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# Level of Satisfaction of Migrant Workers in the Informal Sector with Public Space in Hanoi

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***Author's contribution***

*The sole author designed, analysed, interpreted and prepared the manuscript.*

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## ABSTRACT

The paper utilized quantitative data collected by survey questionnaires conducted with migrant workers in the informal sector to examine their level of satisfaction with public space in Hanoi. Their two fundamental characteristics, namely type of occupation and that of migration, were analyzed in order to explore whether there existed a link with their level of satisfaction with public space. Overall, the survey sample was relatively satisfied with most types of public space in Hanoi. However, a fairly high proportion of the migrant workers expressed their dissatisfaction with sports playgrounds (either free or charged). The findings also revealed no relationship between type of migration or occupation and the sample's level of satisfaction with public space.

*Keywords: Migrants; informal sector; public space; satisfaction.*

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## 1. INTRODUCTION

In Vietnam, the informal sector has been playing a significant role in addressing unemployment and underemployment among untrained workers, elderly ones and those out of the working age but still able to work in rural and urban areas. According to the General Statistics Office of Vietnam (2022), roughly 991,5 thousand working-age people were underemployed in 2022. The underemployment rate was higher in rural areas than in urban areas (2.51% and 1.70% respectively). Meanwhile, the unemployed working-age population was nearly 1.07 million, and the working-age unemployment rate was 2.32 per cent in 2022. Unlike the underemployment rate, the unemployment rate was higher in urban areas than in rural areas [1].

In big cities, employment in the informal sector is plentiful, satisfying urban dwellers' needs with a wide variety of types of work, such as vending in small temporary markets to meet the demands of residential areas and households for fresh and affordable food or providing loading and unloading or motor trike services, , etc. that can go deep into each alley. Wulandari [2] figured out that a large number of workers in the informal sector do not have specific places to perceive as "workplaces", or "colleagues" with whom to discuss their work. Thus, the question is whether the spatial factor in the case of workers in the informal sector is a variable that is hard to identify or changeable [2].

Derived from the idea of the space for migrant workers in the informal sector, this article selected the type of public space where socio-economic, cultural and socio-political functions are recognized to examine these people's level of presence in public space as well as their level of satisfaction with public space in Hanoi.

## 2. METHODOLOGY

### 2.1 Instrument

The study utilized a questionnaire consisting of two main parts. The first part contained questions to collect data about characteristics of the respondents, namely gender, occupation (or current main job), and type of migration. The second part was designed to survey opinions of migrant workers in the informal sector, including two main questions, namely (1) frequencies of use or presence in 08 public spaces in Hanoi: (i) shopping areas, (ii) restaurants/ diners and cafeterias, (iii) squares, (iv) parks and flower gardens, (v) pavilions, temples and pagodas, (vi) streets ( for walking, cycling, etc.), (vii) free sports playgrounds and (vii) charged sports playgrounds with five options, including multiple times daily, daily, weekly, monthly and rarely and (2) level of satisfaction of the respondents with public spaces in Hanoi, including the aforementioned 08 public places, which was determined by a 5-point Likert scale: Very dissatisfied – Dissatisfied – Neutral – Satisfied – Very satisfied. In addition, the option "Not applicable" (NA) was available for those who do not or have never been to any public spaces.

### 2.2 Sample

The sample was migrant workers in the informal sector with a total of 322 forms collected but only 300 forms meeting the data requirements. The sample structure by gender was 43% and 57% for males and females respectively. That by occupational group included 33% for street vendors (C1), 30.3% for hired laborers (C2), 18% for motorbike taxi drivers, loaders, etc. (C3) and 18.7% for self-employed people in fixed locations (C4). The proportion of the sample by type of migration was 7.3% for daily travellers (M1), 6.3% for weekly travellers (M2), 6.7% for seasonal migrants (M3) and 79.7% for long-term migrants (living in Hanoi for one year and over) (M4).

### 2.3 Data Collection

Since the sample was migrants living in hostels, rented houses or workplaces, it was not feasible to meet them at their accommodation because local authorities could only manage their temporary residence and stay rather than record their occupational information. In addition, to enter the hostels or rented houses requires landlords' consent. Moreover, workers in the informal sector have diverse working and non-working hours, depending on their jobs. For example, food sellers start their work from midnight, going to wholesale agricultural markets to purchase goods and only finish their work once all the goods have been sold out. Therefore, the strategy to approach the sample was as follows. The first step was to map public spaces (flower gardens, parks, community playgrounds, sidewalks and commercial streets) in Thanh Xuan District. The second step was that the research team went to each specified location at different times of the day (morning,

noon and late afternoon), observing and selecting the target sample as well as seeking ways to talk to and persuade them to participate in the survey. The third step was that after the questionnaire completion, the researcher asked the respondents to introduce their relatives, friends and acquaintances who could be the subjects of the study to take part in the survey. Therefore, the initial location of the survey was in a public space where the survey sample was working or entertaining and relaxing.

## 2.4 Data Analysis

To achieve the research objectives, the study used two statistical analysis methods. Firstly, descriptive statistics was used to describe two aspects, namely (1) frequencies of visits to 08 types of public space in Hanoi among migrant workers in the informal sector and (2) level of satisfaction of this group with 08 types of public space in Hanoi. Secondly, so as to explore the relationship between frequencies as well as level of satisfaction and occupational groups as well as types of migration, crosstabulation was adopted.

Chi-square tests were utilized to determine the relationship between variables to be analyzed. The Chi-square test result is only statistically significant when the number of observations is large enough. This means that if more than 20% of the cells in the crosstab have expected frequencies less than 5, then the chi-square approximation is no longer reliable and thus will not be included in the evaluation. In contrast, the Asymptotic Significance (2-sided) of the Pearson Chi-Square (or p-value) is considered in two cases as follows: (1) if p less than 0.05, there is a statistically significant relationship between the two variables; (2) if p more than 0.05, the two variables show no relationship to one another.

After that, if the two variables are determined to have a statistically significant relationship, the degree of association between these variables is evaluated on the basis of the value of Phi and Cramer's V. If the two variables have only two values, then Phi is used for evaluation, while if either of the two variables has three values or more, Cramer's V is used. As the variables tested in this study all had three values or over, the value of Phil and Cramer's V (ϕ) was considered to evaluate the degree of association between the two variables as illustrated in Table 1 below.

**Table 1. Range of the value of Cramer's V**

| Phil & Cramer's V. | Relationship level |
|---|---|
| $\phi = 0.0$ | No or very weak |
| $0.05 < \phi < 0.10$ | Weak |
| $0.10 < \phi < 0.15$ | Moderate |
| $0.15 < \phi < 0.25$ | Strong |
| $\phi > 0.25$ | Very strong |

*Source: Dai et al. [3]*

## 3. RESULTS

### 3.1 Frequencies and Purposes of Visits to Public Space in Hanoi among Migrant Workers in the Informal Sector

The analysis of the data in Table 3 revealed that the public space in Hanoi most frequented by migrant workers in the informal sector was "*streets (for walking, cycling, etc.)*" with 44.7% of the respondents selecting "*multiple times daily*" while only 25.3% claimed "*never*" to come to this public space.

Meanwhile, "*charged sports playgrounds*" were the least commonly chosen location with 91.7% of the respondents stating that they ""*never*" came to this public space while merely 0.3% selected "*multiple times daily*". In addition, as regards frequencies of visiting such public spaces as "*pavilions, temples and pagodas"*, "*free sports playgrounds"* and *"squares"*, low proportions of the respondents chose "*multiple times daily*" (1.7%, 2.3% and 3.7% respectively) while a large percentage of them selected "*never*" (40.0%, 78.3% and 64.3% respectively).

Such public spaces as "*shopping areas (markets, supermarkets and shopping malls)*", "*restaurants/ diners and cafeterias*" as well as *"parks and flower gardens"* also had a relatively small percentage of the respondents selecting "*multiple times daily*" (10.3%, 12.0%, and 9.3% respectively).

The purposes of visits to public space among migrant workers in the informal sector were divided into 02 categories: 1. livelihood purposes: working and purchasing goods and services; 2. entertainment purposes: socializing, practicing sports, relaxing/sightseeing and searching for information. The analysis of frequencies and

purposes of visits to each type of public space indicated that the purposes of visits to all types of public space which had the largest percentage (in total) were "*relaxing/sightseeing*" (157.7%), "*purchasing goods*" (111.3%), "*working*" (96.6%) and "*socializing*" (89%). It is important to note that the survey questionnaire on purposes of visits to public space was a Multiplier effect questionnaire, i.e. recording types of purposes of the survey sample. "*Searching for information*" and "*practicing sports*" had a very low rate, which was a huge difference from the four purposes with the highest proportion.

Of all the categories of purposes, the purpose of coming to "*work*" on the "*streets*" had the highest proportion with 51.7% of the survey sample choosing it. The 2nd and 3rd highest one respectively belonged to the purpose of visiting religious buildings such as pavilions, temples, pagodas, churches, etc. (40.3%) and "*relaxing/ sightseeing*" (32.7%).

Regarding specific purposes of the survey sample, streets, restaurants/ diners, and shopping areas had the highest percentage of selection. Meanwhile, charged sports playgrounds were least commonly chosen for the purposes of the survey sample (only 7%), and free sports playgrounds as well as squares had a higher percentage for visits with the purposes specified.

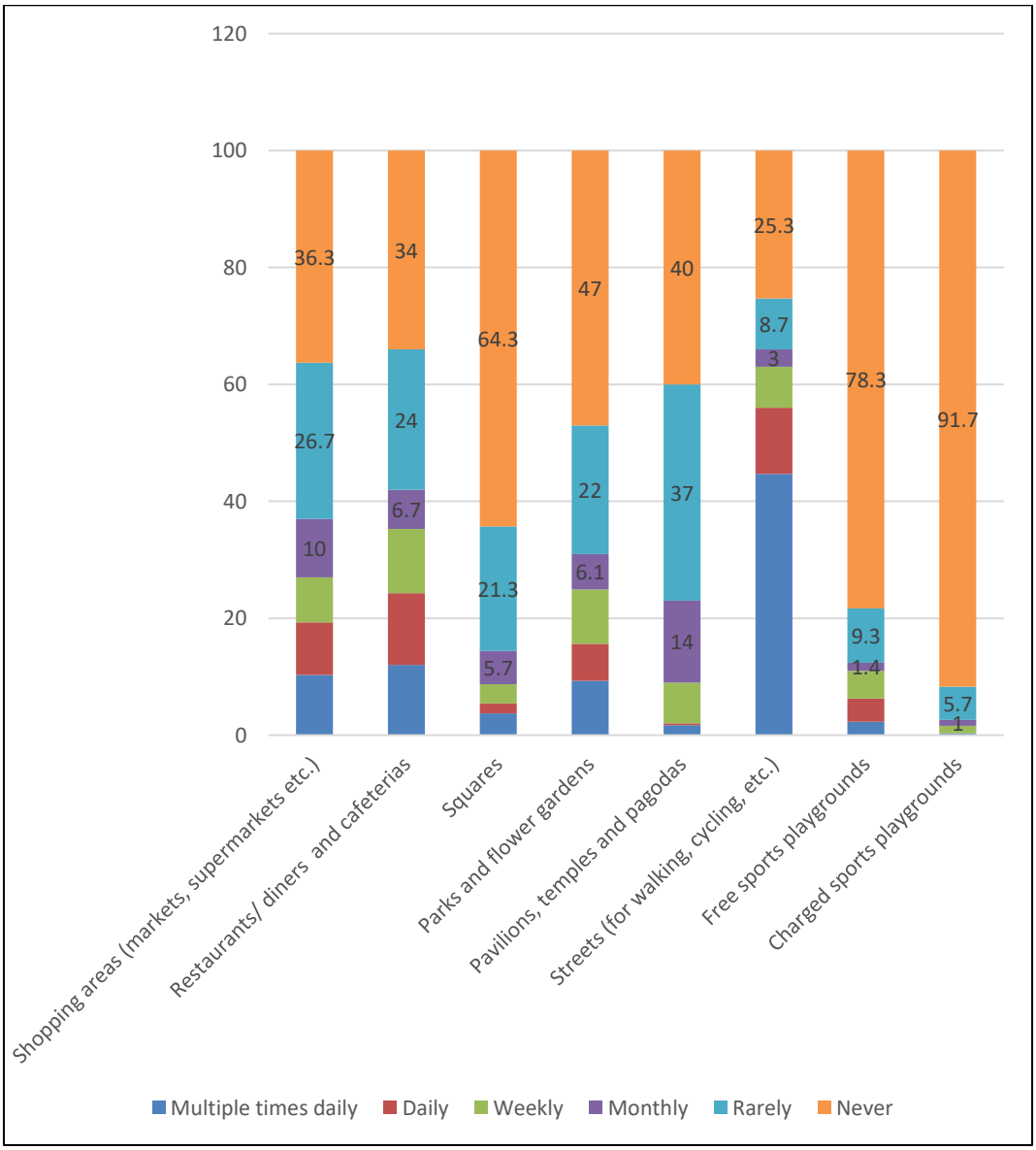


**Fig. 1. Frequencies of visits to public spaces in Hanoi among migrant workers in the informal sector *(Unit: %)***

## 3.2 Level of Satisfaction of Migrant Workers in the Informal Sector with Public Space in Hanoi and the Relationship with Types of Migration and Occupations

### 3.2.1 Level of satisfaction of migrant workers in the informal sector with public space in Hanoi

The analysis of the results illustrated that the percentage of the respondents choosing the "*NA*" option was the largest in each type of public space. Like the aforementioned analysis of frequencies of visits to public space, the two public spaces with the highest proportion of the sample opting for "*NA*" were "*free sports playgrounds*" (81.7%) and "*charged sports playgrounds*" (94.7%) while "*streets (for walking, cycling, etc.)*" also had the smallest percentage (28.7%).

In terms of the level of satisfaction with public space in Hanoi, in general, the majority of the respondents rated "*Satisfied*" or "*Very satisfied*" with the majority of public spaces, except for "*free sports playgrounds*" (12.7%) and "*charged sports playgrounds*" (3.3%), which had very low rates for these two answer choices. Meanwhile, "*restaurants/ diners and cafeterias*" had the highest rate for these options with 31.7% of the respondents choosing "*Satisfied*" and 7.7% selecting "*Very satisfied*".

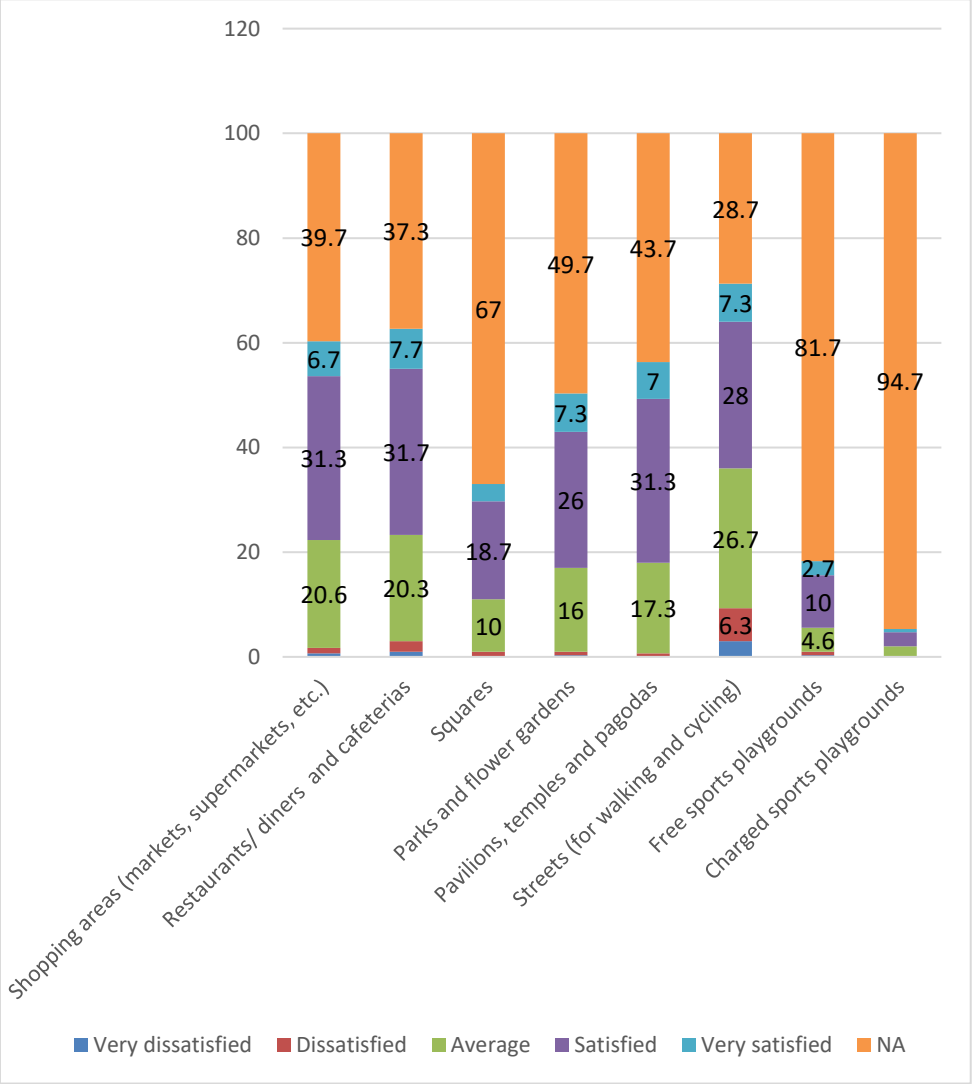


**Fig. 2. Level of satisfaction of migrant workers in the informal sector with each type of public space in Hanoi (Unit: %)**

### 3.2.2 Relationship between level of satisfaction of migrant workers in the informal sector with public space in Hanoi and sample groups

**Type of Migration:** Although the Chi-square test results shown in Table 2 indicated that "*restaurants/ diners and cafeterias*" had a p-value <0.05, all types of public space had more than 20% of the expected frequencies less than 5 (a-value). As a result, this p-value was not reliable enough to evaluate the relationship between the variable "*level of satisfaction with public space in Hanoi*" and the variable "*type of migratio*n". Several remarkable results will be described as follows.

As regards the level of satisfaction with "*shopping areas (markets, supermarkets and shopping malls),* group M2 and group M4 accounted for the highest proportion in selecting the option "*Very satisfied*" (50%). Meanwhile, group M4 had 100% choosing "*Dissatisfied*" whereas no one in the other three groups opted for this level. Group M4 was also the group with the highest rate in picking up the choices "*Satisfied*" (80.9%) and "*Very satisfied*" (85.0%) compared to the other groups. The group with the lowest proportion for "*Satisfied*" was group M2 (3.2%), and no one in group M1 felt "*very satisfied*" with this public space.

Regarding the level of satisfaction with "*restaurants/ diners and cafeterias*", group M4 took up not only the highest proportion in selecting "*Very dissatisfied*" (33.4%), and "*Dissatisfied*" (100%) but also the highest for "*Satisfied*" (75.8%) and "*Very satisfied*" (78.3%) compared to the other groups. The group with the lowest rate for the latter two options was group M1 (4.2% and 4.3% respectively).

As for the level of satisfaction with "*squares*", none of the groups of migration types were "*very dissatisfied*" with this public space. Group M4 was the group with the highest rate for "*Dissatisfied*" (66.7%), "*Satisfied*" (82.1%), and "*Very satisfied*" (80.0%) compared to the other groups. Meanwhile, group M2 and group M1 had the lowest proportion for "*Satisfied*" (1.8%) and "*Very satisfied*" (0%) respectively.

With regard to the level of satisfaction with "*parks and flower gardens*", group M4 made up the maximum percent (100%) for the choices "*Very dissatisfied*" and "*Dissatisfied*". This means that the other three groups expressed no dissatisfaction with this public space. In terms of the higher satisfaction levels, group M1 had the lowest rate for "*Satisfied*" and "*Very satisfied*" compared to the other groups (2.6% and 0% respectively).

When it comes to the level of satisfaction with "*pavilions, temples and pagodas*", like "*squares*", no group of migration types was "*very dissatisfied*" with this public space. Group M4 accounted for the maximum percentage for "*Dissatisfactied*"; by contrast, this group took up the majority for the options "*Satisfied*" and "*Very satisfied*" compared to the other groups (80.9% and 81.0% respectively). Group M1 and group M3 had the lowest rate for "*Satisfied*" (1.1%) and "*Very satisfied*" (0%) respectively.

In terms of the level of satisfaction with "*streets (for walking, cycling, etc.)"*, group M4 occupied not only the highest proportion for "*Very dissatisfied*" (88.9%) and "*Dissatisfied*" (73.7%) compared to the other groups but also the major rate for "*Satisfied*" (81.0%) and "*Very satisfied*" (77.3%). Meanwhile, the ones with the lowest proportion for "*Satisfied*" were group M1 (3.6%), and group M3 (0%).

As regards the level of satisfaction with "*free sports playgrounds*", of all the groups, group M1 had the highest rate for "*Very dissatisfied*" (100%), and corespondingly the lowest rate for "*Satisfied*" and "*Very satisfied*" (3.3% and 0% respectively). The group with the largest percentage for "*Satisfied*" and "*Very satisfied*" was still group M4 (76.7% and 100% respectively); however, this group also had the highest rate for "*Dissatisfied*" (100%).

Regarding the level of satisfaction with "*charged sports playgrounds*", no groups selected the options "*Very dissatisfied*" and "*Dissatisfied*". Meanwhile, group M4 made up 75% and 100% for "*Satisfied*" and "*Very satisfied*" respectively. The group with the lowest rate for these two choices compared to the other groups was group M1.

**Occupational Group:** The Chi-square test results illustrated in Table 3 revealed that such public spaces as "*shopping areas (markets, supermarkets and shoppig malls)",* "*free sports playgrounds*" and "*charged sports playgrounds*" had a p-value <0.05. However, all the types of public space had more than 20% of the expected frequencies less than 5 (value a). Therefore, the p-value of this test was not reliable enough to evaluate the relationship between the level of satisfaction with public space in Hanoi and

occupations of migrant workers in the informal sector. Some of the results emerging from the data analysis will be presented as follows.

As for the level of satisfaction with "*shopping areas (markets, supermarkets and shopping malls)"*, group C2 and group C3 had the highest level of satisfaction compared to the other groups (35.0% for "*Very satisfied*"). The one with the highest proportion for "*Satisfied*" was group C2 with 40.4%. Meanwhile, no one in group C3 and group C4 was "*very dissatisfied*" with this public space. Nevertheless, of all the four occupational groups, group C4 made up the smallest percentage for the option "*Very satisfied*".

When it comes to the level of satisfaction with "*restaurants/ diners and cafeterias*", group C2 accounted for the highest proportion for all the satisfaction levels compared to the other groups, specifically "*Very dissatisfied*": 66.7%, "*Dissatisfied*": 33.3% (equivalent to that of group C1), "*Satisfied*": 36.1% and "*Very satisfied*": 31.6%. No one in group C1 and group C4 chose the option "*Very dissatisfied*". In addition, the group with the lowest rate for "*Satisfied*" and "*Dissatisfied*" was group C3 (14.7% and 20.0% respectively).

Regarding the level of satisfaction with "*squares*", no one in the four occupational groups was "*very dissatisfied*" with this public space. Group C2 occupied the largest percentage for the options "*Dissatisfied*" (66.7%), "*Satisfied*" (41.1%) and "*Very satisfied*" (40.0%) while group C4 was the one with the lowest rate for "*Satisfied or more*" ("*Satisfied*": 16.1% and "*Very satisfied*": 20.0%).

With regard to the level of satisfaction with "*parks and flower gardens*", only group C1 was "*very dissatisfied*" with this place with 100% and correspondingly had the lowest proportion for the choice "*Very satisfied*" compared to the other groups (18.2%). Similarly, of all the four occupational groups, group C3 had the highest rate for "*Dissatisfied*" with 100% and the lowest for "*Satisfied*" with 19.2% in comparison to the other groups. The group with the highest rate for "*Satisfied*" and "*Very satisfied*" was group C2 with 33.4% and 40.9% respectively.

As regards the level of satisfaction with "*pavilions, temples and pagodas*", no one was "*very dissatisfied*" with this public space. The group with the largest percentage for "*Very satisfied*" was group C1 (38.1%) while group C4 had the highest rate for "*Dissatisfied*" (100%). Group C2 and group C3 made up the lowest proportion for the choices "*Very satisfied*" (14.3%) and "*Satisfied*" (11.7%) respectively.

In terms of the level of satisfaction with *"streets (for walking, cycling, etc.)"*, of all the occupational groups, group C1 had the highest rate for "*Very dissatisfied*" (55.6%) and correspondingly accounted for the lowest for "*Very satisfied*" (18.2%). Yet, this group made up the highest proportion for "*Satisfied*" (34.6%). Group C2 had the highest rate for "*Dissatisfied*" (42.1%) and also the lowest for "*Very satisfied*" together with group C1 (18.2%). Meanwhile, the groups occupying the lowest proportion for "*Very dissatisfied*" were group C3 and group C4 (11.1% each).

As for the level of satisfaction with "*free sports playground*", only group C3 was "*very dissatisfied*" with this public space. Meanwhile, the group with the highest rate for the choice "*Very satisfied*" was group C4 (50.0%). The one with the highest proportion for "*Satisfied*" was group C2 with 46.7%, and the one with the lowest was group C1 with 13.3%.

Regarding the level of satisfaction with "*charged sports playgrounds*", no occupational group was "*very dissatisfied*" and "*dissatisfied*" with this public space. This was the location with which only group C3 felt "*very satisfied*" (100%). Of all the four groups, the one with the highest rate for "*Satisfied*" was group C2 (37.5%) while the one with the lowest was group C1 (12.5%).

## 4. DISCUSSION

The level of satisfaction of workers in the informal sector with public space was determined on the basis of their experiences and purposes of visits to these types of public space. Although numerous studies have revealed different functions of public space, including social, cultural, political and economic functions, this study focused on exploring social, cultural and economic roles of public space while providing descriptions of purposes of their visits to or use of public space. These are also the most necessary aspects for human existence as they are places where people conduct their livelihood and leisure activities as well as expanding their social networks. Wulandari [2] argues that plenty of workers in the informal sector are unable to identify their "workplaces" and/or have no "colleagues". This implies that a portion of workers in the informal sector have unstable employment with limited social networks.

**Table 2. Results of analysis of the relationship between level of satisfaction of migrant workers in the informal sector with public space in Hanoi and type of migration**

| Type of public space | Level of satisfaction | Type of migration | | | | Total | Chi-Square Tests (p-value) | Proportion of cells < 5 (a-value) |
|---|---|---|---|---|---|---|---|---|
| | | M1 | M2 | M3 | M4 | | | |
| Shopping areas (markets, supermarkets etc.) | Very dissatisfied | 0.0% | 50.0% | 0.0% | 50.0% | 100.0% | .055 | 58.3% |
| | Dissatisfied | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | | |
| | Neutral | 4.8% | 9.7% | 1.6% | 83.9% | 100.0% | | |
| | Satisfied | 4.3% | 3.2% | 11.6% | 80.9% | 100.0% | | |
| | Very satisfied | 0.0% | 10.0% | 5.0% | 85.0% | 100.0% | | |
| | NA | 12.6% | 5.9% | 5.9% | 75.6% | 100.0% | | |
| Restaurants/ diners and cafeterias | Very dissatisfied | 33.3% | 33.3% | 0.0% | 33.4% | 100.0% | .044 | 58.3% |
| | Dissatisfied | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | | |
| | Neutral | 4.9% | 4.9% | 3.3% | 86.9% | 100.0% | | |
| | Satisfied | 4.2% | 6.3% | 13.7% | 75.8% | 100.0% | | |
| | Very satisfied | 4.3% | 8.7% | 8.7% | 78.3% | 100.0% | | |
| | NA | 11.6% | 6.3% | 2.6% | 79.5% | 100.0% | | |
| Squares | Very dissatisfied | - | - | - | - | - | .287 | 65.0% |
| | Dissatisfied | 0.0% | 33.3% | 0.0% | 66.7% | 100.0% | | |
| | Neutral | 3.3% | 0.0% | 3.3% | 93.4% | 100.0% | | |
| | Satisfied | 5.4% | 1.8% | 10.7% | 82.1% | 100.0% | | |
| | Very satisfied | 0.0% | 10.0% | 10.0% | 80.0% | 100.0% | | |
| | NA | 9.0% | 8.0% | 6.0% | 77.0% | 100.0% | | |
| Parks and flower gardens | Very dissatisfied | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | .199 | 62.5% |
| | Dissatisfied | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | | |
| | Neutral | 2.1% | 6.2% | 2.1% | 89.6% | 100.0% | | |
| | Satisfied | 2.6% | 3.8% | 10.3% | 83.3% | 100.0% | | |
| | Very satisfied | 0.0% | 4.5% | 4.5% | 90.9% | 100.0% | | |
| | NA | 12.8% | 8.1% | 6.6% | 72.5% | 100.0% | | |
| Pavilions, temples and pagodas | Very dissatisfied | - | - | - | - | - | .106 | 50.0% |
| | Dissatisfied | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | | |
| | Neutral | 7.7% | 7.7% | 1.9% | 82.7% | 100.0% | | |
| | Satisfied | 1.1% | 5.3% | 12.7% | 80.9% | 100.0% | | |
| | Very satisfied | 14.2% | 4.8% | 0.0% | 81.0% | 100.0% | | |

| Type of public space | Level of satisfaction | Type of migration | | | | Total | Chi-Square Tests (p-value) | Proportion of cells < 5 (a-value) |
|---|---|---|---|---|---|---|---|---|
| | | M1 | M2 | M3 | M4 | | | |
| | NA | 10.7% | 6.9% | 5.3% | 77.1% | 100.0% | | |
| Streets (for walking, cycling, etc.) | Very dissatisfied | 11.1% | 0.0% | 0.0% | 88.9% | 100.0% | .452 | 37.5% |
| | Dissatisfied | 15.8% | 0.0% | 10.5% | 73.7% | 100.0% | | |
| | Neutral | 5.0% | 6.2% | 5.0% | 83.8% | 100.0% | | |
| | Satisfied | 3.6% | 4.8% | 10.6% | 81.0% | 100.0% | | |
| | Very satisfied | 13.6% | 9.1% | 0.0% | 77.3% | 100.0% | | |
| | NA | 9.3% | 9.3% | 5.8% | 75.6% | 100.0% | | |
| Free sports playgrounds | Very dissatisfied | 100.0% | 0.0% | 0.0% | 0.0% | 100.0% | .214 | 70.8% |
| | Dissatisfied | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | | |
| | Neutral | 7.1% | 7.1% | 0.0% | 85.8% | 100.0% | | |
| | Satisfied | 3.3% | 6.7% | 13.3% | 76.7% | 100.0% | | |
| | Very satisfied | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | | |
| | NA | 7.8% | 6.5% | 6.5% | 79.2% | 100.0% | | |
| Charged sports playgrounds | Very dissatisfied | - | - | - | - | - | .935 | 68.8% |
| | Dissatisfied | - | - | - | - | - | | |
| | Neutral | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | | |
| | Satisfied | 0.0% | 12.5% | 12.5% | 75.0% | 100.0% | | |
| | Very satisfied | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | | |
| | NA | 7.7% | 6.3% | 6.7% | 79.3% | 100.0% | | |

** (p<0.05 and a<20%)*

*Note: M1: Traveling daily (commuting to Hanoi in the morning and returning to the hometown in the evening); M2: Returning to the hometown weekly; M3: Coming to Hanoi whenever being free from agricultural work or to meet employers' and customers' demand; M4: Living in Hanoi for more than one year (renting accommodation in Hanoi continuously)*

**Table 3. Results of analysis of the relationship between level of satisfaction with public space in Hanoi and type of occupation of migrant workers in the informal sector**

| Type of public space | Level of satisfaction | Occupation | | | | Total | Chi-Square Tests (p-value) | Proportion of cells < 5 (a-value) |
|---|---|---|---|---|---|---|---|---|
| | | C1 | C2 | C3 | C4 | | | |
| Shopping areas (markets, supermarkets etc.) | Very dissatisfied | 50.0% | 50.0% | 0.0% | 0.0% | 100.0% | .003 | 41.7% |
| | Dissatisfied | 0.0% | 33.3% | 33.3% | 33.4% | 100.0% | | |
| | Neutral | 25.8% | 35.5% | 12.9% | 25.8% | 100.0% | | |
| | Satisfied | 22.3% | 40.4% | 16.0% | 21.3% | 100.0% | | |
| | Very satisfied | 20.0% | 35.0% | 35.0% | 10.0% | 100.0% | | |
| | NA | 33.0% | 30.3% | 18.0% | 18.7% | 100.0% | | |
| Restaurants/ diners and cafeterias | Very dissatisfied | 0.0% | 66.7% | 33.3% | 0.0% | 100.0% | .577 | 41.7% |
| | Dissatisfied | 33.3% | 33.3% | 16.7% | 16.7% | 100.0% | | |
| | Neutral | 33.3% | 33.3% | 16.7% | 16.7% | 100.0% | | |
| | Satisfied | 27.9% | 36.1% | 14.7% | 21.3% | 100.0% | | |
| | Very satisfied | 27.4% | 31.6% | 20.0% | 21.0% | 100.0% | | |
| | NA | 42.9% | 24.1% | 16.0% | 17.0% | 100.0% | | |
| Squares | Very dissatisfied | - | - | - | - | - | .139 | 40.0% |
| | Dissatisfied | 0.0% | 66.7% | 0.0% | 33.3% | 100.0% | | |
| | Neutral | 20.0% | 43.3% | 20.0% | 16.7% | 100.0% | | |
| | Satisfied | 21.4% | 41.1% | 21.4% | 16.1% | 100.0% | | |
| | Very satisfied | 20.0% | 40.0% | 20.0% | 20.0% | 100.0% | | |
| | NA | 39.3% | 24.4% | 16.9% | 19.4% | 100.0% | | |
| Parks and flower gardens | Very dissatisfied | 100.0% | 0.0% | 0.0% | 0.0% | 100.0% | .280 | 41.7% |
| | Dissatisfied | 0.0% | 0.0% | 100.0% | 0.0% | 100.0% | | |
| | Neutral | 33.3% | 29.2% | 14.6% | 22.9% | 100.0% | | |
| | Satisfied | 26.9% | 33.4% | 19.2% | 20.5% | 100.0% | | |
| | Very satisfied | 18.2% | 40.9% | 22.7% | 18.2% | 100.0% | | |
| | NA | 38.3% | 28.2% | 16.7% | 16.8% | 100.0% | | |
| Pavilions, temples and pagodas | Very dissatisfied | - | - | - | - | - | .064 | 30.0% |
| | Dissatisfied | 0.0% | 0.0% | 0.0% | 100.0% | 100.0% | | |
| | Neutral | 40.4% | 25.0% | 15.4% | 19.2% | 100.0% | | |
| | Satisfied | 30.9% | 35.1% | 11.7% | 22.3% | 100.0% | | |
| | Very satisfied | 38.1% | 14.3% | 23.8% | 23.8% | 100.0% | | |
| | NA | 31.3% | 32.1% | 22.9% | 13.7% | 100.0% | | |

| Type of public space | Level of satisfaction | Occupation | | | | Total | Chi-Square Tests (p-value) | Proportion of cells < 5 (a-value) |
|---|---|---|---|---|---|---|---|---|
| | | C1 | C2 | C3 | C4 | | | |
| Streets (for walking, cycling, etc.) | Very dissatisfied | 55.6% | 22.2% | 11.1% | 11.1% | 100.0% | .135 | 33.3% |
| | Dissatisfied | 26.3% | 42.1% | 26.3% | 5.3% | 100.0% | | |
| | Neutral | 35.0% | 32.5% | 10.0% | 22.5% | 100.0% | | |
| | Satisfied | 34.6% | 33.3% | 13.1% | 19.0% | 100.0% | | |
| | Very satisfied | 18.2% | 18.2% | 36.4% | 27.2% | 100.0% | | |
| | NA | 32.6% | 26.7% | 24.4% | 16.3% | 100.0% | | |
| Free sports playgrounds | Very dissatisfied | 0.0% | 0.0% | 100.0% | 0.0% | 100.0% | .006 | 66.7% |
| | Dissatisfied | 50.0% | 50.0% | 0.0% | 0.0% | 100.0% | | |
| | Neutral | 21.4% | 64.3% | 0.0% | 14.3% | 100.0% | | |
| | Satisfied | 13.3% | 46.7% | 20.0% | 20.0% | 100.0% | | |
| | Very satisfied | 0.0% | 12.5% | 37.5% | 50.0% | 100.0% | | |
| | NA | 37.1% | 26.9% | 18.0% | 18.0% | 100.0% | | |
| Charged sports playground | Very dissatisfied | - | - | - | - | - | .020 | 75.0% |
| | Dissatisfied | - | - | - | - | - | | |
| | Neutral | 0.0% | 83.3% | 16.7% | 0.0% | 100.0% | | |
| | Satisfied | 12.5% | 37.5% | 25.0% | 25.0% | 100.0% | | |
| | Very satisfied | 0.0% | 0.0% | 100.0% | 0.0% | 100.0% | | |
| | NA | 34.5% | 29.2% | 17.3% | 19.0% | 100.0% | | |

** (p<0.05 and a<20%)*

*Note: C1: Street vendors; C2: Hired laborers for shops and factories; C3: Service workers (motorbike taxi drivers, technology motorbike taxi drivers, loaders); C4: Shop owners*

In Vietnam, for rural-urban migration groups, social relationships and networks of migrants such as relatives and fellow townmen play a highly significant role, not only providing information about employment or accommodation but also acting the part of social control [4–7]. The social network of fellow townmen not only guides rural-urban migrants but also connects them to their homeland [8]. In their daily interactions, leisure activities or integration into a new living environment, when encountering difficulties, they turn to conventional social networks rather than local government agencies and unions. The public spaces most closely associated with migrant workers in the informal sector are streets and sidewalks as well as restaurants/ diners and cafeterias. In particular, the findings indicated that the most evident function of these public spaces was for livelihoods with over 50% of the survey sample stating that streets are their workplace. Meanwhile, the function of physical training through physical activity of public space was almost unexploited. Does it result from the fact that the nature of their jobs (mostly manual labor) minimizes their need for physical training?

As regards living conditions (accommodation) of migrants in Vietnam, Veronnique Marx, Katherine Fleischer and Le Thi Thieu Hoa [9,10] indicate that housing problems are described as the most dissatisfactory aspect among migrants whose living conditions are depicted as cramped, insecure and unsanitary. Housing conditions for migrants in the informal sector are often harsh: they have to live in cramped one-floor houses or share their houses with many others, etc. Those with unstable employment such as street vendors, loaders, laborers in open-air labor markets, etc., have to move frequently and thus rent a motel to sleep overnight. In general, migrant workers who come to work in the informal sector tend to live in neighborhoods with signs of severe pollution and lack of sanitation such as dust, plenty of noise and few trees [6,8,11,12]. After a long working day, returning to such accommodation, they will find it suffocating. Therefore, with their limited income, free or partially charged public spaces are the right solution for them. They express high level of satisfaction towards some types of public space. However, sports playgrounds (either charged or free), have not satisfied them. Within the scope of quantitative descriptive research, this study cannot provide valid explanations for the reasons for their dissatisfaction, which might be offered by qualitative research, examining the perspectives of migrant workers in the informal sector.

## 5. CONCLUSION

Overall, public space plays a significant role in the livelihoods of migrant workers in the informal sector, acting as a workplace where they can easily reach their customers without paying fees. In addition, the mobility of residence is also the reason why public space is their choice. Although a high level of satisfaction with public space was expressed by a high proportion of the sample, up to 03 (out of 08) types of public space in Hanoi poorly attracted their visit: squares as well as free and charged sports playgrounds. All of these are types of spaces that can fulfill the function of entertainment for the people.

Even though certain characteristics of their employment make migrants work in some types of public space where they address their need to approach their customers, types of migration and occupations are not the factors influencing their level of satisfaction with public space.

## CONSENT

As per international standard or university standard, participants' written consent has been collected and preserved by the author(s).

## COMPETING INTERESTS

Author has declared that no competing interests exist.

## REFERENCES

1. General Statistics Office, Press release on labor and employment in the second quarter and the first half of 2022; Jul. 2022. Accessed: Nov. 17, 2022. [Online]. Available:https://www.gso.gov.vn/du-lieu-va-so-lieu-thong-ke/2022/07/thong-cao-bao-chi-tinh-hinh-lao-dong-viec- lam-quy-ii-va-6-month-dau-nam-2022/
2. Wulandari S. Organizing Strategies for Informal Economy Workers. Kowloon, Hong Kong: Asia Monitor Resource Center; 2008.
3. Daid RM. Migrant Teachers in Ireland: An Untapped Trapped Reservoir?, in Diversifying the Teaching Profession, 1st ed. in Routledge Research in Educational

Equality and Diversity. London: Routledge, 2022;11. [Online].
Available:https://www.taylorfrancis.com/chapters/edit/10.4324/9781003188735-14/migrant-teachers-ireland-rory-mc-daid

4. Dang NA. The Role of Social Networks in the Migration process. 1998;62(2): 16–24.
5. Bui TH, Nguyen TT. Quality of Life of Young People Migrating to Hanoi to Work in the Informal Sector, in the 4th Vietnamese Studies Conference, National University Publishing House.
6. Luu BN, Nguyen TT. The Impact of Youth Migration to the Informal Sector in Hanoi on Socio-Economic Development" presented at the Fourth International Conference, Vietnam. 201;12.
Accessed: Nov. 17, 2022. [Online].
Available:https://repository.vnu.edu.vn/flowpaper/simple_document.php?subfolder=94/92/72/&doc=9492728569833005196238558724479509385&bitsid=e67884bc-eee4-4cf5-8c47-8b55a5bc8406&uid=
7. Van Ginneken W. Social Security for the Informal Sector: A New Challenge for the Developing Countries, Int. Soc. Secur. Rev. 1999;52(1):21(49-69).
DOI: 10.1111/1468-246X.00033
8. Hoang TT. Social work with migrant workers in Phuc Xa ward, Ba Dinh district, Hanoi, University of Labor and Social Affairs, Hanoi; 2017.
9. Marx V, Fleischer K. Internal migration: Opportunities and challenges for socio-economic development in Vietnam, United Nations in Vietnam; Jul. 2010. [Online].
Available:https://vietnam.unfpa.org/sites/default/files/pub-pdf/Migration%20Main%20Paper_VIE_FINAL_0.pdf
10. Le THN. Sidewalks - Accessible Public Spaces of the Community, Architecture Magazine - Vietnam Association of Architects; Mar. 27, 2020.
Accessed: Nov. 09, 2022. [Online].
Available:https://www.tapchikientruc.com.vn/chuyen-muc/via-khong-gian-cong-cong-de-tiep-can-cua-cong-dong.html
11. Duong CT. Social Security for Workers Migrating from Rural to Urban Areas in Vietnam today, Sociological Review. 2013; 4(60):51–60.
12. Le TTH. Policies and Laws for Freelance Workers Migrating from Rural to Urban Areas in Vietnam, Institute of Legal Sciences - Ministry of Justice, Ministerial-level project; 2015.



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