zones often increases vulnerability to eviction and confiscation, exacerbating stress and job insecurity.

Similarly, the perception of business registration and permit acquisition as a worthwhile investment was not widely shared. Only 48 to 53 respondents showed full awareness of these benefits. Even more critically, the awareness of the consequences of vending without permits remained low, failing to reach a mean score above 2.38. This limited understanding may result in unintended non-compliance, provoking enforcement action, and psychological distress (Chen, 2012).

The lack of comprehensive ordinance awareness among street vendors hinders effective policy implementation and may also negatively affect mental health. When individuals operate in environments characterized by legal uncertainty, limited knowledge, and inconsistent enforcement, they are more likely to experience stress, fear, and anxiety—factors that compromise their psychological well-being (Lund et al., 2010). Therefore, the findings underscore the urgent need for inclusive, culturally relevant, and sustained information campaigns to raise awareness and empower vendors with the knowledge necessary to navigate legal requirements and safeguard their mental health.

Table 4. Level of Mental Health Issues in terms of Stress Experienced by Street Vendors

Stress Level	High Stress Level	Moderate Stress Level	Low Stress Level	No Response	Total	Average	Remarks
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I can find ways to meet my needs.	12	105	16	0	133	1.97	Moderate Stress Level
I feel pressured to earn enough despite the restrictions.	82	50	0	3	135	2.56	High Stress Level
I can take control of outgoing.	15	96	21	3	135	1.91	Moderate Stress Level
I am confident about my ability to manage financial responsibility.	12	98	23	2	135	1.89	Moderate Stress Level
I feel relieved about my financial fund.	18	86	28	3	135	1.88	Moderate Stress Level
Average	—	—	—	—	—	2.042	Moderate Stress Level

Legend: 1.00 – 1.49 (Very Low) 1.50 – 2.49 (Low) 2.50 – 3.49 (Moderate) 3.50 – 4.49 (High) 4.50 – 5.00 (Very High).

Table 4 presents the stress levels experienced by unauthorized street vendors in Pagadian City. The average stress level was 2.042, within the "Moderate Stress Level" range. This indicates that, in general, vendors feel a consistent but manageable amount of stress about their livelihood.

Among the five indicators assessed, the highest stress was recorded in the item "I feel pressured to earn enough despite the restrictions," with a mean score of 2.56, classified as a "High Stress Level." This suggests that financial pressure caused by regulatory and environmental limitations significantly contributes to their stress. Meanwhile, the other four indicators—including the ability to meet needs, control outgoing expenses, manage financial responsibilities, and feel relief about their financial situation—were rated under "Moderate Stress Level," with average scores ranging from 1.88 to 1.97. These findings imply that while the vendors are coping with some aspects of financial management, the overarching stress from income insecurity and regulatory barriers continues to impact their well-being.

The findings show that unauthorized street vendors are moderately stressed overall, but certain factors—particularly policy-related restrictions on earning capacity—intensify their stress levels. This highlights a critical area for intervention, such as financial planning support, mental health counseling, or more inclusive and enabling policies for informal workers. A study by Shanmugam and Anuradha (2025) explored street vendors' psycho-social and economic well-being, focusing on mental health, social networks, and financial resilience.

The research revealed that financial instability and limited social support are significant stressors adversely affecting vendors' mental health and resilience. Strong social networks were found to play a crucial role in enhancing economic resilience by offering coping mechanisms and stability. Similarly, research conducted in Manila highlighted that street vendors face numerous challenges, including financial vulnerability and regulatory pressures. These stressors contribute to their overall mental health burden, emphasizing the need for supportive policies and interventions.

These physical stressors, combined with economic pressures, contribute to their mental health challenges. These studies underscore the multifaceted stressors street vendors face, including financial instability, lack of social support, and challenging work environments. The findings from Pagadian City resonate with these broader patterns, highlighting the need for targeted interventions to support the street's mental health and economic resilience.

Table 5. Level of Mental Health Issues in terms of Anxiety Experienced by Street Vendors

Anxiety Level	High Anxiety	Moderate Anxiety	Low Anxiety	No response	Total	Average	Remarks
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1. I feel anxious about the future of my vending business.	87	45	0	3	135	2.6	High Anxiety Level
2. I experience uneasiness whenever I see law enforcement officers near my vending area.	85	46	1	3	135	2.58	High Anxiety Level
3. I constantly worry about losing my source of income due to vending regulations.	97	35	0	3	135	2.67	High Anxiety Level
4. I feel worried when I do not make enough sales to cover my daily expenses.	105	28	0	2	135	2.75	High Anxiety Level
5. I have trouble relaxing because I am always thinking about the risk of vending	90	41	1	3	135	2.61	High Anxiety Level
6. I feel that my anxiety has increased due to stricter enforcement of vending laws	83	49	1	2	135	2.58	High Anxiety Level
Average						2.632	High Anxiety Level

Legend: 1.00 – 1.49 (Very Low) 1.50 – 2.49 (Low) 2.50 – 3.49 (Moderate) 3.50 – 4.49 (High) 4.50 – 5.00 (Very High)

Table 5 presents the responses related to the anxiety experienced by unauthorized street vendors, with all six items showing a "High Anxiety Level." The overall average score is 2.632, confirming that vendors are experiencing considerable and pervasive anxiety related to their livelihood and the enforcement of local ordinances.

The highest anxiety indicator was Item 9 ("I feel worried when I do not make enough sales to cover my daily expenses"), which scored an average of 2.75, with 105 respondents indicating high anxiety. This underscores how day-to-day survival remains a significant source of psychological distress, especially in a low-income, highly regulated setting.

Similarly, very high anxiety levels were observed in Item 8 ("I constantly worry about losing my source of income due to vending regulation") with a mean of 2.67, and in Item 6 ("I feel anxious about the future of my vending business") with a mean of 2.6. These items reflect fear of uncertainty and a deep-seated concern over the sustainability of their livelihood. Additionally, encounters with law enforcement officers, difficulty relaxing, and increased anxiety due to stricter enforcement all further reinforce this high level of psychological burden.

Unauthorized street vendors in Pagadian City are facing substantial levels of anxiety, primarily driven by economic insecurity, fear of law enforcement, and uncertainty about their future. These results indicate the need for psycho-social support services, stress-reduction initiatives, and more inclusive urban policies that recognize and protect informal economic activities as legitimate sources of livelihood.

The anxiety experienced by unauthorized street vendors is strongly linked to livelihood instability and the threat of enforcement actions. According to Roever and Skinner (2016), informal vendors often face harassment, confiscation of goods, and forced evictions by authorities, creating a persistent climate of fear and uncertainty. These stressors are compounded by daily financial struggles, where insufficient sales can threaten their ability to meet basic needs—echoing the findings in our study, where 105 respondents reported high anxiety about not meeting daily expenses.

Moreover, a study by Steel et al. (2021) observed that fear of business disruption due to urban regulations significantly increases vendor psychological distress. Their findings highlighted how legal insecurity and unpredictable enforcement mechanisms

foster anxiety about income loss and future prospects, similar to how vendors in Pagadian City worry about the sustainability of their business.

Further, Resurreccion and Medina (2019) found that in the Philippine context, informal workers, including vendors, often experience high levels of emotional strain due to a lack of job protection, low earnings, and social stigma. These challenges intensify during crackdowns or ordinance implementation, making them vulnerable not only economically but also mentally.

These studies support the conclusion that anxiety among unauthorized street vendors is not merely situational but deeply rooted in systemic vulnerabilities. The data from our study aligns with this body of literature, underscoring the need for policies that integrate mental health and economic rights into urban governance.

Table 6. Level of Awareness on Ordinances and Stress Level of Street Vendors

Stress Awareness	Aware	Slightly Aware	Total
High Stress Observed	7	1	8
Level Expected	3.79	4.21	8
Moderate Stress Observed	57	70	127
Level Expected	60.21	66.79	127
Total	64	71	135

Legend: 1.00 – 1.49 (Very Low) 1.50 – 2.49 (Low) 2.50 – 3.49 (Moderate) 3.50 – 4.49 (High) 4.50 – 5.00 (Very High)

Table 6 presents a crosstabulation between street vendors’ level of awareness of local ordinances and their corresponding level of stress. Among the 135 respondents, 64 were categorized as "Aware," while 71 were "Slightly Aware." Most vendors fell under the "Moderate Stress Level" category, regardless of awareness level.

Specifically, 57 vendors who were aware of the ordinances reported moderate stress, and 70 vendors who were slightly aware also reported moderate stress. This is close to the expected distribution (60.21 and 66.79, respectively), indicating no substantial deviation. Meanwhile, only eight respondents were classified under high stress, with seven being aware and just one slightly aware of the ordinances. This deviates from the expected values (3.79 and 4.21), suggesting that higher awareness may be associated with greater stress levels, potentially due to increased understanding of penalties or fear of enforcement.

While most street vendors experience moderate stress regardless of awareness, the data suggests that those with higher awareness may experience elevated stress—possibly because knowing the regulations in detail makes them more conscious of the risks and pressures involved in unauthorized vending.

The Pagadian City survey, which reveals a nuanced relationship between street vendors' awareness of local ordinances and their stress levels, aligns with existing research on the psychological impacts of regulatory knowledge in the informal economy. Specifically, the data indicates that while most vendors report moderate stress regardless of their awareness, those with higher awareness of local ordinances exhibit slightly higher stress levels. This suggests that increased knowledge of regulations may heighten stress, possibly due to greater concern over potential penalties or enforcement actions.

Supporting this observation, a study by Shanmugam and Anuradha (2025) found that financial instability and limited social support are significant stressors for street vendors, adversely affecting their mental health and resilience. Additionally, the study highlights that strong social networks play a crucial role in enhancing economic resilience by offering coping mechanisms and stability. This underscores the importance of addressing economic and informational aspects to mitigate stress among street vendors.

These studies highlight the complex interplay between awareness of local ordinances and stress levels among street vendors. While awareness can empower vendors with knowledge, it may also increase stress without supportive measures such as clear communication, training, and resource access. Therefore, policymakers should consider these dynamics when designing interventions to support street vendors, ensuring that increased awareness leads to positive outcomes rather than exacerbating stress.

Table 7. Crosstabulation of the level of awareness of ordinances and anxiety level of street vendors

Anxiety	Awareness		Total
	Aware	Slightly Aware	

High Anxiety Level	Observed	42	55	97
	Expected	46	51	97
Moderate Anxiety Level	Observed	22	16	38
	Expected	18	20	38
Total	Observed	64	71	135
	Expected	64	71	135

Legend: 1.00 – 1.49 (Very Low) 1.50 – 2.49 (Low) 2.50 – 3.49 (Moderate) 3.50 – 4.49 (High) 4.50 – 5.00 (Very High)

Table 7 explores the relationship between awareness of ordinances and anxiety levels among street vendors. The data indicates that a large majority (97 out of 135) experienced high anxiety, while the remaining 38 respondents experienced moderate anxiety. Of those with high anxiety, 42 were aware of the ordinances, and 55 were slightly aware. Although slightly aware vendors had more reported cases of high anxiety, the expected values (46 and 51, respectively) show a relatively balanced distribution. On the other hand, among those with moderate anxiety, 22 were aware, and 16 were slightly aware, again reflecting a slight deviation from the expected frequencies (18 and 20).

This suggests that while awareness level may not drastically change the overall anxiety distribution, vendors who are slightly aware seem to experience more high anxiety than expected. Both high and slightly aware groups experience high anxiety, but incomplete knowledge (slight awareness) may amplify anxiety more than full awareness, likely due to confusion or misinformation. This underscores the importance of clear, accessible information and community-based orientation efforts regarding local ordinances.

The survey reveals a significant relationship between street vendors' awareness of local ordinances and their anxiety levels. While both "aware" and "slightly aware" groups predominantly report high anxiety, the slight awareness group exhibits a higher-than-expected incidence of high anxiety. This suggests that an incomplete or partial understanding of regulations may exacerbate anxiety due to uncertainty and fear of potential penalties.

Supporting this observation, a study by Shanmugam and Anuradha (2025) found that financial instability and limited social support are significant stressors for street vendors, adversely affecting their mental health and resilience. Additionally, the study highlights that strong social networks play a crucial role in enhancing economic resilience by offering coping mechanisms and stability. This underscores the importance of addressing economic and informational aspects to mitigate anxiety among street vendors.

Table 8. Relationship between the Level of Awareness on Ordinances and the Mental Health Issues (Stress and Anxiety) of the Street Vendors

Variable Relationship	χ^2 Test Statistic	df	p	Remarks
Awareness Level				
Stress Level	5.48*	1	0.0192	Significant
Anxiety Level	2.33	1	0.1267	Not Significant

*Significant at $\alpha = 0.05$

The Chi-square test of independence was employed to determine the relationship between the street vendors' level of awareness of ordinances and their mental health status—specifically in terms of stress and anxiety. This statistical test is appropriate when examining the association between two categorical variables, which in this case are the awareness level of the respondents (categorized as "Aware" and "Slightly Aware") and their corresponding stress or anxiety levels (categorized as "High" or "Moderate"). The use of the Chi-square test allows for the assessment of whether the distribution of stress and anxiety levels differs significantly depending on the level of awareness.

The results revealed a statistically significant relationship between the respondents' awareness level and stress level, with a Chi-square value of 5.48, one degree of freedom, and a p-value of 0.0192. Since the p-value is less than the 0.05 significance level, the null hypothesis of independence is rejected, indicating that the level of awareness of ordinances is significantly associated with the stress experienced by street vendors. This suggests that street vendors more aware of the ordinances tend to report different stress levels than those who are only slightly aware.

On the other hand, the Chi-square test result for the relationship between awareness level and anxiety level yielded a test statistic of 2.33, a p-value of 0.1267, and one degree of freedom. Since the p-value exceeds the 0.05 threshold, there is insufficient evidence to conclude a significant relationship between the two variables. This implies that the anxiety levels of street vendors are not significantly affected by their awareness of the ordinances. Overall, while awareness of local ordinances appears to have a notable

impact on stress, it does not have a similar effect on anxiety, highlighting the complex and multifaceted nature of mental health among street vendors.

The relationship between awareness of local ordinances and mental health outcomes among informal workers has been widely explored in urban studies. Roever and Skinner (2016) emphasized that street vendors with greater knowledge of city regulations often experience increased stress as they are more aware of the consequences of enforcement actions such as fines, confiscations, or displacement. This aligns with the current study's findings, which showed a statistically significant relationship between ordinance awareness and stress ($\chi^2 = 5.48$, $p = 0.0192$).

Similarly, Bhowmik (2012) noted that the stress experienced by vendors tends to intensify when they are aware of legal risks but lack the means to comply, leading to psychological strain rooted in fear of enforcement. On the other hand, several scholars argue that anxiety—unlike stress—is more closely related to chronic economic insecurity than to ordinance knowledge. Chen et al. (2014) found that anxiety among informal workers was more influenced by unpredictable income, lack of social safety nets, and long-term livelihood concerns than by specific awareness of legal frameworks. This supports the non-significant result in the present study ($\chi^2 = 2.33$, $p = 0.1267$), suggesting that while awareness may raise stress due to fear of enforcement, anxiety tends to persist regardless of ordinance knowledge due to deeper socioeconomic vulnerabilities. These findings reinforce the idea that both regulatory and economic structures play distinct roles in shaping the mental health of marginalized workers.

5. Conclusions

This study demonstrates that unauthorized street vendors in Pagadian City face moderate levels of stress and high levels of anxiety, primarily due to economic insecurity, income limitations, and the constant fear of ordinance enforcement. Findings indicate that greater awareness of local ordinances is significantly associated with higher stress levels, likely because increased knowledge heightens awareness of risks and penalties. Interestingly, while overall anxiety remains high across all levels of awareness, vendors with only partial knowledge tend to experience even greater anxiety, suggesting that incomplete or unclear information may fuel uncertainty and fear.

These results underscore the importance of providing clear and accessible information about local regulations to street vendors, alongside community-based orientation efforts to reduce confusion and misinformation. Furthermore, the findings highlight the need for mental health support services, financial literacy programs, and inclusive urban policies that acknowledge the vital economic role of informal vendors while protecting their psychosocial well-being. By addressing these challenges through humane and balanced governance, local authorities can help mitigate the unintended mental health impacts of regulatory enforcement on vulnerable urban workers.

6. Recommendations

Based on the findings of this study, the following recommendations are proposed to address the mental health challenges faced by unauthorized street vendors in Pagadian City:

- 6.1. **Enhance Information Dissemination:** Local government units should develop clear, simple, and accessible information materials about relevant ordinances, translated into local languages where appropriate. Community-based orientation sessions can help ensure that vendors fully understand the regulations affecting their livelihoods, minimizing misinformation and confusion that may heighten anxiety.
- 6.2. **Strengthen Mental Health Support:** The city government, in collaboration with social welfare agencies and local NGOs, should establish targeted mental health support programs for informal workers. This may include stress management workshops, counseling services, and peer support groups to help vendors cope with anxiety and stress related to economic and regulatory pressures.
- 6.3. **Implement Financial Literacy and Resilience Training:** Financial education initiatives should be offered to help street vendors manage income instability, budget daily earnings, and plan for emergencies. Such programs can empower vendors to make informed decisions that alleviate financial stress.
- 6.4. **Adopt Inclusive and Balanced Urban Policies:** Policymakers should consider inclusive approaches that balance the need for urban order with the economic realities of informal workers. Alternatives such as designated vending zones, affordable permit schemes, or livelihood integration programs can help regularize vending activities without compromising vendors' income security and mental well-being.
- 6.5. **Foster Multi-Stakeholder Dialogue:** Local authorities, vendor associations, civil society groups, and community leaders should engage in continuous dialogue to ensure that the perspectives and needs of street vendors are incorporated into policy design and enforcement strategies.

By implementing these measures, Pagadian City can move toward more humane, responsive urban governance that safeguards not only public order but also the dignity and mental health of its informal workers.

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