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Original Research Article

Beyond the Stalls, Within the Alleys: Socioeconomic Provisions of Biñan Public Market and the Informal Settler Families' Sense of Place

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Abstract

Biñan City contains the largest public market in Region IV-A (CALABARZON), catering to the needs of its growing population. Along with this, the city contains a prominent number of informal settler families (ISF), specifically in Barangay Dela Paz, Ganado, Bungahan, and Loma. In this study, sense of place (SOP) was used to analyze the relationship between the provisions of the Biñan Public Market (BPM) and the presence of the ISF population. Through stratified random sampling, assisted and online survey questionnaires were distributed. It was identified that 1) the market's competency is the completeness and cheapness of its goods and services, 2) the ISF population has a high place identity, as supported by their long ancestry in the place, 3) access to market goods procures high place dependence and identity, 4) there is a high positive relationship between the market services and the overall SOP of the population, and 5) jobs in the market are anchors of oneself towards the place. The study concludes that interventions to provide more job opportunities to the people, to incorporate cultural and heritage preservation in planning, and to ensure that ISF has access to their needs need to be prioritized by local planners and policymakers.

Keywords— informal settler families, market, planning, provisions, sense of place

1 Introduction

Biñan, Laguna, a city near Metro Manila, is catching up to the metro's development in population, infrastructure and projects, and economy. It was declared one of the eight Spanish Villas in the Philippines during the Spanish Colonization Period. It became one of the centers of Spanish rule, commerce, and culture, enabling it to be organized and structured as magnets to the population [1].

With approximately 400,000 residents and a 3.69% population growth rate, Biñan, known as the "Trading and Commerce Center of the South," accounts for 12.05% of the whole population of Laguna [2]. The city has the largest public market in Region 4A - CALABARZON to address the population's needs. The Biñan Public Market (BPM) contains 461 market stalls, providing various goods, services, and job opportunities to the Biñanenses. In support of the contribution of BPM to Biñan's development, the United Nations (UN) emphasized that public markets serve as an instrument for sustainable development through their ability to provide labor and entrepreneurial opportunities [3].

The relevance of public markets or *palengke* is still evident in the Philippines. According to Republic Act No. 6039 entitled, "An Act Instituting a National Market Code of the Philippines", public markets remain the primary trading center for all cities and municipalities in the country [4]. As such, the law aimed at developing policies, supports, and programs for public markets to strengthen their development and maximize their benefits to suppliers and consumers. RA 6039 enumerated policies involving public market regulations such as the right of market vendors, construction of new markets, creation of a market committee, and support to public markets through the sinking fund. This also mandates public markets to maximize their ability to provide goods, services, and job opportunities to their covered population.

A city's growing population contributes to the emergence of informal settlements [5]. Informal settlements, identified as informal settler families (ISF), do not have formal housing tenure, represented by land and housing titles [6]. In Biñan, with its positive population growth rate and overcrowded population density of 10,118 people per square kilometer, the proliferation of ISF in the city, with a total of 2,910 ISF, also becomes evident [7]. Despite the prejudice that the presence of ISF is an indication of poverty, Cities Alliance (2019) emphasized that informalities in a city are also prominent contributors to successful emerging economies [8], such that informalities in a city have the potential to create job opportunities, to strengthen and/or build cultures, and to pave the way for emerging developments and programs that focus on making cities and communities more progressively inclusive. This is also supported by Jensen et al. [9] stating that oftentimes, ignored informalities in cities lead to inaccurate policy implementation and inefficient management of the general population, subsequently suggesting a more inclusive approach to developments, especially those involving people and their place of residence.

The ISF population was one of the considerations in building the Panobo Mangrove Park Eco-tourism Project in Panabo City in Davao Del Norte [10]. The study focused on the potential trade-offs and challenges the project may face regarding their livelihood. It was highlighted that awareness of the ISF population can help shed light on any inequalities and/or injustices that the project may induce and that proponents can then tackle these issues before the project's actual operation. Additionally, the ISF population has also been a part of other fields of research, specifically those that focused on climate change adaptation and/or resilience assessment, i.e., Mega Cebu development plans, laws and ordinances [11], i.e. the case of BASECO (Bataan Shipping and Engineering Company) Compound as a reclaimed land in Manila City, Philippines [12] – all pointing out to how they are an integral part of any area's planning and development. However, the aforementioned researches on ISF still lack investigating through the said population's perspective, specifically on assessing their deeper connection, as represented by their sense of place in this study, and their contribution to their respective areas, as represented by their access and purchase of the goods,

services, and acquisition of job opportunities from the Biñan Public Market.

The aforementioned works of literature, however, are more focused on the direct economic relationship between the market's provisions and the people's needs. This study fills this gap by highlighting the relationship between the socioeconomic provisions of the public market (Biñan Public Market), specifically the goods, services, and job opportunities, and the people's (Informal Settler Families) sense of place (SOP). The study does not only focus on the actual needs of the people that the BPM is catering to but more so on the attachment that the people build with the place because of its provisions.

In understanding the presence of a population in a certain area, one of the concepts used is the sense of place (SOP). Semken [13] defines the sense of place as the meaning and attachment of an individual or a community towards a place [11]. It is further divided into three sub-components: place attachment, place dependence, and place identity. Place attachment refers to the emotional relationship that an individual builds with other individuals and the environment within the place, place dependence is the functional relationship that an individual builds with the place by how the place provides their needs and demands, and place identity is the definition of self and oneness of an individual with a place that is built upon complex interactions and life experiences that mainly occur during their stay [14]. However, overall, a sense of place is not prioritized, if not ignored, in formulating local plans and laws due to its intangibility. Fleming et al. [15] recognized that a sense of place is essential in discovering more about a community's identity, its attachment to the place, and its awareness of giving importance to their cultural heritage. Knowledge of these factors makes local plans more accurate, inclusive, holistic, and fitting to the general population. More so, the Sustainable Development Goals (SDG) 2030 emphasized that in goals number eight, nine, and eleven, all populations must be capable of contributing to economic growth, policies, and systems must be inclusive for all, and cities and communities must be sustainable - encompassing positive growth and development for all of its components, including the minority of the population. Henceforth, to understand the ISF population as contributors to successful emerging economies and the BPM as the largest public market in the region, it is imperative to investigate the relationship of the two aforementioned variables through the lenses of sense of place to help formulate plans that develop the potential of the said population, and that maximize the ability of the market to provide the people's needs.

This research aims to determine the relationship between the socioeconomic provisions offered by the BPM and the informal settlers' sense of place (SOP). Specifically, these socioeconomic provisions refer to the goods, services, and job opportunities present in BPM. The study becomes more relevant in terms of local planning, specifically emphasizing the importance of public markets and the potential contribution of informal settlers to the city's economic growth, given the BPM's socioeconomic prominence and the ISF's presence in the city. This contributes to further incorporating the concepts of accessibility and availability of resources, as represented by the BPM, and the location of the population, as represented by the ISF, with human and urban settlement planning, specifically in formulating land use and zoning ordinances.

2 Methodology

2.1 Locale of the Study

The research local is composed of the highest ISF-populated barangays in Biñan. These barangays are Dela Paz - Lupang Pangarap, Dela Paz - Sitio Pulo Gonzales, Ganado, Loma, and Bungahan, as illustrated in Figure 1. The ISF population of these barangays accounts for 71% of the whole ISF population in the city. Due to limitations on time and manpower, the 1,548 ISF population from the barangays as mentioned earlier calculated a sample size of 68 with a 90% confidence level. There were 25, 20, 9, 8, and 7 ISF surveyed from Brgy. Dela Paz - Lupang Pangarap, Dela Paz - Sitio Pulo

Gonzales, Ganado, Loma, and Bungahan, respectively. The distances of each barangay from the Biñan Public market are in Table 1.

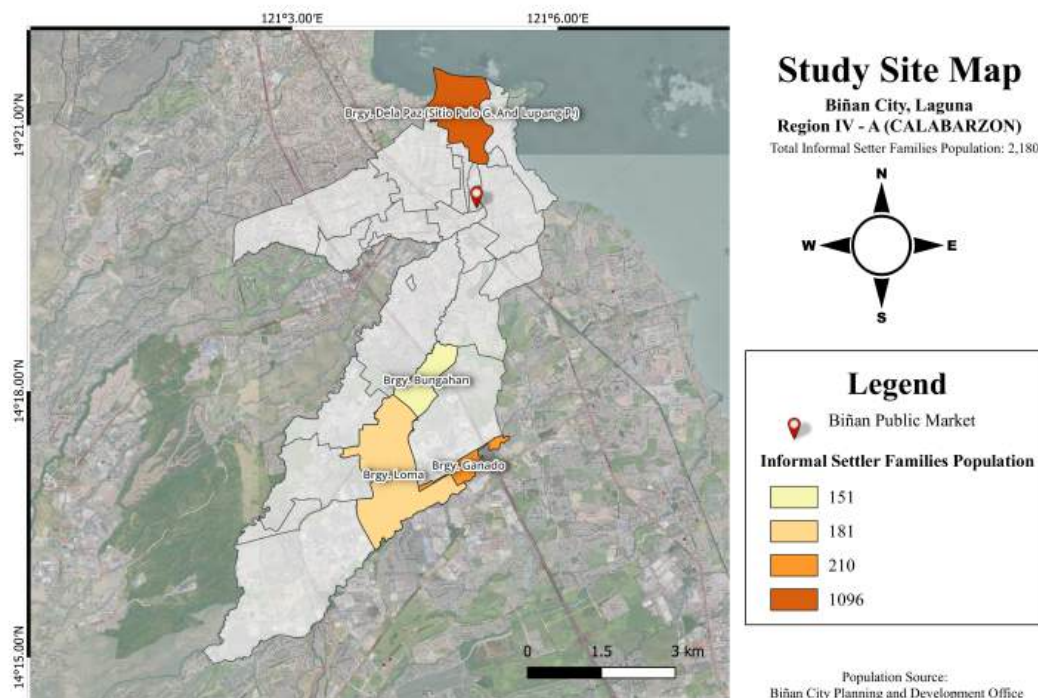


Figure 1. Informal Settler Families Study Site Map

Table 1. Distances of Barangays from the Biñan Public Market

Barangays	Distances from Biñan Public Market (KM)
Dela Paz - Lupang Pangarap	0.50
Dela Paz - Sitio Pulo Gonzales	1.90
Ganado	6.00
Loma	5.00
Bungahan	4.00

2.2 Research Design

This quantitative research used stratified random sampling. A quantitative method was used as the objectives mainly required the analysis of only numerical data. Subsequently, stratified random sampling was done to ensure that each barangay had equal representation, strengthening the validity and impartiality of the information. The Informal Settler Location Map provided by the Biñan LGU also indicated the number of ISF population from each barangay. By ranking, the ISF population from Barangay Dela Paz - Lupang Pangarap, Dela Paz - Sitio Pulo Gonzales, Ganado, Loma, and Bungahan, accounts for 71% of the total ISF population in Biñan. The computed sample size of 68 is subjected to an assisted survey questionnaire. The sample size per barangay was calculated by ratio and proportion, as summarized in Table 2. During data gathering, the researcher acquired an actual sample size of 97. Additionally, information was gathered from key informant

interviews (KII) involving the two informants from the city offices assigned to housing livelihood and market. The same questionnaire was used with the online and face-to-face data gathering methods and the KII. The KII results were used only to give more context to the results from the face-to-face and online questionnaires. The informants were also found suitable as their sectors focus on the fields of the variables of the study.

Table 2. Actual Sample Size per Barangay

Barangays	Population Size	Percent Share on Total Population	Computed Sample Size	Actual Sample Size
Dela Paz - Lupang Pangarap	549	35.46%	24	20
Dela Paz - Sitio Pulo Gonzales	457	29.52%	20	30
Ganado	210	13.57%	9	17
Loma	181	11.69%	8	15
Bungahan	151	9.75%	7	15
Total	1548	100%	68	97

2.3 Data Collection Methods

Records from the City Planning and Development Office identifying the location of ISF were used to determine the highest ISF-populated barangays in Biñan. From this, the number of samples from each barangay was computed. The researcher then distributed and conducted assisted survey questionnaires to the respondents from Brgy. Ganado, Loma, and Bungahan, while the respondents from Brgy. Dela Paz was subjected to answering an online questionnaire due to accessibility concerns, such as their places still being submerged in floods during the data gathering period. Both the assisted survey questionnaire and the online questionnaire have the same components. These components include 1) issued permit from the barangay captains, 2) informed consent, 3) housing and tenure and socioeconomic status, 4) socioeconomic provisions of the Biñan Public Market, and 5) sense of place, as detailed in the supplementary material. There were also no biases or differences in results despite the difference in data collection methods. The respondents were approached house-to-house using the face-to-face method, and the online respondents were gathered with the help of barangay representatives. The questionnaire was approved and further revised by experts in the field of planning and sense of place before dissemination. The summary of data collection methods is shown in Figure 2.

2.4 Data Analysis

A Likert scale was used to measure the level of SOP of each type of resident. This scale uses levels of agreement (strongly agree to strongly disagree) to measure the components of SOP.

On the other hand, the socioeconomic provisions (i.e., goods, services, and job opportunities) were analyzed through demographic or frequency analysis, and item analysis. Afterward, since each of the items under each of the categories of socioeconomic provisions is furthermore asked in terms of frequency of purchase, they were further categorized by this aspect (i.e., *hindi pa kahit kailan nakakabili* or not applicable, *madalang* or seldom, *buwanan* or monthly, *lingguhan* or weekly, and *araw-araw* or daily). This was transformed into numerical values, one to five, to be efficiently subjected to data analysis.

The SOP Likert scale and the categorized socioeconomic provisions, specifically those from goods and services, were analyzed through the Kendall Rank Correlation Coefficient, commonly referred to as Kendall's Tau-b Coefficient. This type of analysis is suitable for determining whether

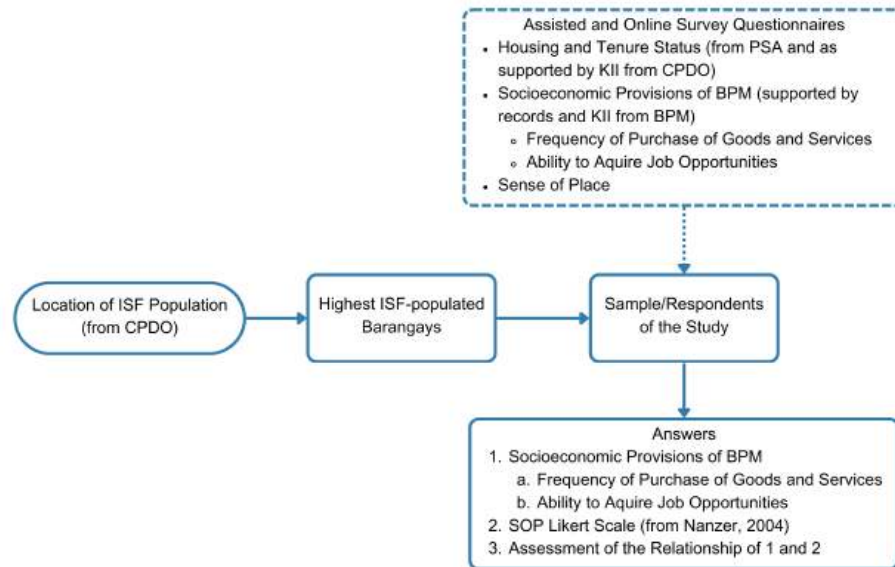


Figure 2.
Summary of Data Collection Methods

two ordinal variables are related to one another or independent of each other. Despite Kendall's Tau-b sensitivity to tied ranks, it measures the strength and direction of association between two ordinal variables rather than linear relationships, making it more suitable for non-parametric data, such as survey answers. Lastly, Spearman's rank coefficient of correlation was used to assess the relationship between the ability to acquire job opportunities and SOP. This type of analysis is best used when assessing the relationship between yes-or-no data and ordinal data for which the questions under job acquisition are answerable by yes or no.

All analyses were calculated using the Statistical Package for the Social Sciences (SPSS) software.

2.5 Ethical Considerations

Ethical considerations were applied when conducting the study. First, voluntary participation allowed the respondents to participate or opt out of the study. Second, the respondents were asked for consent. These consents include complete information regarding the purpose of the study, its benefits, and possible risks, if any. Third, confidentiality ensures that the identity of the respondents is seen as less essential for the study; thus, there is an option not to provide their names. The information that was prominently needed is their general address, including their barangay, municipality, or city. Since there are two types of data gathered, physically written and online, measures on keeping them confidential include keeping the physically written response in enclosed envelopes per barangay, which were only opened during data analysis period, and keeping the online responses in a private Google Form link upon completion. Fourth, the researcher ensured that the results of the study were made available to the respondents. Lastly, it is ensured that the study is free of plagiarism or research misconduct.

3 Results

3.1 Biñan Public Market's Edge: Completeness and Cheaper Price

The study gathered information from the marketing office regarding the locations of the goods and services in the market. However, despite the publicly owned market, most businesses and stalls are privately owned by small and medium-sized enterprises, usually by individuals living within Brgy. Poblacion and Brgy. San Antonio. Available goods in BPM include pork meat, beef meat, fish, chicken, processed foods, fruits and vegetables, dairy products, spices, beverages, and tools and hardware products.

Concerning the enumerated goods, the BPM provides the same types of goods to the people, similar to the usual provisions of public markets [16]. There are no identified unique or special products sold in the market.

Among these goods, Figure 3 below shows that all respondents purchase pork meat, fish, and fruits and vegetables from the market. On the other hand, dairy products, processed foods, tools, and hardware products were the least purchased, with only 89 out of 97 respondents (91.75%) and 79 out of 97 respondents (81.44%, respectively). They stated that in addition to their seldom consumption and usage of the latter-mentioned goods, there are nearby *sari-sari* stores, grocery stores, and *talipapa* in their place of residence where they can acquire dairy products, processed foods, and day-to-day minor tools and hardware, negating the need for them to access the BPM still. However, most of the respondents still mentioned that the main reason why they still access BPM is that the market has relatively cheaper prices as compared to the aforementioned nearby stores. More so, the BPM serves as a one-stop-shop for all of their needs due to its completeness in goods.

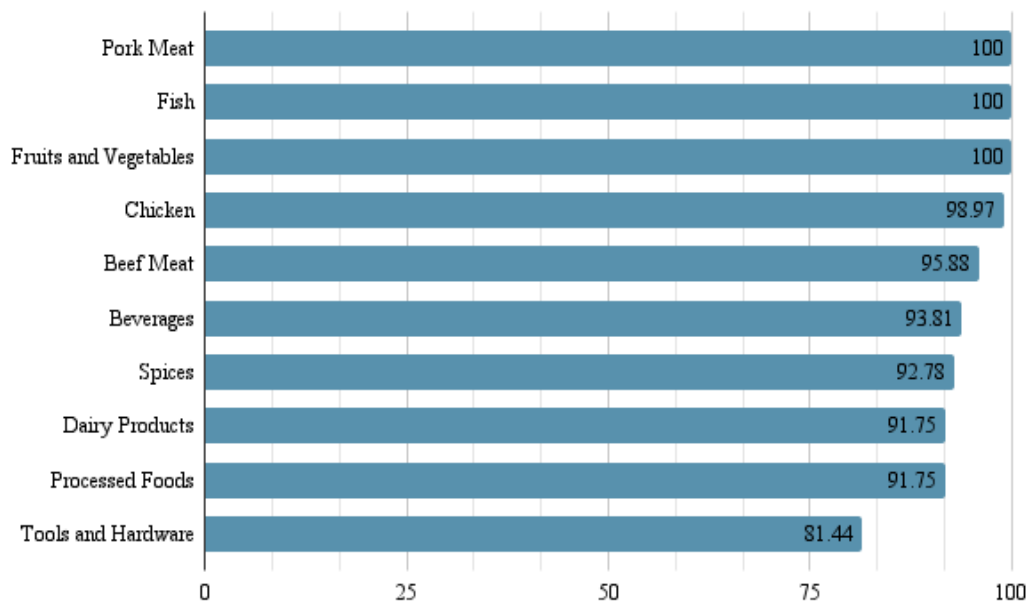


Figure 3. Percentage of Respondents who Purchased Goods from the Biñan Public Market

The next socioeconomic provision of the BPM is its services, such as ready-to-eat services, repair services, barbershops and salons, and tailoring and upholstery services. Figure 4 summarizes the respondents' ability to access the available services in BPM. The data shows that ready-to-eat services were accessed by most of the respondents, amounting to 88 out of 97 respondents (90.72%), followed by repair, barbershops, tailoring or upholstery with 81 (84.54%), 76 (78.35%), and 75 (78.32%) respondents, respectively. According to them, this is similar to their access to

some of the goods wherein nearby repair shops, barbershops, and tailoring shops within their residence, not to mention the infrequent need for these services. As one of the respondents stated, "If we only need to buy a few things, we just buy here in our area. For example, if we run out of salt while cooking, we just get it here. As for tailoring, it's not something we always need, so we just go to whoever is available here. But if we need to do a big grocery shopping or have a lot of clothes tailored, that's when we go to the public market".

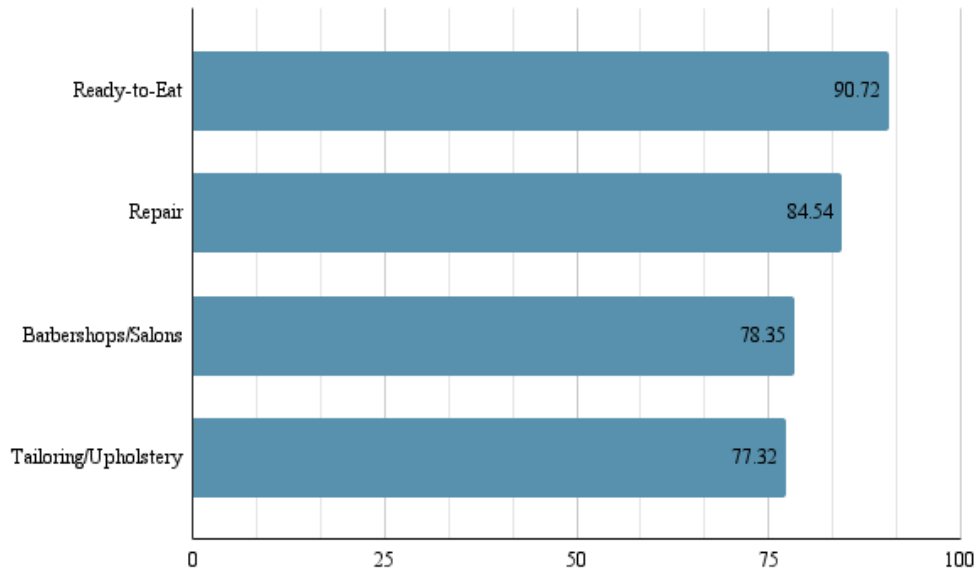


Figure 4.
Percentage of Respondents who were able to access the Services

The last socioeconomic provision of the BPM is the job opportunities. Most respondents, 78 out of 97 or 80.40%, stated they could not acquire any job opportunity or livelihood from the BPM. Their residence is near other commercial establishments such as factories and construction sites. Some indicated they had employment in Metro Manila as there is a relatively higher salary than the job opportunities offered in Biñan Public Market or Biñan in general. On the other hand, the rest (19.60%) of the respondents were able to acquire job opportunities from the BPM. These job opportunities include fruit and vegetable vendors, tailoring businesses, and car wash staff. However, these respondents no longer work in the market, as they mentioned that their income from the aforementioned jobs was insufficient, given that they only served as staff or assistants to the owners of the stalls or businesses. To replace their previous jobs, they put up their small businesses in their residence, such as having small eatery, *sari-sari* stores, or are now employed as delivery riders.

Despite BPM having these goods, services, and job opportunities, it can be concluded that the respondents also consider nearby commercial areas such as *sari-sari* stores, grocery stores, *talipapa*, and service shops in acquiring their needs. The respondents tend to access these small commercial areas when they only need small amounts of goods or do not have other reasons to travel away from their houses. However, the BPM still plays a major role in acquiring their needs, especially in buying in bulk as the said market is cheaper and has more complete goods and services. This implies that despite its distance from the people's place of residence, the population still prominently access the market because of its relatively cheaper and more complete goods and services. This is supported by a recent study by Smith and Doe (2023), stating that consumers often sacrifice distance and travel costs when choosing a market of cheaper goods. The perceived

savings are mostly emphasized on the price of the goods and products, and the additional costs due to additional effort and travel costs are often negated [17].

On the other hand, concerning job opportunities, BPM was not as efficiently accessed as ISF's acquisition of goods and services. Those who acquired job opportunities from BPM could also establish their source of income near their place in replacement of their previous jobs in the market. Contrary to the Sector Model by Homer Hoyt [18], the results of this study showed that the Central Business District, as represented by the Biñan Public Market, can be replaced by other small commercial areas near the residences of the population. Although the BPM still attracts the population and serves as the main commercial district that provides the needs of the people, the growing economy away from the BPM, as represented by other smaller commercial areas, cannot be neglected as they also serve as magnets to the population. This shows that the historical strength of the Central Business District, despite it being the pioneer provider of goods, services, and job opportunities to the people, throughout time, can compete with other newly developed commercial establishments, especially when these are in nearer proximity to the residential areas.

In relation to the purchase of the respondents' ability to purchase goods and services, Engel's Law is aligned with the results of Ogaki [19]. Among goods and services, the respondents tend to allot their money and purchase more goods, specifically meat products, than services. This strengthens the claim of the law that when an individual has a low income, he or she spends most of his or her money on food, putting lesser priority on their other needs, as represented by the services of the BPM. The ISF's characterization of having a low-income level resonates with Engel's Law, showing that the little income they have been allotted or focused more on the goods or foods the BPM provides.

The aforementioned data shows that the BPM's competency lies in the completeness and cheapness of prices of the goods and services they offer. Despite its relatively greater distance away from residential areas, it continues to attract people because of its cheap and complete socioeconomic provisions, especially its enumerated goods. This supports Gregory & Borland [20], which states that one of the characteristics of the public market is that it provides relatively lower prices of goods and services since it is ideally managed, if not entirely owned, by the government. However, in relation to Republic Act No. 6039 entitled, "An Act Instituting a National Market Code of the Philippines" [4] which includes regulating markets as providers of employment and livelihood, BPM falls short of providing adequate and sustainable job opportunities to the ISF population. This pushes the ISF population to establish their livelihood in their places of residence or to acquire job opportunities outside BPM or even away from the city.

3.2 Sense of Place: High Place Identity of ISF towards Biñan Public Market

The concept of sense of place was divided into three sub-components, namely 1) place attachment, 2) place identity, and 3) place dependence. There are 11 statements subjected to Likert Scale type of measurement, four of which fall under place attachment and place dependence each, and three falls under place identity.

The frequency of responses for each component of sense of place is shown in Figures ???. These scores show that all components lead to a high value of the respondents' overall sense of place. However, place identity had the highest modal score among the three components. This means the ISF sample identifies themselves in oneness with Biñan and BPM. To specify, the statement, "The BPM is important to me" gathered the highest score under place identity.

On the other hand, there are many strongly disagree and disagree responses to the statement "As far as I am concerned, there are no better marketplaces than BPM", as shown in Figure 5. This implies that the respondents do not necessarily regard BPM as better than other marketplaces. This explains the presence of smaller flea markets or talipapa closer to their residence, which they may access more frequently than BPM.

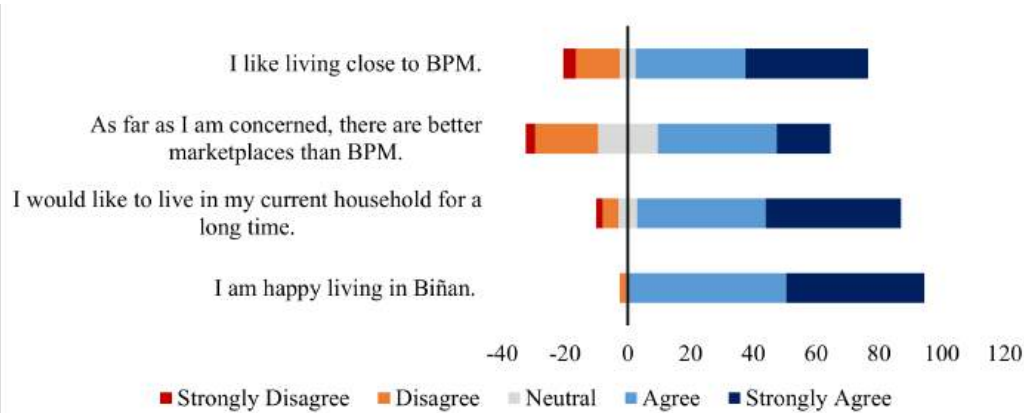


Figure 5.

Place Attachment of the Respondents towards Biñan Public Market

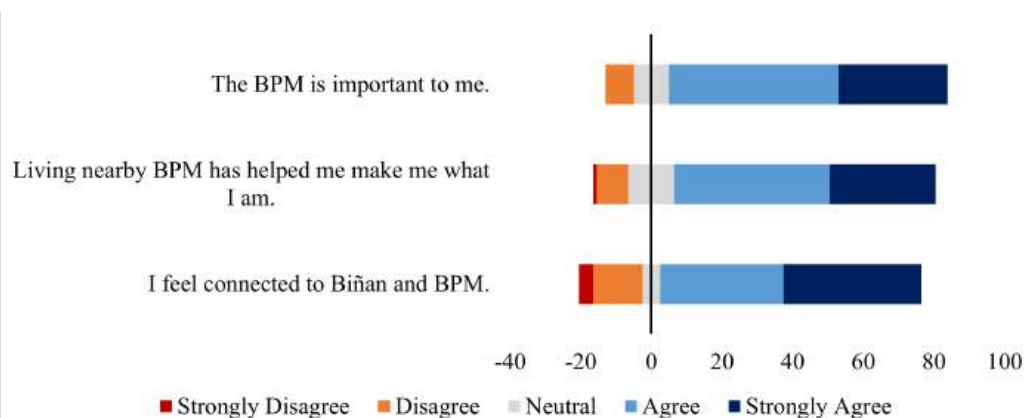


Figure 6.

Place Identity of the Respondents towards Biñan Public Market

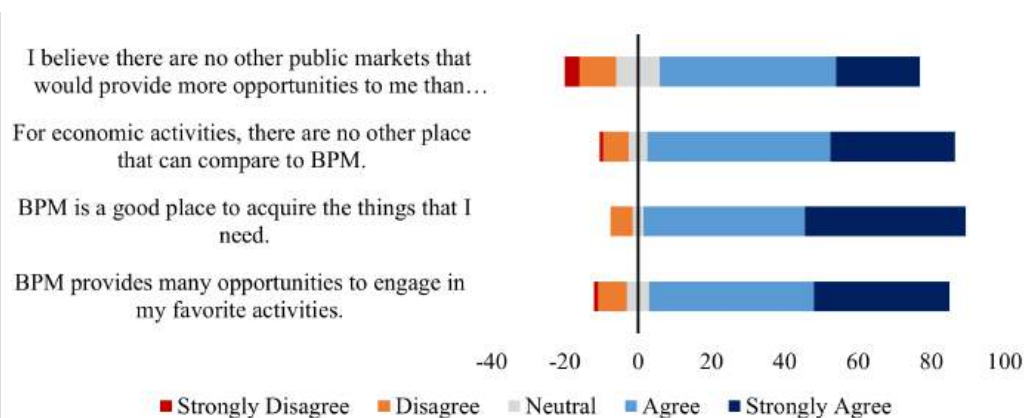


Figure 7.

Place Dependence of Respondents towards Biñan Public Market

It can be concluded that the ISF characterizes itself as part of the city and its market. Through built life experiences and complex interactions, as characterized by place identity [13], respondents tend to associate themselves, along with their characteristics and personality, with Biñan City and BPM. This can also be supported by how most respondents mentioned that they have lived

in the Biñan since birth through their parents and long-ancestral lineage who were original city residents. The reason behind their ancestors' long-time residency in the city was not identified. However, it has the potential to be related to the phase of Biñan during the Spanish Colonization Era, emphasizing them as one of the Spanish Villas – centers of commerce and culture at that time; subsequently connecting to the desire and need of the people to stay in the city decades and generations before the present. This can be supported by a recent study by Zhang et al. [21] indicating that places with long-established historical background, specifically those that are established as centers of commerce during the Spanish Colonization Era, significantly enhance residents' sense of belongingness, motivating them to stay for a more extended period up to the present. In addition, it can be inferred that despite Biñan City being near Metro Manila where migration and movement of people are prominent, Biñanenses tend to stay in the city, implying that their demands, needs, and wants can be met without the need to change their residence.

3.3 Goods: Frequency of Purchase establishes Functional Relationships and Sense of Oneness between the Market and the Respondents

Figures 8 and 9 show the relationship of each of the market's goods to the respondents' sense of place through Kendall Tau-b Coefficient. It assessed the relationship between the frequency of purchase and the respondents' sense of place. Numerical values, one to five, were assigned to represent the frequency of purchase: not applicable, seldom, monthly, weekly, and daily/everyday, respectively. Based on the gathered data, five out of ten goods have a positive significant relationship (Tau-b or correlation coefficient is positive, and $p < 0.05$) with place dependence and place identity. These goods are pork, fish, chicken, dairy products, and tools and hardware products. This means that as the frequency of purchase of the aforementioned goods increases, both the respondents' place dependence and place identity increase; thus, purchasing these goods builds a functional relationship and a sense of oneness between the respondents and the BPM. The relatively high correlation of these goods can be connected to the frequent need of the people to buy these goods, on top of their relatively cheaper prices as compared to others; such that pork and fish are relatively cheaper than beef meat, and that dairy and hardware products may frequently be more needed from the BPM as compared to processed foods, spices, and beverages, which can be accessed easier on nearby stores without going to public markets.

Next, three goods have a positive significant relationship only with place dependence: beef meat, beverages, and processed foods. As for beef meat, this may reflect its higher price than other goods, making it relatively inaccessible, as supported by only 95.88% of the respondents who purchase it. Meanwhile, buying beverages and processed foods is seen as simply acquiring the respondents and providing the BPM, thus not correlating its purchase frequency with place attachment and place identity. When purchasing small amounts daily, beverages and processed foods can be acquired from nearby small stores without the need to access the BPM. As such, regardless of their purchase frequency, purchasing beef meat, beverages, and processed foods can only build a functional relationship between the respondents and the BPM.

More so, fruits, vegetables, and spices do not have a significant relationship with any of the three components of a sense of place. This reflects that regardless of bulk or small purchases, with their relatively cheaper prices than other goods and services, their acquisition can be made through nearby commercial areas without needing to access the BPM. This shows an inability to build a significant relationship with their frequency of purchase and the respondents' sense of place.

Lastly, it can be noticed that none of the goods have a significant relationship with place attachment, inferring that the frequency of purchase does not affect the place attachment component of the respondents' sense of place. This shows that purchasing these goods could not establish an emotional relationship with the people and the place.

Figure 8.1 Relationship between Goods from Biñan Public Market and Respondents' Sense of Place (a) Pork Meat Purchase, (b) Beef Meat Purchase, (c) Fish Purchase, (d) Chicken Meat Purchase, (e) Fruits and Vegetables Purchase

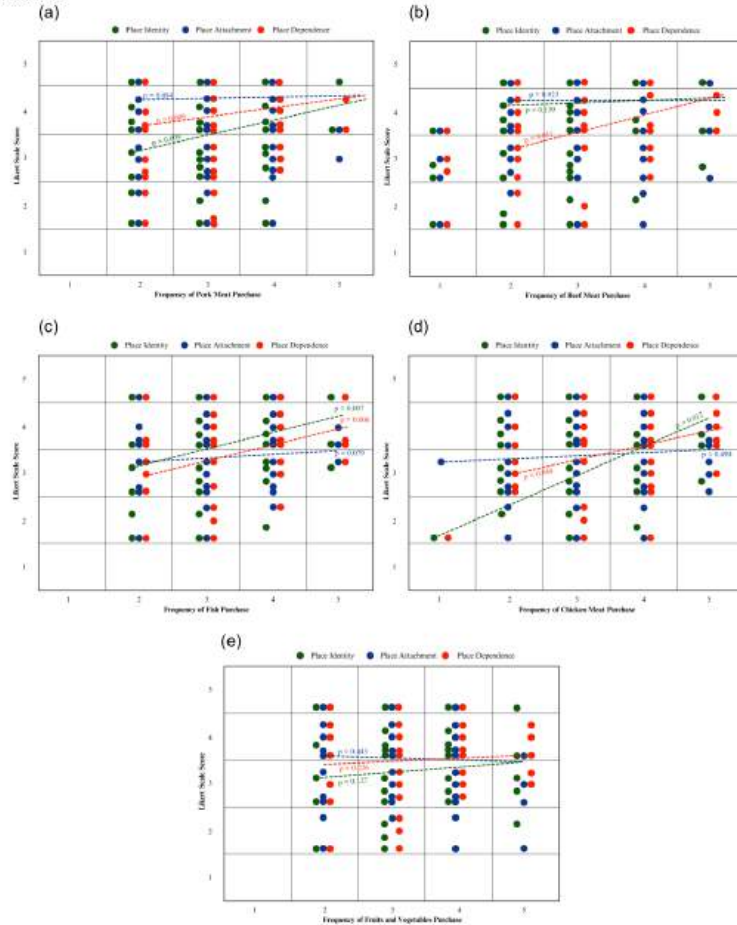


Figure 8.

Relationship between Goods from Biñan Public Market and Respondents' Sense of Place: (a) Pork Meat Purchase, (b) Beef Meat Purchase, (c) Fish Purchase, (d) Chicken Meat Purchase, (e) Fruits and Vegetables Purchase

The aforementioned data on the frequency of purchase of goods and its relationship with sense of place showed that functional relationships and oneness of the respondents and the BPM can be strengthened by making the products more accessible to the population. The more frequently the respondents acquire these goods, the higher their place dependence and place identity are towards BPM. This aligns with the study of Wang et al. [22], stating that frequent shopping behaviors in local markets can contribute to their enhanced sense of place, specifically place dependence, and identity. Both the present study and the reference emphasized that there is a formed emotional and functional attachment through repeated interactions with the place. This also implies that they perceive buying from the market as part of their character as a Biñanense. Without the BPM and people's access to its goods, the perception that the city provides for their needs and connection to Biñan may decline over time.

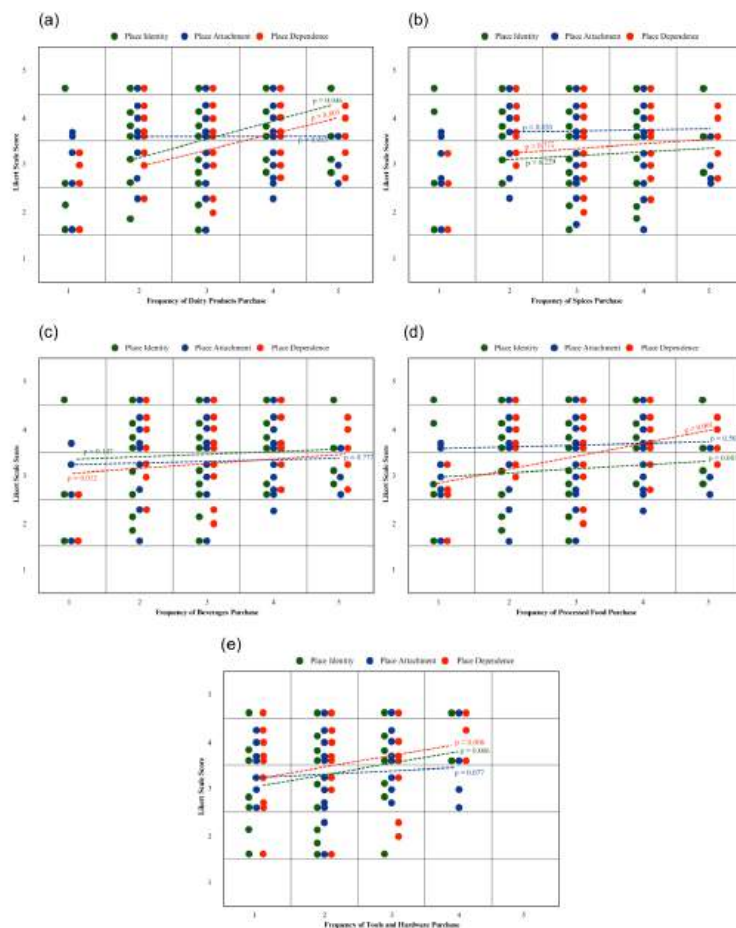


Figure 9.

Relationship between Goods from Biñan Public Market and Respondents' Sense of Place: (a) Dairy Products Purchase, (b) Spices Purchase, (c) Beverages Purchase, (d) Processed Food Purchase, and (e) Tools and Hardware Purchase

3.4 Services of Biñan Public Market as Magnets to the People

In terms of the services provided by the BPM, it can be seen in Figure 10 in the supplementary materials that three out of four services, namely repair, tailoring, and barber shops or salons, have a positive significant relationship with all of the three sub-components of SOP (Tau-b or correlation coefficient is positive, and $p < 0.05$). This shows that as the frequency of acquisition of these services increases, their SOP towards the market also increases. On the other hand, one of the four services, which is frequency of acquisition to fastfood or ready-to-eat services, fails to have a significant relationship with place attachment. This reflects the greater prominence of fastfood chains and other ready-to-eat services away from the BPM, which people have more access these. It is also important to note that the usual image of public markets in the Philippines is leaning on retail and trade. Having ready-to-eat services, which ideally builds social and cultural bonds among the people [23], based on the results of the study, is not necessarily applicable in the context of BPM as these services in the said market are incapable of building up emotional relationships between the place and the people.

The positive relationship between the services, fastfood or ready-to-eat services, tailoring, and barbershops or salons, from the BPM and respondents' sense of place suggests that the market

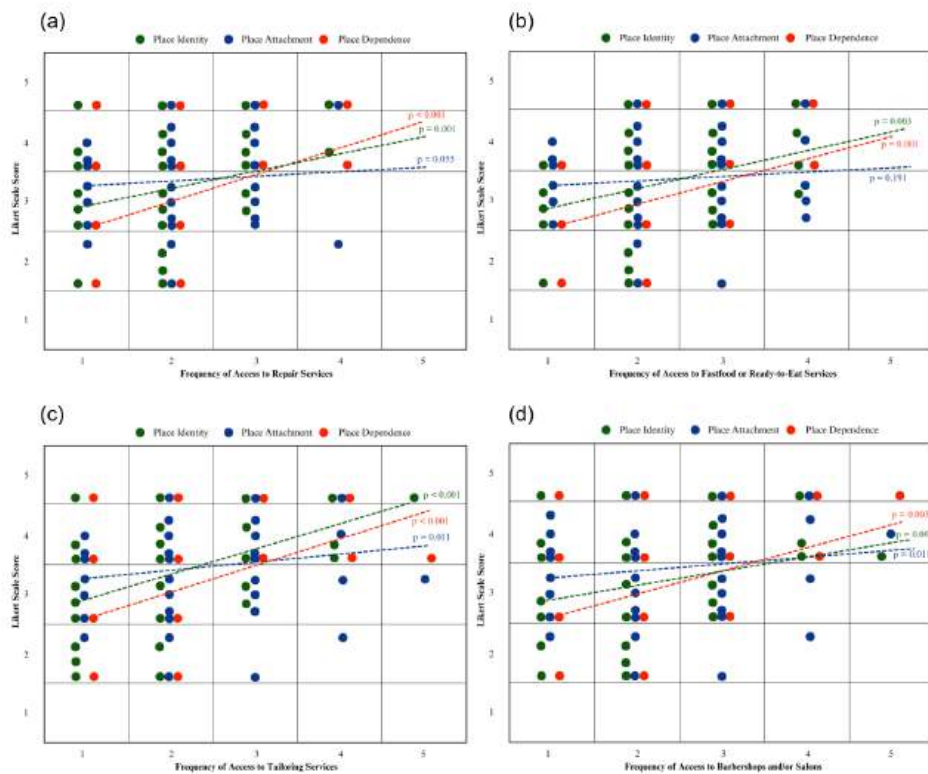


Figure 10.

Relationship between Services from Biñan Public Market and Respondents' Sense of Place: (a) Repair Services, (b) Fastfood or Ready-to-Eat Services, (c) Tailoring Services, and (d) Barbershops and/or Salons

management should also consider enhancing and developing these services, making them one of the highlights of the BPM, aside from only focusing on the provision of goods. When people begin to identify BPM as the main provider of such services, they will tend to access the market more, and as a result, their sense of place towards the market and the city as a whole will gradually be strengthened, as well. Improving the ability of the market to provide these services, subsequently increasing the people's frequency of access to them, generates an increase in sense of place, thus allowing people to see themselves in connection and oneness with holistically, and in need of the city – as characterized by the three components of sense of place [24].

3.5 Job Opportunities from the Market as Symbols of Biñanenses' Identity

Among the three components of sense of place, only place identity has a significant relationship with job opportunities provided by the BPM (Tau-b or correlation coefficient is positive, and $p < 0.05$), as shown in Figure 11. This indicates that the more job opportunities the people acquire, the greater their sense of oneness with the place. This suggests that working in BPM may create a greater sense of belonging through interactions and experiences. More than the norm that job opportunities provide the needs of the people, in this study, job opportunities are more than providers of needs; instead, through the result of this study, they build identity and oneness – a new context that past literature often neglect.

However, the lack of a significant relationship between job opportunities and place attachment and place dependence shows that jobs do not affect people's emotional and functional relationships, despite the ability of people to acquire jobs from BPM. This reflects the low number

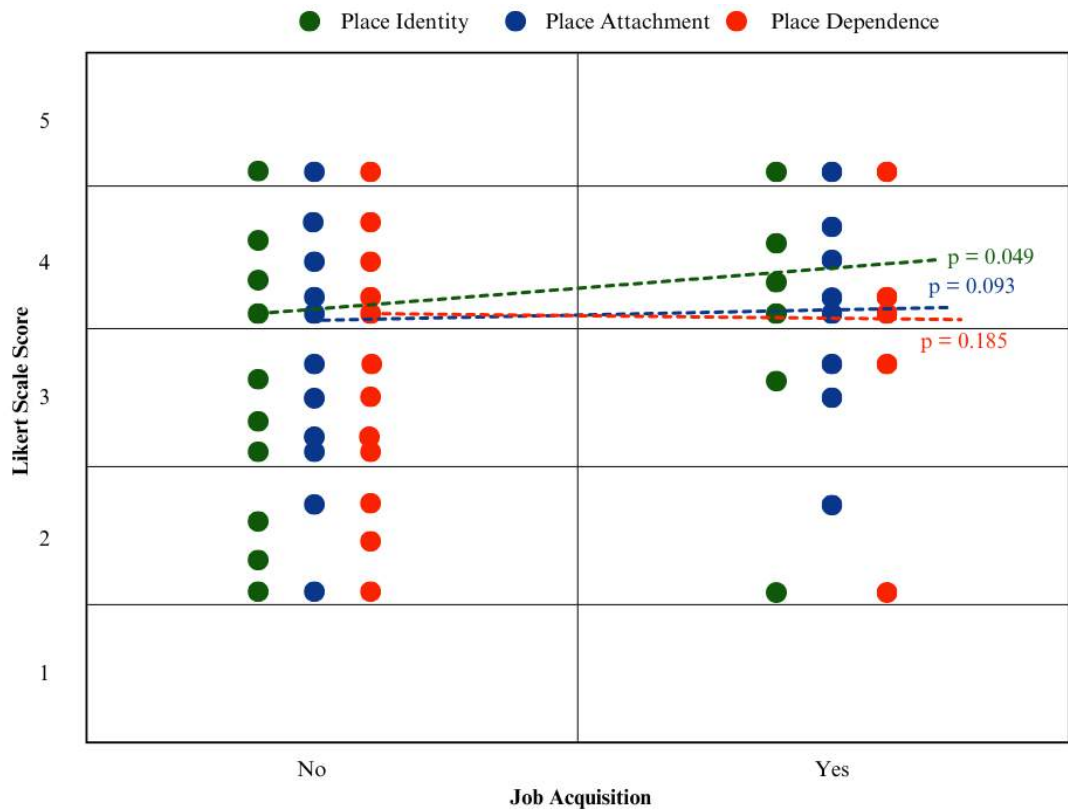


Figure 11. Relationship of Job Opportunities from Biñan Public Market and Respondents' Sense of Place

of respondents (19 out of 97) who could acquire jobs from the market. Also, these respondents all had new livelihoods and no longer working in BPM. More so, job opportunities in the BPM are not announced in public. Those who acquire job opportunities from the market are more on through internal connections (family members and or friends) rather than formal job hiring. This imposes the need to possibly formalize job opportunities on the market to make these opportunities more available and known to the population. Formal employment ranges from registered market vendors and/or business owners. Informal employment ranges from parking assistants, barkers, and unregistered ambulant vendors [25]. Despite both types of employment, most of the respondents acquire their jobs and livelihood either from neighboring establishments near their residences or outside Biñan. Few who were able to acquire jobs from the market were seen to have increased place identity, implying that if BPM can generate more jobs that are accessible to more population, more can see themselves in oneness with the city.

This indicates that jobs from the BPM are not merely seen as providers of the needs of the people, as reflected by the lack of relationship with place dependence, or as emotional tools built upon other people and the place, as represented by the lack of relationship with place attachment. Jobs are seen as an anchor of oneself toward the place, a defining factor of one's character with the place, as emphasized by the significant relationship with place identity [13].

4 Conclusion

Through the study, it was identified that there is a significant positive relationship between the socioeconomic provisions of the market and the ISF's sense of place. Generally, the results of the study mainly imply that 1) there is a need to improve the socioeconomic provisions of the BPM in terms of the populations' access, and 2) informal settler families should be included in local

government planning, specifically to ensure that they have access to their needs, which can be specified as part of the Comprehensive Development Plan (CDP).

In line with the main points of the study, the Local Government Unit may develop and strengthen the ability of the Biñan Public Market to provide job opportunities. The LGU may explore the developing job opportunities of the market since these also serve as instruments in increasing people's sense of place. In the market's current location, informal economies generating informal livelihood (e.g., parking assistants, barkers, unregistered ambulant vendors, etc.) can be formalized. Job descriptions, hiring processes, salaries, and other job-related aspects can have specific systems that locals can follow and be made aware of. Formalizing these economies and livelihoods may open job opportunities that are more efficient and accessible to the people.

In a broader perspective, although it was mentioned by the key informant that there are plans to establish slaughterhouses in the city and other supporting facilities to the BPM, the LGU may consider the actual replication of the BPM in different areas in Biñan to make it more accessible to the general public. Since the results showed some instances of residents accessing nearby stores with more expensive goods and services within their place of residence, it is suggested that a replication of the BPM could make the cheap and complete goods and services from the BPM more accessible to the people. Economic centers could be in patch form and distributed throughout the city where the goods and services are as cheap as the current BPM and where job opportunities are made both more available and accessible. However, road networks to and from these economic centers may first be assessed and considered to ensure efficient accessibility. With this, suitability factors such as distances to road networks and consideration of population centers (southern, middle, and northern) could be identified throughout the city, subsequently aiding in identifying suitable new areas for the BPM replicates. Planners and developers may also further incorporate cultural and heritage preservation in establishing new facilities and zoning ordinances in the city. Most of the respondents of the study have their long ancestral lineage living in Biñan. This emphasizes that they have been residing in the city for a long time despite having access to neighboring cities' services and job opportunities and services. Besides developing Biñan into a highly commercialized city, planners and developers may consider preserving its character and history to strengthen the people's sense of belongingness and oneness with the place. Some of the practices in character and historical preservation can include the development of social amenities such as parks, green spaces, and museums that are well-integrated with the city's history. Making the city inclusive in terms of being more conducive to the elderly may promote people's longer stay and stronger attachment to the city. This can be practiced by establishing more complete healthcare facilities, conducting programs related to people's well-being, developing walkable pathways where special-used equipment such as wheelchairs and strollers can pass, emphasis on the prioritization of pedestrians, and more.

In addition to inclusivity, informal settler families' locations must enable them to acquire their needs. The key informant stated that there are plans to relocate the city's current ISF population. While there are still no proposed relocation sites, this study recommends that, regardless of the actual location, it is important to consider that it must be within reach of commercial areas where goods, services, and job opportunities are made available to the people. This reflects how the respondents mentioned that their usual mode of transportation to the market is through tricycles and jeepneys, which are often expensive. Having walkable or bikable distance to commercial areas may help them acquire their needs in terms of proximity and cut off their transportation expenses.

Lastly, this study suggests that future researchers first explore focusing on proximity or distance. Since the current study focused on the frequency of purchase and acquisition to the socioeconomic provisions of the Biñan Public Market, future researchers may consider shifting the focus to proximity or distance since it is also a factor in assessing the accessibility of the place. This may generate a different lens for studying the city's economic centers and populations. Future researchers may

increase their sample size to strengthen the results. Second, assess other facilities in the city that may contribute to the people's sense of place. One of the limitations of the study is that it only focused on the market. Different individuals may have different reasons for staying in a particular city. This furthermore emphasizes the possibility of expanding this research towards examining other facilities and establishments, as well as other possible factors or reasons of individuals, in identifying a more holistic view of their stay and/or residency. Third, consider the length or period of conducting the study. With a limited time of approximately one year, this study could not consider if time or seasons may affect the results, given that it assessed needs acquisition - an element in people's lives that may frequently change throughout time. In further studying concepts related to the city's development, economic centers, and people's living patterns, future researchers may increase the length or period of their study, making it observe possible trends and or changes that may contribute to refining their study. Lastly, a unified data-gathering method was established among all the respondents. This current study utilized two data-gathering methods, one through face-to-face interviews and the other through online questionnaires. Future researchers are highly suggested to conduct only either of these two as it may decrease biases and/or outliers caused by the differences in the data gathering method. Ensure the chosen data gathering method is efficient for all respondents/samples.

Statements and Declarations

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Conflicts of Interest

The authors declare no competing interests.

Ethical Considerations

The study was conducted following the Declaration of Helsinki. Free, prior, and informed consent (FPIC) was sought from the participants, who were also explained the purpose of the study, their voluntary participation in the study, and how the collected data would be used.

Data Availability

The data of this study is available upon request from the author.

Author Contributions

B.A.Y.D.: conceptualization, methodology, investigation, writing—original draft preparation, visualization. **J.C.L.E.:** conceptualization, methodology, writing—original draft preparation, supervision. **E.M.R.Jr.:** conceptualization, validation, writing—review and editing, supervision. **A.B.T.:** conceptualization, validation, writing—review and editing, supervision.

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