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**PERCEPTIONS ON THE ROLE OF URBAN GREEN SPACES AT QUEZON  
MEMORIAL CIRCLE (QMC), PHILIPPINES: THE JOB SECTOR'S PERSPECTIVE**

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03 May 2025

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### **PERCEPTIONS ON THE ROLE OF URBAN GREEN SPACES AT QUEZON MEMORIAL CIRCLE (QMC), PHILIPPINES: THE JOB SECTOR'S PERSPECTIVE**

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- I. The special problem comprises only my original work towards the MENRM except where indicated in the Preface
- II. Due acknowledgement has been made in the text to all other material used
- III. The special problem is fewer than 25,000 words in length, exclusive of tables, maps, bibliographies and appendices.

**ANDREA MAE N. MANABAT**  
Name

## Acknowledgement

Finishing this study would not have been possible without the love and support of the people around me. For that, I am proud to call them my own personal team.

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## TABLE OF CONTENTS

Title Page	i
University Permission Page	ii
Acceptance Page	iii
Declaration	iv
Acknowledgement	v
Table of Contents	vi
List of Tables	vii
List of Figures	viii
Abstract	ix
I. INTRODUCTION	1
II. REVIEW OF LITERATURE	3
III. STATEMENT OF THE STUDY	8
IV. OBJECTIVES OF THE STUDY	9
V. RATIONALE	10
VI. SCOPE AND LIMITATIONS	11
VII. DESCRIPTION OF THE STUDY AREA	12
VIII. METHODOLOGY	13
IX. RESULTS	18
X. RESULTS AND DISCUSSION	29
XI. RECOMMENDATION AND CONCLUSION	37
XII. REFERENCES	38

## List of Tables

Table 9.1	Demographic profile of respondents from the job sector	18
Table 9.2	Association of respondents' perception to UGS in QMC and their rating of QMC UGS using Fisher's Exact Test P-Value	24
Table 9.3	Association of respondents' demographic profile and their rating of QMC UGS using Fisher's Exact Test P-Value	24
Table 9.4	Association of respondents' demographic profile and their perception of feeling safe using Fisher's Exact Test P-Value	25
Table 9.5	Association of respondents' demographic profile and their perception of feeling healthy using Fisher's Exact Test P-Value	26
Table 9.6	Association of respondents' demographic profile and their perception of feeling happy using Fisher's Exact Test P-Value	26
Table 9.7	Association of respondents' demographic profile and their perception of feeling connected to nature using Fisher's Exact Test P-Value	26
Table 9.8	Association of respondents' demographic profile and their perception of feeling anxious using Fisher's Exact Test P-Value	27
Table 10.1	Reasons why the job sector visits Quezon Memorial Circle	31
Table 10.2	Important role of urban green spaces according to the job sector	31
Table 10.3	Significant difference of respondents' length of stay in their job sector and their perception of being healthy, happy, and connected to nature using Wilcoxon Ranked Sum Test	33

## List of Figures

Figure 8.1.	Flow of the disseminated survey questionnaire (a) personal information, (b) part I, (c) part II, and (d) part 3 to willing respondents that are part of the job sector.	14
Figure 9.1.	Relationship between the familiarity of UGS and (a) sex, (b) age group, (c) highest educational attainment, and (d) job sector.	20
Figure 9.2.	Respondents' frequency of visit and length of stay in QMC.	22

## **Abstract**

In a highly urbanized and progressive city in the National Capital Region, Philippines such as Quezon City, it is common to get a sight of various forms of developmental projects in order to live up to the present population and lifestyle of people in the city. However, these developments cause detrimental effects to the environment especially if not regulated. Urban green spaces play an important role in both the environment and the overall well-being of a person. This study aimed to recognize how people in the job sector perceive the presence of urban green spaces in the Quezon Memorial Circle and how it contributes to their lives. The survey questionnaire was administered to eighty-one (81) willing respondents through snowballing method. Gathered data were analyzed using descriptive statistics and were further tested through measures of association. Findings of the study revealed that visiting the Quezon Memorial Circle for its urban green spaces and staying for about 1-2 hours to relax, be with nature, and spend time alone significantly contributes to job sectors' feeling of being connected to nature especially to those who have been staying in their job sector for a longer time.

**Keywords:** Perceptions; Urban Green Spaces; Job Sector

## I. INTRODUCTION

According to the Philippine Statistics Authority, the Philippines has an average urban population annual growth rate of 2.8% from the year 2015 to 2020. Specifically, the National Capital Region (NCR) was found to have a total population of 13,484,462 as of the 2020 census into which Quezon City holds the highest percentage to this population count.

Chaolin (2020) said that urbanization can be defined as the relative concentration of population in urban areas - the towns and cities - of a given territory. The continuous trend in population increase in urban areas like Quezon City often, if not always, concentrate on urban developments such as construction of residential housing, commercial spaces for businesses, and road improvements, among others, in order to facilitate living requirements of residents, students, and workers. However, these so-called developments that claim to help improve the quality of life of urban residents fail to consider and incorporate strategies that pertain to relevant environmental needs of the public that are suitable according to their needs and overall well-being.

The presence of urban green spaces (UGS) are considered as an essential aspect of both the urban environment and the community living therein as it enhances the overall quality of life through the environmental, social, and economic benefits that it offers. Green spaces are essential components of a livable city because they provide healthier environments and diverse advantages for urban residents (Addas, 2023). Therefore, for urban green spaces to be considered as a livable component to urban residents, understanding the perception of the public on how they consider UGS to be beneficial to them will be helpful in crafting plans and eventually incorporating it in management strategies.

Knowing and putting into consideration the actual perceptions of a community that has access to a certain urban green space area and utilizes whatever service it has to offer will be of great contribution to environmental planners/managers in formulating and eventually putting into practice a holistic environmental space that does not only rely on their knowledge and skills but incorporates realistic components in accordance the actual inclination of the preferred quality of life of a populace.

This paper will focus on the perceptions of the job sector on the role of urban green spaces located at the Quezon Memorial Circle in Quezon City, Philippines.

## II. REVIEW OF LITERATURE

### *Quezon Memorial Circle*

In the center of the Elliptical Road of Diliman Quadrangle lies the greatest monument of Quezon City (Olivares, 2020), the Quezon Memorial and the 27-hectare park that surrounds it. Planning for the park's construction began in the year 1941 but the many unforeseen circumstances including the Japanese invasion, death of former President Quezón, and the lack of sufficient funds, caused the delay of its construction. In the year 1951, President Quirino at that time orchestrated a national competition for the memorial's design to which Arch. Federico S. Ilustre won. His design included the present 66-meter tall memorial to which the said height represents the age of Pres. Quezón when he passed, with three pylons representing the three major island groups of the Philippines – Luzon, Visayas, and Mindanao. Between the years of 1957 and 1958, the Quezon Memorial was completed excluding the proposed library, museum, and theatre of Arch. Ilustre due to the lack of funds. It was only until the 1970s that the construction of the park continued by virtue of Presidential Decree No. 1 and the establishment of the Quezon Memorial Circle Development and Beautification Committee (Olivares, 2020). By the year 1976, the entirety of the Quezon Memorial Park was completed. Over the years, many significant additions to the park, including the World Peace Bell and garden, the 31 marble reliefs on Philippine history and the life of the late President Quezón, renovation of *Museo ni Manuel Quezón*, Quezon City Experience Museum, the Presidential Automobile Museum, Circle of Joy, and the Circle of Fun. Several green areas have also opened including an organic vegetable garden, Joy of Urban Farming, *Hardin ng mga Bulaklak*, Orchid Shoe, Garden of Succulents, and the Fern Garden.

## *Urban Green Spaces*

In a publication by the World Health Organization (2017) the term urban green space is defined as all urban land covered by vegetation of any kind and is a component of green infrastructure. This covers vegetation on private and public grounds, irrespective of size and function, and can also include small water bodies such as ponds, lakes or streams (“blue spaces”). This includes street trees, gardens, parks, landscaping around buildings, sports fields, flowerbeds, ponds, green entryways, green roofs, individual plants, and more (Davitt et al., 2023).

Urban greenspaces play a vital role in improving social health and connection of the people living in urban areas. Urban green areas, particularly urban parks of all sizes, serve as a nearby resource for relaxation and recreation. Green areas in cities provide contact with nature, for example, marking the rhythm of the changing of the seasons: autumn when leaves fall, the flowering of plants and trees in spring, the presence of seasonal birds. Greenspaces also serve as a climate regulator and a carbon mitigation tool through the urban trees and soils present in a highly urbanized area. Thus, green spaces and trees provide an emotional warmth and softness to city life, as opposed to the hardness of concrete and pavement, and can also add a sense of privacy (Heidt & Neef, 2008).

Green infrastructure is one of the significant pillars of urban structures that accelerates human life events by promoting physical activities, mental and psychological relaxation, oxygen for breathing, and purifying air pollutants (Jabbar et al., 2021). It is considered to be an interconnected network of natural areas and other open green spaces that conserves the natural values and services offered by an ecosystem. Green infrastructures promote healthier and safer environments by

regulating the urban temperature, controlling environmental extreme events like floods caused by intense rainwater run-off, regulating air quality or wind speed, reducing noise, or promoting biodiversity within the city (Santos et al., 2018). Therefore, the presence of viable green spaces within an urban area will commensurate to the extent of environmental, economic, and social benefits a green infrastructure can provide to the population residing therein.

### *Job Sector*

A job sector is an economic term used to classify a broad group of occupations and industries that are related by what they do (Indeed Editorial Team, 2024). Six major job sectors were identified by the same article including (1) health care and (2) education which both relies on human labor, (3) real estate and development in planning residential and consumer demands, (4) information technology for technological advancements, agriculture comprising of businesses in produce, and the (6) government for policy-making and implementation.

Migration patterns within a country are common especially when a developed or developing area offers more diverse job opportunities. It is obvious that lack of employment opportunities in rural localities pushes people to migrate to other places with more available jobs (Pîrciog et al., n.d.).

According to Lam and Elsayed (2021), in most developing and low-income countries' perspectives, migration presents a dual challenge: international migration is often accompanied by rural–urban migration. This migration on the national level may bring economic and social benefits to disadvantaged population groups, as well as overall economic gains, and thus should be advanced and well organized.

### *Perceptions and Preferences*

Ugolini et al. (2022) expressed that human perceptions and preferences towards nature are believed to be both innate (according to evolutionary theories) and learned (according to cultural theories). According to Acking and Sorte (1973), the experience an environment gives can be described in terms of a small number of relevant factors. These factors were described as a collection of human general experiences of exposure to an environment that includes pleasantness, complexity, unity, enclosedness, potency, social status, affection and originality (Acking & Sorte, 1973; Zhou & Tan, 2024).

While environmental managers have the capacity to plan and design urban green spaces that are deemed suitable for specific needs of an urban area, and to the needs of the public, it is important to consider the actual perceptions and preferences of UGS users. Assessing users' preferences for urban green spaces can support public authorities and urban planners as they strive to effectively design and manage urban green spaces to meet users' needs (Kefale et al., 2023; Madureira et al., 2018).

### *Quality of Life*

According to Mensah et al. (2016), the term "quality of life" has been used vigorously across many disciplines, ranging from environmental and health sciences to social sciences. This is due to its complex nature embracing diverse elements that influence human livelihood. These differing perspectives illustrate the extent to which quality of life can be influenced by different variables. However, one area which has not received much research scrutiny is the influence of natural environments or green spaces on quality of life.

The World Health Organization (2012) defined quality of life as individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept incorporating in a complex way the persons' physical health, psychological state, level of independence, social relationships, personal beliefs and their relationships to salient features of the environment.

There is still no single definition of quality of life however, several literatures mentioned factors, including but not limited to – mental well-being, emotional well-being, social well-being, material well-being, and environmental well-being, that are considered to have an influence in the quality of life of an individual. Considering that the environmental aspect is a contributor in determining a person's quality of life, significant improvement and incorporation of UGS through studies and recommendations especially in developing cities should be considered in order to administer opportunities in enhancing an individual's environmental well-being.

### **III. STATEMENT OF THE STUDY**

The National Capital Region is now facing numerous challenges pertaining to the effects of rapid urbanization, especially that sixteen of its cities are considered to be highly urbanized cities. In terms of the environmental aspect of development, one of the challenges that it's facing is the lack of present urban green spaces in the metro.

This study centers in Quezon City which is considered to be the highest populated city in NCR, specifically at the Quezon Memorial Circle, and aims to recognize how various job sectors perceive the role of urban green spaces. Gathered and analyzed data can identify beneficial roles of urban green spaces to the different job sectors which can in turn be a basis of improvement of UGS not only in Quezon Memorial Circle, but parks across the country.

#### **IV. OBJECTIVES OF THE STUDY**

This study aims to recognize how urban green spaces situated at the Quezon Memorial Circle contribute in the lives of the job sector. Specifically, the study aims to:

1. Identify how people in different job sectors perceive the presence of the QMC green spaces in close vicinity of their respective working place;
2. Examine and assess the roles and benefits of Quezon Memorial Circle using both quantitative and qualitative methods; and
3. Provide recommendations to enhance local urban parks addressing the needs of various job sectors.

## V. RATIONALE

In a highly urbanized and progressive area like Quezon City which is found at the heart of the National Capital Region, it is not uncommon to catch sight on some form of development – may it be through expansion, infrastructure development, or transportation improvement – that are administered to live up to the present lifestyle of the population living therein and follow through advancements that therefore, can influence internal immigration because of increased employment opportunities and the possibility of having a better life in an urban area.

In order to restore equilibrium to the detrimental effects of development and advancement, it is paramount to integrate greening practices to negate the negative effects of urbanization.

This study is conducted in order collect the perceptions of a population, the job sector for this instance, and be able to use it as a guide when creating or improving urban green spaces specifically for the Quezon Memorial Circle as it is located in the heart of Quezon City and is therefore surrounded by various workplaces – both government and private. The actual responses that will be gathered and analyzed from this study will greatly contribute to how environmental managers can elevate their understanding on how to establish UGS that are in accordance with the actual needs of the public. Moreover, this can also be a basis for other highly urbanized or emerging urban cities in the country.

## **VI. SCOPE AND LIMITATIONS**

This study is centered on the perceptions of people that are part of the job sector – both professional and skilled workers, in Quezon City. The results presented and discussed in this paper should be examined in consideration of the encountered limitations whilst conducting the study. Given that the researcher is also a full-time employee, a larger percentage of the processed results from the conducted survey were highly dependent on the responses gathered from the disseminated online survey through snowballing method than the actual one-on-one interviews. In addition, while the researcher sought permission from the QMC Office to conduct on-site interviews to QMC park goers, some setbacks were encountered such as the QMC Office's requirement to acquire a permit during their office hours every time an interview will be conducted within QMC, and the refusal of some park-goers to be interviewed despite explaining that their personal information will be confidential.

Moreover, out of the three (3) requested Key Informant Interviews (KII), only one was able to push through, that being from the Administrative Office of the Quezon Memorial Circle. The City Planning and Development Department (CPPD) decorously refused the request for KII as they believed that they would not be able to properly respond and impart knowledge regarding the subject matter at hand. However, their Office referred the researcher to Parks Development and Administration Department (PDAD) but despite several follow-ups, no schedule was provided.

Moreover, the statistical results following the data collection were highly dependent and limited only on the data gathered.

## VII. DESCRIPTION OF THE STUDY AREA

According to the Quezon City Government, Quezon City – or what is commonly referred to as QC is located at the northeast portion of Metro Manila and is bounded by several cities and provinces. The city has a total area of 16,112.58 hectares and is considered to be the largest city in the National Capital Region. Based on the 2020 census released by the Philippine Statistics Authority, Quezon City holds a population of 2,960,048 which places it at the top spot of being a Highly Urbanized City (HUC) in NCR.

The main area of concern in this paper is the Quezon Memorial Circle or QMC. Quezon Memorial Circle is considered as a National Park (Gutierrez, 2022) and is located in the center of the Elliptical Road of the Diliman Quadrangle. Six main roads namely Commonwealth Avenue, Kalayaan Avenue, East Avenue, Quezon Avenue, North Avenue, and Visayas Avenue lead to QMC. This park located in the heart of Quezon City creates opportunities for economic exchanges, relaxation, and recreation (Quezon Memorial Circle Administration Office, n.d.)

Quezon Memorial Circle's mission is *“To sustain QMC as a prime, safe and modern learning environment that promotes green public space, biodiversity conservation, recreation, socio-cultural, economic exchange and inclusivity for all.”*, while their vision is *“To make QMC a world-class urban park with sustainable, inclusive and safe green space that is the center of culture, arts, and ecotourism, contributing to the economic and environmental well-being of the city.”*

## VIII. METHODOLOGY

In order to accomplish the objectives of the study, primary data collection was conducted through dissemination of online survey forms and actual one-on-one interviews to willing participants. A key informant interview with representatives of the Quezon Memorial Circle Administrative Office was also conducted. Gathered data were analyzed through associating the respondents' demographic profile with their perception on the Urban Green Spaces in Quezon Memorial Circle.

### *Survey and Sampling*

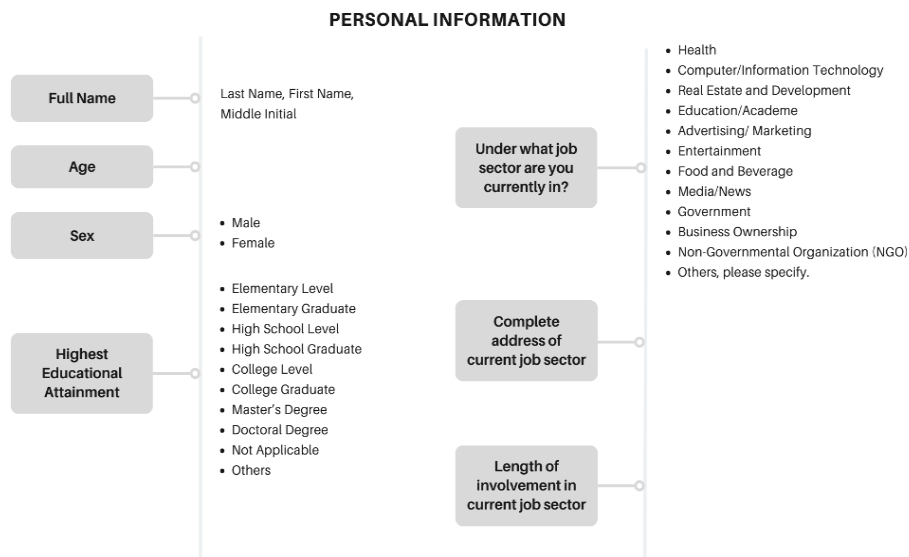
A semi-structured online survey questionnaire form through Google Forms was prepared based on related literatures and questionnaires, and underwent preliminary testing prior to its actual online dissemination from 09 December 2024 until 31 March 2025. In addition, a letter requesting to conduct an on-site interview to willing park visitors that are part of the job sector of Quezon City was sent to the Quezon Memorial Circle Administrator. The on-site interviews were conducted within the period of 05 March 2025 until 28 March 2025.

Since Quezon City has a reported 2,285,000 individuals as part of the preliminary labor force survey data in the year 2023 as reported by the Philippine Statistics Authority ("Quezon City Quick Stat," 2025), a non-probability sampling specifically snowballing method was conducted in order to gather responses.

The survey questionnaire form was designed to appreciate the level of knowledge pertaining to urban green spaces of willing respondents. Moreover, it was constructed to gather responses on how the job sector perceives the presence of UGS in QMC, their rating of the area, and the most beneficial roles of urban green spaces in their perspective.

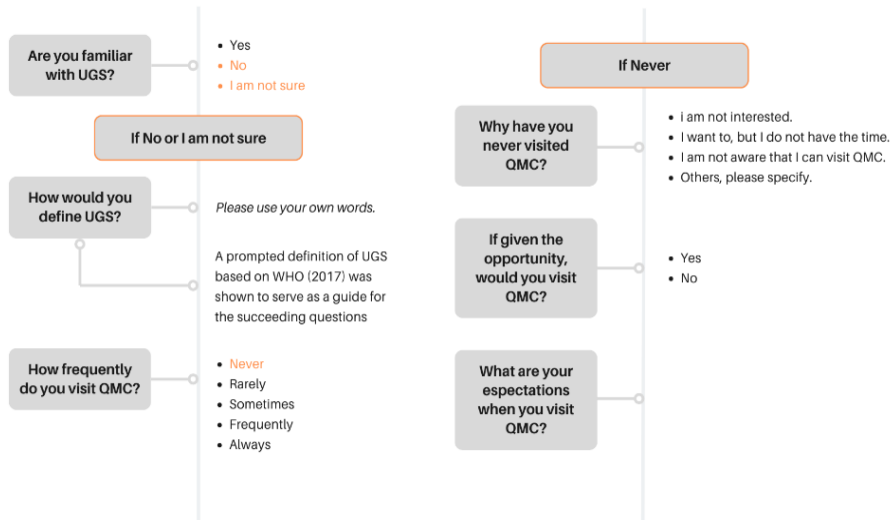
The preliminary part of the survey questionnaire form gathered the personal information of the respondent. It was then followed by questions that focused on the respondents' familiarity of UGS, their frequency and length of visit in QMC through a Likert Scale, and their reasons for visiting the said park. The last part centered on how they perceive the UGS in QMC and how it benefits them. This part also included their rating for QMC as a park that houses UGS and how it can be improved. To be more specific, Figure 8.1. shows the flow of the disseminated questionnaire.

Figure 8.1. Flow of the disseminated survey questionnaire (a) personal information, (b) part I, (c) part II, and (d) part 3 to willing respondents that are part of the job sector.



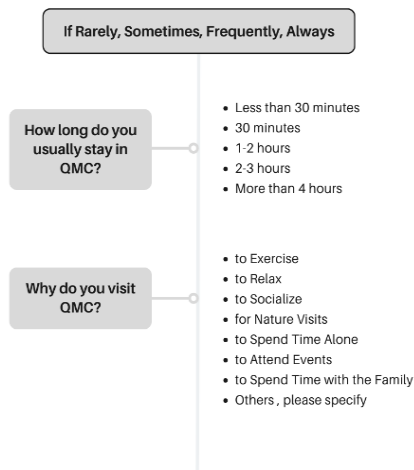
(a)

**PART I**



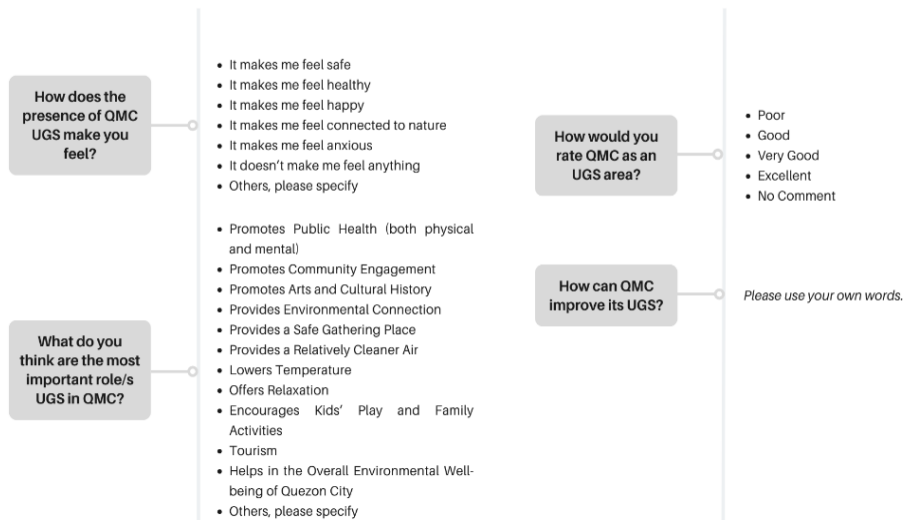
(b)

**PART II**



(c)

PART III



(d)

### Key Informant Interview (KII)

Aside from the survey questionnaires disseminated to willing respondents of the job sector, a key informant interview was also conducted in order to gather insights and perspectives from environmental managers. A letter request to carry out KII was sent to Quezon Memorial Circle Administrative Office and the City Planning and Development Department (CPPD). Further, CPPD provided an endorsement to Parks Development and Administration Department (PDAD) as they believed that this department will be able to provide useful information regarding the study.

### Data Analysis

In order to measure how the job sector perceives the presence of urban green spaces in Quezon Memorial Circle, two main questions were considered – *How does the presence of Quezon Memorial Circle urban green spaces make you feel?*, and *How would you rate Quezon Memorial Circle as a green space area?*. Further, in the

interest of this study, the association of the respondents' demographic profile as to how QMC UGS made them feel, and their ratings were explored.

Several variables of interest were considered for the quantitative analysis including categorical variables such as age groups, sex, highest educational attainment, job sector, familiarity with UGS, frequency of visit to QMC, and their perceptions of being safe, healthy, happy, and connected to nature. These categorical variables were converted into codes to be able to treat them as factors with corresponding levels according to their value. Quantitative variables including length of involvement in their current job sector, and rating of UGS in QMC were also included.

Measure of association through Fisher's Exact Test P-Value in consideration of the study's sample size was employed to be able to determine the connection between the demographic profile of the respondents and ratings of QMC as urban green space area in relation to their perceptions on the role of urban green spaces in Quezon Memorial Circle. Further, Cramer's V was employed to determine the strength of these associations, and the Wilcoxon Rank Sum Test to verify the differences in rating.

## IX. RESULTS

The online survey form together with the one-on-one interviews were able to gather a total of 81 responses.

### *General Demographic Profile of Respondents'*

Results from the gathered responses show that most respondents were female (58%), while the remaining 42% were male. The highest age group were in their 30s (38.3%), followed by respondents in their 20s (27.2%), 40s (19.8%), 50s (13.6%), and lastly in their 60s (1.2%).

The top three (3) educational attainments of respondents that belong to the job sector are College Graduate (35.8%), College Level (23.5%), and High School Graduate (19.8%).

Table 9.1 further shows that out of the 81 responses, most respondents belong to the Government sector with 59.3%, followed by respondents belonging to the Food and Beverage sector with 14.8%, and third are those in the security sector with 6.2%. The Health Sector, and Business Ownership Sector both have a response percentage of 4.9. The BPO, Education/Academe, Environmental Planning, and Insurance Financial Sectors each have the lowest percentage of 1.2.

**Table 9.1**

*Demographic profile of respondents from the job sector*

<b>Sex</b>	<b>Count</b>	<b>Percentage</b>
Female	47	58%
Male	34	42%

<b>Age Group</b>	<b>Count</b>	<b>Percentage</b>
20-29	22	27.2%
30-39	31	38.3%
40-49	16	19.8%
50-59	11	13.6%

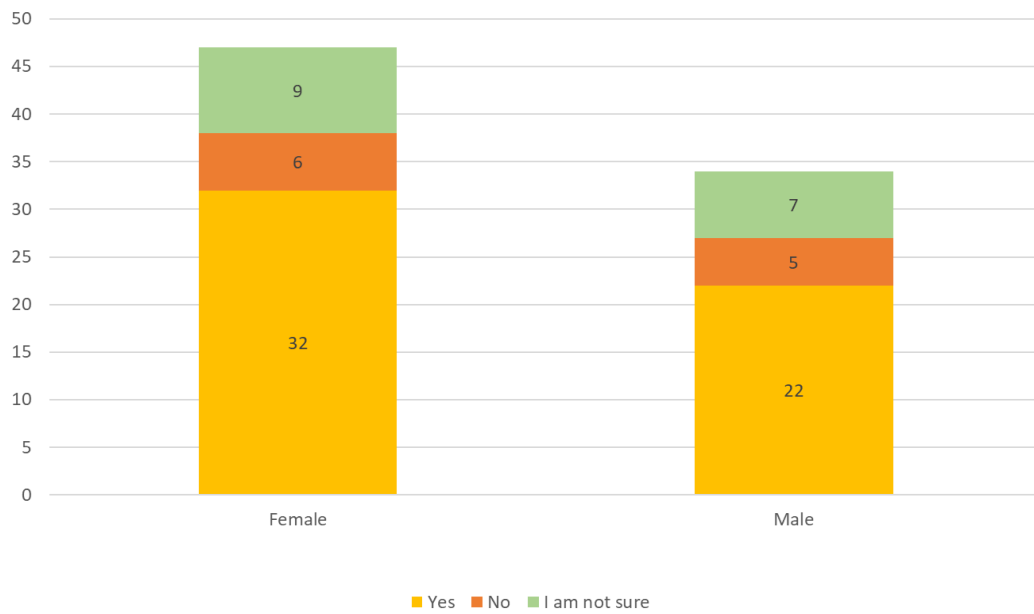
60-65	1	1.2%
<b>Highest Educational Attainment</b>	<b>Count</b>	<b>Percentage</b>
Elementary Level	1	1.2%
Elementary Graduate	0	0%
High School Level	5	6.2%
High School Graduate	16	19.8%
College Level	19	23.5%
College Graduate	29	35.8%
Vocational Course Graduate	6	7.4%
Master's Degree	4	4.9%
Doctoral Degree	0	0%
Others: Law Graduate	1	1.2%
<b>Job Sector</b>	<b>Count</b>	<b>Percentage</b>
Health	4	4.9%
Computer/Information Technology	0	0%
Real Estate and Development	0	0%
Education/Academe	1	1.2%
Advertising/Marketing	2	2.5%
Entertainment	0	0%
Food and Beverage	12	14.8
Media/News	0	0%
Government	48	59.3%
Business Ownership	4	4.9%
Non-Governmental Organization	0	0%
Others: Security	5	6.2%
Others: Janitorial Services	2	2.5%
Others: BPO	1	1.2%
Others: Environmental Planning	1	1.2%
Others: Insurance/Financial	1	1.2%

### *Familiarity with Urban Green Spaces*

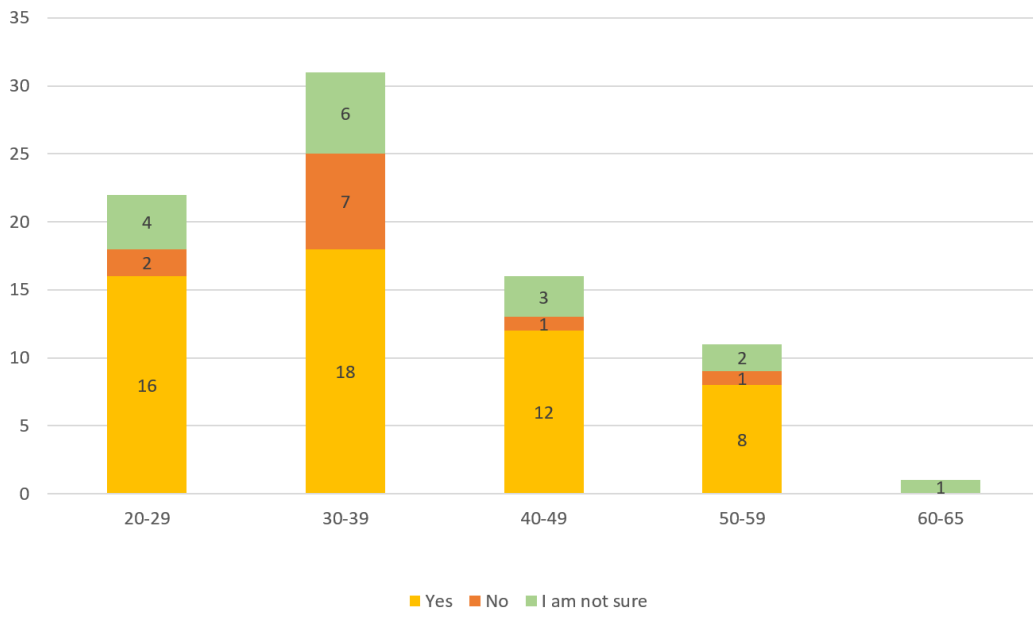
Results showed that more than half of the respondents are familiar with the term urban green spaces (66.7%) while 19.8% are not sure of its meaning, and 13.6% do not have an idea regarding the concept of Urban Green Spaces.

Figure 9.1. shows the relationship of the respondents' familiarity with urban green spaces in relationship with their collected demographic profile.

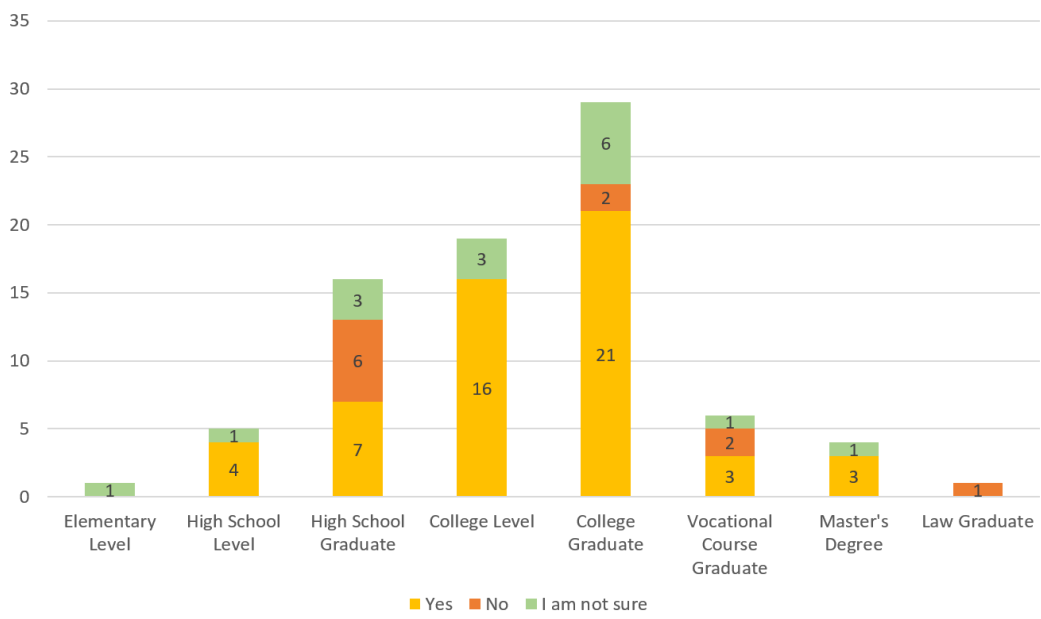
Figure 9.1. Relationship between the familiarity of UGS and (a) sex, (b) age group, (c) highest educational attainment, and (d) job sector.



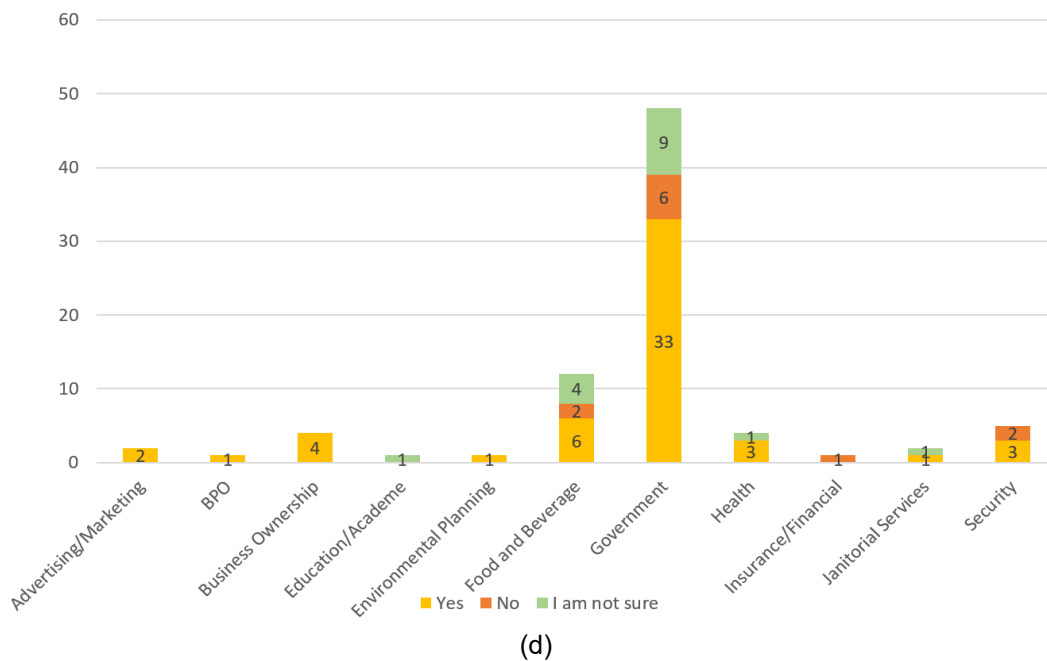
(a)



(b)



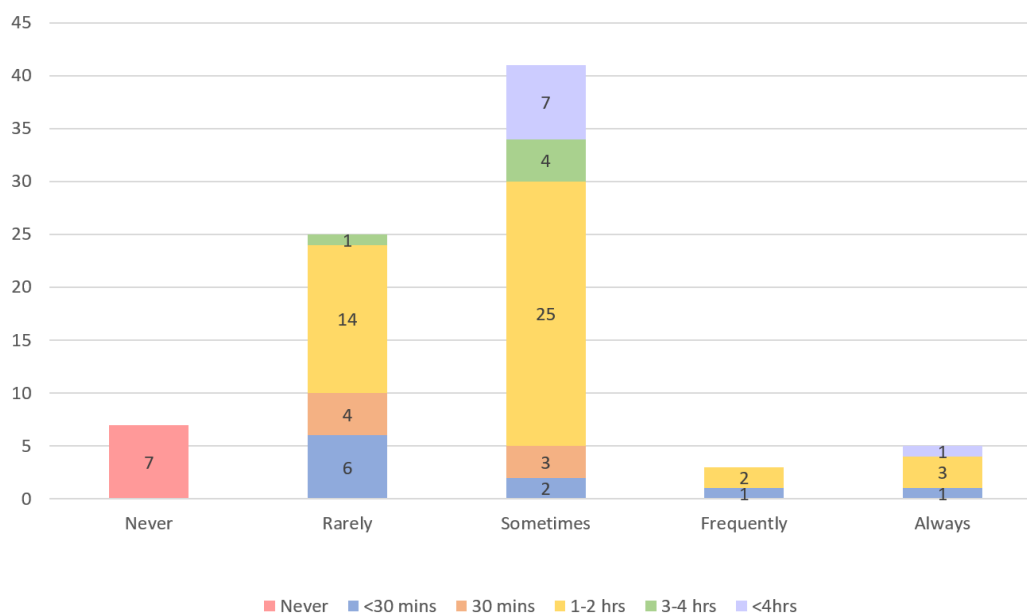
(c)



### *Frequency of Visit to Quezon Memorial Circle*

The respondents from the different job sectors were asked how they frequently visit the Quezon Memorial Circle through answering a Likert Scale where 41 out of the 81 (50.6%) respondents answered that they visit the said park “Sometimes”. Moreover, 25 of them usually stays for about 1-2 hours in Quezon Memorial Circle (Figure 9.2.).

Figure 9.2. Respondents’ frequency of visit and length of stay in QMC.



### *Association of Respondents' Perception to UGS in QMC and their Rating of QMC UGS*

When asked about how the presence of QMC urban green spaces make them feel, the respondents' answer/s from the given choices of feeling safe, healthy, happy, connected to nature, or anxious were converted into binary codes (1 = yes, 0 = no) for analysis. The Fisher's Exact Test was used to determine the association between the respondents' perception (nominal variable) and rating (ordinal variable) in order to determine whether there is a significant association between the variables as shown in Table 9.2.

**Table 9.2**

*Association of respondents' perception to UGS in QMC and their rating of QMC UGS using Fisher's Exact Test P-Value*

<b>Variable</b>	<b>Fisher's Exact Test P-Value</b>
QMC – Safe	0.978
QMC – Healthy	0.631
QMC – Happy	0.294
QMC – Nature	0.097**
QMC – Anxious	0.114

\*\* The estimated associations were significant at level of significance = 0.05.

The association between respondents' perception of being connected to nature and their rating of the urban green spaces in QMC was significant at a level of 0.05 and was likely not to occur due to chance. Further, in order to determine the strength of association, Cramer's V was used yielding a value of 0.3080.

*Association of Respondents' Demographic Profile and their Rating of QMC UGS*

The demographic profile of the respondents including their age, sex, education, job sector, familiarity with UGS, frequency of visits to QMC, and length of stay in QMC were associated with their rating of urban green spaces in QMC using the Fisher's Exact Test as shown in Table 9.3.

**Table 9.3**

*Association of respondents' demographic profile and their rating of QMC UGS using Fisher's Exact Test P-Value*

<b>Variable</b>	<b>Fisher's Exact Test P-Value</b>
Age	0.220
Sex	0.810
Education	0.108
Job Sector	0.327
Familiarity with UGS Code	0.253
Frequency of Visits to QMC	0.012**
Length of Stay in QMC	0.028**

\*\* The estimated associations were significant at level of significance = 0.05.

The association between respondents' frequency of visits and length of stay at Quezon Memorial Circle were both significant at a level of 0.05 and were likely not to occur due to chance. Further, the value of Cramer's V for both variables were also computed yielding a value of 0.3080 for frequency of visits to QMC and 0.3202 for length of stay in QMC.

*Association of Respondents' Demographic Profile and their Perceptions to UGS in QMC*

Using the same tests, the association between the demographic profile of respondents and their perception of being safe, healthy, happy, connected to nature, or anxious were determined, as shown in Tables 9.4 to 9.8.

**Table 9.4**

*Association of respondents' demographic profile and their perception of feeling safe using Fisher's Exact Test P-Value*

<b>Variable</b>	<b>Fisher's Exact Test P-Value</b>
Age	0.220
Sex	0.876
Education	0.876
Job Sector	0.445
Stay in the Job Sector (months)	0.453
Familiarity with UGS Code	0.459
Frequency of Visits to QMC	0.789
Length of Stay in QMC	0.137

**Table 9.5**

*Association of respondents' demographic profile and their perception of feeling healthy using Fisher's Exact Test P-Value*

<b>Variable</b>	<b>Fisher's Exact Test P-Value</b>
Age	0.977
Sex	0.257
Education	0.257
Job Sector	0.102
Stay in the Job Sector (months)	< 0.001**
Familiarity with UGS Code	0.638
Frequency of Visits to QMC	0.658
Length of Stay in QMC	0.135

\*\*The estimated associations were significant at level of significance = 0.05

**Table 9.6**

*Association of respondents' demographic profile and their perception of feeling happy using Fisher's Exact Test P-Value*

<b>Variable</b>	<b>Fisher's Exact Test P-Value</b>
Age	0.962
Sex	0.775
Education	0.775
Job Sector	0.730
Stay in the Job Sector (months)	< 0.001**
Familiarity with Urban Green Spaces	0.002**
Frequency of Visits to QMC	0.294
Length of Stay in QMC	0.363

\*\*The estimated associations were significant at level of significance = 0.05

**Table 9.7**

*Association of respondents' demographic profile and their perception of feeling connected to nature using Fisher's Exact Test P-Value*

<b>Variable</b>	<b>Fisher's Exact Test P-Value</b>
Age	0.851
Sex	0.286
Education	0.286
Job Sector	0.216

Stay in the Job Sector (months)	0.045**
Familiarity with UGS Code	0.818
Frequency of Visits to QMC	0.033**
Length of Stay in QMC	0.592

\*\*The estimated associations were significant at level of significance = 0.05

**Table 9.8**

*Association of respondents' demographic profile and their perception of feeling anxious using Fisher's Exact Test P-Value*

<b>Variable</b>	<b>Fisher's Exact Test P-Value</b>
Age	0.790
Sex	1.000
Education	1.000
Job Sector	0.400
Stay in the Job Sector (months)	0.544
Familiarity with UGS Code	0.292
Frequency of Visits to QMC	0.400
Length of Stay in QMC	0.103

Table 9.6 shows that there is a strong association between the respondents' perception of being happy because of the presence of UGS in QMC with their familiarity with the concept of urban green spaces (Fisher's Exact Test p-value = 0.002, V = 0.3706). With regards to the perception of being connected to nature, Table 9.7 shows that there is a strong association between the respondents' frequency of visit to Quezon Memorial Circle Fisher's Exact Test p-value = 0.033, V = 0.3653).

It is important to note that the length of stay of respondents in their job sector is significantly associated with their perceptions of feeling healthy, happy, and connected to nature due to the presence of urban green spaces in Quezon Memorial Circle with a Fisher's Exact Test p-value of < 0.001 for both the feeling healthy and happy, and 0.045 for being connected to nature.

*Key Informant Interview*

Aside from the survey questionnaire, a key informant interview was also conducted to put into consideration the perspectives of environmental managers pertaining to urban green spaces. Representatives from the Quezon Memorial Circle Administration Office were able to provide details regarding the urban green spaces in Quezon Memorial Circle. The interview centered on how the Quezon Memorial Circle environmental managers perceive urban green spaces together with their practices on how to maintain a 27-hectare National Park that caters to numerous visitors. Aside from this, challenges pertaining to management and unforeseen circumstances were also tackled. The QMC representatives also shared plans on how they envision Quezon Memorial Circle in the future.

## **X. RESULTS AND DISCUSSION**

### *General Demographic Profile of Respondents'*

Results have shown that there were more female respondents than male respondents by a difference of 16%. According to the 2015 census (City Planning and Development Department [CPPD], n.d.) the total working age population in QC is 2,041,025, where 51.07% of whom are female and the remaining 48.93% are male. Moreover, the age group with the highest population in Quezon City is between the ages of 20-24. Following this data ten years later, the said age range is well within their 30s therefore, supporting the highest age group that answered the survey questionnaire.

The Quezon Memorial Circle being strategically placed in the center of Quezon City is surrounded by various government agencies for easier public access and the flourishing food and beverage industry. Results showed that the top respondents are from the two mentioned job sectors together with security related services that are affiliated with the same.

### *Familiarity with Urban Green Spaces*

A larger percentage of respondents answered that they are familiar with the concept of urban green spaces. To be more specific, those who declared their familiarity are also part of the top responses in other variables such as age, highest educational attainment, and job sector. This relationship can be related to the actual responses where those who are part of the government sector, are in their 30s, and have graduated college are more affiliated to environmental work that may actively include or even just briefly touch the concept of urban green spaces such as Barangays, Department of Environment and Natural Resources, and the Philippine Statistics Authority.

When asked about how the respondents would define the term Urban Green Spaces using their own words, the most common descriptions that were mentioned include “park”, “trees”, “plants”, and “open space/area”. Although these do not entirely capture the subject matter and its other components, it provides a general idea that the concept of urban green spaces is not a foreign or unrecognizable terminology to the job sector. Even those who responded no or I am not sure when asked if they were familiar with UGS were able to provide their opinion about the concept by just reading between the lines.

#### *Frequency of Visit to Quezon Memorial Circle*

Results showed that when respondents were asked how frequently they visit Quezon Memorial Circle, the most common answer in the Likert Scale was “Sometimes” with a length of stay of about 1 to 2 hours. Further, in line with their frequency of visit and length of stay, respondents were asked why they visit Quezon Memorial Circle wherein the top three reasons were (1) to relax, (2) for nature visits, and (3) to spend time alone as shown in Table 10.1. Moreover, when asked about what they think is the most important role of UGS in QMC, the top three answers were (1) provides environmental connection, (2) helps in the overall environmental well-being of Quezon City, and (3) promotes public health (both physical and mental) as shown in Table 10.2.

**Table 10.1***Reasons why the job sector visits Quezon Memorial Circle*

<b>Reasons for visiting QMC</b>	<b>Count</b>
To Exercise	19
To Relax	33 (1)
To Socialize	14
For Nature Visits	32 (2)
To Spend Time Alone	11 (3)
To Attend Events	27
To Spend Time with the Family	30
Others: To Ride the Bus	2
Others: To Buy Plant Needs	2

**Table 10.2***Important role of urban green spaces according to the job sector*

<b>Important Role of UGS</b>	<b>Count</b>
Promotes Public Health (both physical and mental)	48 (3)
Promotes Community Engagement	34
Promotes Arts and Cultural History	22
Provides Environmental Connection	56 (1)
Provides a Safe Gathering Place	36
Provides a Relatively Cleaner Air	47
Lowers Temperature	29
Offers Relaxation	43
Encourages Kids' Play and Family Activities	47
Tourism	31
Helps in the Overall Environmental Well-Being of QC	50 (2)

Based on the gathered responses, the job sectors' most chosen reasons as to why they visit the Quezon Memorial Circle corresponds to what they believe the most important roles of urban green spaces are – first is visiting the said park to be closer to nature can be related to the role of QMC UGS as a source of environmental connection and at the same time serves as a tool in elevating the overall environmental well-being of Quezon City. Moreover, visiting QMC to relax, be with nature, and spend solitary time corresponds to the top three UGS roles of promoting environmental

connectivity, elevating the environmental well-being of QC, and promoting public health in both physical and mental aspects.

In a study by Reyes-Riveros et al. (2021), a systematic review of literatures was conducted, and evidence suggests that characteristics of public urban green spaces positively influence users' health in terms of stress reduction, satisfaction, mental well-being, and physical activity. Moreover, a study assessing the role of urban green spaces for human well-being said that green infrastructure is one of the significant pillars of urban structures that accelerates human life events by promoting physical activities, mental and psychological relaxation, oxygen for breathing, and purifying air pollutants (Jabbar et al., 2021).

#### *Association of Respondents' Perception to UGS in QMC and their Rating of QMC UGS*

Results showed that there is a strong and significant association between the respondents' perception of being connected to nature and their rating of urban green spaces in QMC (Fisher's Exact Test p-value = 0.097, V = 0.3080). In order to further verify if there were differences in their ratings, Wilcoxon Rank Sum Test was conducted and yielded a value of 0.9649. Hence, the respondents' ratings were not likely varied in consideration of their perception of being connected to nature.

#### *Association of Respondents' Demographic Profile and their Rating of QMC UGS*

There is a strong and significant association between the respondents' frequency of visit to QMC (Fisher's Exact Test p-value = 0.012, V = 0.3080), as well as their length of stay in QMC (Fisher's Exact Test p-value = 0.028, V = 0.3202). Using the Kruskal-Wallis Test, there was sufficient evidence to conclude that the ratings did not differ based on the frequency (0.511) and length of visit (0.224) of respondents at the Quezon Memorial Circle.

*Association of Respondents' Demographic Profile and their Perceptions to UGS in QMC*

Focusing on the findings of the statistical analysis that the length of stay of respondents in their respective job sector is strong and significantly associated with the perceptions of being healthy, happy, and connected to nature brought by the presence of urban green spaces in Quezon Memorial Circle, a Wilcoxon Ranked Sum Test was conducted to verify if the said perceptions cause a significant difference in their length of stay in their current job sector.

**Table 10.3**

*Significant difference of respondents' length of stay in their job sector and their perception of being healthy, happy, and connected to nature using Wilcoxon Ranked Sum Test*

<b>Perception</b>	<b>Wilcoxon Ranked Sum Test</b>	<b>P-value</b>
Healthy	539	0.008149
Happy	738	0.526
Nature	546	0.154

Table 10.3 shows that there is no significant difference in the stay of the respondents in their respective job sectors with their perceptions of being happy and connected to nature due to the presence of urban green spaces in Quezon Memorial Circle. Thus, even though their stay in their job sector and their perceptions of being happy and connected to nature is strong, it did not cause significant difference in their length of job service.

Further, results showed that there is a significant difference with the respondents' perception of being healthy with regards to the presence of UGS in QMC.

Using the One-Sided Wilcoxon Ranked Sum Test, respondents that stayed longer in their job sector tend to perceive the feeling of being healthy because of the presence of urban green spaces in the Quezon Memorial Circle. One interviewee expressed that while he thinks that the current greeneries in QMC are adequate enough, additional colorful flowers and even vegetable plots for a pop of color would brighten QMC more, which he personally thinks will result in a calmer mind and feeling of visitors.

A research pertaining to the effect of workplaces that have access to green outdoor environments contributes in lowering the level of stress and increases the positive attitude in the workplace (Lygum et al., 2023; Lottrup et al., 2012). Findings regarding the valuable effects of green spaces on both the physical and mental state of people that are part of the job sector are of high significance especially that most working people in Quezon City spend more of their waking hours at work than in their home (Gilchrist et al., 2015). Further, a study revealed that people who spend more than one hundred twenty minutes (120 mins) of their time in natural environments were significantly more likely to disclose better health or well-being. Positive associations peaked at 200-300 minutes per week regardless if visits were spent in many short or few longer periods (Lygum et al., 2023; White et al., 2019).

The urban green spaces found in the Quezon Memorial Circle serves as a place of rest and relaxation for the fast-paced lives of people that are part of the job sector in the metro. Having an accessible park where one could easily socialize with family and friends, exercise, and connect with nature even in an urban environment is an essential part of the overall well-being of a person.

### *Key Informant Interview*

### *Perceptions and Practices of QMC Environmental Managers on UGS*

According to the QMC Administration representatives, the presence and purpose of UGS within the said park is in line with their mission and vision to make Quezon Memorial Circle a world-class urban park that promotes sustainable, inclusive and safe green spaces which contributes to both the economic and environmental well-being of Quezon City. They take pride in the amenities and services that the park offers, such as botanical kiosks, playground, multi-purpose open field, fitness trail, and various sport courts, among others, and how it serves as a venue where families, friends, and communities can relax, bond, and create meaningful social interactions without spending a significant amount on fees and charges.

The QMC representatives further elaborated that they recently created a biodiversity team wherein their area of focus is on the maintenance of greeneries starting from the sapling stage to their relocation in the park itself. Further, as part of their mandate to educate the public of what QMC can offer – name tags with brief background and trivia on various tree species located inside the park were installed for the better appreciation of visitors. The management considers the park's continuous and process driven maintenance of greeneries as an important component in making QMC a place of relaxation where one can breathe and recharge even in a metropolitan setting.

### *Challenges*

Managing a 27-hectare park in the center of Quezon City definitely has its challenges. One that was mentioned by the QMC representatives was the accommodation of events, meetings, and gatherings. While the park has a large area, it sometimes struggles with accommodating requests for meetings, events, and practices for students, especially during peak seasons such as Valentine's Day and

the Christmas season. To address this, prioritization of booking requests based on the requestor, purpose, and urgency are considered.

While it is within their best intentions and effort to make Quezon Memorial Circle a safe urban green space area for their visitors, they sometimes encounter uncontrolled challenges and accidents such as falling branches and tree debris especially during extreme weather conditions. Further, since QMC caters to large events that are attended by many, damages to low-lying plants that can be easily stepped on by visitors cannot be entirely avoided.

#### *Future plans*

The Quezon Memorial Circle Administration Office envisions to make QMC a world-class park that is accessible to the public where services and amenities ranging from provision of health welfare through offering a spacious area for exercise and play, relaxation brought by the presence of urban greeneries, social collaboration by facilitating events, and economic development by incorporating sale of sustainable products and local food stalls in the area can be offered. They aim to provide this wide range of services by keeping in mind the idea that QMC can be recognized as a state-of-the-art park where most, if not all services can be accessed.

Focusing on the flourishing of urban green spaces in the vicinity of the Quezon Memorial Circle is in line with the 14-point agenda of current Mayor Ma. Josefina “Joy” Belmonte, specifically under the environment and climate change which aims to build a livable, green and sustainable city.

## **XI. RECOMMENDATION AND CONCLUSION**

The aim of this research is to recognize how urban green spaces situated at the Quezon Memorial Circle contribute to the lives of the job sector. To have an absolute understanding on how the job sector perceives the presence of urban green spaces and the benefits that it provides, it is crucial to know their level of understanding of the concept at hand. While a higher percentage of respondents who participated in this study expressed that they are familiar with the concept of urban green spaces, it is pivotal that further information regarding UGS be disseminated especially with the growing population of Quezon City that is continuously experiencing the effects of rapid urbanization and should therefore incorporate greening benefits to counteract its negative effects. Once they are well-informed of the concept of urban green spaces, environmental planners/managers can formulate and improve urban green spaces not only in national parks, but local parks as well, in accordance to the actual perceived role and benefits that the public needs.

Data showed that visiting QMC for its UGS and staying for about 1-2 hours to relax, be with nature, and spend time alone significantly contributes to job sectors' feeling of being healthy, especially to those who have been staying in their job sector for a longer time.

Further, the current practices, perceptions, and services provided by the Quezon Memorial Circle Administration in accordance with their mission and vision are in line with how the job sector perceives the roles and benefits of urban green spaces in QMC. The perception of both the respondents and representatives of QMC can serve as a guide to other local urban parks on how to improve their urban green spaces.

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