

Livelihood Resiliency of Selected Informal Sectors in Cebu City, the Philippines

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Abstract

This study focused on the livelihood resiliency of selected informal sectors in Cebu City, the Philippines. It employed a mixed-method approach to describe how informal sectors responded to external shocks. A quantitative approach was used to measure three resilience capacities: absorptive, adaptive, and transformative resilience. The results revealed that both street and platform vendors showed high resilience capacities. When relationships between gender and resilience capacity levels were tested for street and platform vendors, only gender and adaptive capacities showed significant relationships at the .02 and .04 levels, respectively. By contrast, their absorptive and transformative resilience capacities showed no significant differences. Qualitative findings revealed that informal sector street and platform vendors were vulnerable in times of economic shock due to their irregular incomes, poor working conditions, and struggles to sell their products. Despite external shocks, they attempted to cope by looking for alternative sources of income, utilizing their savings, and receiving assistance from the government, along with support from their families.

Keywords: *Resilience capacity, livelihood resiliency, informal sectors, Philippines*

Introduction

Having a livelihood is an essential element for human survival. However, external threats such as economic and natural disasters pose ongoing risks. Therefore, it is important to look into how individuals or communities adjust to the different shocks that affect their livelihoods. The livelihoods of people in small communities are often those most severely affected by external shocks. Exploring the livelihood options and resilience of rural communities in earthquake-prone areas is critical for assisting them in dealing with disaster risks (Zhou et al., 2021).

There are increasing efforts by international development and humanitarian organizations to measure livelihood resilience to external shocks such as floods or droughts (Quandt, 2018). The study of livelihood resiliency cannot be under-estimated, as the world constantly faces different disasters that affect community livelihoods and, thus informal livelihood sectors. Some scholars believe that in an uncertain future, livelihood resilience may be the best way to protect informal livelihoods and promote communities' long-term development (Zhou et al., 2021). Resilience thinking offers a fresh perspective on livelihood research. It can help us understand how individuals maintain their livelihood levels in times of adversity (Forster et al., 2014).

The United Nations Sustainable Development Goal 8.3 (2021) states: "Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity, and innovation, and encourage formalization and growth of micro, small, and medium-sized enterprises, including through access to financial services." This is the only Sustainable Development Goal that directly targets informal economic sectors (International Labour Organization, 2022). Despite significant societal progress, a substantial number of people at the grassroots level are excluded from the benefits of economic growth. This is contrary to the claims of mainstream development economists about the "trickle-down" effects of economic growth.

According to McKay and Summer (2008), for economic growth to benefit the poor, it must be linked to creating new jobs, giving opportunities to the poor, and helping them transition away from agriculture. Economic growth may generate new jobs. However, the quality of these jobs, whether the poor can take advantage of these opportunities, and whether these jobs are stable enough to

withstand economic shocks, are key determinants in the relationships between growth, poverty reduction, and inequality (Melamed et al., 2011).

Livelihoods are undergoing major worldwide transformations due to changes in environmental and social systems. Dangerous climate change has a disproportionate impact on informal sector livelihoods, increasing vulnerability and limiting the development of livelihood sustainability (Tanner et al., 2015). The United Nations warned that during the COVID-19 pandemic, 1.6 billion workers in the informal economy worldwide were at risk of losing their livelihoods (United Nations Sustainable Development Goal, 2021).

External shocks like natural disasters and pandemics primarily impact vulnerable workers in the informal economy. This sector consists of small-scale, self-employed producers and distributors of goods and services, who are generally not covered by labor laws and regulations. The vulnerable employment rate, defined as the share of single proprietorships and contributing family workers in total employment, is one proxy measurement and indicator of the informal economy (International Labour Organization, 2021). These characteristics make the livelihoods of informal workers vulnerable to external shocks.

In 2008, the Philippine National Statistics Office conducted the first nationwide survey with support from the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP). The survey revealed that 37.1 Filipino million workers were employed in the formal sector (Philippine Statistics Authority, 2019), while 10.5 million were informal sector operators. Thus, total employment was 47.6 million. This meant that about 22% of the labor force in the Philippines belonged to the informal sector. The informal sector consisted of 9.1 million self-employed non-paid workers who were employed by a family farm or company, and 1.4 million employers.

An Informal Sector Survey conducted in 2018 by the Philippines Statistics Authority (PSA) (2019) provides the most recent accessible statistics on the number of workers in the Philippines' informal economy. The Institutional Shareholders Services estimated this number at 15.68 million, or roughly 38% of the total working population, with the PSA using the Labour Force Survey proxy indicator on self-employed and unpaid family workers to provide an admittedly incomplete statistic. The PSA used the operational definition for the informal sector as "household unincorporated enterprises that consist of both informal own-account enterprises and enterprises of informal employers."

The highest Philippine unemployment rate of 17.6%, with 7.2 million unemployed persons, was reported in April 2020. This reflected the effects of the COVID-19 pandemic on the Philippine labor market (Philippine Statistics Authority, 2020). Using proxy indicators from the May 2021 Philippine Labor Force Survey, the International Labour Organization estimated that 38.3% were employed in the informal economy (International Labour Organization, 2021). This was much higher than the 2008 estimate of 22% of the labor force. The informal sector's social protection is limited or non-existent. This means that when shocks occur, informal workers are the most vulnerable. Workers in the informal sector work without written contracts, paid leave, minimum wages, or access to social safety nets. Most are subject to "no work, no pay" conditions, and if joblessness last several days, they are in imminent danger of falling below the poverty line (Development Asia, 2020). Although most sectors in the economy were severely affected by the COVID-19 pandemic, informal operators with no access to financial capital were most susceptible to the impact of this shock.

In this study the response of informal sectors to the pandemic shock was investigated as were measures to integrate informal sectors into the formal economy. This was in harmony with the three objectives listed in the 2015 International Labour Organization's Recommendation 204 entitled "Transition Informal to Formal Economy." The objectives were as follows:

1. Facilitate the transition of workers from the informal to the formal economy.
2. Promote the sustainability of decent jobs in the informal economy.
3. Prevent the informalization of formal economy jobs.

Objectives of the Study

The aim of the study was to describe the livelihood resiliency of selected sectors in the informal economy of Cebu City, Philippines. Specifically, the following aspects were addressed:

1. Assess the resilience capacity of the informal sectors in the following context (absorptive capacity, adaptive capacity, and transformative capacity).
2. Describe strategies of livelihood coping mechanisms used by the selected informal sectors.

Literature Review

Resilience Capacity

Resilience in complex adaptive systems involves more than just an aversion to change and a wish to return to the way things were (Folke, 2006). No single one of the three resilience capacities leads to resilience; each capability produces a distinct outcome: (a) absorptive capacity produces endurance (or continuity) (Béné et al., 2013), (b) adaptive capacity produces incremental adjustments or alterations, and (c) transformative capacity produces system-changing transformational responses.

Informal Economy

Employment in the informal sector is defined by the nature of the workplace, such as unregistered or small-scale enterprises, while informal employment refers to jobs that lack formal contracts, worker benefits, and social protections, regardless of the workplace. According to international norms from the 15th International Conference of Labour Statisticians, the informal sector includes unincorporated units that produce goods or services primarily to provide employment and income. These enterprises operate at a low organizational level, on a small scale, with minimal division of labor and capital (Bonnet et al., 2019)

According to the IBON Foundation (2022), informal labor in the Philippines grew across all occupational categories during the pandemic. From January 2020 to July 2022, self-employed workers rose by 1.8 million to nearly 13 million, unpaid family employees increased by 1.1 million to 3.7 million, and employers in family-run farms or businesses grew by 269,000 to 1.3 million. By July 2022, 20.1 million jobs (42.4%) were informal, including domestic help, small family farms, and self-employed or unpaid family workers—an increase of 3.4 million since January 2020.

Livelihood Resilience

Tanner et al. (2015) defined livelihood resilience as the ability of people across generations to sustain and improve their livelihood opportunities and well-being in the face of environmental, economic, social, or political disruptions. In practice, a "resilient livelihood" refers to employment with minimal impact or pressures on one's primary source of well-being, which can create new opportunities for economic development and policy innovation (Folke, 2006).

Hodbod and Eakin (2015) postulated that a diversity of income sources allows for various responses when dealing with disturbances, and may lessen their impact. Diversification of livelihoods can take several forms depending on the situation. Diversification is sometimes used to accumulate resources, but it may also be used to distribute risk or cope with brief crises. Other individuals may use it to respond to longer-term decreases in incomes or resources, or large-scale economic or environmental changes that are beyond local control (Quandt, 2018).

The breadth of research on livelihood resilience emphasizes that having access to capital, or buffer capacity, helps people to grow their assets and continue to produce even in the face of risks to their livelihoods (Tanner et al., 2019). Although earlier research has provided a general grasp of resilience and coping strategies, it mostly provides an overview without going into detail about particular situations. In contrast, the informal sector has developed ways for people and families to survive in countries with few work prospects, and to help small business owners get around legal restrictions (Global Development Research Center, 2020).

Vulnerability of the Informal Sector

An investigation by the Organization for Economic Cooperation and Development (OECD, 2019) explored the difficulties facing informal economies. First, it incorporated the household dimension into pictures of informality, demonstrating how informality is frequently more complex than as revealed by standard indicators, which focus on individual workers or enterprises. This report also demonstrated how pervasive poverty and occupational risks, along with a lack of access to social protection and risk management measures, exposed many informal sector workers (particularly women and their families) to significant vulnerability.

The report closed by advising policymakers to prioritize areas that would reduce vulnerability in informal economies. Informal laborers are twice as likely as formal workers to live in low-income households. The poverty line, set at US\$3.10 per day, has been defined using Purchasing Power Parity as the minimum daily income required to cover basic needs in many developing nations. In the 29 countries where comparable data were available, this metric indicated that almost 20% of formal workers, and nearly 42% of informal workers, were living below the poverty line (OECD, 2019).

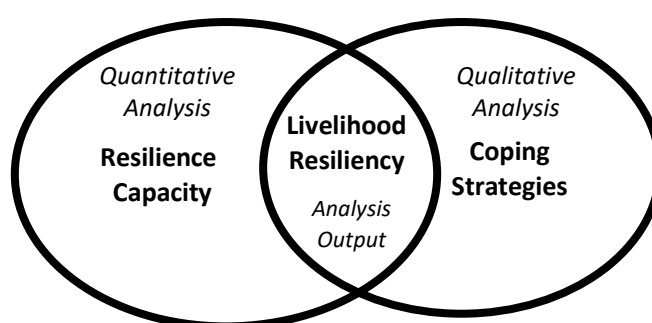
Damage to Economic Fabric

Restrictions on people movements, as well as an abrupt halt or severe downscaling of economic activities, have a significant impact on and are likely to have consequences for informal enterprises. Given that they have no savings or other financial cushion, most owners of informal businesses are forced to spend their meager business capital. As a result, they may be forced to close their informal businesses either temporarily or permanently, resulting in job losses and increased poverty. Income loss and deepening poverty, in turn, may lead to an increase in child labor and lower school enrollment rates, particularly among young girls. The uneven impact of a crisis on different sectors may result in large-scale economic restructuring. The reorganization of manufacturing activities and supply chains may result in frictional unemployment or expansion of the informal economy (International Labour Organization, 2020b).

Conceptual Framework

Figure 1 shows the conceptual framework adopted for this study. Instead of treating livelihood resiliency as a separate or dependent variable, it was measured using a mixed-methods approach. According to Quandt (2018), measuring livelihood resiliency is challenging and requires practical data measurement, analysis, and visualization methods. Similarly, Jones and Tanner (2015) pointed out that resilience is not directly measurable, and that most researchers have used proxies or indicators.

Figure 1 *Conceptual Framework*



In this study, a quantitative approach focused on resilience capacity, which encompassed the three core principles of resilience (absorptive, adaptive, and transformative) at the individual level. A qualitative exploration of coping mechanisms/strategies of informal sector workers was used to gain a deeper understanding of how they adapt and sustain their livelihoods during times of adversity. By combining these two analyses, a comprehensive description of livelihood resiliency was provided. It is

important to note that no single data source or indicator can fully capture the complexity of livelihood resiliency. Hence, the researchers used this mixed approach in an effort to better understand it.

Research Methodology

Methodological Gap

As mentioned above, most of the approaches used by previous researchers to measure livelihood resiliency employed surrogates or indirect indicators of resilience. In this study elements of livelihood resilience were investigated that were considered to keep livelihoods intact in the face of change, focusing on people's innate ability to bounce back from setbacks and develop new skills. Although research on livelihood resilience is scarce and has frequently used different approaches or focused on other issues, these efforts complement an approach that focuses on poverty alleviation (Speranza et al., 2014).

Research Design

A mixed-method approach was used in this investigation to explore livelihood resiliency. Quantitative analysis was adopted to examine resilience capacities, comparing vendors and platform economy participants, while a qualitative focus group provided insights into how these groups adapted to shocks. Combined, these approaches furnished a deeper understanding of livelihood resiliency.

Research Environment

The study was carried out in Cebu City, Philippines, the capital of the 80 barangays that are located on Cebu Island. Cebu City, well-known for its thriving unofficial sector that includes small, unregistered companies and street vendors, was a perfect place for this study. Cebu City unites old marketplaces with contemporary commercial districts to serve as a regional center for trade, business, and culture.

Participants of the Study

Two informal sectors were examined—street sellers and platform economy members. Street vendors needed to be unregistered with local or national agencies, willing to participate, and of legal age. Platform vendors needed to be self-employed, rely on platforms like Facebook or Instagram to sell their items, be unregistered with national or local organizations, operate in Cebu City, and be willing to participate. The study included 200 respondents from each group, for a total of 400.

Instrument

The two informal sectors resilience capacity was assessed using a self-developed instrument. The survey questionnaire was in two sections: The first was about respondents' demographic profiles, while the second evaluated the three resilience indicators—absorptive, adaptive, and transformative capacity. After being pre-tested on thirty laborers and evaluated by professionals, the instrument received a high-reliability Cronbach's alpha score of .974. Focus group discussions were led by a moderator where data were collected on the groups' livelihood coping mechanisms.

Data Gathering

The data collection was divided into two phases: An online survey was utilized for platform merchants, and a field survey evaluated street vendors' potential for resilience. Convenient locations were chosen for focus groups with street vendors, while online sessions were done with platform sellers. No one was coerced into participating in the study. Instead, participants signed an informed consent form attesting to their free involvement.

Data Analysis

Quantitative analysis included comparing the responses of platform and street vendors, frequency analysis, a Mann-Whitney U test, and a comparison of respondents' resilience capacities. Correlations

among gender, vendor types, and resilience were also examined. Focus group transcripts were subjected to thematic analysis, which involved finding patterns and categorizing them into themes. The intended meaning of participant responses was verified during data collection, ensuring the validity of the qualitative data.

Results

Resilience Capacity (Quantitative Results)

Table 1 shows informal sector resilience levels, presenting absorptive, adaptive, and transformative capacities for both platform and street sellers.

Table 1 *Informal Sector Levels of Resilience Capacity (N = 400)*

Categorization	Absorptive Capacity		Adaptive Capacity		Transformative Capacity	
	Platform Vendors	Street Vendors	Platform Vendors	Street Vendors	Platform Vendors	Street Vendors
Highly Resilient	124	103	47	103	124	104
Resilient	74	65	120	65	66	64
Less Resilient	2	24	33	25	10	24
Not Resilient	-	8	-	7	-	8

Note. Highly Resilient & Resilient – Desirable levels of resilience capacity; Less Resilient & Not Resilient – Less desirable levels of resilience capacity.

Platform vendors (124) demonstrated higher absorptive capacity compared to street sellers (103). For adaptive capacity, street vendors (103) outperformed platform vendors (47), with 65 street vendors and 120 platform vendors in the Resilient category. However, there were 65 street sellers and 120 platform vendors in the Resilient category showing adaptive capacity. Less Resilient were 25 street vendors and 33 platform vendors, with 7 street vendors and no platform vendors in the Not Resilient group.

Platform vendors led the Highly Resilient category. On the other hand, 104 street vendors reported highly transformational capacities levels, meaning that they could build new systems if the current ones were broken. There were 24 street vendors and 10 platform sellers in the Less Resilient group. The Not Resilient tier had no platform vendors and just eight street vendors.

The data revealed how intricate and varied resilience was within various vendor groupings. Previous research had indicated that resilience was not a single quality, but rather a combination of multiple capacities, including coping, adapting, and changing. From a practical standpoint, this implied that interventions aimed at enhancing the livelihood resilience of street and platform sellers must be customized to meet their unique requirements. Interventions can be more successfully implemented with awareness of the different degrees of resilience among informal vendors.

The absorptive capacity findings in Table 2 indicated that platform merchants had higher levels of resilience (mean score of 3.65) than did the street vendors (mean score of 3.47).

Table 2 *Respondents' Absorptive Resilience Capacities*

Indicators	Street Vendors (n = 200)		Platform Vendors (n = 200)	
	Mean	Interpretation	Mean	Interpretation
1. When faced with a problem, I work hard for a solution instead of worrying.	3.55	Highly Resilient	3.56	Highly Resilient
2. I aim to know more about anything that will help me to equip myself.	3.53	Highly Resilient	3.69	Highly Resilient
3. I am motivated to work hard on something because I love doing it regardless of its difficulty.	3.55	Highly Resilient	3.56	Highly Resilient
4. I use my previous experience to solve my current problem.	3.37	Highly Resilient	3.72	Highly Resilient

5. I see any situation as an opportunity to learn.	3.43	Highly Resilient	3.69	Highly Resilient
6. I am aware of the risk of this type of job.	3.39	Highly Resilient	3.66	Highly Resilient
7. I develop new insights and ideas by combining my knowledge with existing knowledge easily available.	3.45	Highly Resilient	3.60	Highly Resilient
8. I constantly consider how I can apply new knowledge to improve my work	3.50	Highly Resilient	3.74	Highly Resilient
Aggregate Mean	3.47	Highly Resilient	3.65	Highly Resilient

Legend. Highly Resilient (3.26–4.00); Resilient (2.51–3.25); Less Resilient (1.76–2.50); Not Resilient (1.00–1.75).

All things considered, the data pointed to a desired level of focus and value placed on expertise within the informal sector. This was in line with Adger's (2000) research, which characterized adaptive capacity as the capability to react to and adjust to changes in the environment. One focus group participant used the pandemic's increased demand and online sales to illustrate this by stating, "When the pandemic began, we were unsure whether to stop or continue our business. However, due to high customer inquiries, we decided to continue since online buying and food delivery became popular." This decision demonstrated an ability to adapt by leveraging technology, reflecting the capacity to recognize, assimilate, and apply new information for business purposes (Cohen & Levinthal, 1990).

Table 3 shows that the street vendors' group had an aggregate mean of 3.24, which meant that they displayed a high level of adaptive resilience capacity, which was considered desirable. A similar resilience capacity level of 3.15 aggregate mean was observed with the platform vendors.

Table 3 *Respondents' Adaptive Resilience Capacities*

Indicators	Street Vendors (<i>n</i> = 200)		Platform Vendors (<i>n</i> = 200)	
	Mean	Interpretation	Mean	Interpretation
1. Every time there is a change, I plan a way to make it work for me.	3.21	Resilient	3.55	Highly Resilient
2. I build network relationships within my community.	3.24	Resilient	3.36	Highly Resilient
3. I do well in my current work but am open to any opportunity for me and my family to survive.	3.38	Highly Resilient	3.60	Highly Resilient
4. I always get professional advice before making any decision.	3.33	Highly Resilient	3.05	Resilient
5. I have the means for transportation, lodging, and funds for my personal needs.	3.20	Resilient	3.12	Resilient
6. I have an emergency fund that I can easily access anytime during events and calamities such as the pandemic.	3.08	Resilient	2.73	Resilient
7. I am confident that I can find another source of income.	3.24	Resilient	3.21	Resilient
8. I have access to affordable health care.	3.23	Resilient	2.58	Resilient
Aggregate Mean	3.24	Resilient	3.15	Resilient

Legend. Highly Resilient (3.26–4.00); Resilient (2.51–3.25); Less Resilient (1.76–2.50); Not Resilient (1.00–1.75).

The data indicated that both groups were able to learn from their experiences and adjust to external conditions. In the focus discussion, this quality was revealed when one of the participants shared this: "Since my younger brother has a bicycle, I ask him to deliver for me."

Another participant was asked about the strategies employed to lessen the impact of the shock that they had experienced. She shared that one should not just stick to one product when selling, but should find another way to earn income.

You have to find another way to earn, like what's popular nowadays. You can't just stick to what you have, like for example, if I stick to selling tapioca and it doesn't sell well, it's risky. It might not sell, so we have to plan another kind of food that you think will sell fast.

The social and technological skills and strategies that people employ to adapt to environmental and socioeconomic changes are referred to as adaptive capabilities. These skills are frequently used in food systems to maintain availability, production, and livelihoods. It is critical to distinguish between mitigation and adaptation capabilities when discussing climate change (Chapin, 2024).

Table 4 shows that street vendors and platform vendors had a high transformative capacity with an aggregate mean of 3.27 and a higher mean score of 3.43, respectively.

Table 4 Respondents' Transformative Resilience Capacities

Indicators	Street Vendors (<i>n</i> = 200)		Platform Vendors (<i>n</i> = 200)	
	Mean	Interpretation	Mean	Interpretation
1. I understand and consciously engage in long-term changes.	3.15	Resilient	3.43	Highly Resilient
2. I easily fit into social and environmental conditions.	3.18	Resilient	3.29	Highly Resilient
3. I have a responsibility to make a contribution to the community I live in.	3.21	Resilient	3.37	Highly Resilient
4. I engaged myself with other people to improve my capacity.	3.22	Resilient	3.42	Highly Resilient
5. My work has value not only to myself and my family but to the community.	3.47	Highly Resilient	3.47	Highly Resilient
6. I actively participate in activities that will bring improvements to my work and others.	3.21	Resilient	3.44	Highly Resilient
7. I am aware of the role I play in the community.	3.19	Resilient	3.43	Highly Resilient
8. I see value in the work that I do.	3.54	Highly Resilient	3.58	Highly Resilient
Aggregate Mean	3.27	Highly Resilient	3.43	Highly Resilient

Legend. Highly Resilient (3.26–4.00); Resilient (2.51–3.25); Less Resilient (1.76–2.50); Not Resilient (1.00–1.75).

These results suggested that both groups were able to establish new systems when existing ecological, economic, or social structures failed. One focus group discussion participant demonstrated this attitude when asked about what was learned from the pandemic, and how they prepared themselves for future problems due to shocks. “We should prepare if something happens, since problems are inevitable and may happen daily.”

Relationship between Gender and Resilience Capacities

An analysis of the street vendors' group in Table 5 showed that absorptive capacity (*p*-value = .58) and transformative capacity (*p*-value = .07) had no significant relationship with gender, suggesting they were not directly associated with gender. In contrast, adaptive (*p*-value = .02) capacity showed a significant relationship with gender, leading to rejection of the null hypothesis.

According to the ILO (2020a), informal economy workers, regardless of gender, had to continue working to survive the pandemic, increasing their exposure to the virus. The study of street vendors highlighted that gender did not significantly impact shock-buffering capacity, but it did affect adaptive capacities. This indicated that while both men and women faced similar survival challenges, their methods for adapting and changing their livelihoods differed.

Table 5 *Relationship Between Gender and Resilience Capacities*

Street Vendors' Pairs of Variables	Chi-Square	df	p-value	Interpretation	Decision
Gender and Absorptive Capacity	4.67	6	.58	Not Significant	Fail to Reject H ₀
Gender and Adaptive Capacity	13.99	6	.02*	Significant	Reject H ₀
Gender and Transformative Capacity	11.50	6	.07	Not Significant	Fail to Reject H ₀

Platform Vendors' Pairs of Variables	Chi-Square	df	p-value	Interpretation	Decision
Gender and Absorptive Capacity	1.89	3	.59	Not Significant	Fail to Reject H ₀
Gender and Adaptive Capacity	9.95	4	.04*	Significant	Reject H ₀
Gender and Transformative Capacity	6.41	4	.17	Not Significant	Fail to Reject H ₀

* Significant at $p \leq .05$

A similar observation was reflected in the platform vendors' test results on absorptive and transformative resilience capacity, which had p -values of .59 and .17 respectively. However, a significant relationship between gender and adaptive capacity was observed with a p -value of .04. This analysis indicated that both genders displayed the ability to respond to external shocks as they strove to find other sources of income.

The three resilience capacities of platform and street sellers are contrasted in Table 6.

Table 6 *Difference in Resilience Capacities Between Street and Platform Vendors*

Pair of Variables	U Value	p-value	Interpretation	Decision
Street and Platform Absorptive	18,796.5	.23	Not Significant	Fail to reject H ₀
Street and Platform Adaptive	19,508.0	.65	Not Significant	Fail to reject H ₀
Street and Platform Transformative	17,452.5*	.01	Significant	Reject H ₀

* Significance at $p \leq .05$

There were no discernible variations in absorptive and adaptive capacity according to the Mann-Whitney U-Tests (p -values of .23 and .65). Significant variations in transformative capacities were found, however, suggesting that the two groups may have different capacities for developing alternative systems if the current ones prove unsustainable.

Strength of the Association of Resilience Capacities

When correlations between pairs of variables were tested (Table 7), the p -values of all pairs were .000, and the data indicated statistically significant links between the three resilience capacities for both platform sellers and street vendors. The data indicated an association among the three resilience capacities. The results, therefore, supported the anchoring theory adopted in this study, which postulated that resilience is not an outcome of just one capacity. Rather, it is comprised of three capacities (*absorptive, adaptive, transformative*), each resulting in a different outcome (Berkes et al. (2003); Walker et al., 2004), as referenced in Bene et al. (2013).

Table 7 *Spearman's Strength of the Association of Resilience Capacities*

Platform Vendors Pairs of Variables			
	Rho Value	p-value	Interpretation
Absorptive and Adaptive	.475	.000	Significant at $p < .01$
Absorptive and Transformative	.548	.000	Significant at $p < .01$
Adaptive and Transformative	.727	.000	Significant at $p < .01$

Street Vendors Pairs of Variables			
Pair of Variables	Rho Value	p-value	Interpretation
Absorptive and Adaptive	.455	.000	Significant at $p < .01$
Absorptive and Transformative	.531	.000	Significant at $p < .01$
Adaptive and Transformative	.757	.000	Significant at $p < .01$

Coping Strategies – (Qualitative Findings)

In focus group discussions, the platform and street vendors shared how they coped with the shocks that they experienced. Four themes emerged from an iterative analysis. The coping strategies indicated that humans were consciously dealing with life's problems and pressures. People engaged in various adaptation behaviors when confronted with personal or interpersonal challenges. If the action was performed consciously, it was referred to as coping; otherwise, it was referred to as a self-defense mechanism (Nasution et al., 2021).

Theme 1. Alternative Source of Income. Shocks inevitably impact the work of people in a community, causing problems. Previous investigators found that informal traders in South Africa and Vietnam explored new products, changed prices, and used innovative supply delivery strategies (Thanh & Duong, 2022). The study participants shared that they resorted to alternative work options to survive. A street vendors' group participant shared: "In the aftermath of Typhoon Odette, I had to find a way to earn. I collect garbage. I make lumps out of Kulafu (alcohol) bottles. I did these things and could earn about one thousand Pesos daily." Another street vendor shared that he volunteered to buy supplies for the residents because of their limited mobility. He said,

During the pandemic, I did what I could to earn money. At that time, residents were prohibited from going out in our area. Since I am allowed to go out, some residents paid me to buy supplies for them, and they paid me 50 Pesos, and this helped me to be able to save.

The platform vendors also shared stories about finding alternative sources of income.

I kept posting at the time, but posted a different one (product). I looked into other things that would work, so I decided to post gold jewelry pieces and RTWs (ready-to-wear) as many are looking for those items, and usually, many are women.

Information technology was also utilized by displaced informal workers for their trade activities during the shutdown. Social media sites like Facebook have developed into online markets for service providers that were deemed non-essential services (e.g., beauty parlors) (Thai et al., 2021).

Theme 2. Family Support. The family is the basic unit in the community, and each member relied on the others for support, especially in times of need. The participants from this study shared that their families were on their side during difficult times in the calamities.

The street vendors shared this: "We continued selling fish, except during the pandemic. My spouse pushed to sell and bought items to be sold." "We still have (money) since we are many in the family, so we have support from one another by lending money."

A platform vendor also shared that her brother was kind enough to help her: "Since my younger brother has a bicycle, I asked him to deliver it for me."

Theme 3. Access to Savings. Savings are a crucial resource, providing a safety net in times of need. In this study, participants from the street vendors' group shared that they relied on their savings to support their daily needs during the crisis.

What we did is to save. Saving, and when we have profit, we have something to use to repurchase materials...we have to save up, and that is what we use...we need to save up as we can never tell when something happens that will come suddenly.

Theme 4. Access to Government Relief. One responsibility of governments is to assist people during calamities. During the pandemic, government agencies provided relief to support constituents in crisis, including the informal sector, one of the most vulnerable groups. Social assistance is essential for reducing the effects of socioeconomic hardship, according to Castle et al. (2012). Participants in this survey reported using government assistance to get by: "Relief aid, we relied on our relief, which was slowly used to get by. In terms of food, we still have our food aid provisions."

Discussion

Resilience was found in absorptive, adaptive, and transformative capacities among informal sectors in Cebu City. The quantitative results provided a broad view of resilience capacities, while

Gender differences emerged in adaptive capacities, with a significant difference in transformative capacities between street and platform sellers. Gender influenced adaptive capacities significantly, suggesting that gender dynamics shape resilience strategies. The disparity in transformational capacity between vendors may stem from different socioeconomic conditions and access to resources. Coping strategies included reliance on other income sources, family support, savings, and government assistance. The analysis deepened our understanding of livelihood resiliency, highlighting the need for tailored interventions that consider gender and contextual differences to enhance resilience.

Recommendations

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