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The American University in Cairo

School of Global Affairs and Public Policy (GAPP)

INTRA-URBAN MIGRATION TO THE NEW CITIES IN THE GREATER CAIRO REGION: CAUSES AND CONSEQUENCES

A Thesis Submitted by

Salwa Abdel Maksoud Abdulla Eissa

Submitted to the Center for Migration and Refugee Studies

Spring 2011

In partial fulfillment of the requirements for

The degree of Master of Arts

In Migration and Refugee Studies

INTRA-URBAN MIGRATION TO THE NEW CITIES IN THE GREATER CAIRO REGION: CAUSES AND CONSEQUENCES

A Thesis Submitted by Salwa Abdel Maksoud Eissa To the Center for Migration and Refugee Studies Spring 2011 In partial fulfillment of the requirements for The degree of Master of Arts has been approved by Dr. Ray Jureidini _____ Thesis Supervisor Affiliation: Date _____ Dr. Ahsan Ullah Thesis first Reader Affiliation: Center for Migration and Refugee Studies, American University in Cairo Date _____ Dr. Helen Rizzo Thesis Second Reader Affiliation: Sociology, Anthropology, Psychology and Egyptology, American University in Cairo Date _____ Dr. Ibrahim Awad _____ Department Chair Date _____ Nabil Fahmy, Ambassador _____ Dean of GAPP Date _____

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Abstract

American University in Cairo INTERNAL MIGRATION TO THE NEW CITIES IN THE GREATER CAIRO REGION: CAUSES AND OUTCOMES Salwa AbdelMaksoud Eissa

A new phenomenon appeared and spread throughout the past decade as vast movements away from Cairo and into new settlements took place. This research is a comparative study between two of the new cities. Sixth of October and New Cairo, which have succeeded in attracting large sectors of the population. The cities under study have different features and facilities, so this research aims to compare them in terms of the following: (a) the reasoning behind the mass movement (b) the impact of land use on migrants and (c) the level of safety. This is done through a survey which was distributed to migrants in both cities; also more details were collected through a personal interview that was conducted with a market expert. This thesis found similarities in the reasons migrants moved to either city as many of the respondents relocated due to accessibility and changes in lifestyle, such as moving closer to jobs, avoiding crowded and dirty streets, to own property, to pay cheaper rent, and to move closer to educational facilities. Yet there were differences in the general attitudes, as New Cairo City is more successful in attracting families and is more capable of catering the needs of middle and upper class citizens, where it has better schools and a better public transportation system than those in Sixth of October City. At the same time, it is important to note that Sixth of October is an older city, thus it has better government facilities and better hospitals. Finally the research also found that safety is an issue in both cities, as the residents feel that there is a lack of safety on the streets.

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Glossary of Terms

- Cairo: a district that consists of the following cities: Abbassia, Ain Shams, Azbakeya, Boulaq, Daher, El Manial, El Marg, Muqatam, Nasr City, El Quba, Rhoda, EL Sakakini, Shobra area (Shobra, Elsahel, Road El Farag), Shubra El Kheima, Zeitoun, Coptic Cairo, Downtown Cairo, Faggala, Fustat, Heliopolis, Islamic Cairo, Kerdasa, Mataria, Old Cairo, Gerden City, Zamalek
- Giza: a district in Greater Cairo, which consists of the following cities: Agouza, Giza, Haram, Imbaba, Mohandessin, Dokki
- Greater Cairo: the capital of Egypt, which consists of the following districts: Cairo, Giza and Helwan
- Helwan: a district in Greater Cairo, which consists of the following cities: El Tagamu El Khames (New Cairo), Obour City, Maadi, Badr City
- Intra-urban Migration: The movement of a household residence within a country's national boundaries (between cities, provinces, or neighborhoods). This term will be used reciprocally with residential mobility in this thesis.
- Junior position (someone who does not hold a lot of experience but holds a bachelors degree, e.g. accountant, web developer)
- Labour position (someone who works manual job that does not require an educational degree, e.g. maid, driver)
- New Cairo City: Tagamoo el Khames or the Fifth Settlement. It is located on the outskirts of Cairo and is part of the Helwan governorate.
- Senior position: someone with professional/academic experience who holds a high position. E.g. professors, managers
- Sixth of October City: A city located on the outskirts of Cairo and is part of the Sixth of October governorate.
- Socioeconomic Status: the position that a person holds within the population's hierarchy, depends on several factors including the education, occupation, income, and property ownership.

Chapter I Introduction

Introduction

The allocation of the Egyptian population throughout Egypt makes Cairo the largest city in the Continent of Africa. Egypt has been characterized as a developing country that is over-urbanized. This is because about 43% of its inhabitants are living in urban areas. Many residents from inside Cairo are now leaving the city to the outskirts to escape the noise, pollution, lack of housing options, crowded streets, deteriorating services, and insufficient infrastructure. Intra-urban migration is very apparent and significant in Egypt, where it has experienced a flow of migration into newly constructed cities. This thesis is a survey study that will focus on intra-urban migration into New Cairo City and Sixth of October City.

Intra-urban migration is defined as the movement of households within urban areas. The term 'intra-urban migration' defines the characteristics of many cities, where it "defines neighborhood dynamics, impacts land-use patterns, and consequently influences ecological systems in the long term as new residents in a neighborhood may have different resources, different landscape and land-use preferences, and different land management practices."

¹ Barry McCormick, Jackline Wahba. "Big Cities and Migration: Evidence from Egypt." *University of Southampton*. 1996, pp. 1-15.

² Hossam Zaater. "Urban Vision." Business Today Magazine. April 2008.

³ Shipeng Sun, Steven Manson. "An Agent-based Model of Housing Search and Intraurban Migration in the Twin Cities of Minnesota." *University of Minnesota*. 2009, p. 1.

The study of intra-urban migration helps explain the behavior of household intra-urban migrants and explains how decisions of relocation are made. The study of this field can also explain how intra-urban migration impacts land use. In this context, land use refers to the different facilities available in the city, such as educational centers, healthcare centers, recreational centers, transportation, and the quality of roads. Thus, this thesis measures socioeconomic dynamics of intra-urban migrants by comparing their neighborhood facilities and services in the new cities.

The movement of people out of big cities into newly constructed cities is not a new phenomenon. This phenomenon usually occurs when housing becomes inadequate in big cities and fails to catch up with a rising population rate; intra-urban migration has been witnessed in many parts of the world.⁴ For example,

A rise in the baby boomer population after World War II, coupled with ongoing industrialization, saw large-scale emigration from the United States' cities to their suburbs. The same was true of inner city London, where wealthier residents fled decaying housing to the outskirts of the metropolis and its satellite cities. Coastal regions in Australia have more recently experienced the same effect due to the 'non-urban urbanization' of suburbs, where the population has shifted first to the suburbs and then towards coastal regions. Even in Germany this trend is evident; since the end of the 1980s, various forms of municipal settlement have been developed on the outskirts of several German cities away from cluttered city centers.⁵

This concept of urban development has been going on for several decades. It is a phenomenon that developing countries experienced mid-century due to the expansion of

⁴ Hossam Zaater. "Urban Vision." *Business Today Magazine*. April 2008.

⁵ Hossam Zaater. "Urban Vision." *Business Today Magazine*. April 2008.

capitalism. Intra-urban migration has determinants, influencing factors, and consequences. Greenwood notes that throughout history financial advantages and higher incomes were the main reason for internal migration; distance also has an effect on internal migration, where most of the time, long distance acts as a deterrent against migration. Currently, the prerequisites for urban internal migration have been transformed. People now migrate to new constructed urban areas because commercial enterprises/investors have created job opportunities and residential areas there; governments have also established services and facilities.

Therefore, this thesis will specifically focus on the causes of intra-urban migration and its impact on urban structure (land use) and safety in New Cairo City and Sixth of October City, comparing the main three socioeconomic classes.

Population Profile

The growth of the Egyptian population has increased exponentially particularly in the last few decades, making it one of the most populated counties in the world. By the mid-1990s, the Egyptian population reached around 56 million; now in mid-2010 the Egyptian population is estimated to be 80 million.⁷ Egypt's habitable area is only around 38,500 km², which is largely

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⁶ Michael Greenwood. "Research on Internal Migration in the United States: A Survey." *Journal of Economic Literature*. Vol. 13, No. 2, 1975, pp 397-433.

⁷ Gil Feiler. "Housing Policy in Egypt." *Middle Eastern Studies*. Vol. 28, No. 2, 1992, pp. 295-312.

located along the Nile River and in its Delta. ⁸ Egypt has 26 governorates, where Giza and Cairo are the most densely populated. ⁹

Dalia Wahdan argues that "since 1952, consecutive Egyptian governments have sought differential forms of physical planning with the aim to 'correct' the unequal spatial distribution of resources over the national territory." She argues that new urban communities planning schemes got detached from their original plans because they were shaped and influenced by the local governments and changing political systems. Therefore, the history of land use in New Cairo City and Sixth of October City can be observed and explained by looking into the history of the Egyptian presidents and governments that ruled over Egypt.

During Gamal Abdel Nasser's ¹¹ era, the Egyptian government owned about 96% of all the land in Egypt. Nasser favored lower-income groups, where he passed rent control laws, increased public housing, and discouraged private investment in construction. ¹² During this era, presidential decrees intervened both directly and indirectly in planning and land use decisions; such decrees countered planning decisions, disrupted regional and local land use plans, and

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⁸ Gil Feiler. "Housing Policy in Egypt." *Middle Eastern Studies*. Vol. 28, No. 2, 1992, pp. 295-312.

⁹ Reem Leila. "Redrawing the map." *Al-Ahram Weekly*. Issue No. 894, 2008.

¹⁰ Dalia Wahdan. "Building 6 October City: Local Politics and the Social Production of Uneven Spatial Development." *American University in Cairo*. 2001, p.1.

¹¹ Gamal Abdel Nasser was the Egyptian President from 1956-1970.

¹² Gil Feiler. "Housing Policy in Egypt." *Middle Eastern Studies*. Vol. 28, No.2, 1992, pp. 295-312.

approved controversial planning projects. ¹³ Nasser initiated the Greater Cairo Region Master Scheme, which was a plan to build four new cities in the desert surrounding Cairo. The aims of constructing new cities were to "absorb Cairo's growth, provide alternative sites for urban development, and redirect the distribution of Egyptian population." ¹⁴ However, Nasser died in 1970, before he had a chance to complete his scheme.

In 1974, Nasser's successor, Anwar Sadat, ordered the establishment of a brand new population redistribution map of Egypt, extensively founded on a new-town program. The initiative of Nasser's Greater Cairo Region Master Scheme developed over time into a large-scale program under Sadat. The plan to redraw the demographic map of Egypt in order to decrease the dense population in Cairo was guided by Sadat's 1970s *infitah* policy. The basic principles of the *infitah* policy were the "decentralization of decision-making in state-owned enterprises, allowing more scope for the private sector, [and] the provision of incentives to stimulate and encourage private foreign investment. ¹⁵ Sadat stressed that Cairo would remain the capital and the center of governmental activity, but numerous offices would be moved to the new towns and local leadership would be promoted in order to strengthen the government's power over a larger part of Egypt. ¹⁶ To encourage people, institutions and businesses to move to the new towns, the Egyptian government first built public buildings and infrastructure services, and

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¹³ Dalia Wahdan. "Building 6 October City: Local Politics and the Social Production of Uneven Spatial Development." *American University in Cairo*. 2001, pp. 1-150.

¹⁴ Dona Stewart. "Cities in the Desert: The Egyptian New-Town Program." *Annals of the Association of American Geographers*. Vol. 86, No. 3, 1996, p. 462.

¹⁵ Gil Feiler. "Housing Policy in Egypt." Middle Eastern Studies. Vol. 28, No.2, 1992, p. 302.

¹⁶ Ibid, pp. 295-312.

then "sold subsidised housing units, promised tax reductions and other benefits to individuals and industries who would resettle in the New Towns." ¹⁷

During Hosni Mubarak's era¹⁸, the Egyptian government decided to continue the implementation of its strategy of the redistribution of the population to new towns. The government continued to encourage and promote such redistribution strategies because Cairo remained overcrowded and its infrastructure continued to deteriorate. The idea of an Egyptian state housing policy, i.e. the establishment of new towns, was due to extreme sanitation conditions, a high demand for housing, high residential density, and inadequate infrastructure to support population growth in Cairo.¹⁹ Feiler explains the plan of the Egyptian government as the following: First, the goal was to raise funds for the new towns from private investors, and at the same time foreign companies were to supply new construction technology. Second, new towns were to provide housing opportunities for the working class families in Cairo, which would reduce the density in Cairo by taking advantage of the vast space available for housing, construction, and infrastructure in desert areas.

Egyptian policies guiding urban land use have changed even further during the late 1980s-2010. "State officials under Sadat and Mubarak were keen to minimize the hazardous effects of presidential intervention in development planning of the new settlements, but not to

¹⁷ Gil Feiler. "Housing Policy in Egypt." *Middle Eastern Studies*. Vol. 28, No. 2, 1992, p. 303.

¹⁸ Egypt's former President (1981-2011).

¹⁹ Gil Feiler. "Housing Policy in Egypt." *Middle Eastern Studies*. Vol. 28, No. 2, 1992, pp. 295-312.

eliminate it altogether."²⁰ As a result, Egypt's economy was liberalized, and its state centralized policies toward urban planning changed. Market driven plans that included the selling of land to private real estate developers were installed. ²¹

Objectives

This thesis will address the following research questions: what led migrants out of their previous homes and how did intra-urban migration affect land use. The objective of this research is to determine the causes of intra-urban migration to New Cairo City and Sixth of October City and study its impact on land use, comparing the three socioeconomic classes.

The three main objectives that this thesis aims to achieve are (a) the causes of intra-urban migration to New Cairo City and Sixth of October City, (b) land use and intra-urban migration, evaluating the impact of land use on migrants in both cities, and (c) safety in New Cairo City and Sixth of October City, analyzing migrants' attitudes towards the safety of streets.

²⁰ Dalia Wahdan. "Building 6 October City: Local Politics and the Social Production of Uneven Spatial Development." *American University in Cairo*. 2001, p. 80.

²¹ Zhi Yong Yin, Dona Stewart, Stevan, Bullard, Jared MacLachan. "Changes in urban built-up surface and population distribution patterns during 1986–1999: A case study of Cairo, Egypt." *Computer, Environment, and Urban Systems.* Vol. 29, 2005, p. 597.

Significance

With the changes that have occurred in the past years, where the Egyptian government attempted to move some of its population away from Cairo and Giza as part of a plan to depopulate the condensed areas in Cairo, intra-urban migration into New Cairo City and Sixth of October City has increased.

Not much research has been done on intra-urban migration in the Middle East, or on the impacts it has on services and facilities available in newly constructed cities. Thus, this study is significant because it fills in the knowledge gap of intra-urban migration in Egypt. This research examines the affects of intra-urban migration on land use by evaluating facilities and services available in New Cairo City and Sixth of October City, keeping migrants' different socioeconomic statuses in perspective.

Given the current conditions in Egypt, where President Hosni Mubarak has resigned on February 11, 2011, because of the strikes of millions of Egyptians asking him to do so, many questions arose concerning the safety of the different areas of the country. Although the research was conducted before these events, face-to-face interviews were conducted with citizens of the new areas to collect details on the current conditions in these areas.

Theoretical Framework

Causes of Intra-Urban Migration

There are different factors that influence the decision to relocate and cause intra-urban migration. Sun explains that there is no definite model of intra-urban migration since it is a decision based upon a complicated network of individual choices and local use. ²² Sun argues that there is not one particular reason that motivates families to relocate, although improving housing and neighborhood qualities or owning a house/apartment are the most prominent reasons. ²³

However, "the actual process of decision-making is more like a cyclic iteration of these two phases, in which households weigh their dissatisfaction with their present location against satisfaction with a possible alternative elsewhere." ²⁴ The decision to relocate is largely based on the grounds of the family's dissatisfaction with their current household. Clark divides the factors that can motivate mobilization into two categories, changes in services and life cycle changes. ²⁵

Accessibility and Changes in Services:

- Quality of schools
- Quality of hospitals
- Housing and neighborhood qualities
- Access to centers of employment

²² Shipeng Sun, Steven Manson. "An Agent-based Model of Housing Search and Intraurban Migration in the Twin Cities of Minnesota." *University of Minnesota.* 2009, pp. 1-8.

²³ Ibid.

²⁴Ibid, p. 28.

²⁵ Wiley Clark. "Migration in Milwaukee." *Economic Geography*. Vol. 52, No. 1, 1976, pp. 48-60.

Life-Cycle Changes:

- Age
- Additional family joining the household
- Retirement

Another factor that can impact migrants' decisions when searching for a new place to relocate is space awareness. The search pattern for a new location is many times constrained by awareness space. Space awareness is "defined as that set of locations within the urban area about which the migrant possesses some knowledge." Space awareness is defined as a households direct activity space in urban locations that has occurred in the past, or as a household's indirect contact in urban locations that are acquired through media or companions. The households' awareness space has a great impact on their search space for a new location which could suit their expectations and desires in a new residence.

Thus, this thesis will achieve its first objective by studying the reasons that motivate families, from different socioeconomic statuses, to migrate to New Cairo City and Sixth of October City.

Intra-Urban Migration and Land Use

Older cities can be overpopulated, tend to have corrupt government systems, high unemployment rates, substandard housing, and inadequate services. Thus, in order to avoid such problems in new cities, an evaluation of services and facilities in newly constructed cities should be undergone. Arthur Gallion and Simon Eisner explain land use plan theory.²⁷ They argue that

²⁶ John Holmes, Lawrence Brown. "Intra-Urban Migrant Lifelines: A Spatial View." *Demography*. Vol. 8, No. 1, 1971, p. 105.

²⁷ Simon Eisner; Arthur Gallion, The Urban Pattern, Fourth Edition, New York 1980.

land use plan theory focuses on the pattern and nature of development within a city's boundaries. The spatial aspect for land use theory is about land space and what happens within this land. It is "basically concerned with the location, intensity, and amount of land development required for the various space-using functions of city life." Eisner and Gallion argue that land use should be divided into parts, such as commercial, educational, recreational, and the industrial uses of land. Thus, this plan sets the basis for the allocation of units with their services and facilities in new cities. The land use plan aims to set out the map of reaching economic, physical, and social community goals. The plan developed can have a powerful influence on the structure and quality of a new cities environment through its effects on private and public investments. ²⁹

The evaluation of the impact and consequences of urban land use planning is of great importance. Therefore, in analyzing the impact of land use on migrants, this thesis will undergo an impact assessment in urban planning in New Cairo City and Sixth of October City. Social impacts will refer to "to various factors such as quality of housing, local services and living environment, [and] conditions of transportation."³⁰

It is important to study the impact of land use on migrants since the term 'impact' refers to something that must be experienced by an individual or household, or society, and therefore it is often perceived differently among people.

²⁸ Shean McConnell. <u>Theories for Planning</u>. Heinemann: London. 1981, p. 73.

²⁹ Arthur Gallion, Simon Eisner, The Urban Pattern, Fourth Edition, New York, 1980.

³⁰ Rauno Sairinen. "Assessing Social Impacts of Urban Land-Use Plans: From Theory to Practice." *Boreal Environment Research.* 2004, p. 509.

Thus, this thesis will achieve its second objective by evaluating the impact of land use on migrants in New Cairo and Sixth of October by studying the facilities and services of educational centers, healthcare, and the transportation system in New Cairo City and Sixth of October City.

Commercial Enterprises, Intra-Urban Mobility, and Land Use

New cities and economic development are strongly related, where cities grow and prosper as a result of improvements in businesses and industry. ³¹ Commercial enterprises that provide goods and services stimulate growth in new urban cities, and play a part in the motivations that cause intra-urban migrants to relocate.

The main influencing factor that commercial enterprises have in new cities is capital. The impact enterprises have is fixed to land use, such as land improvements, architectural designs, stock of buildings, and the stock of resident services (malls, supermarkets, restaurants, entertainment, etc.). 32

Enterprises' decisions of locating different facilities in new cities influence the urban land structure of new cities. For example, the proximity of malls, supermarkets, schools, and clubs to residential areas can attract households that are planning on relocating.

³¹ David McKee, William Leahy. "Intra-Urban Dualism in Developing." *Land Economics*. Vol. 46, No. 4, 1970, pp. 486-489.

³² Britton Harris. "Some Problems in the Theory of Intra-Urban Location." *Operations Research*. Vol. 9, No. 5, 1961, p. 695-721.

Brown explains that space awareness, or areas that migrants have some knowledge of, influences their decision on relocation.³³ This is where a household is more likely to migrate to a new city in proximity to their city of origin. Here, enterprises play a role because of media and advertisements.

Enterprises have to reach the masses and increase the awareness of households living in different cities of their area. They face some "constraints on the information frame within which the purchase decision is made... [This is due to the fact that migrant households have] a limited amount of time and resources which they are willing to expend in their search for a house."³⁴ They mostly base their relocation decision either on personal acquaintance, awareness of the new city, or on public information like newspapers or real estate agencies.

Thus, studying the facilities and services of commercial enterprises in New Cairo and Sixth of October will help achieve this thesis' second objective of evaluating the impact of intraurban migration on land use.

³³ John Holmes, Lawrence Brown. "Intra-Urban Migrant Lifelines: A Spatial View." *Demography*. Vol. 8, No. 1, 1971, p. 105.

³⁴ Risa Palm. "Real Estate Agents and Geographical Information." *Geographical Review*. Vol. 66, No. 3, 1976, pp. 267/268.

Government Policies, Intra-Urban Migration, and Land Use

Government policies in development are what initiate and structure the development of new cities. The nature of development of new urban settings, forms, and land structure is hence process-oriented, because it is a result of policies set by decision makers. The government has to consider many factors in new cities, which include efficiency, health, and safety. However, the two most important decisions in city planning are transportation and land use. Policy makers have to adequately plan how land use and transportation will work together. Such policies are regularly being modified through experience; however, progress based on experience may not be proceeding in a sufficient amount of time. "The intricate interaction of transportation facilities with the whole metropolitan environment make the setting of transportations standards matter of vital concern to all urban planning and policy-making."

In order to assess the government's role in land use this thesis will look at different factors, like the quality of the streets, forms of transportation, availability of public transportation stations, ease of reaching public transportation stations, personal transportation, quality of the roads, and safety. The evaluation of whether the Egyptian government has adequately planned the interactions between land use, transportation, and quality of roads will help achieve this thesis' second objective concerning the impact of intra-urban migration on land use.

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³⁵ Britton Harris. "Some Problems in the Theory of Intra-Urban Location." *Operations Research*. Vol. 9, No. 5, 1961, p. 696.

Safety in New Cities

Migrants want to move to safe neighborhoods. New Cairo and Sixth of October are cities that are still under construction, therefore the issue of 'street safety' becomes of great importance.

Safety is more of a feeling than a qualifier of urban space. The perception of safety is affected by several variables some pertaining to both the social realm and others to the characteristics of the built environment. When a community's sense of safety is high, the opportunity to commit crimes decreases because people are out on the streets leading to increased natural surveillance, 'more eyes on the street', stronger community ties, less opportunity for no-good-doers to infiltrate the neighborhood.³⁶

New cities are often alleged to be safe and private, while overpopulated neighborhoods are described as being unsafe and unsecure.³⁷ Thus, studying whether migrants in New Cairo City and Sixth of October City feel safe is important. Men, women, and children residing in these cities may feel unsafe due to different factors, such as there are too many workers, theft cases, crime cases, or too many dogs in the streets. A study on the sense of security in New Cairo and Sixth of October is discussed in the results section of this thesis. Thus, this thesis will achieve its third objective by evaluating whether migrants feel safer in the streets of their previous crowded neighborhoods in Cairo or feel safer in New Cairo and Sixth of October.

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³⁶ Dina Shehayeb. "Planning and Designing Urban Space, Community and Crime Prevention: The Case of Arab Countries." *Policy Brief Series.* No. 16, 2010, p. 7.

³⁷ Anneli Kahrik, Kadri Leetmaa. "Residential Preferences towards Suburban Living in Post-Socialist Metropolies." *University of Tartu.* 2009, pp. 1-19.

Conceptualization of the Issue of Socioeconomic Status

Certain classifications have to be made in order to observe the relationship between internal migration and socioeconomic status. There is a socioeconomic component for intra-urban migration.³⁸ Previous studies have looked into different aspects of socioeconomic status which include occupation, income, educational level, and housing cost. This thesis' approach in measuring a migrant's socioeconomic status is determined according to three main areas:

- 1) Education: whether the respondent holds a university degree or not.
- 2) Occupation: whether the respondent works in a senior (someone with professional/academic experience who holds a high position, e.g. professors, managers), junior position (someone who does not hold a lot of experience but holds a bachelors degree, e.g. accountant, web developer), or labour position (someone who works manual job that does not require an educational degree, e.g. maid, driver).
- 3) Residential Area: whether the respondent owns/rents a villa, apartment, or an extension of a building (roof, basement).

A more detailed classification of socioeconomic status is given in Chapter III: Materials and Methods section.

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³⁸ James Johnson; Keith Halfacree; Robin Flowerdew. "The Characteristics of British Migrants in the 1990s: Evidence from a New Survey." *The Geographical Journal*. Vol. 158, No. 2, 1992, pp. 157-169.

Intra-urban migration is described as the movement from a less desirable neighborhood into a more desirable one. The factors that influence desirability and lead households to change residence are social and occupational mobility. This is apparent when different socioeconomic classes decide to match their status with that of the residential area, where they use their financial resources to live in places that contain their desired neighborhood. Households that earn more money are more likely to move to new cities in order to satisfy their needs and preferences, thus, new cities are more likely to likely to accommodate higher socioeconomic households. People who earn relatively high incomes are more likely to engage in intra-urban migration.

This Thesis is divided into the following chapters:

Chapter II: Background- Discusses the reasons behind the establishment of new suburban cities, and examines land use features in New Cairo City and Sixth of October City.

Chapter III: Literature Review- Discusses previous research on intra-urban migration in different regions of the world, pointing out the existing gaps in the literature.

Chapter IV: Materials and Methods- Specifies how the survey was carried out, and the means by which information was gathered. This chapter gives an overview of the questionnaire,

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³⁹ Kyle Crowder, Scott South. "Escaping Distressed Neighborhoods: Individual, Community, and Metropolitan Influences." *The American Journal of Sociology.* Vol. 102, No. 4, 1997, pp. 1040-1084.

⁴⁰ Ibid.

⁴¹ Wiley Clark. "Migration in Milwaukee." *Economic Geography*. Vol. 52, No. 1, 1976, pp. 48-60.

the sample size used, and how the social status of the respondents was determined. It also discusses ethical concerns and how the results gathered were calculated.

Chapter V: Analysis and Discussion- Analyzes the results of this study in three main areas: the reasons behind households moving to New Cairo City and Sixth of October City, landuse and intra-urban migration in New Cairo and Sixth of October, and safety levels in both cities.

Chapter VI: Conclusions and Discussions- Summarizes the most important findings of the research. It also addresses future research needed in the field of intra-urban migration.

Chapter II Background

Chapter I in this thesis gave an introduction to the issue of intra-urban migration in Egypt and set out the objectives and theoretical framework. This chapter discusses the reasons behind the establishment of new suburb cities, and examines land use features in New Cairo City and Sixth of October City.

New Suburb Cities in Cairo: Underlying Factors

Abdel Moneim Said explains in his article "Change in Egypt" that the relationship between Egyptians and their land has changed tremendously over the past 30 years. ⁴² Egyptian society has a folklore song that used to criticize a man for selling his land, as it was considered socially unacceptable. Yet as years passed, Egyptians have changed their views, as many of them started pursuing better living conditions for themselves and their families. As a result, many Egyptians migrated externally to Western countries in search of better educational opportunities and/or to get another citizenship. Other Egyptians migrated to Gulf countries in search of better jobs and salaries. Yet, even with these external migrations most Egyptians did not move internally until the new cities were developed.

The Egyptian relationship with their geographical region has changed at home, as well, with the shift of huge portions of the population from the countryside to the city, which was followed by a second shift from the city to the suburbs. Over the past three decades Egyptians moved to 33 completely new satellite cities, such as 6 October governorate,

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⁴² Abdel-Moneim Said. "Change in Egypt." *Al Ahram Weekly*. Issue No. 1010, August 2010.

Al-Tagammu Al-Khamis, Shorouq and Rehab, which now combined house millions. The urbanised area of our country has expanded from three to seven per cent of the land, much of this stretching beyond the Nile Valley to the coastal areas.⁴³

Abdallah Attia, professor of architecture and urban planning at Ain Shams University, says that part of the initial plans of Cairo's urban development was to develop ten industrial areas, each with a capacity of 250,000 inhabitants. Those areas included both Sixth of October City and New Cairo City.⁴⁴

These industrial areas were to assist in the alleviation of population growth in Cairo.⁴⁵ They were all planned to provide employment for their working inhabitants, but that was not the case in reality. A new minister for Housing and Urban Development was appointed in 1993, and he changed the whole plan. He started selling land in New Cairo City and Sixth of October, with the goal not being development, but rather income generation for the government.⁴⁶

The Egyptian government's original plan was to reduce the overpopulation in Cairo whilst stemming the growth in slum areas; however, this plan was not executed. ⁴⁷ The Egyptian government failed to establish a strong enterprise system in the early 1990s and decided to make private investors in charge of the fate of these new cities. As a wealthier middle class emerged in Egypt, they started yearning to join the rich and prosperous people that migrated out of Cairo

⁴³ Abdel-Moneim Said. "Change in Egypt," *Al Ahram Weekly*. Issue No. 1010, August 2010.

⁴⁴ S. F. Shihata, "Cairo's Solutions Lie Outside." *Al-Ahram Weekly*. Issue No. 851, 28 June - 4 July 2007.

⁴⁵ M.Farid, H. El Shafie, "An Assessment of the New Cairo City." *Cairo University*. 1996, pp. 1-19.

⁴⁶ S. F. Shihata. "Cairo's Solutions Lie Outside." *Al-Ahram Weekly*. Issue No 851, 28 June - 4 July 2007.

⁴⁷ Ibid.

into the new cities in order to escape the pollution, noise, busy streets, and lack of housing choices. At Rather than the low-income people moving to the new settlements, in New Cairo and Sixth of October, the settlements transformed into cities with inhabitants of the medium and higher socioeconomic classes. Therefore, both cities came to have commercial areas as well as low, medium and high cost housing.

Ahmed Dabbous, the Chief Financial Officer at a leading Egyptian real estate development company, Sixth of October Development and Investment (SODIC), explained the major boom in the new cities in Cairo. Inner city Cairo cannot meet the demand anymore. "It's congested, it's full, there's no space to develop anything so people are moving out... People are demanding a better life; to breathe fresh air, to cycle to school. The other issue is of course the legal issue. The legality of acquiring and buying a house is difficult in central Cairo." ⁵⁰

The Greater Cairo Region (GCR) consists of three major cities: Cairo, Giza, and Qalubiya. In order to ease down the burden on the region two new governorates have been created by presidential decree on April 17, 2008.⁵¹ The two newly created governorates were Sixth of October and Helwan. The Sixth of October governorate consists of Sixth of October City, Al-Wahat Al-Bahariya, and will extend across Wadi el Natrun until it reaches the borders

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⁴⁸ H. Zaater. "Urban Vision." *Business Today Magazine*. April 2008.

⁴⁹ M.Farid, H. El Shafie, "An Assessment of the New Cairo City." *Cairo University*. 1996, pp. 1-19.

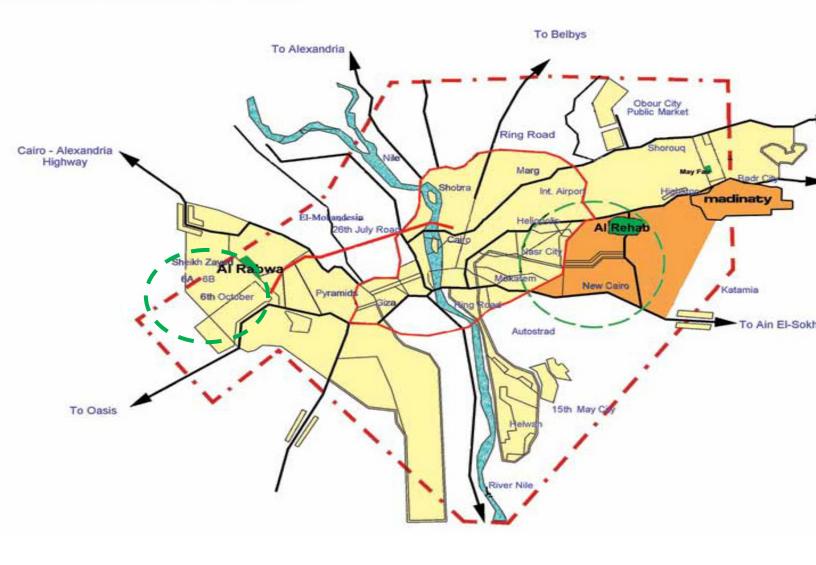
⁵⁰ H. Zaater. "Urban Vision." *Business Today Magazine*. April 2008.

⁵¹ Reem Leila. "Redrawing the Map." *Al-Ahram Weekly*. Issue No. 894, April 2008.

of Marsa Matrouh. The Helwan governorate consists of Maadi, Helwan, 15th May, New Cairo, Haikstep, Badr and Sherouk cities.⁵²

Frame Tella. "Redrawing the Map." *Al-Ahram Weekly*. Issue No. 894, April 2008.

Figure 1.1. Map of Greater Cairo⁵³



 $^{^{53}\} http://www.madinaty.com/images/Greater-cairo-eng.jpg$

The decision to create two new governorates was very much needed due to the overpopulation problem facing the governorates of Cairo and Giza. According to the Minia Governor, "the changes will relieve Cairo and Giza of many problems and help speed up the provision of services."⁵⁴

Land Use in New Cairo City and Sixth of October City

New urban communities are characterized as large scale developments that are built as an expansion to existing urban centers, on newly developed private or public land; new communities are built to provide housing, educational facilities, public utilities, and healthcare facilities. 55

H. Zaater argues that New Cairo City and Sixth of October City are places that have no heart or soul since there are currently no centers/malls that are fully functioning to meet the demands of these growing new suburbs. "They don't have the utilities and services: hospitals, shopping centers, entertainment centers. The nucleus or center of the city is missing." There still remains a shortage of services and stores, where the inhabitants in New Cairo and in Sixth of October continue to drive into their previous neighborhoods in Cairo and Giza to buy their home supplies and groceries.

⁵⁴ Reem Leila. "Redrawing the Map." *Al-Ahram Weekly*. Issue No. 894, April 2008.

⁵⁵ Gideon Golany. <u>The Contemporary New Communities Movement in the United States.</u> *University of Illinois*. 1974.

⁵⁶ H. Zaater. "Urban Vision." *Business Today Magazine*. April 2008.

However, the Egyptian company SODIC, and their Lebanese partner Solidere, is developing two new centers. The construction of these urban centers started in 2009. The first is called Eastown, which is located in New Cairo; and the second is called Westown, which is located near Sixth of October City on the Cairo-Alexandria Highway. SODIC's goal behind building such urban centers is the creation of a nucleus which will secure all the inhabitants' needs in both cities. SODIC argues that,

If you want to create two cities, one in the east and one in the west, it makes sense to create an attractive center that pulls everything together. And our experience is in city making; we create mixed-use city centers supported by state-of-the-art infrastructure and added value services such as broadband connections...The total 'built up area' for the Eastown and Westown projects is just over three million square meters. ⁵⁷

Zaater explains that Westown is located on the Cairo-Alexandria Highway at the intersection of the Dahshour Road leading to Sixth of October City. It covers an area of around 1.2 million square meters. It includes shopping premises, residential neighborhoods, an office park, and hotel and entertainment facilities. On the other hand, Eastown is adjacent to the American University in Cairo (new campus), and is being constructed over an area of 858,000 square meters. It includes a residential neighborhood, a retail mall, a community center and entertainment district, and an office park.

These two town centers, however, do not take the lower class into consideration. "Critics say that developments such as these simply cater to wealthy Egyptians escaping the city." ⁵⁸

⁵⁷ H. Zaater. "Urban Vision." *Business Today Magazine*. April 2008.

⁵⁸ Ibid.

These developments could cause problems that include inflation in real estate prices in new cities and could discourage lower socioeconomic status citizens from relocating.

New Cairo City

New Cairo City is located on the Eastern Arch of the Greater Cairo Region. It was established through presidential decree 191/2000 and has a built area of 70 thousand feddans⁵⁹ which could hold up to 4.9 million inhabitants, when completed.⁶⁰ It will take New Cairo around 50 more years to be complete, population-wise and services-wise; it will take 50 years to become a fully established city like Zamalek, Mohandiseen, and Nasr City.⁶¹

The residential area in New Cairo consists of a total area of 43 thousand feddans, which are divided into three sections, the low/medium priced apartments, the above medium priced apartments, and the luxury priced villas.

The subsequent government urban policy towards New Cairo, however, has been entirely changed.

In the beginning the proposed new settlements were aimed at providing low and medium levels of housing to solve the problems of 'Marginality' and 'Squatters.' Then, the Eastern Arch was transformed into a gigantic urban mass. The New Cairo city was

60 "New Cairo," New Urban Communities Authority. 2010.

⁵⁹ Egyptian unit of area equivalent to 1.038 acres

⁶¹ Mohammed Hassanein, Senior Real Estate Agent at Coldwell Banker. Personal Interview. September 2010.

developed to provide luxury level of housing for higher socio-economic groups...it encompasses residential, commercial, and industrial districts.⁶²

The number of schools, universities, hospitals, and companies is increasing in New Cairo City. For example, universities in New Cairo include: the American University in Cairo, Future University and German University in Cairo. New Cairo also has a number of educational academies/institutes, such as New Cairo Academy for Arts and Services, Cairo Academy, and the International Institute for Languages. Schools (include all grades, elementary, middle, and high) available there include Al Manal Integrated Language Schools, Arabian International Academy, The International School of Choueifat – Cairo, and the New Cairo British International School.

Thus, New Cairo is already a well developed suburb. It includes upper class housing compounds, medium and lower class housing, malls, restaurants, cafes, gas stations, and many other facilities.

New Cairo has basic services, such as electricity and water available. These services are needed for construction and infrastructure. However, water is sometimes cut-off, which causes inconvenience to businesses, workers, and residents. In August 2009, a pipe broke, which caused disruptive water cuts in New Cairo, Maadi, and Nasr City. The water was cut-off for six days. In August 2010, the water was cut-off in New Cairo for three consecutive days. ⁶³

⁶² M.Farid, H. El. Shafie "An Assessment of the New Cairo City." *Cairo University*. 1996, p. 17.

⁶³ Maha Bahnasawy. "New Cairo Residents Crave a Drop of Water." *Al-Masry Al-Youm.* August 2010.

This water problem is a problem mainly along al-Tesseen street [Road 90]...Ways of dealing with the problem vary, according to the nature of the inhabitants. For instance, there is the al-Banafseg region, known for its luxurious villas, the owners of which have departed due to the water shortage, moving back to their second residences. Some residents, instead, have been relying on their neighbors to bring water using their cars...[Others] learned that one gasoline station had its water running. That made [it their] daily mission to transport the biggest quantity possible to [their] home. 64

Thus, it is important to assess the different utilities found in New Cairo, an evaluation of their facilities and services should be studied in order to understand whether the migrants are satisfied with land use developments in this city.

Sixth of October City

Sixth of October City is named after the military success in the Yom Kippur War on Sixth of October, 1973. Sixth of October City is on the west side of Cairo, near the Alexandria road. It is located about 32 km from the centre of Cairo. Sixth of October City's total built area is 61.5 thousand feddans, which is expected to hold up to 3.75 million inhabitants, upon completion. It will take Sixth of October around 25-30 years to be complete, population-wise and services-wise. The complete of the complete of

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⁶⁴ Maha Bahnasawy. "New Cairo Residents Crave a Drop of Water." *Al-Masry Al-Youm*. August 2010.

⁶⁵ Gil Feiler. "Housing Policy in Egypt." *Middle Eastern Studies*. Vol. 28, No.2, 1992, pp.295-312.

^{66 &}quot;Sixth of October." New Urban Communities Authority. 2010.

⁶⁷ Mohammed Hassanein, Senior Real Estate Agent at Coldwell Banker. Personal Interview. September 2010.

Sixth of October City is currently a well planned city both industrially and residentially. It is divided into three areas, an industrial area, governmental apartment buildings, and finally private villas and apartment blocks. The residential area is around 22.3 thousand acres and is divided into three districts, low/medium priced housing, above medium priced housing, and luxury priced housing.

The workers live in the industrial area. The industrial area has many mechanic shops that deal with electricity and cars. The governmental area of Sixth of October City is dull and isolated; it consists of blocks of identical buildings that stand alone in one part of the desert. These apartment buildings were built to accommodate the employees of companies located in Sixth of October City. Finally, the private area consists of privately owned and built apartment buildings, villas, and land. "Cairo's middle classes endlessly talk of moving away from the city's traffic and pollution. It would be so good for the children, they say. But they would very much like their friends to move first. In the meantime, they are building a house or two or three, as speculation or insurance."

Sixth of October City's proximity to Cairo is a great advantage to that city, where it can attract residents from people working in Cairo. Sixth of October's industrial sector has a total area of 8,000 acres. ⁶⁹ The number of schools, universities, and companies is increasing in Sixth of October City. Universities in Sixth of October include the Modern Arts and Sciences

⁶⁸ "Away from the crowded Nile. (Transforming the Cairo desert)." *The Economist US.* March 1999.

⁶⁹ "Sixth of October." New Urban Community Authority (2010).

University, October Six University, Misr University for Science and Technology, and the Ahram Canadian University.

There are a number of businesses now open in Sixth of October which include Stream Global Services Inc, Egyptian German Automotive Company, Bavarian Auto Manufacturing Company, General Motors Egypt, Ghuhayna, and Bahgat Electronics. It also has a number of companies and factories that work in/produce/manufacture plastics, paper, weaving, metals and machines, chemical and pharmaceutical, and building materials.⁷⁰

There are also a number of malls which include Dandy Mall, Hyper1, Diamond Mall, and ZamZam Mall. These malls target different classes in Sixth of October City's society. Dandy and Hyper1 target the upper-middle and upper classes, while ZamZam and Diamond target the middle and lower classes.

Sixth of October City also has a number of functioning public and private hospitals, which include Al Zohor Hospital, Dar El Fouad Hospital, Al Safwa Hospital, MUST Hospital, and Six October University Teaching Hospital (SOUTH) Hospital.

Sixth of October has its own public transportation buses/microbuses set up by the government to take people from Sixth of October to Giza, Cairo, Suhag, Monofiya, and Gharbiya (and vice versa).⁷¹

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⁷⁰ "Sixth of October." New Urban Community Authority (2010).

⁷¹ Ibid.

Some failures in electrical and water services have irritated businesses and residents in Sixth of October City.

Production has been halted by electrical interruptions which are far more frequent in Sixth of October than in Cairo. Similar interruptions in phone services [have] left the city's factories out of reach of their customers or administrative and sales offices. And the inadequate public transportation, either bus or subway, between 6 October and Cairo as well as within the city, has hampered efforts to increase the population, especially the lower classes.⁷²

With the success of these new cities in attracting migrants, and the living conditions listed above comes a need to evaluate the migrants' views on these cities after residing there.

Therefore, this research focuses on a survey that aims to evaluate the success/failure of land use in Sixth of October City from the migrants' point of views.

⁷² Stewart, Dona. "Cities in the Desert: The Egyptian New-Town Program." *Annals of the Association of American Geographers*. Vol. 86, No. 3. 1996, p. 462/473.

Chapter III Literature Review

Chapter II in this thesis gave a background on the reasons behind the establishment of new suburb cities in Egypt, and discussed land use patterns in New Cairo City and Sixth of October City. This chapter discusses previous research that has been done about intra-urban migration in different regions of the world, pointing out the existing gaps in this field.

Very few studies on intra-urban migration have been conducted in the Middle East, where it seems that it is a neglected field of research in this region of the world. Most of the literature at hand is based upon case studies from western countries. Notwithstanding such a fact, it is necessary to consult and review such literature in order to understand the different models and theories of intra-urban migration.

Researchers have studied several variables in the field of intra-urban migration, and have established a number of models and theories that support their work. Authors such Rossi looks into how life cycle changes affect intra-urban migration; ⁷³ Johnson, Halfacree, and Flowerdew

⁷³ H. Rossi. Why Families Move: A Study in the Social Psychology of Urban Residential Mobility. Free Press, New York. 1955.

look into the relationship between socioeconomic status and intra-urban mobility; ⁷⁴ Stouffer, Brown and Holmes studied the relationship between distance and intra-urban migration. ⁷⁵

The studies conducted on intra-urban migration mainly focus on the questions of (a) who migrates (b) where they migrate to and from (c) socio-economic status. They do not succeed in addressing the issue of urban structure and residential mobility. This study will take a different approach to the subject of intra-urban migration, where it will look into urban structure and population mobility. Not much research has been done on land use and the quality of utilities and infrastructure in new cities; therefore, this research will try to fill in this gap by looking at migrants of different socioeconomic statuses, and by examining (a) why migrants relocated (b) land use utilities, facilities, and services (c) whether migrants feel safe in their new city.

Sun carried out a case study on the Twin Cities of Minnesota, where he used parcel data to figure out the relationship between intra-urban migration, urban growth, and residential structure. His research studies how the economic and financial environment at the national level has an effect on intra-urban migration in the Twin Cities. He argues that there is a relationship between intra-urban migration and growth, where migration inspires growth and growth stimulates migration. He assumes that there are two main theoretical views that concern intra-urban migration, which are economic and behavioral.⁷⁶

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⁷⁴ James Johnson, Keith Halfacree, Robin Flowerdew. "The Characteristics of British Migrants in the 1990s: Evidence from a New Survey." *The Geographical Journal.* Vol. 158, No. 2, 1992, pp. 157-169.

⁷⁵ John Holmes, Lawrence Brown. "Intra-Urban Migrant Lifelines: A Spatial View." *Demography*. Vol. 8, No. 1, 1971, pp. 103-122.

⁷⁶ Shipeng Sun, Steven Manson. "An Agent-based Model of Housing Search and Intraurban Migration in the Twin

Behavioral theories focus on individual or household-level decision-making processes concerning relocation, namely who moves, why they move, and where they move. Economic theories, in contrast, concentrate on aggregate socioeconomic processes in a broader context, such as how housing submarkets interact with migration and how accessibility influences migration patterns.⁷⁷

However, Sun's study focused on how the financial and economic environment at the national level had an effect on intra-urban migration. Therefore, one gap in his research is that it was solely economic, and therefore, his results may have been inadequate because a lot of different factors play a role in residential mobility, such as inevitable life cycle changes or accessibility and changes in services, or the space awareness of potential migrants to new cities.

One of the rare studies on intra-urban migration in the Middle East was that of Solomon Eaglstein and Yitzhak Berman, titled "Correlates of Intra-Urban Migration in Israel." This study is significant because its findings are contrary to the findings of research in Western countries. These authors argue that "less intra-urban migration is manifested in towns in which the inhabitants are older, more established, better educated and more affluent." Furthermore, Eaglstein and Berman's results reveal that factors such as the size of a town, household crowding, and conditions of employment are not related and do not affect intra-urban mobility.

Cities of Minnesota." University of Minnesota. 2009, p. 27.

⁷⁷ Shipeng Sun, Steven Manson. "An Agent-based Model of Housing Search and Intraurban Migration in the Twin Cities of Minnesota." *University of Minnesota*. 2009, p. 27.

⁷⁸ Berman Yitzhak; Solomon Eaglstein. "Correlates of Intra-Urban Migration in Israel." *Social Indicators Research*. 1988, Vol.20, No. 1, pp. 103-111.

⁷⁹ Ibid, p. 107.

They argue that juvenile crime and female unemployment are the factors that cause intra-urban migration in Israel.

The results of Eaglstein and Berman's study are very important because they contradict the results of many Western studies. The West believes that household crowding, the size of a town, and employment have a great affect on intra-urban mobility, increasing it. Thus, Eaglstein and Berman's research is significant because it shows a comparison between different regions in the world, i.e. the Western world vs. the Middle East.

On the other hand, a study conducted in Asia, by Masood Ahmed, explains the pattern of intra-urban mobility using a different approach; his study was conducted in Bahawalpur City, Pakistan. 80 Ahmed looks into three points: the reasons of intra-urban mobility, the direction and distance of intra-urban mobility, and urban structure and population mobility. He argues that "patterns of residential mobility both create and reflect the social structure of residential areas." He explains that these patterns are affected by housing prices and the different socioeconomic classes moving into a new city. However, Ahmed's study failed to consider that some cities are constructed to inhabit people of different socioeconomic statuses, where all types of housing with different price ranges are available for migrants.

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⁸⁰ Masood Ahmad. "Pattern of Residential Mobility Bahawalpur City." *Islamia University Bahawalpur*. 1995, pp. 1-236.

⁸¹ Masood Ahmad. "Pattern of Residential Mobility Bahawalpur City." *Islamia University Bahawalpur*. 1995, p. 161.

Peter Newton conducted a study on residential structure and intra-urban migration in Christchurch in 1974. 82 He argues that "At least three major outcomes of the residential mobility process can be identified and modeled. These include the decision to move or stay, the nature of housing chosen by mover households, and thirdly, locational choice." 83

Newton's study focuses on three specific outcomes of residential mobility. Newton's study forms a gap because it does not succeed in addressing the issue of urban structure and residential mobility. This thesis will take a different approach to the subject of intra-urban migration, where it will look into land use and intra-urban migration. Not much research has been done on the evaluation of land use facilities found in new cities; therefore, this research will try to fill in this gap.

Literature on socioeconomic status suggests that there is a relationship between intra-urban migration, social status and the distance it takes to reach work. Dudley Poston argues in his study in Metropolitan America that this relationship is direct. "High-socioeconomic-status workers tend to have more separation between their homes and workplaces than low-[socioeconomic status] workers." Low socioeconomic status migrants' choices in residence are usually restricted by their work location; this is because they have fewer resources to reach their work

⁸² Peter Newton. "Residential Structure and Intra-Urban Migration." *University of Canterbury*. 1976, pp.1-370.

⁸³ Peter Newton. "Residential Structure and Intra-Urban Migration." *University of Canterbury*. 1976, p. 13.

⁸⁴ Dudley Poston. "Socioeconomic Status and Work-Residence Separation in Metropolitan America." *The Pacific Sociological Review.* Vol. 15, No. 3, 1972, p. 368.

destination. The higher a household's level of education, income, and occupational position is, the more likely it will move to a higher status residential location.

Furthermore, a study, conducted by L. Long, indicates that educated households are more likely to migrate, and in longer distances, than less educated households. Some households decide to move to become more compatible with their socioeconomic status. For example, some households with children move to neighborhoods that have good schools and are considered safer neighborhoods, because this neighborhood's community is most probably associated with a higher socioeconomic status.

The studies mentioned above form a gap because each only concentrates on one small variable aspect of intra-urban migration, which is socioeconomic status; thus they are not comprehensive. Neither Poston nor Long studied or significantly looked into the affect of intra-urban mobility on new cities structures. Therefore, this thesis is important because it fills in this gap; it focuses on both the causes the led migrants to relocate, dividing the respondents into socioeconomic classes, and evaluates land use facilities and services in new cities.

Rees and Berry studies argue that there are specific factors that determine the residential location a household will end up, (a) socio-economic status (b) stage in life (c) housing quality.⁸⁶

⁸⁵ L. Long. Migration and Residential Mobility in the United States. New York: Russell Sage Foundation. 1988.

⁸⁶ Berry Brian, Philip Rees. "The Factorial Ecology of Calcutta." *University of Chicago*. 1968, pp. 445-491.

Rees and Berry's theory assumes that people always have a choice in their relocation process; it disregards the fact that some people are forced to move into new urban spaces due to external factors such as, government subsidized housing or work/occupation residence. They also fail to study the living conditions of migrants in new cities. Thus, this research will fill in this gap by studying why people migrate, and the living conditions of migrants in new cities, while also considering socioeconomic status.

Chapter IV Materials and Methods

Chapter III discussed previous research conducted on intra-urban migration in different regions of the world, pointing out the existing gaps in this field. This chapter specifies how the survey was carried out and the means by which the information was gathered and calculated. It also addresses ethical concerns and discuses the challenges of the study.

This research involved two paths in gathering the required data. The first path was collecting information from site visits, reliable resources and previous studies done on the two cities under study, Sixth of October and New Cairo. Information gathered included the facilities at the city, public transportation available in the city, some reasons behind the migrations, available activities in the city, and safety levels. Each of these points is broken down in the same way as explained in the survey. 87

The second path is a survey that was passed out to residents of the two cities. The survey used a non-probability quota sample because of the researcher's limited resources. Quotas were given to divide the respondents into different groups according to the city they were living in. This sample was divided according to the class of the respondent, where a sample was taken

⁸⁷ Refer to Appendix B and C.

from each of the following sub-groups of the population: upper, middle or lower socioeconomic classes.

A pilot survey was first passed out to a non-random sample of ten respondents from each of the cities under study. This pilot survey assisted the researcher in making several modifications to the wording and organization of the questions included in the survey. Furthermore, some of the responses to the open ended option "other" that was available in many of the questions pilot study were repeated several times, thus the researcher added them as close-ended options to the questions.

After the modifications were made to the pilot survey, the final draft of the survey was passed out by the researcher Salwa Eissa, a Masters student at the Center for Migration and Refugee Studies. Two graduates from the Political Science Department at the American University in Cairo assisted Eissa in passing out the surveys: Noha Saad Zaghloul and Enas Olama.

The research targeted migrants of different social classes in each of the cities under study. The research team visited different levels of malls, coffee shops, stores, shops, and restaurants in each of the cities in order to reach people of the three social classes under study. Furthermore, in order to reach all levels of the society the surveys were available in both Arabic and English. Also, the researcher and the assistants helped the illiterate respondents by reading the survey questions and marking down the answers of the respondents.

IRB approval was obtained from the American University in Cairo. Before any of the surveys were passed out, informed consent was obtained from the respondents. The research team member explained the purpose of the survey to the participants both orally and in writing on the questionnaire, where she explained that the research is used for a master's thesis at the American University in Cairo aiming to find out the effects that internal migration has on the migrants that move to the cities of Sixth of October and New Cairo. Also, they were informed that any information they provide will remain confidential. The researcher did not ask for nor recorded the names of the participants in her notes. The responses were handwritten by the researcher, research assistants, or the participant, depending on the participant's level of literacy.

The researcher obtained *oral* consent from all the respondents before they started answering the survey. It was explained that their participation was entirely voluntary, that they may skip a question that they do not wish to answer, and that they can stop the survey at any time without having to give a reason. The reason for choosing oral consent is that the nature of the survey and data gathered is not sensitive and does not go into detail about the participants' personal lives.

This survey was carried out in the months of July and August 2010. The survey was available in both Arabic and English. It included questions examining the following points:

1. Reasons behind the migration

E.g. work, university, school, new housing, loaded streets, peace of mind, etc.

2. Land use infrastructure/facilities and services in the new city.

- a. Basic Shopping requirements: do the residents face any difficulties engaging in basic shopping requirements (i.e. buying groceries and medicines)?
- b. Hospitals: are hospitals available at convenient distances? How does the resident evaluate the quality of hospital facilities and services compared to the previous city he/she lived in?
- c. Education: are schools available at convenient distances? How does the resident evaluate the quality of school facilities and services compared to the previous city he/she lived in?
- d. Occupation: does the resident work in the same city he/she lives in? How long does it take the respondent to get to work?
- e. Entertainment: are entertainment places (e.g. cafes, restaurants, malls, cinemas, parks) available in the new city. Has this affected the lifestyle of the resident?
- f. Governmental facilities: knowledge of availability of governmental facilities in the city, e.g. traffic department, police station, etc.
- g. Facilities: Availability of water and electricity in the city.
- 3. Transportation and streets condition at the new city.
 - a. How easy is it to travel from the city to different places in Cairo?
 - b. Quality of the roads, e.g. road bumps, traffic organization, pedestrians crossing, etc. Is it better or worse or the same as downtown Cairo?
 - c. Is it convenient for someone to live there if he/she does not own a car?
 - d. How convenient is it to find public transportation or taxis in the new city?
- 4. Participation in activities associated with the migration
 - a. Are they happy about their new location or not?
 - b. Are they able to do all the activities they were active in while living in Cairo? E.g. social activities, sports activities, political activities (if any).
 - c. Has their physical activity rate increased or decreased? Whether they see that as a good or bad change.
 - d. Advantages and disadvantages of the migration from the view of the migrants.

- 5. Safety in the new city.
 - a. Is it safer here than the crowded places in Cairo, why or why not?
 - b. If migrants feel safe walking in the streets in the new city or not.

The quota sample used in the research consisted of a total of 150 people, with 75 living in Sixth of October City and 75 living in New Cairo City. It was conducted with the head of the household, i.e. the families' decision maker, (20-70+ years).

Table 1.1. Division of the Sample

	25 Upper Class
Sixth of October	25 Middle Class
	25 Lower Class
	25 Upper Class
New Cairo (5th District)	25 Middle Class
	25 Lower Class

The social status of the respondents was determined according to their education, job and residential area. The subject should have at least two of the three characteristics listed below to be classified in a class.

Table 1.2. Characteristics of Division of the Sample

	Hold a university degree
Upper-class	Work in a senior position
	Own/rent a villa, or own the building their apartment is in
	Hold a university degree
Middle-class	Work in a junior position

	Own/rent an apartment
	Do not hold a university degree
Lower-class	Work in a labor position
	Own/rent an extension of a building (roof, basement or external room)

After the surveys were filled out, SPSS was used to calculate frequencies and cross tabulations between variables. The Chi-Square χ^2 Test was used to test the homogeneity of distribution of any two variables. The most important comparisons in this case were Sixth October City and New Cairo City. One assumed the null hypothesis that the two distributions are the same. χ^2 will measure if the null hypothesis is supported or not. χ^2 is calculated as the summation of the squares of the differences between expected and observed values as a ratio of the expected value.⁸⁸

The resultant value of χ^2 is compared with the theoretical χ^2 values at the levels of probability. If the calculated value is larger, the χ^2 is significant at the probability level and the distributions of A & B are not the same. If the calculated value of χ^2 is smaller, the distribution of A & B is the same.⁸⁹

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⁸⁸ J. R. Dominick, R.D. Wimmer. Mass Media Research: An Introduction. 2003.

Refer to Appendix C for Chi-Square χ^2 Test equation.

⁸⁹ Dominick, Wimmer, 2003.

Challenges of the Study

In the malls in both cities, the upper-middle and upper classes were very welcoming and were willing to fill out the surveys. However, many of the middle and lower classes were reluctant to fill out such surveys. The working class, waiters, cleaners, clerks, receptionists, were not willing to fill out the survey, even after being promised that it will remain confidential and does not ask too many personal questions. They were worried they would get in trouble.

The researcher found the survey to be inclusive because she ended up obtaining results from different age groups and a few different nationalities. However, one obstacle that faced the researcher is that some of the people that were approached during the survey were a bit skeptical and showed reluctance in answering the surveys. This made the researcher struggle with one issue while carrying this survey research. The issue is that the researcher can never be sure whether the participants are actually truthful and answering the survey accurately, or whether they are just filling in any of the multiple choice questions so that they could finish the survey.

This research mainly depended on survey research that used defined categories (standardized options). This use of close-ended questions helped in this comparative research as it showed whether the results were statistically significant or not. At the same time the research included an open-ended option where the respondents could choose "other" and write down their own opinion as an answer to the close-ended questions. Although the pilot study aimed to fix any errors in the survey and add any missing options, the researcher still decided to keep the "other"

field available for the respondents so that they are not limited or led into selecting predetermined answers. Yet the inclusion of the "other" option led some of the respondents to choose this answer without filling out the details. This flaw could have been avoided if more pilot studies were passed out in order provide the respondents with more options that they may select as an alternative to including the "other" field.

Finally, the Egyptian government did not publish any official data or statistics about intra-urban migration to new cities in Egypt. Thus, this survey is of great importance because it gives an overview of the different facilities and services available in these new cities.

Chapter V Analysis and Discussion

Chapter IV discussed the materials and methods used to conduct this research. This chapter discusses the results of the study by looking at three main issues: the reasons behind households moving to New Cairo City and Sixth of October City, land-use and intra-urban migration in both cities, and safety levels.

The sample used in the research was made up of 75 people who have moved to Sixth of October and 75 who have moved to New Cairo. The surveys were passed out to the head of the household, therefore most of the respondents were male (72.5%). The survey was passed out in public places such as malls, supermarkets and coffee shops. In order to reach respondents from the different socioeconomic levels the research team went to public places that targeted higher, middle and lower class customers. Also, the respondents mainly consisted of Egyptians (92%). This section is divided into three parts (a) causes of intra-urban migration in New Cairo and Sixth of October (b) land use and intra-urban migration in New Cairo and Sixth of October (c) safety in New Cairo and Sixth of October. Each section discusses the results of the survey and gives an analysis of the results found.

Causes of Intra-Urban Migration in New Cairo City and Sixth of October City

This section will determine and discuss the factors that motivated migrants to relocate to a new city.

Clark's theory suggests that factors that motivate mobilization are divided into two categories, changes in services and life cycle changes. ⁹⁰ The results from the sample found that most of the migrants to Sixth of October and New Cairo relocated due to adjustment causes that refer to accessibility and changes in services. Discussed below is the reasoning behind moving to the new cities.

The respondents were asked to choose all of the reasons for migrating to the new city, which resulted in a total number of responses to be 412, although the number of respondents was 150.⁹¹

The survey asked the respondents to select all of the reasons that applied to them moving to the new cities. The results, when comparing both cities, were statistically significant: p < 0.0001. In Sixth of October, the major factors that led the migrants out of their previous homes to Sixth of October respectively are: to move closer to their jobs (17%), to avoid the crowded streets in the city they previously lived in (16%), to avoid the dirty streets in the city they

⁹⁰ Wiley Clark. "Migration in Milwaukee." *Economic Geography*. Vol. 52, No. 1, 1976, pp. 48-60.

⁹¹ Refer to Table 1.8.

previously lived in (13%), to own a villa/building/apartment (13%), to own a villa/ building/ apartment/ extension of a building (roof, basement or external room), (13%), to move in a new building (11%), to pay cheaper rent (9%), government buildings, schools and businesses moved there, (5%), to move closer to children's school/university (4%), and finally to move closer to family (3%). 92

The respondents in New Cairo were also asked to select all of the major factors that led them out of their previous homes, these factors respectively are: to pay cheaper rent (21%), to own a villa/building/apartment (19%), to avoid the crowded streets in the city they previously lived in (11%), government buildings, schools and businesses moved there (10%), to move closer to their job (9%), to move in a new building (9%), to move closer to children's school/university (8%), to avoid the dirty streets in the city they previously lived in (8%), and finally to move close to family (4%). 93

As Mohammed Hassanein, a senior real estate agent at Coldwell Banker, explained:

The demand is high on these two cities because there is a fully packed place called 'Cairo.' In Cairo it has become impossible to go out or reach your home in the rush hours. Furthermore, people migrate all the time. Some people decide to move due to the lack of facilities in new places. However, other people decide to move and sacrifice some of their expectations in order to gain more physical space in their life, whether it be a family moving or a business moving. People that move gain easy parking, less pollution, easy access to storage, more employees, and less maintenance. ⁹⁴

⁹³ Refer to Table 1.8.

⁹² Refer to Table 1.8.

⁹⁴ Mohammed Hassanein. Senior Real Estate Agent at Coldwell Banker. Personal Interview. September 2010.

Here it is important to note that the main factors that led the participants to migrate are different in both cities. The majority of the participants that migrated to Sixth of October moved because they wanted to move closer to their jobs, in contrast with the majority of participants in New Cairo that moved to pay cheaper rent. This shows that the priorities that migrants set for moving are diverse when moving to different locations.

Therefore, one can assume that the high, middle, and low socioeconomic status migrants in Egypt are more likely to move to New Cairo residential areas than Sixth of October due to the factor of paying cheaper rent. This shows that New Cairo's residential infrastructure is more successful than that of Sixth of October since it attracts more migrants from different socioeconomic classes. This can be explained since New Cairo City is a newer city than Sixth of October and its architectural and residential infrastructures' modernity have proven to be more appealing to the different socioeconomic classes in addition to more affordable rent rates.

One important finding is that the majority, 66%, of the middle and lower classes migrated to Sixth of October City to move closer to their jobs, compared to only 21% in New Cairo. Thus, an assumption can be made that since Sixth of October is an industrial city, many of the workers there are from the middle-lower classes, which do not have the means to travel long distances to work every day;

therefore, they decided to relocate. However, this indicates that there is a lack of commercial enterprises that employ middle and lower classes in New Cairo; this can be explained since New Cairo was initially developed as a residential city while Sixth of October was initially developed as an industrial city. These finding can be further explained by looking into the relationship between intra-urban migration, socioeconomic status, and distance. Poston (1972) argues that there is a direct relationship between intra-urban migration, social status and the distance it takes to reach work, where "high-socioeconomic-status workers tend to have more separation between their homes and workplaces than low-[socioeconomic status] workers."

To further explain the main cause of the migrants' relocation to Sixth of October City, moving closer to jobs, a separate question regarding migrants' job location was asked in the questionnaire. ⁹⁶ The survey results show that the majority of the low classes in both cities work in the same city they live in, 96% in Sixth of October and 84% in New Cairo. Furthermore, the majority of the middle classes in both cities also work in the same city they live. By contrast, the high classes in both cities do not work in the same city they live. Only 24% in Sixth of October and 28% in New Cairo live and work in the same city. ⁹⁷ Thus, Poston's (1972) theory applies in Sixth of October and New Cairo, as the upper class residents mostly work outside

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⁹⁵ Dudley Poston. "Socioeconomic Status and Work-Residence Separation in Metropolitan America." *The Pacific Sociological Review.* Vol. 15, No. 3, 1972, pp. 368.

⁹⁶ Refer to Table 1.22 and Figure 1.17.

⁹⁷ Refer to Table 1.22.

the city (76% and 72% respectively). The upper class have transportation means to move to further away cities, also the largest percentage of them (41% in both cities) have moved to the new cities for a more comfortable life (i.e. to avoid crowded or dirty streets); in contrast with the middle and lower classes in Sixth of October who have moved to be closer to their job (28% in both classes). In the assessment made above, one can conclude that there is a direct relationship between intra-urban migration, social status and the distance it takes to reach work. However, this is more apparent and reflected in the middle and lower classes in Sixth of October City than the middle and lower classes in New Cairo City.

Age and Intra-Urban Migration to Sixth of October City and New Cairo

Age is another factor that can be used to study the causes of intra-urban migration to new cities. The table below shows the age groups of the respondents used in the survey.

Table 1.3. Age Groups of Respondents

	Classes in Sixth October			Cl	Grand				
Age group in									
Years	Н	M	L	Total	Н	M	L	Total	Total
20-29	5	9	6	20	10	6	4	20	40
	(20)	(36)	(24)	(27)	(40)	(25)	(16)	(27)	(27)
30-39	5	10	14	29	8	10	15	33	62
	(20)	(40)	(56)	(39)	(32)	(42)	(60)	(45)	(42)
40-49	13	6	5	24	3	6	6	15	39
	(52)	(24)	(20)	(32)	(12)	(25)	(24)	(20)	(26)
50-59	2			2	3	2		5	7
	(8)	0	0	(3)	(12)	(8)	0	(7)	(5)
60-69					1			1	1
	0	0	0	0	(4)	0	0	(1)	(1)
70+	0	0	0	0	0	0	0	0	0

Total	25	25	25	75	25	24	25	74	149
	(100	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing						1		1	1

^{*}The figures in parenthesis indicate percentages.

The table above shows that migrants within the age group of 30-39 years are most likely to migrate to Sixth of October and New Cairo (42%). Also, the age group between 20-39 years makes up 69% of the respondents, in contrast to the age group between 40-69 which only makes up 32% of the respondents. Therefore, one can assume that younger households are more likely to migrate more frequently than older households. Thus, aging may mean that older households are more likely to have residential stability, which in turn decreases their chance of intra-urban migration.

Overall, younger households are more likely to migrate into new cities than older households. As Gallup Institute describes this trend, "those with fewer commitments or greater mobility -- younger adults -- are generally more likely to say they would like to move." The main reasons for such intra-urban migration in Sixth of October City and New Cairo are for the migrants to pay cheaper rent and to move closer to jobs.

⁹⁸ Jenny Marlar, Julie Ray, Neli Esipova. "Employed or Not, Many Young People Desire to Migrate." *Gallup*. September 2010.

Land Use and Intra-Urban Migration in New Cairo City and Sixth of October City

This section examines the respondents' views on their city's land use and infrastructure facilities. This section is divided into two parts. The first part will discuss land use and development in terms of groceries, pharmacies, hospitals and schools. The second part will discuss land use and government in terms of forms of transportation, ease of reaching public transportation stations and quality of roads.

Land Use and Development

In the process of urban planning, a healthy environment should be established. According to Hugh Barton and Catherine Tsourou this is a "good relationship between housing and local employment, retail, education and health facilities is critical to establishing healthy neighborhoods. It means that people without access to a car can get local jobs and use neighborhood shops, clubs, school and health facilities." They also explained that residents should be able to make most of their journeys on foot or bike; and that if the residents use cars, they should not need to travel very far. With this, the research examined the availability of these basic resources in the two cities under study.

⁹⁹ Catherine Tsourou, Hugh Barton. <u>Healthy Urban Planning: a WHO Guide to Planning for People.</u> *World Health Organization*. 2000, p. 132.

This brings up a new phenomenon that is available in many of the grocery stores and pharmacies in Egypt: home delivery services. "Home delivery and takeaway services are nothing new in Egypt and the majority of people are familiar with these consumer foodservice formats. The convenience offered is becoming ever more popular, especially among time-pressed urbanites. The rapid pace of lifestyle among many Egyptians has helped 100% home delivery/takeaway to gain ground as consumers enjoy the convenience of not having to leave the house or office to make a purchase." Many Egyptians who can afford to take advantage of this service do so, yet it is not available for everyone as it means paying for the phone call and tipping the delivery man. With these additions the groceries and pharmaceuticals cost slightly more than if the consumer goes to the store.

Groceries:

Twenty eight percent of the upper class in Sixth of October drive to a market to buy their groceries, while 48% call a market to buy their groceries. The remaining 24% may either call or drive, but none of them walk to the market. In contrast, the middle class in Sixth of October were closely divided between calling, driving, or walking to a market to buy their groceries. However, the majority of the lower class in Sixth of October City (76%) walk to a market to buy their groceries.

Similarly, the upper class in New Cairo either drive to a market to buy their groceries, call or both (48%, 28%, 24% respectively), but none of them walked to the market. The largest

100 "100% Home Delivery/Takeaway in Egypt 2010." EuroMonitor International's Report. 2010.

proportion of the middle class in New Cairo call a market nearby that delivers their groceries to their door step (48%). The majority of the lower class in New Cairo (96%) walk to a market to buy their groceries. ¹⁰¹

One difference to note between the upper class in Sixth of October and New Cairo is that there are a higher percentage of people that call a market to deliver their groceries in Sixth of October than in New Cairo (48% compared to only 28%). This is presumably because there is larger number of supermarkets open and scattered around the city of Sixth of October than in New Cairo; this can be linked to the fact that Sixth of October is an older city and had more time to develop than New Cairo.

The results, when comparing both cities with regards to availability of grocery shops, are statistically significant: p < 0.0371. The results show that the majority of the migrants in Sixth of October City find grocery shops available around their homes to have all or most of their needs met totaling to 84% of the upper class, 92% of the middle class and 80% of the lower class. Also, the majority of the three classes in New Cairo find grocery shops available around their homes to have either all or most of their needs met totaling to 92% of the upper class, 76% of the middle class and 75% of the lower class. 103

101 Refer to Table 1.9

¹⁰² Refer to Table 1.9

¹⁰³ Refer to Table 1.10

Yet it is important to note that in comparing the two cities, a bigger percentage of the upper class in New Cairo find their needs met than those in Sixth of October. However, the middle and lower classes in New Cairo find less of their needs met in the grocery shops than those in Sixth of October City. Here, an assumption can be made that the supermarkets in New Cairo are more prepared to cater the needs of upper classes than those in Sixth of October. This can be linked back to the history of both cities. The society that first migrated to New Cairo was different than the society that migrated to Sixth of October City; this is due to the fact that Sixth of October City started with industrial zones while New Cairo City first started with residential zones and resorts. Therefore, Sixth of October City attracted factory workers and their families; it had low income buildings to accommodate such people. On the other hand, New Cairo City attracted people that were seeking luxurious services and housing. Thus, the grocery shops in New Cairo City are businesses that want to make a more substantial profit by targeting the needs of the upper class. This is reflected by grocery shops in New Cairo City being more prepared for the requirements of the upper class residents. Therefore, the fact that the results show that New Cairo City meets the needs of the upper classes and does not meet the needs of middle and lower classes in relation to groceries is explained.

Pharmacies:

Twenty percent of the upper class in Sixth of October drive to a pharmacy to buy their medication, while 72% call a pharmacy to buy them. The remaining 8% may either call or drive, but none of them walk to the pharmacy. In contrast, the middle class in Sixth of October were closely divided between calling, driving, or walking to a market to buy their medication.

Furthermore, the majority of the lower class in Sixth of October City (76%) walk to a pharmacy to buy their medication. Similarly, the upper class in New Cairo mainly either drive to a pharmacy to buy their medication, call or both (36%, 40%, 20% respectively), but none of them walk to the pharmacy. The majority of the middle class in New Cairo call a pharmacy nearby that delivers their medication to their door step (64%). The majority of the lower class in New Cairo (92%) walk to a pharmacy to buy their medication. ¹⁰⁴

Although the overall behavior of the subjects is similar across the classes in both cities, there is a difference in buying medication, as 72% of the upper class in Sixth of October City call a pharmacy nearby that delivers to their door step if they need to buy medication in comparison to only 40% of the upper class New Cairo. ¹⁰⁵ This can be explained because Sixth of October is more developed than New Cairo since it is a much older city. Sixth of October has a greater number of pharmacies open next to residential areas than in New Cairo, and therefore pharmacies there have the opportunity to offer residents more services, such as home delivery.

Fortunately, the availability of participants' needs being met in pharmacies is very similar in both classes and cities. The upper, middle, and lower class in Sixth of October and New Cairo all agreed that the pharmacies available around their homes have all or most of the medications they need.

¹⁰⁴ Refer to Table 1.11

¹⁰⁵ Refer to Table 1.11

Hospitals:

Out of the respondents who needed to go, or take someone, to the hospital 24% of those living in Sixth of October City replied that the hospital was too far in comparison to 83% of those living in New Cairo City. ¹⁰⁶ This is due to the fact that Sixth of October city has a greater number of hospitals functioning in different parts of the city. This is also due to the fact that there is only one hospital functioning in New Cairo.

The respondents realized this lack of hospitals in New Cairo as 57% of them felt that the number of hospitals there were few compared to the number of hospitals available in the previous city they lived in. In contrast, the respondents living in Sixth of October feel that the number of hospitals available in the new city is many compared to those available in the previous cities they have lived in, averaging to 48%. ¹⁰⁷

In order to evaluate the quality of the hospitals available the respondents were asked to evaluate the facilities and the services available.

Hospital Facilities and Services

The results, when comparing both cities hospital facilities and services, are statistically significant; p < 0.0001. The majority of the middle and lower class respondents living in Sixth of

¹⁰⁷ Refer to Table 1.16

¹⁰⁶ Refer to Table 1.15

October City said that the facilities and services at hospitals were good compared to hospitals of the same social classes that were available in the previous city they lived in. Sixty-five percent of the middle class said facilities were good and 53% said services were good; while 60% of the lower class respondents said that each of the facilities and services were good. 108 Yet it is important to note that the results of the upper class living in Sixth of October were closely divided between the facilities and services being better, worse, and of the same standard as the hospitals available in their previous cities. 109 These results show that hospitals targeting the middle and lower classes in Sixth of October have better facilities and services than hospitals in other cities in Egypt, yet those that targeted upper class citizens were not necessarily of the same standard. This can be explained since there are many university hospitals in Sixth of October City where students diagnose and treat patients for free, irrespective of class. Therefore, middle and lower class respondents may be content with the services and facilities offered at these hospitals.

On the other hand, a high percentage of the upper and middle class who live in New Cairo agree that facilities and services at hospitals are bad compared to hospitals of the same social classes that were available in the previous cities they lived in. Thirty-three percent of the upper class said facilities were bad and 25% said services were bad; while 57% of the middle class said that each of the facilities and services were bad. 110 One important finding in the results was that the upper class were very discontent with the facilities and services available in the

¹⁰⁸ Refer to Tables 1.17 and 1.18.

¹⁰⁹ Refer to Tables 1.17 and 1.18.

¹¹⁰ Refer to Tables 1.17 and 1.18.

hospital in their city since a high percentage of the respondents answered "other" explaining that they left the hospital because of bad conditions, 33% left the hospital due to their discontent in facilities and 38% left the hospital due to their discontent in services. ¹¹¹

However, the majority of the lower class in New Cairo thinks that facilities and services in the hospitals they visit are of the same standard as the hospitals available in the previous cities they lived in, 67% think that each of the facilities and services are of the same standard. The discontent of the upper and middle class could be explained; since New Cairo is a young city that is still under construction, its infrastructure is not complete yet. Therefore, the fact that there is only one hospital in New Cairo City, which is governmental/public, explains the discontent of middle and upper classes, which might be looking for upgraded facilities as those found in private hospitals. Private investors have tapped into this and there are now a number of hospitals and medical complexes under construction in and around the heart of New Cairo City, being built to cater to the middle and upper class residents. The cater to the middle and upper class residents.

Schools:

All the classes agree (63%) that the number of schools in Sixth of October is fewer than those available in the previous cities they lived in. By contrast, all the classes agree (77%) that

¹¹¹ Refer to Tables 1.17 and 1.18.

¹¹² Refer to Table 1.17 and 1.18.

¹¹³ Mohammed Hassanein. Senior Real Estate Agent at Coldwell Banker. Personal Interview. September 2010.

the number of schools in New Cairo is more than those previously available to them. 114 The results regarding school facilities and services are statistically significant, p < 0.0001.

School Facilities:

Across classes in each of the cities, there was agreement on the quality of the facilities available. The table below shows that overall the respondents felt that the facilities in the schools available in their new city of residence are good compared to schools of the same standard in the previous cities they lived in.¹¹⁵

Table 1.4. School Facilities

	Sixth of October	New Cairo
Facilities in the schools are:	Total	Total
Good compared to schools of the same standard	34	51
that were available in the previous city I lived in	(52%)	(72%)
Bad compared to schools of the same standard	23	5
that were available in the previous city I lived in	(35%)	(7%)
Of the same standard as the schools available in	4	10
the previous city I lived	(6%)	(14%)
Other	4	5
	(6%)	(7%)
	65	71
Total	(100)	(100)
Total	10	4

¹¹⁴ Refer to Table 1.19.

¹¹⁵ Refer to Table 1.20

One important finding in the table on the previous page is the difference between percentages in both cities of those who think that school facilities are bad compared to schools of the same standard available in their previous cities. Thirty five percent in Sixth of October City think schools are bad compared to only 7% in New Cairo.

School Services:

The highest percentage of both cities selected that the school services are good compared to schools of the same standard that were available in the previous city they lived in (43% in Sixth of October and 71% in New Cairo). Yet the difference between these percentages shows that the services in New Cairo schools are of better quality. This is also reflected in the percentage of Sixth of October residents (39%) who said that the schools are bad compared to schools of the same standard that were available in the previous city they lived in.

Table 1.5. School Services

	Sixth of	
	October	New Cairo
Services at schools are:	Total	Total
Good compared to schools of the same standard	29	52
that were available in the previous city I lived in	(43%)	(71%)
Bad compared to schools of the same standard	26	1
that were available in the previous city I lived in	(39%)	(1%)
Of the same standard as the schools available in	8	16
the previous city I lived	(12%)	(22%)
	4	4
Other	(6%)	(5%)
	67	73
Total	(100)	(100)
Missing	8	2

The highest percentage of the upper class in Sixth of October, 43%, think that services at schools in Sixth of October are bad compared to schools of the same standard that were available in the previous city they lived in. The highest percentage of the middle class, 39%, think that services at schools in Sixth of October are good compared to schools of the same standard that were available in the previous city they lived in. Fifty two percent of the lower class also thinks that services at schools in Sixth of October are good compared to schools of the same standard that were available in the previous city they lived in. In contrast, all classes in new Cairo agree that services at schools in New Cairo are good compared to schools of the same standard that were available in the previous city they lived in. 87% in the upper class and 64% in the middle and lower class (each) think that services at schools in New Cairo are good compared to schools of the same standard that were available in the previous city they lived in New Cairo are good compared to schools of the same standard that were available in the previous city they lived in. 116

In Sixth of October City, all classes combined, 43% think that services at schools in Sixth of October are good compared to schools of the same standard that were available in the previous city they lived in, 39% think that services at schools in Sixth of October are bad compared to schools of the same standard that were available in the previous city they lived in, and 12% think that services at schools in Sixth of October are of the same standard as schools available in the previous city they lived in. On the other hand, in New Cairo, all classes combined, 71% think that services at schools in New Cairo are good compared to schools of the same standard that were available in the previous city they lived in, only 1% think that services at schools in New Cairo are bad compared to schools of the same standard that were available in the previous city

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¹¹⁶ Refer to Table 1.21.

they lived in, and 22% think that services at schools in New Cairo are of the same standard as schools available in the previous city they lived in. 117

This is a clear reflection of the schools quality and quantity in New Cairo City as mentioned in the land use section in the Background and History chapter in this thesis, where many top end and mid range private schools, such as American, British, and International schools, all have branches in New Cairo City. These schools target the upper classes of society. However, such competition may have put more pressure on lower and middle range schools to maintain their market share in new cities.

These results show that overall, both new cities need a lot services to be made available at walking distance for the residents in order to qualify as healthy neighborhoods. Yet an important question arises with this: even if the main necessities become available at walking distance, are the streets safe enough for the residents to walk or ride a bike? This will be discussed in the section titled, "Safety in New Cairo City and Sixth of October City" on page 85.

Land Use and Government

This section evaluates the Egyptian governments land use facilities in New Cairo City and Sixth of October City, and will determine whether the Egyptian government has successfully processed the interactions between land use and facilities in these two cities. "Land use and transport are interlinked. To have an efficient and effective transport system implies getting the

¹¹⁷ Refer to Table 1.21.

land use planning right, and planning urban development implies getting the transport access right."¹¹⁸ To assess the governments land use policies this section looks into government facilities such as police stations, traffic departments, fire departments, tap water, electricity, forms of transportation, ease of reaching public transportation stations, and quality of roads.

Government Facilities:

<u>Police station:</u> Both cities have a police station that the majority of the citizens are aware of. All of the people surveyed in both cities have awareness that there is a police station located in their city; 100% of the people in Sixth of October know for sure there is one compared to 92% in New Cairo. 119

Traffic department: The respondents surveyed in Sixth of October, in all classes, are aware of the governmental facilities available in their city. Ninety five percent of the classes combined are sure that they have a traffic department in their city, while only 5% are unsure. The upper class in New Cairo seems to be the least aware of certain facilities in their city. Only 72% of the upper class was aware that there is a traffic department in their city compared to 92% in the middle class and 84% in the lower class. ¹²⁰

¹¹⁸ Stephen Marshall; Yamina Lamrani. "Synthesis Report: Land Use Planning Measures." *PLUME: Synthesis Report on Land Use Planning Measures*. 2002-2011, p. 4.

¹¹⁹ Refer to Table 1.27.

¹²⁰ Refer to Table 1.28.

<u>Fire department:</u> Only 71% of the three classes in New Cairo know for sure whether they have a fire department in their city or not; while 89% of the three classes in Sixth of October know for sure where is a fire department in their city of not.

Overall, the results show that migrants living in Sixth of October are more aware of their city services than migrants living in New Cairo.

The distribution of the governmental facilities in these cities is better than those of Cairo and Giza districts. The new cities each have a police station, traffic department and fire department. In contrast, many of the cities in Cairo and Giza share these facilities with other cities.

Tap water: The results are statistically significant, when comparing both cities availability of tap water, p < 0.0001. The results show that 69% of the three classes in Sixth of October City have tap water available all the time, compared to 42% in New Cairo City. On the other hand, only 3% in Sixth of October City said that water was not available in their house on a regular basis, compared to 27% in New Cairo City. ¹²¹ These results are important because they show that Sixth of October has better tap water facilities with regards to consistency. It shows that the water system provided by the government is more reliable in Sixth of October City than New Cairo City.

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¹²¹ Refer to Table 1.30.

A contributing factor to this finding is the age of Sixth of October City. Sixth of October has had almost 30 years of adjustments to finally stabilize the usage and output of its water supply system. Newer cities, such as New Cairo, have been more erratic in their growth because of surges in residential flows into the city, making it a difficult task to accurately adjust and maintain the water system. Furthermore, several companies, including EGYCO, were contracted in 1994 to implement the water supply network in Sixth of October City for 12 million Egyptian pounds. 122 However, it became evident that more funding was essential; thus, the contract for water and drainage utility works was upgraded signed in the year 2008 for 60 million Egyptian pounds. 123 This is a clear explanation for the reliability and consistency of Sixth of October's water supply, and is a pattern predicted to be seen repeating itself in New Cairo City in the near future.

Electricity: The results are statistically significant, when comparing both cities availability of electricity, p < 0.0038. The results show that people living in Sixth of October, all classes combined, are more satisfied with their city's electric system than the people living in New Cairo, where 78% of people in Sixth of October have electricity available all the time in their house, compared to 65% in New Cairo. While 15% of the surveyed people in New Cairo said that electricity was not available in their house on a regular basis, only 3% of those living in

¹²² "Design and Carrying out of the Utilities Works (Roads – Water – Drainage) for (2000 Parcels of Land) at the North District in 6th of October City." *Egyco*. 2011.

¹²³ Ibid.

Sixth of October said so. 124 This shows that the electric system is more reliable in Sixth of October City than in New Cairo City.

Forms of Transportation:

In Sixth of October 65% of the respondents have a car while in New Cairo 52% of the respondents have a car. The results are statistically significant, when comparing both cities car ownership levels, p < 0.0001. The breakdown by social class is as follows:

- 100% of the upper class living in Sixth of October have cars
- 96% of the upper class living in New Cairo have cars
- 84% of the middle class living in Sixth of October have cars
- 52% of the middle class living in New Cairo have cars
- 12% of the lower class living in Sixth of October have cars
- 8% of the lower class living in New Cairo have cars

These results show that overall in both cities, the upper classes have cars and that the lower classes do not. Yet there is a significant difference in the percentage of middle class citizens who own cars, as 84% of those living in Sixth of October have cars in comparison to only 52% in New Cairo. This can be traced back to several reasons:

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¹²⁴ Refer to Table 1.31.

- Most of the middle class residents living in Sixth of October feel that all or most of the roads are of good quality (92%), which makes people who can afford to buy a car more likely to buy one. In contrast with those who live in New Cairo, less than half of the respondents felt that all or most of the streets are of good quality (44%). 125
- Also, the lack of public transportation pushes the middle class residents of Sixth of October to buy cars, if they can afford to do so. As the majority of the respondents (67%) feel that the public buses are not available frequently throughout the day. Yet the residents of New Cairo may not feel the need to own a car as less than half of the respondents (40%) feel that public buses are not available frequently throughout the day. ¹²⁶

Ease of Reaching Public Transportation Stations:

The measurement of how easy it is for the respondent to reach public transportation was left to the judgment of the respondents. The survey targeted adults with a large age gap (20-70 years) so determining what would be considered a long/short walk for the younger residents may be different for the older ones.

¹²⁶ Refer to Table 1.37.

¹²⁵ Refer to Table 1.32.

The results showed that the majority of those living in either city felt that they needed to walk for a long distance in order to reach public transportation; 71% of those living in Sixth of October and 53% of those living in New Cairo. 127

Overall, all three classes in both cities seem to agree that it is not easy to reach public transportation because it is a long walk. The percent difference in the upper and middle classes in both cities is significant:

- 74% of the upper class in Sixth of October said it is a long walk to reach public transportation compared to 52% of the upper class in New Cairo
- 72% of the middle class in Sixth of October said it is a long walk to reach public transportation compared to 44% of the middle class in New Cairo.

This shows that the location of public transportation is more convenient to residents of New Cairo than those of Sixth of October. Furthermore, if divided by age groups, the findings show that it is older residents who feel that the walking distance to the public stations is long.

Table 1.6. Division of Age Groups in Relation to Walking Distance

1 4010 1101 2 1112201	Sixth of October	New Cairo
20-39 year olds	13	12
	25%	30%
40+	39	28
	75%	70%

¹²⁷ Refer to Table 1.34.

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Quality of the roads:

The results are statistically significant when comparing both cities quality of roads, p < 0.0001. Fifteen percent of the upper, middle, and lower classes in Sixth of October City think that the quality of roads in Sixth of October is better than the roads in their previous city, compared to only 6% in New Cairo City. 128

Fourteen percent of all the participants in Sixth of October think that there are too many road bumps in the streets, compared to only 5% in New Cairo. This shows that road safety is given upper priority in Sixth of October than in New Cairo.

The highest percentage of the upper, middle, and lower classes in Sixth of October said that there is a sufficient number of traffic lights in their roads, 46% in comparison to only 8% that said there are no traffic lights. 129

Most of the respondents in the upper and middle classes in New Cairo said that there are no traffic lights in the roads in their city, 18% of the upper class and 19% of the middle class.

However, 21%, of the lower class in New Cairo said that there are a sufficient number of traffic

¹²⁸ Refer to Table 1.40.

¹²⁹ Refer to Table 1.40.

lights in their city. This could mean that the traffic department in New Cairo is more interested in the progress of the lower class areas first because they are more crowded. 130

The majority of the upper and middle classes in New Cairo think that there are no traffic police in the streets; however, the majority of the lower class thinks that there are too many traffic police in the streets. This once again leads to the conclusion that traffic police may be concentrated in the lower class areas to ensure order.

The highest percentage, 39%, of the upper, middle, and lower classes in Sixth of October think that there are safe places for pedestrians to cross the roads compared to only 8% that think that there are no safe places for pedestrians to cross the roads.¹³¹

The highest percentage, 37%, of the upper, middle, and lower classes in New Cairo think that there are no safe places for pedestrians to cross the roads compared to only 22% that think that there are safe placed for pedestrians to cross the roads. Thus the results reveal that the roads in Sixth of October are perceived as safer for pedestrians to cross than the roads in New Cairo. 132

¹³¹ Refer to Table 1.40.

¹³⁰ Refer to Table 1.40.

¹³² Refer to Table 1.40.

Safety in New Cairo City and Sixth of October City:

This section of the results discusses the migrants' feelings towards moving to a new city with respect to safety. Overall, the migrants of all classes feel that the new cities are more dangerous than the previous cities that they have lived in, 59% of those living Sixth of October and 71% of those living in New Cairo. They ordered their reasoning as follows:

- It is dangerous for children and women to walk on the streets alone.
- There are too many workers.
- There are too many dogs. ¹³³

Some of the residents in New Cairo complained about such security issues, as getting robbed, and women getting harassed; police officers are not available in many parts of the city (dark streets and side streets). 134

Although Sixth of October City has been under construction since the 1980s, it still has security problems. The city's organizational structure is the main problem in security because residential areas are located at a distance from one another. This makes the residents in the city

¹³³ Refer to Table 1.42.

¹³⁴ Mohammed Hassanein. Senior Real Estate Agent at Coldwell Banker. Personal Interview. September 2010.

feel less safe because it makes it harder for the police to obtain maximum efficiency in security. 135

For example, seven reports of sexual harassment were filed in 6th of October City in Eid Al-Adha, 2009. 136

Furthermore, the case of two university students that got murdered in Sixth of October was nationally publicized in November 2008. This is an example of the low level of security in Sixth of October City.

Heba Al Akkad, daughter of Moroccan singer Laila Ghofran, was sleeping over at Nadine Khaled's apartment in a Sheikh Zayed compound in northwest Cairo on November 27. Khaled, 19, and Al Akkad, 23, were best friends. Both were students at the Modern Science and Arts University in Sixth of October City. Both were known to be loveable, gregarious and friendly. When a robber crept into the apartment and stabbed them both to death, it was a devastating blow to their family and friends: Two young lives snuffed out for LE 400 and a mobile phone — the thief's only spoils. ¹³⁷

There are many other examples of crimes that were committed in Sixth of October City, but the most brutal recent event was the following:

¹³⁵ Mohammed Hassanein. Senior Real Estate Agent at Coldwell Banker. Personal Interview. September 2010.

¹³⁶ Eid Al-Adha: Islamic holiday celebrated by Muslims.

[&]quot;Hundreds of Cases of Harassment during Eid." *Al-Masry Al-Youm*. December 2009.

¹³⁷ Dina Basiony. "Murdering Ethics." *Egypt Today*. February 2009.

There were 22 employees on the company bus that Sweilam, 54, was driving. He collected them from their homes, as he did each working day, then pulled up 300 meters from the company's premises in 6 October governorate, where he showered his passengers with bullets from an automatic rifle. ¹³⁸

New Cairo and Sixth of October are cities that are still under construction, therefore the fact that migrants do not feel safe in these cities can be explained. Although migrants feel that new cities are more dangerous than the previous cities they lived in, they still decide to relocate. This shows that migrants are willing to give up their sense of 'safety' in exchange for other benefits, such as less pollution, cleaner air, cheaper rent, etc...

During the 2011 Egyptian Revolution, all of the cities in Egypt experienced security problems, where the police forces vanished from the streets. Beginning on January 25, 2011 hundreds of thousands of people revolted to put an end to Hosni Mubarak's thirty year old rule. The uprisings took place in Cairo, Alexandria, Suez, and other cities in Egypt. Security/police forces failed to stop the protestors so they pulled out and their presence vanished throughout all of Egypt. ¹³⁹ As soon are security guards disappeared from the streets, Egyptian citizens came together and organized checkpoints, road blocks, and neighborhood watch groups to protect their neighborhoods from thugs and prisoners that filled the streets. ¹⁴⁰ Although security was very low

138 Mohamed Abdel Baky. "Bus Driver Kills Colleagues." Al Ahram Weekly. Issue No 1006, July 2010, Front Page.

¹³⁹ Nawal El Saadawi. "The Egyptian Revolution Establishes a New Social Contract and Values." *BikyaMasr*. Feb. 7, 2011.

¹⁴⁰ Sallie Pisch. "Egypt's Revolution: A Victory Embodied by the Egyptian Spirit." *BikyaMasr.* February 12, 2011.

throughout all the cities in Egypt, it is important to explore the impact of the 2011 Egyptian Revolution on security in New Cairo City and Sixth of October City.

A personal interview was conducted with a 45 year old dentist living in New Cairo City, about his experience during the Egyptian Revolution concerning safety/security.

We felt very insecure, at times it was very frightening. Police stations were closed during the revolution. There were no security forces in the streets, we felt very weak; thugs were attacking our neighborhoods, and vandalizing our malls, shops and restaurants. We heard gun fire at night during the revolution. We were later told the gunshots were alarm rounds to get people to the streets to keep the vigilante groups protecting the roads. My wife and I decided to stay these days with our son, who lived in Heliopolis, because the conditions there were safer; he told us they had road blocks and checked any car before entering his street. We felt safer staying with our son in Heliopolis because of the small number of people living in our street in New Cairo City, since it was difficult for the people in our neighborhood to form strict/secure road blocks with such few people. When the army intervened and things were slowly getting back to normal again; there was an apparent decline in un-orderly behavior and the thugs were being rounded up by the dozens. A few days later, the police started reappearing again and are now increasing their presence in the streets. We feel much safer moving back to New Cairo City especially that now the police are back, given the fact that New Cairo is an area with a high number of schools, we were especially worried some of the thugs might try targeting children or school buses. 141

Another personal interview was conducted with a 34 year old physician living in Sixth of October City, about his experience during the Egyptian Revolution concerning safety/security.

Safety, that one thing we had none of at least for the first week or two during the revolution. The police presence was down to a minimum. I had never seen anything like it. Shops were being robbed and vigilante groups were up all through the night in shifts, trying to make sure this chaos wouldn't persist. Many of the buildings under construction

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¹⁴¹ Dentist. Personal Interview. March 2011.

in our street were robbed; thugs would show up in pickup trucks and steal the metal bars used in construction. At night we switched off all our electricity so that the thugs wouldn't know we were in the apartment; and we placed the furniture against the doors and waited holding knives and insecticides to protect ourselves from any attacks. The police station was open but was not really efficient in dealing with any of the complaints made by the residents or the emergency calls, but in fairness it was the same all over the country. We're lucky ours was not burnt! One of the most frightening moments was when we heard heavy artillery being used. We had no idea what was going on and till this day we have had no official explanation; this was during the first week of the revolution and some of the prisoners had escaped from prisons surrounding the Ring Road and allegedly opened fire on an army check point when confronted. The show down took place in a school in Sixth of October City, where the prisoners took refuge and the army decided to use the tank's heavy artillery. Sixth of October is back to a relative normality now and although some are skeptical we try to get on with our daily lives as usual. 142

This shows that although there was a security crisis in all of Egypt all of this time, the people living in the outskirts of Cairo, felt more insecure than the rest because of the small number of residents in the areas who are available to help in time of need. This is not to say that the rest of Egypt is safer in terms of the amount of crime. Egypt has seen an increase in crime rate over the past years, as sociologist Samir Naim explained to Al Ahram Weekly, this increase is due to "the widening gap between the rich and the poor, deterioration in education, and the disappearance of proper rearing." Yet Sixth of October has made headlines several times because of the brutality of the crimes committed there.

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¹⁴² Physician. Personal Interview. March 2011.

¹⁴³ Mohamed El Sayed. "The Growth of Violent Crime." *Al Ahram Weekly*. Issue No 1010, August 2010, pp. 5-11.

Chapter VI Conclusions and Discussions

Chapter V discussed and analyzed the results of the survey conducted on migrants in New Cairo City and Sixth of October City. This chapter will summarize the most important findings of the research, and will give recommendations for future studies needed.

Very few studies on intra-urban migration have been conducted in the Middle East, where it seems that it is a neglected field of research in this region of the world. Most of the literature at hand is based upon case studies from western countries. The studies conducted on intra-urban migration mainly focus on the questions of (a) who migrates (b) where they migrate to and from (c) socio-economic status. They do not succeed in evaluating the infrastructure development in new cities.

This study adds to the literature because it takes a different approach to the subject of intra-urban migration, where it looked into the causes of intra-urban migration, and focused on the issue of land use and its impact on migrants (evaluating the two cities infrastructure and services), and safety perceptions of migrants.

The issue of land use is often overlooked in similar studies although it is of great importance in determining the kind of migration these new cities attract. This thesis is important since researchers can use the results and compare them to new and potential urban cities in

different regions in the world for further research in the field of intra-urban migration. This study also gives potential migrants to these cities an overview about the facilities and services available in each city. This thesis may aid governments and private developers in laying plans regarding land use and its effects on the types of socioeconomic migrants and their needs.

When discussing the future development of new urban communities in countries, it is essential to take into deep consideration its history and background as this may prevent future trial and error episodes. This thesis provides an insight to the development of a thought process followed by creating a plan of action regarding migration schemes and incentives, in which the government and the private sector both had their share in expanding New Cairo City and Sixth of October City. This thesis dealt with the advantages and disadvantages of each and how in some aspects the government failed where the private sector succeeded and vice versa. From this thesis we can learn how to provide optimum cooperation between government and private sectors' roles to ensure a harmonious shift to new urban development following a central policy controlled by a definite plan of action.

With this, the research showed that while some of the respondents chose to move out to avoid certain conditions in their previous homes, others chose to move out seeking benefits. This research showed that the migration process is motivated by a number of factors that include moving closer to jobs, avoiding crowded and dirty streets, to own property, to pay cheaper rent, and to move closer to educational facilities. The results show that factors that led the participants to internally migrate are different in both cities. The majority of the participants that migrated to Sixth of October moved because they wanted to move closer to their jobs, in contrast with the

majority of participants in New Cairo that moved to pay cheaper rent. The lower and middle classes spent less time reaching their jobs after moving to the new cities, which supports Poston's idea that there is a relationship between the social status of the migrants and where they choose to move, as the lower class migrants tend to move to areas closer to their jobs. 144

Sixth of October City is more organized and well-structured in government facilities than New Cairo City. Participants living in Sixth of October are more aware of government facilities and services available to them. 100% of all three classes knew definitively that there a police station available in their city, 95% knew definitively that there is a traffic department in their city, and 89% knew that there is a fire department in their city. Furthermore, the water and electric supply is stronger and available more consistently in Sixth of October then in New Cairo. The streets are of better quality in Sixth of October than in New Cairo, where they have more traffic lights, more traffic police, safer places for pedestrians to cross the roads, and a more sufficient number of traffic signs. With time, many of these issues should be resolved as the new cities are fully developed.

The public transportation system in New Cairo is more advanced than the public transportation system in Sixth of October. Public buses are closer to the residence areas of high, middle, and lower classes in New Cairo than in Sixth of October, and they are easier to reach.

¹⁴⁴ Dudley Poston. "Socioeconomic Status and Work-Residence Separation in Metropolitan America." *The Pacific Sociological Review.* Vol. 15, No. 3, 1972, p 368.

Families that want to migrate to a new city and have a family member with health issues will be better off in Sixth of October City since it has a greater number of hospitals available than New Cairo, which are located near high, middle, and lower classes residential areas. Sixth of October hospitals also have better facilities and services than the hospitals in New Cairo. With the further development of New Cairo, more hospitals are expected to open, yet will require time, effort and money.

In contrast, the families that want to migrate to a new city and have children who will need to attend school will be better off in New Cairo. New Cairo has a greater number of schools available than in Sixth of October City. After calculating the results of all three classes combined in both cities, it becomes clear than New Cairo's schools have better facilities and services than the schools in Sixth of October. This shows that New Cairo caters to the needs of younger residents and the upper classes including business people. In contrast, Sixth of October caters to the needs of the industrial sector, so it is more attractive for engineers and workers, although it is also attractive for business people who may find it convenient to start a business there or live near their businesses. Also, both cities aim to attract new couples who still have the energy to live in, thus transport to, places that are far away from their families or jobs, and who are looking to pay substantially less for property rent.

Potential migrants that want to reside in a safe city will be better off in New Cairo, for although both cities have police and fire stations, Sixth of October is perceived to be less safe because of the sensational and brutal crimes that were reported in the media.

Overall, the migrants in both cities seem to be "happy" with moving to this new city. A total of 97% of all participants are happy moving to Sixth of October and a total of 96% are happy moving to New Cairo. 145 This shows that although the migrants expressed some concerns and complaints about services, transportation, and safety, they are still content about their decision of relocating. It also shows that migrants decide to move and sacrifice some of their expectations in order to gain more physical space in their life, easy parking, less pollution, less traffic, better weather, and easy access to storage.

Recommendations and Future Research

Future research should be done that would primarily focus on the issue of safety in new cities. It should study whether the safety factor is a function of the new cities being still in development, or whether the government is held responsible for the migrants' feelings of insecurity.

In a year or two infrastructure will develop and more facilities and services will be available for the migrants. Therefore, longitudinal research, where data is collected at different points in time, could be a great way to research the topic. This type of research could help examine the development of the cities throughout the coming years as well as the changes in facilities and services available, whether they have improved or deteriorated.

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¹⁴⁵ Refer to Table 1.46.

Another important recommendation for future studies in this field is that researchers should broaden the scope of the study to the rest of the new cities in Egypt, instead of limiting it to these two cities. This would give potential migrants reviews of the different cities available that they could migrate to and provide data for more academic and scholarly studies.

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Appendix A English Survey

This survey is part of a research conducted for a Masters Thesis at the Migration and Refugee Studies Center at the American University in Cairo. All results will remain anonymous and will be used for determining the effect of internal migration in Egypt on the migrants to new cities. Feel free to skip any questions that you do not feel comfortable answering and turning in the survey at any time.

- 1. Where do you live?
 - a. New Cairo (Fifth Settlement)
 - b Sixth of October
- 2. When did you move there?
 - a. 0-2 years ago
 - b. 3-5 years ago
 - c. 6-8 years ago
 - d. 9-11 years ago
 - e. More than 11 years ago
- 3. Why did you decide to move to a new city? Mark all that apply.
 - a. To avoid the crowded streets in the city I previously lived in
 - b. To avoid the dirty streets in the city I previously lived in
 - c. To move closer to my job
 - d. To move closer to my children's school/university
 - e. To move closer to my family
 - f. To move in a new building
 - g. To pay cheaper rent
 - h. To own a villa/building/apartment
 - i. Government buildings, schools and businesses moved there, which makes it the future of Egypt

•	0.1			
1	Other			
	CHILL			

- 4. If I want to buy groceries I
 - a. Call a market nearby that delivers to my door step
 - b. Walk to a market
 - c. Drive to a market
 - d. Other _____
- 5. The grocery shops available around my house have
 - a. All of my needs
 - b. Have most of my needs
 - c. Do not have most of my needs
 - d. Do not have any of my needs

e. Other
6. If I need to buy medication I
a. Call a pharmacy nearby that delivers to my door step
b. Walk to a pharmacy
c. Drive to a pharmacy
d. Other
7. The pharmacies available around my house have
a. All of my needs
b. Have most of my needs
c. Do not have most of my needs
d. Do not have any of my needs
e. Other
8. Overall, I usually
a. have trouble getting my daily needs
b. have no trouble getting my daily needs
c. Other
9. Since I moved to this new city I have needed to go, or take someone, to a hospital
a. yes
b. no
If yes go to question 10, if no go to question 14.
10. The distance to the hospital was
a. Far
b. Near
c. Other
11. The number of hospitals available in the new city I live in are
a. Many compared to hospitals available in the previous city I lived in
b. A few compared to the hospitals available in the previous city I lived in
c. The same as the hospitals available in the previous city I lived in
d. Other
12. The facilities in the hospital are
a. Good compared to hospitals of the same standard that were available in the previous
city I lived in
b. bad compared to hospitals of the same standard that were available in the previous city
I lived in
c. of the same standard as the hospitals available in the previous city I lived
d. Other
13. The services at the hospital are

a. Good compared to hospitals of the same standard that were available in the previous city I lived in b. Bad compared to hospitals of the same standard that were available in the previous city I lived in c. Of the same standard as the hospitals available in the previous city I lived d. Other 14. The number of schools available in the new city I live in are e. Many compared to schools available in the previous city I lived in f. A few compared to the schools available in the previous city I lived in g. The same as the schools available in the previous city I lived in h. Other 15. The facilities in the school are a. Good compared to schools of the same standard that were available in the previous city I lived in b. bad compared to schools of the same standard that were available in the previous city I c. of the same standard as the schools available in the previous city I lived d. Other 16. The services at the schools are a. Good compared to schools of the same standard that were available in the previous city I lived in b. Bad compared to schools of the same standard that were available in the previous city I lived in c. Of the same standard as the schools available in the previous city I lived 17. My job is located

- a. In the same city I live in
- b. In a close-by city
- c. In a far-away city
- d. Other
- 18. On average, the amount of time I spend going from my home to work is
 - a. 1-15 minutes
 - b. 16-30 minutes
 - c. 31-45 minutes
 - d. 46-60 minutes
 - e. 61-75 minutes
 - f. 76-90 minutes
 - g. More than 91 minutes

19. How often do you go out of your house for entertainment (coffee shop, cinema, club,
etc.)
a. As often as I used to in the previous city I lived in
b. More often than I used to in the previous city I lived in
c. Less often than I used to in the previous city I lived in
d. Other
20. I usually spend my free time in
a. Clubs
b. Internet cafes
c. Coffee shops
d. Friend's house
e. Family member's house
f. My home
g. Game cafes (to play Playstation, WII, etc.)
h. Nightclubs
i. Malls
j. Restaurants
k. Other
K. Other
21. When I want to spend my free time outside the house I find
a. I find several nearby places that I can go to
b. I go to another city to find places that are of interest to me
c. Although there are places that are of interest to me, I go to other cities to meet my
friends who live far away
d. Other
22. Is there a police station in your city?
a. Yes
b. No
c. I am not sure
23. Is there a traffic department in your city?
a. Yes
b. No
c. I am not sure
24 I. there a fine demand in severe it 2
24. Is there a fire department in your city?
a. Yes b. No
c. I am not sure
C. I am not sure
25. Is tap water available in your house
a. Yes
b. It is available most of the time

c. N	ot on a regular basis
d. N	0
e. O	ther
26 Is eld	ectricity available in your house?
a. Y	
	is available most of the time
	ot on a regular basis
d. N	-
e. O	ther
27. On t	he way to other cities
	the streets are of good quality
	o. most of the streets are of good quality
	most of the streets are of bad quality
	l. the streets are of bad quality
ϵ	c. other
28 Do x	ou have public transportation stations near your home?
-	. Yes
	163). No
	c. Other
	. omer
29. Is it	easy to reach the public transportation stations?
	Yes, it is a short walk
ł	o. No, it is a long walk
C	c. Other
30. Do y	ou own a car?
г	. Yes, I have my own car
t	Yes, I have a car that I share with my family
	No, I do not know how to drive
Ċ	I. No, I do not have a car
	e. No, I am not allowed to drive the family car
f	Other
31 For 1	ransportation I usually
	Drive my own car
	b. Use public transportation
	walk
	l. Take a taxi
	c. Other
	. •
32. Publ	ic busses are usually
	11110 11111

- a. available frequently throughout the day
- b. not available frequently throughout the day

		only available in the morning
		only available at night
	e.	other
33	Taxis	are usually
		available frequently throughout the day
		not available frequently throughout the day
		only available in the morning
		only available at night
		only available if I call the driver to book a ride
		other
34	Is it co	onvenient for someone to live in your city if he/she does not own a car? (mark all
	that ap	· · · · · · · · · · · · · · · · · · ·
	-	Yes, there are many alternative ways to get around
		Yes, but only before sunset
		No, many of the streets are cut off
		Other
35	The a	uality of the roads is (mark all that apply).
		The same as the streets in the previous city I lived in
		Better than the streets in the previous city I lived in
		There are too many road bumps
		There too little road bumps so there are many speeding cars
		There are no traffic lights
		There is a sufficient number of traffic lights
		There are no traffic signs
		There is a sufficient number of traffic signs
	i.	_
	j.	There are too many traffic police men
		There are safe places for pedestrians to cross the roads
	1.	There are no safe places for pedestrians to cross the roads
		Other
36.	How s	afe are the streets in the new city, compared to the previous city you lived in?
		They are safer
		They are more dangerous
		They are of the same safety standard
		Other
37.	If is sa	afe for residents to walk in this new city
•		It is safe for anyone to walk
		No, there are too many dogs
		No, there are too many workers
		It is dangerous for children and women to walk on the streets alone

e. It is dangerous for anyone to go out after sunsetf. Other	
38. Are you able to do the same activities you were active in while living in your of neighborhood (check all that applies) Gathering/going out with your friendsPolitical protestsWalking/jogging/running in the street at nightCruising with the carStaying out lateOther	old
 39. Overall, my activity rate has a. Increased since I moved to this new city b. Decreased since I moved to this new city c. Remained the same d. Other 	
 40. I am a. Satisfied with my activity rate in this new city b. Hope to have a more activities in this new city c. Hope to have less activities in this new city d. Other 	
41. Overall, I ama. Happy with moving to this new cityb. Regret moving to this new cityc. Other	
42. List three advantages of migrating to this new city: • • •	
43. List three disadvantages of migrating to this new city • • •	

Personal Information:

- 1. Age group:
 - a. 20-29
 - b. 30-39
 - c. 40-49

	e. 60-69 f. 70+
2.	Gender: a. Male b. Female
3.	Education: a. Elementary b. Middle school c. High school d. Diploma e. Bachelors f. Masters g. Ph.D.
4.	Previous residential area
5.	Residence: a. Villa: i- Rent ii- Own
	 b. Apartment i- Rent ii- Own c. Extension of a building (roof, basement or external room) i- Rent ii- Own
6.	Occupation: a. Senior position b. Junior position c. Labour position d. Please specify exact title
7.	Nationality:

d. 50-59

Appendix B Arabic Survey

هوية لكم ا

سح جرء من رساله ماجستير في مركز دراسات الهجرة واللجوء بالجامعة الاميركية في الفاهرة. جميع التنابج لن تكشف عز أن المدين في تدير النتاب التريد تأثير المسترات المارات المرابات المدينة في الفاهرة . جميع التنابج لن تكشف عز	
ُمجاوب وسوف تستخدم النتايج لتحديد تأثير الهجر ة الداخلية إلى المدن الجديدة في مصر على المهاجرين ِ حرية في التوقف عن حل اى سؤال او الاستبيان في اى وقت	
عریه دي اسونت عن عن ای سوان او ۱۰ مسیبان دي ای ولت 1 - این تعیش؟	
۱ - این تغیس: (أ) القاهرة الجدیدة (التجمع الخامس)	-
(ب) العامرة الجديدة (التجمع العامس) (ب) السادس عن أكتوبر	
(ب) المعادس عن الحدوير	
2 - متى قمت بالنقل هناك؟	2
(أ) منذ 2-0 عاما	
(ب)منذ 5-3 عاما	
(ج) منذ 8-6 عاما	
(د) منذ 11-9 عاما	
(ُه) أكثر من 11 عاما	
3 - لماذا قررت الانتقال إلى مدينة جديدة؟ (علم على كل ما ينطبق)	3
(أ) لتجنب الشوارع المزدحمة في المدينة التي سكنت فيها سابقا	
(ب)لتجنب الشوارع القذرة في المدينة التي سكنت فيها سابقا	
(ج) للاقتراب من موقع وظيفتي	
(د) للاقتراب من موقع مدرسة / جامعة او لادي	
(ه) للاقتراب من موقع عائلتي	
(و) للسكن في مبنى الجديد	
(ز) لدفع إيجار أقل	
(ح) لامتلاك فيلا / بناء / شقة	
(ط) لِنقل المباني الحكومية والمدارس والشركات هناك ، ممايجعل هذة المدن مستقبل مصر	
(ي) أخرى	
4 - إذا كنت تريد شراء البقالة أنا (أ) اطلب خدمة التوصيل من سوق قريب	ŀ
(۱) الطلب خدمه التوطنين من سوق فريب (ب) اذهب سيرا على الاقدام الى السوق	
(ب) المحب سير، عملي المحددة التي المعلوى (ج) اقود سيارتي الي السوق	
(د) افرد سیارتی اسی اسون (د) افری	
5 - محلات البقالة المتوفرة حول بيتي	5
َ	
(ب) تبيع معظم احتياجاتي	
(ج) لا تبيع معظم احتياجاتي	
(ُد) لا تبيع أي من احتياجاتي	
(ه) أخرى	

6 - إذا كنت بحاجة لشراء الدواء

(أ) اطلب خدمة التوصيل من صيدلية قريبة (ب) اذهب سيرا على الاقدام الى الصيدلية (ج) اقود سيارتي الى الصيدلية (د) أخرى	
دليات المتوفرة حول بيتي (أ) تبيع جميع احتياجاتي (ب)تبيع معظم احتياجاتي (ج) لا تبيع معظم احتياجاتي (د) لا تبيع أي من احتياجاتي (ه) أخرى	
ادة (أ) اجد صعوبة في الحصول على احتياجاتي اليومية (ب) لا أجد صعوبة في الحصول على احتياجاتي اليومية (ج) أخرى	
تقلت إلى هذه المدينة الجديدة اضررت الى الذهاب (او اخذ شخص) الى مستشفى (أ) نعم (ب) لا	
ة بنعم يرجى الانتقال إلى السؤال 10 إذا كلنت الاجابة لا يرجى الانتقال إلى السؤال 14. المسافة إلى المستشفى (أ) بعيدة (ب) قربة (ج) أخرى	10 کانت
لمستشفيات المتاحة في المدينة الجديدة التي أعيش فيها (أ) كثير بالمقارنة مع عدد المستشفيات المتاحة في المدينة التي عيشت فيها سابقا (ب)قليلة بالمقارنة مع عدد المستشفيات المتاحة في المدينة التي عيشت فيها سابقا (ج) نفس عدد المستشفيات المتاحة في المدينة التي عيشت فيها سابقا (د) أخرى	
س عن المحديث المقارنة مع المستشفيات التي بنفس المستوى التي كانت متوفرة في المدينة التي عشت فيها الس سابقا (ب) سيئة بالمقارنة مع المستشفيات التي بنفس المستوى التي كانت متوفرة في المدينة التي عشت فيها سابقا (ج) بنفس مستوى المستشفيات المتاحة في المدينة عشت فيها سابقا (د) أخرىــــــ	
الله عن المستسعيات التي النه الله الله الله الله الله الله الله	

	14 - عدد المدارس المتاحة في المدينة الجديدة التي أعيش فيها
التي عيشت فيها سابقا	(أ) كثير بالمقارنة مع عدد المدارس المتاحة في المدينة
التي عيشت فيها سابقا	(ُب) قليلة بالمقارنة مع عدد المدارس المتاحة في المدينة ا
فيها سابقا	(ج) نفس عدد المدارس المتاحة في المدينة التي عيشت ا
	(د) أخرى
in the second of the second	15 المرافق في المدرسة
	أ. جيدة بالمقارنة مع المدارس التي بنفس المستوى التي كانت
	(أ) سيئة بالمقارنة مع المدارس التي بنفس المستوى التي
ها سابقا	(ب) بنفس مستوى المدار س المتاحة في المدينة عشت في
	(ج) أخرى
	16 الخدمات في المدارس
. كانت متو فرة في المدينة التي عشت فيها سابقا	(أ) جيدة بالمقارنة مع المدارس التي بنفس المستوى التي
	(ب) سيئة بالمقارنة مع المدارس التي بنفس المستوى التي
	رب) (ج) بنفس مستوى المدارس المتاحة في المدينة عشت في
	(د) أخرى (د) أخرى
	17 -مكان عملي يقع
	(أ) في نفس المدينة التي أعيش فيها
	(ب) في مدينة قريبة
	(ج) في مدينة بعيدة
	(د) أخرى
	18 - الطرق من المنزل الى العمل عادة ما يستغرق
	(أ) 15-دقيقة (أ) 15-دقيقة (أ)
	(ب) 16-30 دقيقة
	(ج) 45-31 دقيقة (ج)
	(د) 46-60 دقيقة
	(ه) 75-61 دقيقة
	(ُو) 90-76 دقيقة
	(ز) أكثر من 91 دقيقة
	19 - اخرج من بيتي للترفيه (المقهى ، السينما ، نادي ، إلخ)
2	(أ) بقدر ما كنت افعل في المدينة التي عشت فيها السابقة
	(ب) اكثر مما كنت افعل في المدينة التي عشت فيها السابة
	ر · ·) (ج) اقل مما كنت افعل في المدينة التي عشت فيها السابقا
	(د) أخرى
	20 - عادة أقضىي وقت فراغي في
	(أ) النوادي
	(ب) مقاهي الانترنت
	(ج) المقاهي (د) ننا
	(د) منزل صدیق (د) منزل با در أفراد المائلة
	(ه) منزل احد أفراد العائلة

(و) بيتي (ز) المقاهي اللعب (للعب بلاي ستيشن ، وى ، الخ.) (ح) النوادي الليلية (ط) مراكز التسوق (ي) المطاعم (ك) أخرى	
ما أريد أن أقضي وقت فراغي خارج المنزل (أ) أجد العديد من الأماكن القريبة التي أستطيع أن أذهب إليها (ب) أذهب إلى مدينة أخرى لإيجاد الأماكن التي تروق لي (ج) بالرغم من أن هناك أماكن في مدينتي الجديدة تروق لي، أنا أذهب إلى مدن أخرى لمقابلة أصدقائي الذين يعيشون بعيدا (د) أخرى	21 - عند
هناك مركز للشرطة في مدينتك؟ (أ) نعم (ب) لا (ج) لست متأكدا	22 - هل
هناك إدارة مرور في مدينتك؟ (أ) نعم (ب)لا (ج) لست متأكدا	23 - هل
هناك مركز اطفاء في مدينتك؟ (أ) نعم (ب) لا (ج) لست متأكدا	24 - هل
مياه الصنبورة متوفرة في منز لك؟ (أ) نعم (ب) متوفرة في معظم الاحيان (ج) ليس باانتظام (د) لا (ه) أخرى	25 - هل
لكهرباء متوفرة في منزلك؟ (أ) نعم (ب) متوفرة في معظم الاحيان (ج) ليس باانتظام (د) لا (ه) أخرى	26 -هل ا
ر) لطريق الى المدن الاخرى (أ) الشواع جيدة	27 في ا

(ب) معظم الشوارع جيدة (ج) معظم الشوارع سيئة (د) الشوارع سيئة (ه) أخرى
28 - هل لديك محطات لوسائل لنقل العام بالقرب من منز لك؟ (أ) نعم (ب) لا (ج) أخرى
29 حلى من السهل الوصول إلى محطات وسائل النقل العام؟ (أ) نعم ، فالمسافة قصيرة (ب) لا ، فالمسافة طويلة سيرا على الأقدام (ج) أخرى
30 هل تملك سيارة؟ (أ) نعم ، لدي سيارتي الخاصة (ب) نعم ، لدي سيارة أشاركها مع عائلتي (ج) لا ، أنا لا أعرف كيف اقود السيارة (د) لا ، ليس لدي سيارة (ه) لا ، يسمح لي بقيادة السيارة العائلية (و) . أخرى
31 لملتنقل انا عادة (أ) أقود سيارتي الخاصة (ب) استخدام وسائل النقل العام (ج) اسير (د) اخذ سيارة أجرة (ه) أخرى
32 حادة ما تكون الباصات العامة (أ) متوفرة على مدار اليوم (ب) غير متوفرة كثير من الأحيان على مدار اليوم (ج) متوفر فقط في الصباح (د) متاحة فقط ليلا (ه) أخرى
33 عادة ما تكون سيارات الأجرة (أ) متوفرة على مدار اليوم (ب) غير متوفرة كثير من الأحيان على مدار اليوم (ج) متوفر فقط في الصباح (د) متاحة فقط ليلا (ه) متاحة فقط اذا تم الاتصال بالسائق او الشركة للحجز (و) أخرى

(علم على كل ما ينطبق)	34 - هل من المناسب العيش في هذه المدينة بدون امتلاك سيارة؟
, ,	(أ) نعم ، هناك طرق اخرى كثيرة للتنقل
	(ُبُ) نعم ، ولكن فقط قبل غروب الشمس
	(ُج) لا ، فعديد من الشوارع مقطوعة
	(د) أخرى
	35 نوعية الطرق (علم على كل ما ينطبق)
عشت فيها سابقا	(أ) في نفُس مستوى الشوارع المتوفرو في المدينة التي
سابقا	(ُبْ) أفصل من الشوارع التي في المدينة التي عشت فيها
	(ُج) هناك الكثير من مطبات الطريق
ن سیارات مسرعة	(د) هناك القليل من مطبات الطريق لذلك هناك العديد مز
	(ُه) لا توجد إشارات المرور
	(ُو) هذاك عدد كاف من إشارات المرور
	(ز) لا توجد علامات المرور
	(ح) هناك عدد كاف من علامات المرور
	* لا يوجد رجال شرطة المرور
	(ط) هناك عدد كبير من رجال شرطة المرور
	(ي) هناك أماكن آمنة للمشاة لعبور الطرق
	(ُكُ) لا توجد أماكن آمنة للمشاة لعبور الطرق
	(ٰل) أخرى (ٰل) أخرى
ابقة الذي عشت فيها؟	36 على الشوارع امنة في المدينة الجديدة بالمقارنة الى المدينة السا
·	(أ) الشوارع اكثر امنا
	(ُب) الشوارع اقل امنا
	(ُج) هم من نفس معابير الامن
	(د) أخرى
	37 ـ هل المشى في هذة المدينة الجديدة امنا؟
	(أ) الطرق امنة للجميع
	(ب) لا ، هناك عدد كبير من الكلاب
	(ج) لا ، هناك عدد كبير من العمال
	(د) من الخطر سير اللأطفال والنساء وحدهم
	(ه) من الخطر للجميع المشى بعد غروب الشمس
	(و) أخرى
في المدينة التي عشت فيها سابقا؟ (اختر كل ما ينطبق)	38 هل أنت قادر على أن تقوم بنفس الأنشطة التي كنت تقوم بها ف
	لقاء الخروج مع الاصدقاء
	المشي في المزاهرات
	المشي/ الركض في الشارع ليلا
	التنزه في السيارة
	البقاء خارج المنزل لوقت متأخر
	112.1
	39 عموما ، معدل نشاطي
	(أ) قد زاد منذ انتقلت إلى هذه المدينة الجديدة

	(ب) انخفض منذ انتقات إلى هذه المدينة الجديدة (ج) نفس المعدل الذى كنت اقوم به في المدينة السابقة (د) أخرى
40 أنا	 (أ) راضي عن معدل نشاطي في هذه المدينة الجديدة (ب) أمل أن يزيد معدل نشاطي في هذه المدينة الجديدة (ج) أمل أن يقل معدل نشاطي في هذه المدينة الجديدة (د) أخرى
41 عمو،	ما ، أنا (أ) سعيد بالانتقال الى هذه المدينة الجديدة (ب)نادم على الانتقال الى هذه المدينة الجديدة (ج) أخرى
42 - اذکر • •	ر ثلاث مزايا للهجرة إلى هذه المدينة الجديدة:
43 - اذکر •	ر ثلاث مساوئ للهجرة إلى هذه المدينة الجديدة
المعلوماد	ت الشخصية:
	العمرية: (أ) 22-29 (ب) 30-39 (ج) 40-49 (د) 50-59 (ه) 60-69 (و) فوق ال 70
	س: (أ) ذكر (ب)أنثى
3 - التعلي	يم: (أ) الابتدائية (ب) المدرسة المتوسطة (ج) مدرسة ثانوية (د) دبلوم (ه) بكالريوس

	(و) ماجستیر (ز) دکتوراه
	4 - المنطقة السكنية السابقة
	5 - مكان السكن في المدينة الجديدة
ایجار ایجار ایجار	(أ) فيلا امتلاك (ب)شقة امتلاك (ج) ملحق لعمارة امتلاك
	6 - الوظيفة (أ) مدير (ب) وظيفة ثانوية (ج) عامل مسمى الوظيفة
	7 - الجنسية

Appendix C Survey Results

Chi-Square χ^2 Test Equation: (Observed – expected)²

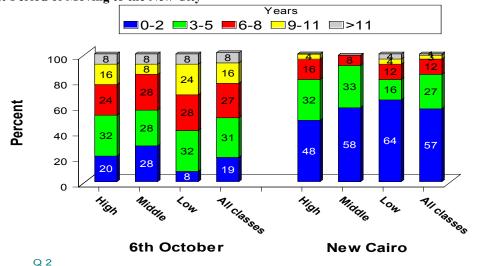
$$\chi^2 = \Sigma$$

Expected

Table 1.7. Period of Moving to the New City

	Classes in Sixth October				Classes in New Cairo				
Years	6Oct-H	6Oct-M	6Oct-L	Total	NC-H	NC-M	NC-L	Total	Grand Total
	5	7	2	14	12	14	16	42	56
0-2	(20%)	(28%)	(8%)	(19%)	(48%)	(58	(64%)	(57%)	(38%)
	8	7	8	23	8	8	4	20	43
3—5	(32%)	(28%)	(32%)	(31%)	(32%)	(33	(16%)	(27%)	(29%)
	6	7	7	20	4	2	3	9	29
6—8	(24%)	(28%)	(28%)	(27%)	(16%)	(8	(12%)	(12%)	(19%)
	4	2	6	12	1		1	2	14
9—11	(16%)	(8%)	(24%)	(16%)	(4%)	0	(4%)	(3%)	(9%)
	2	2	2	6			1	1	7
>11	(8%)	(8%)	(8%)	(8%)	0	0	(4%)	(1%)	(5%)
	25	25	25	75	25	24	25	74	149
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing						1		1	1

Figure 1.2. Period of Moving to the New City



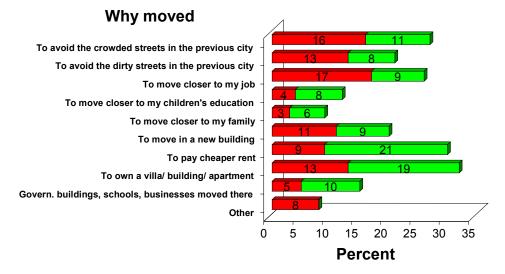
	~ =	
χ^2	Degree of freedom	P value
39.384	4	< 0.0001

Table 1.8: Reason for Moving to the New City

	Classes in Sixth October			Classes in New Cairo				Grand	
Why moved	Н	M	L	Total	Н	M	L	Total	Total
To avoid the crowded streets									
in the city I previously lived	16	4	6	26	20	6	1	27	53
in	(22%)	(10%)	(13%)	(16%)	(25%)	(14%)	(1%)	(11%)	(13%)
To avoid the dirty streets in	14	4	3	21	13	5	2	20	41
the city I previously lived in	(19%)	(10%)	(6%)	(13%)	(16%)	(12%)	(2%)	(8%)	(10%)
To move closer to my job	3	11	13	27	4	4	15	23	50
	(4%)	(28%)	(28%)	(17%)	(5%)	(9%)	(12%)	(9%)	(12%)
To move closer to my	4	2	1	7	3	3	13	19	26
children's school/university	(5%)	(5%)	(2%)	(4%)	(4%)	(7%)	(10%)	(8%)	(6%)
To move closer to my family	3	1	1	5	4	1	10	15	20
	(4%)	(3%)	(2%)	(3%)	(5%)	(2%)	(8%)	(6%)	(5%)
To move in a new building	12	4	2	18	9	10	3	22	40
	(16%)	(10%)	(4%)	(11%)	(11%)	(23%)	(2%)	(9%)	(10%)
To pay cheaper rent	1	4	9	14	9	10	33	52	66
	(1%)	(10%)	(19%)	(9%)	(11%)	(23%)	(26%)	(21%)	(16%)
To own a villa/ building/	14	3	4	21	12	2	35	49	70
apartment	(19%)	(8%)	(9%)	(13%)	(15%)	(5%)	(27%)	(19%)	(17%)
Government buildings,									
schools and businesses									
moved there, which makes it	3	3	2	8	7	2	17	26	34
the future of Egypt	(4%)	(8%)	(4%)	(5%)	(9%)	(5%)	(13%)	(10%)	(8%)
Other	3	3	6	12					12
	(4%)	(8%)	(13%)	(8%)	0	0	0	0	(3%)
	73	39	47	159	81	43	129	253	412
Total*	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.3: Reason for Moving to the New City





χ^2	Degree of freedom	P value
22.703	9	0.0069

Table 1.9: Buying Groceries

	C	lasses in Si	xth Octob	er		Classes in	New Cairo		Grand
To buy groceries	Н	M	L	Total	Н	M	L	Total	Total
Call a market nearby that delivers to my door step									
	12	5	3	20	7	12	1	20	40
	(48%)	(21%)	(12%)	(27%)	(28%)	(48%)	(4%)	(27%)	(27%)
Walk to a market									
	0	7	19	26	0	8	24	32	58
		(29%)	(76%)	(35%)		(32%)	(96%)	(43%)	(39%)
Drive to a market									
	7	9	2	18	12	3	0	15	33
	(28%)	(38%)	(8%)	(24%)	(48%)	(12%)	0	(20%)	(22%)
	0	0	1	1	0	0	0	0	1
Other			(4%)	(1%)					(1%)
	6	2	0	8	6	2	0	8	16
a. & c.	(24%)	(8%)		(11%)	(24%)	(8%)	0	(11%)	(11%)
	0	1	0	1	0	0	0	0	1
b. & c.		(4%)		(1%)					(1%)
	25	24	25	74	25	25	25	75	149
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing		1		1	-				1

Figure 1.4: Buying Groceries

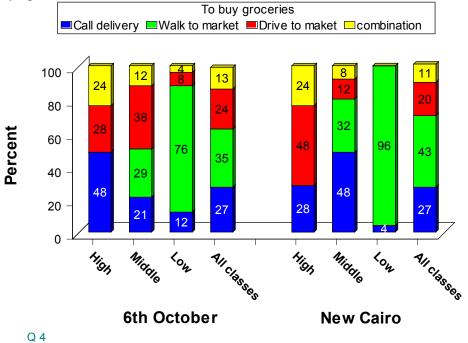
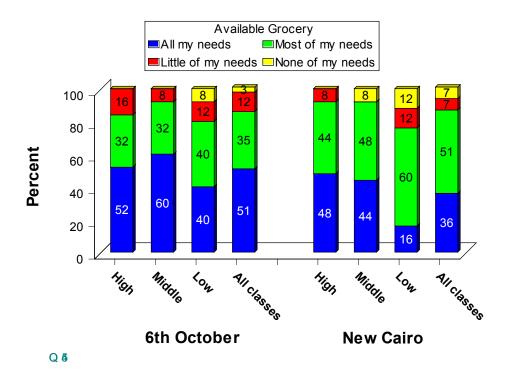


Table 1. 10: Availability of Grocery Shops

	Cla	Classes in Sixth October				Classes in	New Cair	О	Grand
Available Grocery	Н	M	L	Total	Н	M	L	Total	Total
All of my needs	13	15	10	38	12	11	4	27	65
	(52%)	(60%)	(40%)	(51%)	(48%)	(44%)	(16%)	(36%)	(43%)
Have most of my needs	8	8	10	26	11	12	15	38	64
	(32%)	(32%)	(40%)	(35%)	(44%)	(48%)	(60%)	(51%)	(43%)
Do not have most of my									
needs	4	2	3	9	2	0	3	5	14
	(16%)	(8%)	(12%)	(12%)	(8%)		(12%)	(7%)	(9%)
Do not have any of my									
needs	0	0	2	2	0	2	3	5	7
			(8%)	(3%)		(8%)	(12%)	(7%)	(5%)
	25	25	25	75	25	25	25	75	150
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.5: Availability of Grocery Shops



χ^2	Degree of freedom	P value
8.479	3	0.0371

Table 1. 11: Buying Medication

	Classes	in Sixth O	ctober		Classes i	n New Ca	iro		Grand
To buy medicine, I	Н	M	L	Total	Н	M	L	Total	Total
Call a pharmacy nearby that delivers to my door step	18	9	5	32	10	16	2	28	60
Walk to a pharmacy	(72%)	(36%)	(20%)	(43%)	(40%)	(64%)	(8%)	(37%)	(40%)
	0	6 (24%)	19 (76%)	25 (33%)	0	5 (20%)	(92%	28 (37%)	53 (35%)
Drive to a pharmacy	5 (20%)	7 (28%)	1 (4%)	13 (17%)	9 (36%)	2 (8%)	0	11 (15%)	24 (16%)
a & c	2 (8%)	2 (8%)	0	4 (5	5 (20%)	2 (8%)	0	7 (9%)	11 (7%)
b & c	0	1 (4%)	0	1 (1%)	0	0	0	0	1 (1%)
o 0- 1-	0	0	0	0	1 (40/)	0	0	1 (10/)	1
a & b	25	25	25	75	(4%)	25	25	(1%) 75	(1%) 150
Total	(100	(100	(100	(100	(100	(100	(100	(100	(100

Figure 1.6: Buying Medication

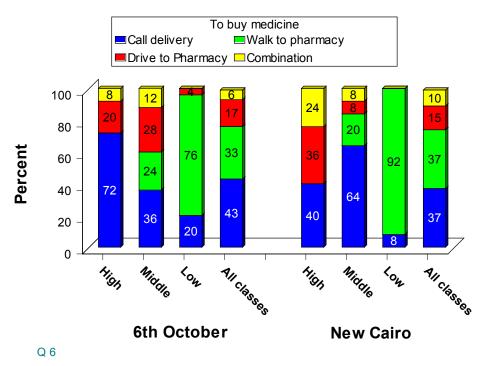


Table 1. 12: Availability of Pharmacies

	C	lasses in Si	xth Octobe	er	(Classes in	New Cairo)	Grand
Pharmacies have	Н	M	L	Total	Н	M	L	Total	Total
All of my needs	13	9	12	34	15	12	12	39	73
	(52%)	(36%)	(48%)	(45%)	(60%)	(48%)	(48%)	(52%)	(49%)
Have most of my needs	12	14	13	39	10	11	11	32	71
	(48%)	(56%)	(52%)	(52%)	(40%)	(44%)	(44%)	(43%)	(47%)
Do not have most of my needs	0	2	0	2	0	2	2	4	6
		(8%)		(3%)		(8%)	(8%)	(5%)	(4%)
Do not have any of my needs									
	0	0	0	0	0	0	0	0	0
	25	25	25	75	25	25	25	75	150
Total	(100	(100	(100	(100	(100	(100	(100	(100	(100

Figure 1.7: Availability of Pharmacies

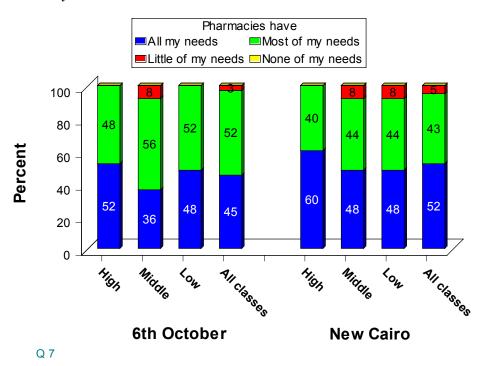


Table 1. 13: Ease of Obtaining Daily Needs

	Classes i	Classes in Sixth October				Classes in New Cairo				
Overall, I usually	Н	M	L	Total	Н	M	L	Total	Total	
have trouble getting my daily	7	8	8	23	5	10	14	29	52	
needs	(28%)	(32%)	(32%)	(31%)	(20%)	(40%)	(56%)	(39%)	(35%)	
have no trouble getting my daily needs	18 (72%)	17 (68%)	17 (68%)	52 (69%)	19 (76%)	15 (60%)	11 (44%)	45 (60%)	97 (65%)	
Other					1			1	1	
	0	0	0	0	(4%)	0	0	(1%)	(1%)	
	25	25	25	75	25	25	25	75	150	
Total	(100	(100	(100	(100	(100	(100	(100	(100	(100	

Figure 1.8: Ease of Obtaining Daily Needs

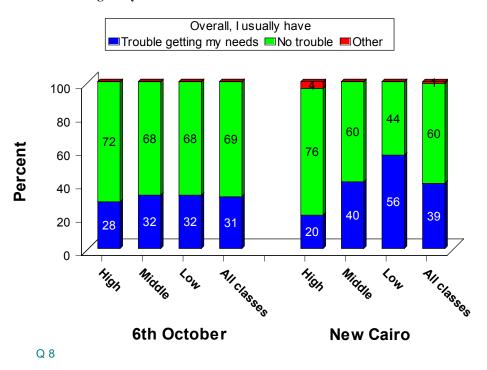
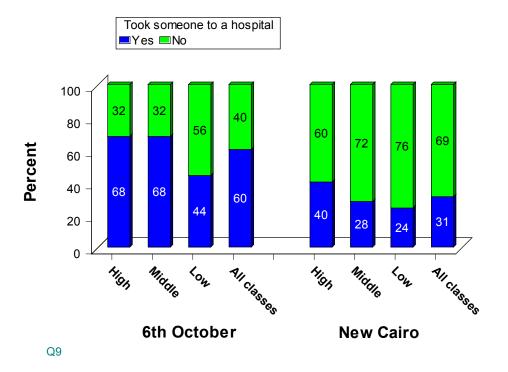


Table 1. 14: Need to Visit a Hospital

Q9	Classes i	Classes in Sixth October				Classes in New Cairo				
Took someone to a hospital	Н	M	L	Total	Н	M	L	Total	Total	
Yes							6			
	17	17	11	45	10	7	(24%	23	68	
	(68%)	(68%)	(44%)	(60%)	(40%)	(28%))	(31%)	(45%)	
No							19			
	8	8	14	30	15	18	(76%	52	82	
	(32%)	(32%)	(56%)	(40%)	(60%)	(72%))	(69%)	(55%)	
	25	25	25	75	25	25	25	75	150	
Total	(100	(100	(100	(100	(100	(100	(100	(100	(100	

Figure 1.9: Need to Visit a Hospital

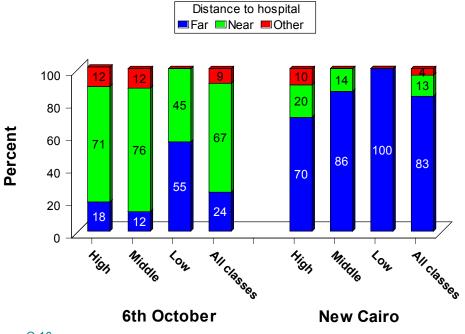


χ^2	Degree of freedom	P value
16.957	1	< 0.0001

Table 1. 15: Distance to the Hospital

	Cl	Classes in Sixth October Classes in New Cairo							Grand
Distance to the									
hospital	Н	M	L	Total	Н	M	L	Total	Total
Far	3	2	6	11	7	6	6	19	30
	(18%)	(12%)	(55%)	(24%)	(70%)	(86%)	(100%)	(83%)	(44%)
Near	12	13	5	30	2	1		3	33
	(71%)	(76%)	(45%)	(67%)	(20%)	(14%)	0	(13%)	(49%)
	2	2		4	1			1	5
Other	(12%)	(12%)	0	(9%)	(10%)	0	0	(4%)	(7%)
Total	17	17	11	45	10	7	6	23	68
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100	(100
Missing	8	8	14	30	15	18	19	52	84

Figure 1.10: Distance to the Hospital

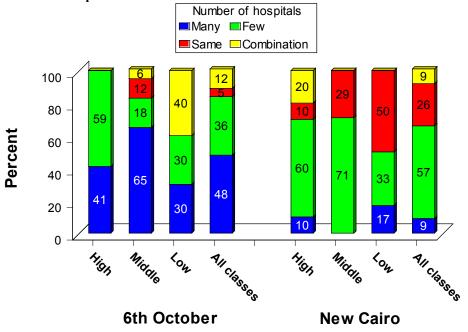


χ^2	Degree of freedom	P value
70.906	2	< 0.0001

Table 1.16: Number of Hospitals Available

	Cl	asses in S	ixth Octob	er		Classes in	New Cair	o	Grand
Number of hospitals are	Н	M	L	Total	Н	M	L	Total	Total
Many compared to hospitals									
available in the previous city I lived in									
iived iii	7	11	3	21	1		1	2	23
	(41%)	(65%)	(30%)	(48%)	(10%)	0	(17%)	(9%)	(34%)
A few compared to the hospitals available in the previous city I									
lived in	10	3	3	16	6	5	2	13	29
	(59%)	(18%)	(30%)	(36%)	(60%)	(71%)	(33%)	(57%)	(43%)
The same as the hospitals available in the previous city I									
lived in	0	2		2	1	2	3	6	8
	0	(12%)	0	(5%)	(10%)	(29%)	(50%)	(26%)	(12%)
		1	0	1	2			2	3
Other	0	(6%)	0	(2%)	(20%)	0	0	(9%)	(4%)
a & c	0	0	(10%)	(3%)	0	0	0	0	(1%)
			3	3					3
b & c	0	0	(30%)	(7%)	0	0	0	0	(4%)
	17	17	10	44	10	7	6	23	67
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing	8	8	15	31	15	18	19	52	83

Figure 1.11: Number of Hospitals Available



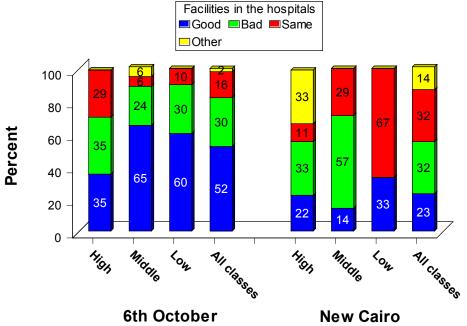
Q 11

χ²	Degree of freedom	P value
46.081	3	< 0.0001

Table 1.17: Hospital Facilities

	(Classes in Sixth October				Classes in New Cairo				
Facilities in the hospital are:	Н	M	L	Total	Н	M	L	Total	Total	
Good compared to hospitals										
of the same standard that										
were available in the previous	6	11	6	23	2	1	2	5	28	
city I lived in	(35%)	(65%)	(60%)	(52%)	(22%)	(14%)	(33%)	(23%)	(42%)	
Bad compared to hospitals of										
the same standard that were										
available in the previous city I	6	4	3	13	3	4		7	20	
lived in	(35%)	(24%)	(30%)	(30%)	(33%)	(57%)	0	(32%)	(30%)	
Of the same standard as the										
hospitals available in the	5	1	1	7	1	2	4	7	14	
previous city I lived	(29%)	(6%)	(10%)	(16%)	(11%)	(29%)	(67%)	(32%)	(21%)	
		1		1	3			3	4	
Other	0	(6%)	0	(2%)	(33%)	0	0	(14%)	(6%)	
	17	17	10	44	9	7	6	22	66	
Total	(100	(100)	100)	100)	100)	100)	100)	100)	100)	
Missing	8	8	15	31	16	18	19	53	84	

Figure 1.12: Hospital Facilities

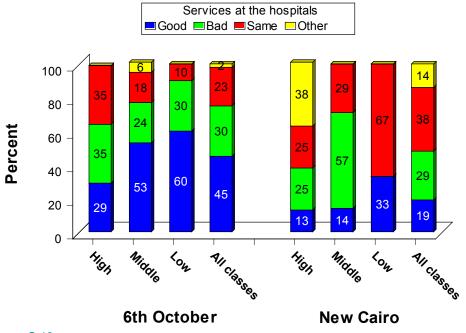


χ^2	Degree of freedom	P value
25.611	3	< 0.0001

Table 1.18. Hospital Services

	Cl	asses in S	ixth Octob	er	C	Classes in 1	New Cairo)	Grand
Services at the hospital are:	Н	M	L	Total	Н	M	L	Total	Total
Good compared to hospitals of the same standard that were available in the previous city I lived in	5 (29%)	9 (53%)	6 (60%)	20 (45%)	1 (13%)	1 (14%)	2 (33%)	4 (19%)	24 (37%)
Bad compared to hospitals of the same standard that were available in the previous city I lived in	6 (35%)	4 (24%)	3 (30%)	13 (30%)	2 (25%)	4 (57%)	0 0	6 (29%)	19 (29%)
Of the same standard as the hospitals available in the previous city I lived	6 (35%)	3 (18%)	1 (10%)	10 (23%)	2 (25%)	2 (29%)	4 (67%)	8 (38%)	18 (28%)
Other	0	1 (6%)	0 0	1 (2%)	3 (38%)	0 0	0	3 (14%)	4 (6%)
Total	17 (100)	17 (100)	10 (100)	44 (100)	8 (100)	7 (100)	6 (100)	21 (100)	65 (100)
Missing	8	8	15	31	17	18	19	54	85

Figure 1.13. Hospital Services

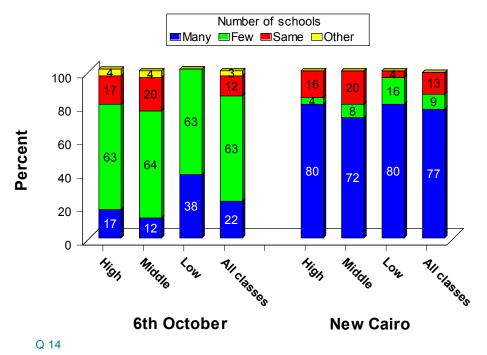


χ^2	Degree of freedom	P value
23.268	3	< 0.0001

Table 1.19: Number of Schools

	C	lasses in S	Sixth Octo	ber		0	Grand		
Number of schools are:	Н	M	L	Total	Н	M	L	Total	Total
Many compared to schools									
available in the previous city I	4	3	9	16	20	18	20	58	74
lived in	(17%)	(12%)	(38%)	(22%)	(80%)	(72%)	(80%)	(77%)	(50%)
A few compared to the schools									
available in the previous city I									
lived in	15	16	15	46	1	2	4	7	53
	(63%)	(64%)	(63%)	(63%)	(4%)	(8%)	(16%)	(9%)	(36%)
The same as the schools									
available in the previous city I	4	5	0	9	4	5	1	10	19
lived in	(17%)	(20%)	0	(12%)	(16%)	(20%)	(4%)	(13%)	(13%)
Other	1	1	0	2	0	0	0	0	2
	(4%)	(4%)	0	(3%)	0	0	0	0	(1%)
Total	24	25	24	73	25	25	25	75	148
	(100)	100)	100)	100)	100)	100)	100)	100)	100)
Missing	1		1	2					2

Figure 1.14: Number of Schools

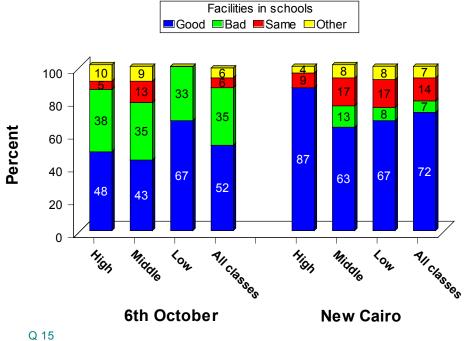


χ^2	Degree of freedom	P value
74.096	3	< 0.0001

Table 1.20: School Facilities

	Cla	asses in Si	xth Octol	ber	C	iro	Grand		
Facilities in the schools are:	Н	M	L	Total	Н	M	L	Total	Total
Good compared to schools									
of the same standard that									
were available in the	10	10	14	34	20	15	16	51	85
previous city I lived in	(48%)	(43%)	(67%)	(52%)	(87%)	(63%)	(67%)	(72%)	(63%)
Bad compared to schools of									
the same standard that were									
available in the previous city	8	8	7	23	0	3	2	5	28
I lived in	(38%)	(35%)	(33%)	(35%)	0	(13%)	(8%)	(7%)	(21%)
Of the same standard as the									
schools available in the	1	3	0	4	2	4	4	10	14
previous city I lived	(5%)	(13%)	0	(6%)	(9%)	(17%)	(17%)	(14%)	(10%)
Other	2	2	0	4	1	2	2	5	9
	(10%)	(9%)	0	(6%)	(4%)	(8%)	(8%)	(7%)	(7%)
	21	23	21	65	23	24	24	71	136
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Total	4	2	4	10	2	1	1	4	14

Figure 1.15: School Facilities

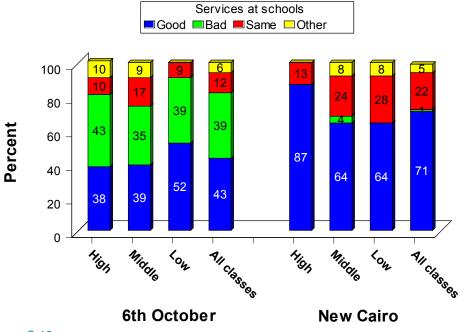


Question	χ²	Degree of freedom	P value
15	25.169	3	< 0.0001

Table 1.21: School Services

	Cl	asses in S	ixth Octo	ber	(Classes in	New Cair	0	Grand
rvices at schools are:	Н	M	L	Total	Н	M	L	Total	Total
Good compared to schools of the same standard that were available in the previous city I lived in									
	8	9	12	29	20	16	16	52	81
	(38%)	(39%)	(52%)	(43%)	(87%)	(64%)	(64%)	(71%)	(58%)
Bad compared to schools of the same standard that were available in the									
previous city I lived in	9	8	9	26	0	1	0	1	27
	(43%)	(35%)	(39%)	(39%)	0	(4%)	0	(1%)	(19%)
Of the same standard as the schools	2	4	2	8	3	6	7	16	24
available in the previous city I lived	(10%)	(17%)	(9%)	(12%)	(13%)	(24%)	(28%)	(22%)	(17%)
	2	2	0	4	0	2	2	4	8
Other	(10%)	(9%)	0	(6%)	0	(8%)	(8%)	(5%)	(6%)
	21	23	23	67	23	25	25	73	140
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing	4	2	2	8	2			2	10

Figure 1.16: School Services



χ^2	Degree of freedom	P value
46.009	3	< 0.0001

Table 1.22: Job Location

	Cl	asses in Si	xth Octob	er	Classes in New Cairo				Grand
My job is located:	Н	M	L	Total	Н	M	L	Total	Total
In the same city I live in	6 (24%)	18 (72%)	24 (96%)	48 (64%)	7 (28%)	13 (52%)	21 (84%)	41 (55%)	89 (59%)
In a close-by city									
	15 (60%)	4 (16%)	0 0	19 (25%)	8 (32%)	10 (40%)	3 (12%)	21 (28%)	40 (27%)
In a far-away city	4 (16%)	3 (12%)	1 (4%)	8 (11%)	10 (40%)	0 0	1 (4%)	11 (15%)	19 (13%)
Other	0	0	0	0	0	2 (8%)	0	2 (3%)	2 (1%)
Total	25 (100)	25 (100)	25 (100)	75 (100)	25 (100)	25 (100)	25 (100)	75 (100)	150 (100)

Figure 1.17: Job Location

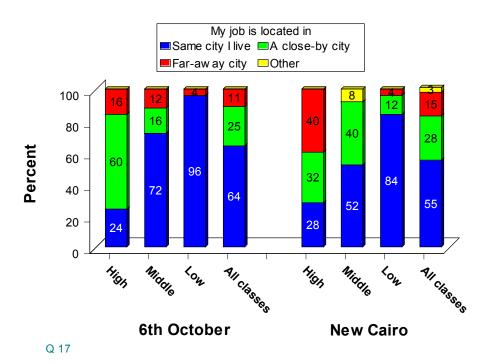
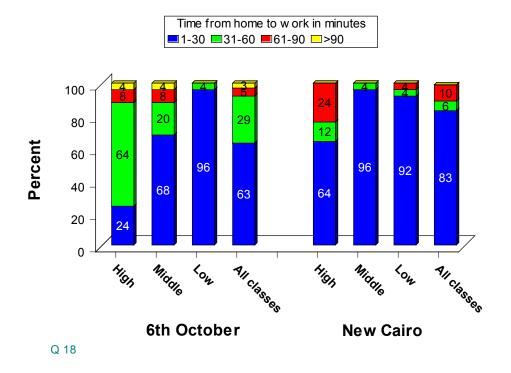


Table 1.23: Time to Reach Work

	Cl	asses in S	ixth Octo	ber	(Classes in	New Cair	0	Grand
Time from home to work	Н	M	L	Total	Н	M	L	Total	Total
a. 1-15 minutes	3	13	17	33	8	9	14	31	64
	(12%)	(52%)	(68%)	(44%)	(32%)	(39%)	(56%)	(42%)	(43%)
b. 16-30 minutes	3	4	7	14	8	13	9	30	44
	(12%)	(16%)	(28%)	(19%)	(32%)	(57%)	(36%)	(41%)	(30%)
c. 31-45 minutes	7	3	0	10	0	0	1	1	11
	(28%)	(12%)	0	(13%)	0	0	(4%)	(1%)	(7%)
d. 46-60 minutes	9	2	1	12	3	1	0	4	16
	(36%)	(8%)	(4%)	(16%)	(12%)	(4%)	0	(5%)	(11%)
e. 61-75 minutes	2	2	0	4	4	0	1	5	9
	(8%)	(8%)	0	(5%)	(16%)	0	(4%)	(7%)	(6%)
f. 76-90 minutes	0	0	0	0	2	0	0	2	2
	0	0	0	0	(8%)	0	0	(3%)	(1%)
g. > 90 minutes	1	1	0	2	0	0	0	0	2
	(4%)	(4%)	0	(3%)	0	0	0	0	(1%)
	25	25	25	75	25	23	25	73	148
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing						2		2	2

Figure 1.18: Time to Reach Work



χ^2	Degree of freedom	P value	Comment
22.521	3	< 0.0001	Too many zeros*

Table 1.24: Time Spent on Entertainment

	С	lasses in Si	xth Octob	er	Clas	ses in New	Cairo	Gra	nd
Out for entertainment	Н	M	L	Total	Н	M	L	Total	Total
As often as I used to in the	12	8	13	33	10	7	4	21	54
previous city I lived in	(48%)	(33%)	(54%)	(45%)	(42%)	(28%)	(16%)	(28%)	(37%)
More often than I used to in the	3	3	4	10	7	1	1	9	19
previous city I lived in									
	(12%)	(13%)	(17%)	(14%)	(29%)	(4%)	(4%)	(12%)	(13%)
Less often than I used to in the	9	13	6	28	7	16	18	41	69
previous city I lived in									
	(36%)	(54%)	(25%)	(38%)	(29%)	(64%)	(72%)	(55%)	(47%)
	1	0	1	2	0	1	2	3	5
Other	(4%)	0	(4%)	(3%)	0	(4%)	(8%)	(4%)	(3%)
	25	24	24	73	24	25	25	74	147
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing		1	1	2				1	3

Figure 1.19: Time Spent on Entertainment

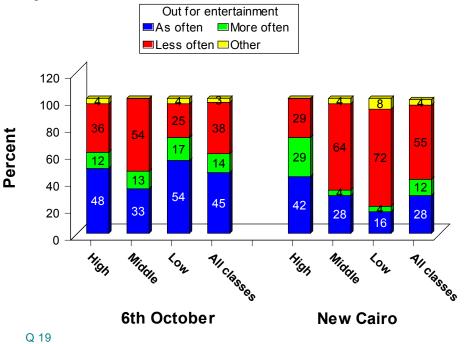


Table 1.25: Places of Spending Free Time

	(Classes in Sixth October				Classes i	n New Cairo		
Spend free time									Grand
in:	Н	M	L	Total	Н	M	L	Total	Total
Clubs	6	3	2	11	8	5	24	37	48
	(7%)	(4%)	(4%)	(5%)	(10%)	(8%)	(19%)	(14%)	(10%)
Internet cafes	2	3	1	6	1	1	8	10	16
	(2%)	(4%)	(2%)	(3%)	(1%)	(2%)	(6%)	(4%)	(3%)
Coffee shops	8	10	17	35	14	14	21	49	84
	(10%)	(15%)	(30%)	(17%)	(18%)	(23%)	(17%)	(18%)	(18%)
Friend's house	11	8	6	25	10	8	6	24	49
	(13%)	(12%)	(10%)	(12%)	(13%)	13%)	(5%)	(9%)	(10%)
Family member's	10	5	4	19	4	10	9	23	42
house	(12%)	(7%)	(7%)	(9%)	(5%)	(16%)	(7%)	(9%)	(9%)
My home	14	13	12	39	15	9(12	36	75
	(17%)	(19%)	(21%)	(19%)	(19%)	15%)	(9%)	(13%)	(16%)
Game cafes (to									
play Playstation,	1	1	2	4	1	2	7	10	14
WII, etc.)	(1%)	(1%)	(4%)	(2%)	(1%)	(3%)	(6%)	(4%)	(3%)
Nightclubs	1	1	4	6	1	7		8	14
	(1%)	1%)	(7%)	(3%)	(1%)	(11%)	0	(3%)	(3%)
Malls	15	13	3	31	12	4	2	18	49
	(18%)	(19%)	(5%)	(15%)	(15%)	(6%)	(2%)	(7%)	(10%)
Restaurants	15	8	1	24	12	2	38	52	76
	(18%)	(12%)	(2%)	(12%)	(15%)	(3%)	(30%)	(19%)	(16%)
	1	3	4	8					8
Other	(1%)	4%)	(7%)	(4%)					(2%)
	84	68	56	208	78	62	127	267	475
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.20: Places of Spending Free Time

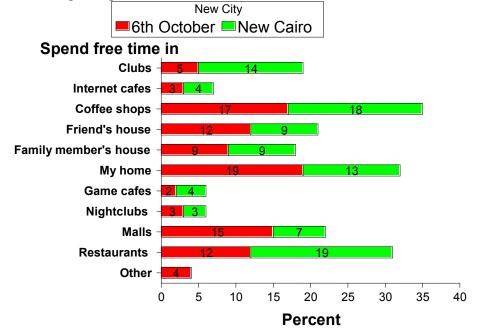


Table 1.26: Ease of Finding Places to Spend Free Time

	Cl	asses in S	ixth Octob	er	Cla	asses in N	lew Cairo)	Grand
Free time outside	Н	M	L	Total	Н	M	L	Total	Total
I find several nearby places that I can go to	12 (48%)	13 (52%)	15 (63%)	40 (54%)	20 (80%)	9 (38%)	11 (46%)	40 (55%)	80 (54%)
I go to another city to find places that are of interest to me	4 (16%)	4 (16%)	3 (13%)	11 (15%)	2 (8%)	2 (8%)	3 (13%)	7 (10%)	18 (12%)
Although there are places that are of interest to me, I go to other cities to meet my friends									
who live far away	9 (36%)	5 (20%)	6 (25%)	20 (27%)	2 (8%)	10 (42%)	10 (42%)	22 (30%)	42 (29%)
	0	3	0	3	1	3	0	4	7
Other	0	(12%)	0	(4%)	(4%)	(12%)	0	(5%)	(5%)
	25	25	24	74	25	24	24	73	147
Total	(100)	(100)	(100)	(1000	(1000	(100)	(100)	(100)	(100)
Missing			1	1		1	1	2	3

Figure 1.21: Ease of Finding Places to Spend Free Time

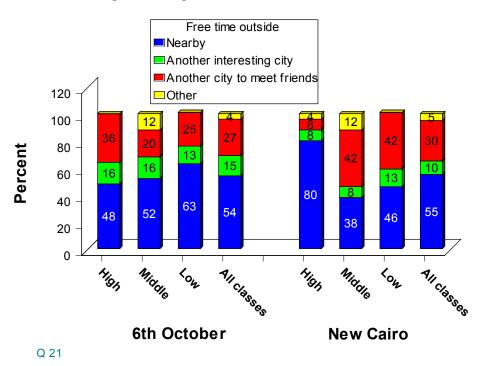
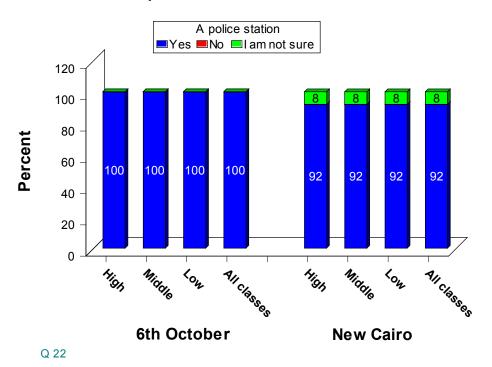


Table 1.27: Awareness of Availability of a Police Station

		Classes in Sixth October				Classes in	New Cairo)	Grand
Is there a police									
station?	Н	M	L	Total	Н	M	L	Total	Total
Yes	25 (100%)	25 (100%)	25 (100%)	75 (100%)	23 (92%)	23 (92%)	23 (92%)	69 (92%)	144 (96%)
No	0	0	0	0	0	0	0	0	0
I am not sure					2	2	2	6	6
	0	0	0		(8%)	(8%)	(8%)	(8%)	(4%)
	25	25	25	75	25	25	25	75	150
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.22: Awareness of Availability of a Police Station



χ^2	Degree of freedom	P value
8.333	1	0.0039

Table 1.28: Awareness of Availability of a Traffic Department

	(Classes in S	Sixth Octo	ber		Classes in	New Cair	o	Grand
Is there a traffic									
department?	Н	M	L	Total	Н	M	L	Total	Total
Yes	24	22	22	70	10	22	21	(2	122
	24 (96%)	23 (92%)	23 (96%)	70 (95%)	18 (72%)	(92%)	21 (84%)	62 (83%)	132 (89%)
No	(9070)	(92/0)	(90/0)	(9370)	(7270)	(92/0)	(04/0)	(6370)	(8970)
INO									
					2			2	2
	0	0	0	0	(8%)	0	0	(3%)	(1%)
I am not sure									
	1	2	1	4	5	2	4	11	15
	(4%)	(8%)	(4%)	(5%)	(20%)	(8%)	(16%)	(15%)	(10%)
	25	25	24	74	25	25	25	75	149
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing			1	1					1

Figure 1.23: Awareness of Availability of a Traffic Department

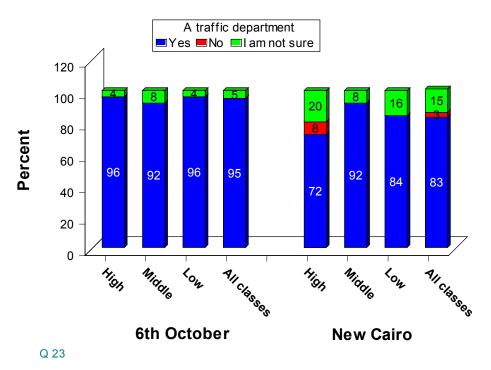
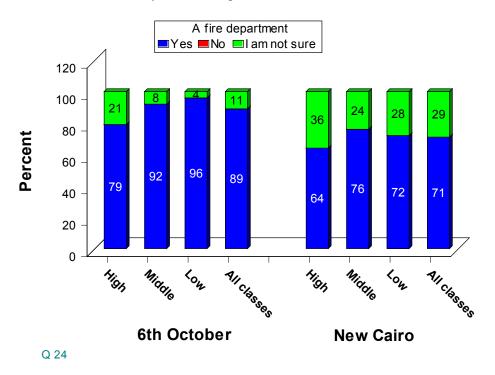


Table 1.29: Awareness of Availability of a Fire Department

	Cl	asses in S	ixth Octo	ber		Classes in	New Cairo	1	Grand
Is there a fire department?	Н	M	L	Total	Н	M	L	Total	Total
Yes	19 (79%)	23 (92%)	24 (96%)	66 (89%)	16 (64%)	19 (76%)	18 (72%)	53 (71%)	119 (80%)
No	0	0	0	0	0	0	0	0	0
I am not sure									
	5 (21%)	2 (8%)	1 (4%)	8 (11%)	9 (36%)	6 (24%)	7 (28%)	22 (29%)	30 (20%)
	24	25	25	74	25	25	25	75	149
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing	1			1					1

Figure 1.24: Awareness of Availability of a Fire Department

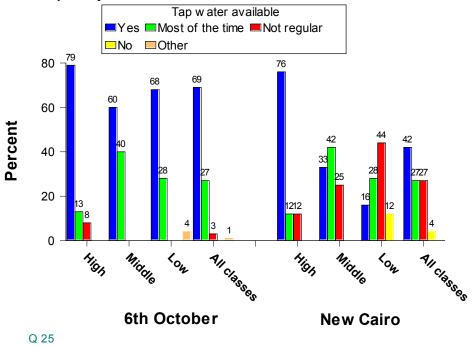


χ^2	Degree of freedom	P value
10.125	1	0.0015

Table 1.30: Availability of Tap Water

	Cl	lasses in S	ixth Octob	er		Classes in	New Cairo		Grand
Is tap water available?	Н	M	L	Total	Н	M	L	Total	Total
Yes	19	15	17	51	19	8	4	31	82
	(79%)	(60%)	(68%)	(69%)	(76%)	(33%)	(16%)	(42%)	(55%)
Available most	3	10	7	20	3	10	7	20	40
of the time									
	(13%)	(40%)	(28%)	(27%)	(12%)	(42%)	(28%)	(27%)	(27%)
Not on a	2	0	0	2	3	6	11	20	22
regular basis									
	(8%)	0	0	(3%)	(12%)	(25%)	(44%)	(27%)	(15%)
No	0	0	0	0	0	0	3	3	3
	0	0	0	0	0	0	(12%)	(4%)	(2%)
	0	0	1	1	0	0	0	0	1
Other	0	0	(4%)	(1%)	0	0	0	0	(1%)
	24	25	25	74	25	24	25	74	148
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing	1			1				1	2

Figure 1.25: Availability of Tap Water

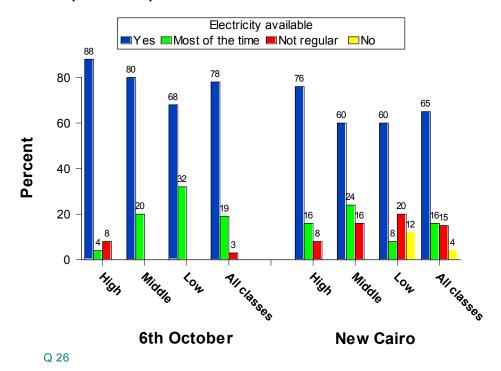


χ^2	Degree of freedom	P value
30.768	4	< 0.0001

Table 1.31: Availability of Electricity

	Classes in Sixth October			Classes in New Cairo				Grand	
Is electricity									
available?	Н	M	L	Total	Н	M	L	Total	Total
Yes	21	20	17	58	19	15	15	49	107
	(88%)	(80%)	(68%)	(78%)	(76%)	(60%)	(60%)	(65%)	(72%)
Available most of	1	5	8	14	4	6	2	12	26
the time									
	(4%)	(20%)	(32%)	(19%)	(16%)	(24%)	(8%)	(16%)	(17%)
Not on a regular	2			2	2	4	5	11	13
basis									
	(8%)	0	0	(3%)	(8%)	(16%)	(20%)	(15%)	(9%)
No							3	3	3
	0	0	0	0	0	0	(12%)	(4%)	(2%)
	24	25	25	74	25	25	25	75	149
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing	1			1				_	1

Figure 1.26: Availability of Electricity



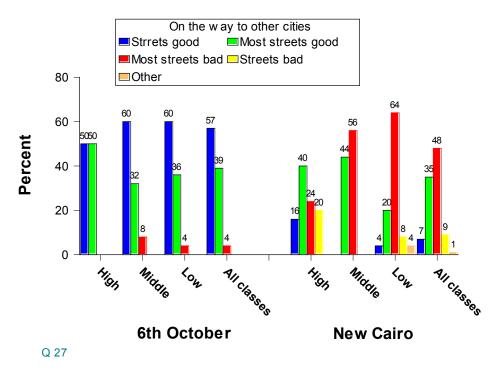
 χ²
 Degree of freedom
 P value

 13.439
 3
 0.0038

Table 1.32: Driving to other Cities

	Classes in Sixth October			Classes in New Cairo				Grand	
On the way to other cities	Н	M	L	Total	Н	M	L	Total	Total
the streets are of good									
quality	12	15	15	42	4		1	5	47
	(50%)	(60%)	(60%)	(57%)	(16%)	0	(4%)	(7%)	(32%)
most of the streets are of									
good quality	12	8	9	29	10	11	5	26	55
	(50%)	(32%)	(36%)	(39%)	(40%)	(44%)	(20%)	(35%)	(37%)
most of the streets are of									
bad quality		2	1	3	6	14	16	36	39
	0	(8%)	(4%)	(4%)	(24%)	(56%)	(64%)	(48%)	(26%)
the streets are of bad									
quality					5		2	7	7
	0	0	0	0	(20%)	0	(8%)	(9%)	(5%)
							1	1	1
Other	0	0	0	0	0	0	(4%)	(1%)	(1%)
	24	25	25	74	25	25	25	75	149
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing	1			1					1

Figure 1.27: Driving to other Cities

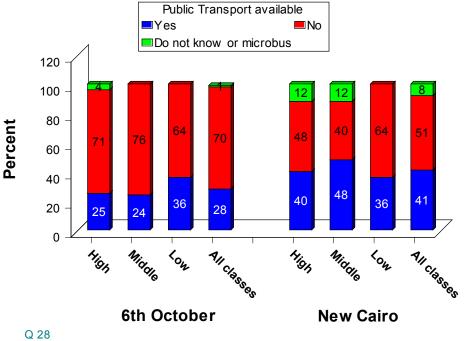


χ^2	Degree of freedom	P value
86.509	4	< 0.0001

Table 1.33: Availability of Public Transportation

	Classes in Sixth October			Classes in New Cairo				Grand	
Public transport station	Н	M	L	Total	Н	M	L	Total	Total
Yes	6 (25%)	6 (24%)	9 (36%)	21 (28%)	10 (40%)	12 (48%)	9 (36%)	31 (41%)	52 (35%)
No	17 (71%)	19 (76%)	16 (64%)	52 (70%)	12 (48%)	10 (40%)	16 (64%)	38 (51%)	90 (60%)
Other (don't know- microbus)	1 (4%)	0	0	1 (1%)	3 (12%)	3 (12%)	0	6 (8%)	7 (5%)
Total Missing	24 (100) 1	25 (100)	25 (100)	74 (100) 1	25 (100)	25 (100)	25 (100)	75 (100)	149 (100)

Table 1.28: Availability of Public Transportation

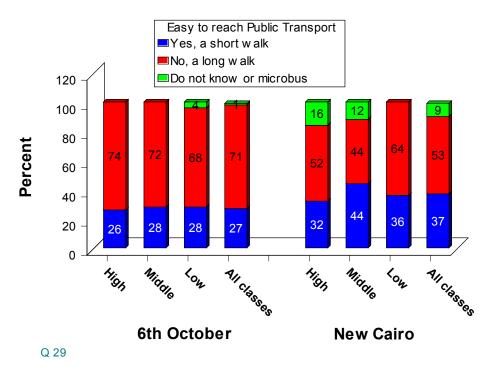


χ^2	Degree of freedom	P value
10.877	2	0.0043

Table 1.34: Access to Public Transportation

	Cl	asses in S	ixth Octob	er		Classes in New Cairo				
Easy to reach public										
transport	Н	M	L	Total	Н	M	L	Total	Total	
Yes, a short walk	6	7	7	20	8	11	9	28	48	
	(26%)	(28%)	(28%)	(27%)	(32%)	(44%)	(36%)	(37%)	(32%)	
No, a long walk										
	17	18	17	52	13	11	16	40	92	
	(74%)	(72%)	(68%)	(71%)	(52%)	(44%)	(64%)	(53%)	(62%)	
Other (don't know-			1	1	4	3		7	8	
microbus)	0	0	(4%)	(1%)	(16%)	(12%)	0	(9%)	(5%)	
	23	25	25	73	25	25	25	75	148	
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	
Missing	2			2					2	

Figure 1.29: Access to Public Transportation



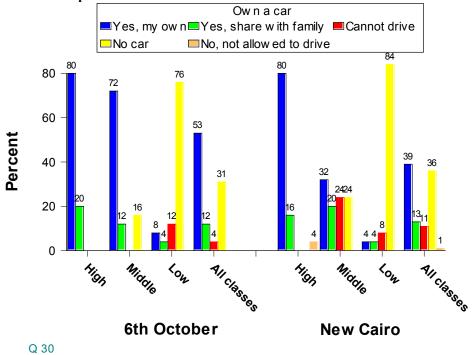
 χ²
 Degree of freedom
 P value

 11.287
 2
 0.0035

Table 1.35: Car Ownership

	Cla	asses in Si	xth Octob	er	Class	ses in New	/ Cairo	Gı	rand
Own a car	Н	M	L	Total	Н	M	L	Total	Total
Yes, I have my own car									
	20	18	2	40	20	8	1	29	69
	(80%)	(72%)	(8%)	(53%)	(80%)	(32%)	(4%)	(39%)	(46%)
Yes, I have a car that I share with my family									
	5	3	1	9	4	5	1	10	19
	(20%)	(12%)	(4%)	(12%)	(16%)	(20%)	(4%)	(13%)	(13%)
No, I do not know how to drive									
	0		3	3		6	2	8	11
N. 7.1	0		(12%)	(4%)	0	(24%)	(8%)	(11%)	(7%)
No, I do not have a car			4.0			_			
	_	4	19	23		6	21	27	50
	0	(16%)	(76%)	(31%)	0	(24%)	(84%)	(36%)	(33%)
No, I am not allowed to drive the					1			1	1
family car	0	0	0	0	(4%)	0	0	(1%)	(1%)
	25	25	25	75	25	25	25	75	150
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.30: Car Ownership

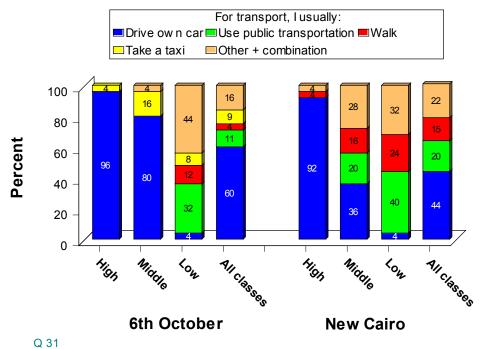


χ ²	Degree of freedom	P value
63.236	4	< 0.0001

Table 1.36: Forms of Transportation

	Cl	lasses in S	ixth Octob	er	(Classes in	New Cairo	0	Grand
For transportation, I	11	М	т	Total	11	М	т	Total	Total
usually:	Н	M	L	Total	Н	M	L	Total	Total
Drive my own car	24	20	1	45	23	9	1	33	78
	(96%)	(80%)	(4%)	(60%)	(92%)	(36%)	(4%)	(44%)	(52%)
Use public transportation			8	8		5	10	15	23
	0	0	(32%)	(11%)	0	(20%)	(40%)	(20%)	(15%)
Walk			3	3	1	4	6	11	14
	0	0	(12%)	(4%)	(4%)	(16%)	(24%)	(15%)	(9%)
	1	4	2	7					7
Take a taxi	(4%)	(16%)	(8%)	(9%)	0	0	0	0	(5%)
						2		2	2
Other	0	0	0	0	0	(8%)	0	(3%)	(1%)
			4	4			8	8	12
b. & c.	0	0	(16%)	(5%)	0	(0	(32%)	(11%)	(8%)
					1			1	1
b. & d.	0	0	0	0	(4%)	0	0	(1%)	(1%)
						2		2	2
c. & d.	0	0	0	0	0	(8%)	0	(3%)	(1%)
		1	7	8		3		3	11
b. & c. & d.	0	(4%)	(28%)	(11%)	0	(12%)	0	(4%)	(7%)
	25	25	25	75	25	25	25	75	150
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.31: Forms of Transportation



 χ²
 Degree of freedom
 P value

 21.390
 4
 0.0003

146

Table 1.37: Availability of Public Busses

	Cla	asses in Si	xth Octol	oer		Classes in	New Cai	iro	Grand
Public buses are usually:	Н	M	L	Total	Н	M	L	Total	Total
Available frequently	7	6	4	17	5	5	10	20	37
throughout the day	(28%)	(25%)	(16%)	(23%)	(20%)	(20%)	(40%)	(27%)	(25%)
Not available frequently	11	16	19	46	10	10	10	30	76
throughout the day									
	(44%)	(67%)	(76%)	(62%)	(40%)	(40%)	(40%)	(40%)	(51%)
Only available in the	1	1	2	4	5	6	5	16	20
morning									
	(4%)	(4%)	(8%)	(5%)	(20%)	(24%)	(20%)	(21%)	(13%)
Only available at night				0		2		2	2
	0	0	0	0	0	(8%)	0	(3%)	(1%)
	6	1		7	5	2		7	14
Other	(24%)	(4%)	0	(9%)	(20%)	(8%)	0	(9%)	(9%)
	25	24	25	74	25	25	25	75	149
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing		1		1					1

Figure 1.32: Availability of Public Busses

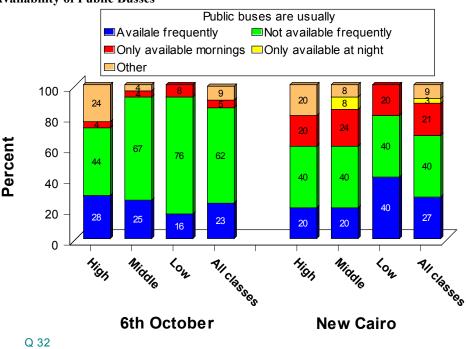
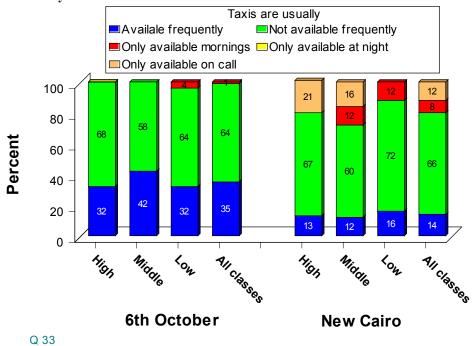


Table 1.38: Availability of Taxis

	Cla	asses in S	Sixth Octo	ber	C	lasses in	New Cai	ro	Grand
Taxis are usually:	Н	M	L	Total	Н	M	L	Total	Total
Available frequently throughout the day	8 (32%)	10 (42%)	8 (32%)	26 (35%)	3 (13%)	3 (12%)	4 (16%)	10 (14%)	36 (24%)
Not available frequently throughout the day	17 (68%)	14 (58%)	16 (64%)	47 (64%)	16 (67%)	14 (56%)	18 (72%)	48 (65%)	95 (64%)
Only available in the morning									
	0	0	1 (4%)	1 (1%)	0	3 (12%)	3 (12%)	6 (8%)	7 (5%)
Only available at night									
	0	0	0	0	0	0	0	0	0
Only available if I call the					5	3		8	8
driver to book a ride	0	0	0	0	(21%)	(12%)	0	(11%)	(5%)
b & e	0	0	0	0	0	2 (8%)	0	2 (3%)	2 (1%)
	25	24	25	74	24	25	25	74	148
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing		1		1	1			1	2

Figure 1.33: Availability of Taxis

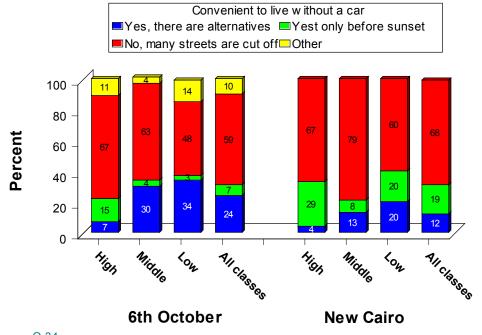


χ^2	Degree of freedom	P value
26.475	4	< 0.0001

Table 1.39: Ease of Transportation without a Car

	Cla	asses in S	Sixth Octol	ber	C	Classes in	New Cai	ro	Grand
	Н	M	L	Total	Н	M	L	Total	Total
Yes, there are many									
alternative ways to get	2	8	10	20	1	3	5	9	29
around	(7%)	(30%)	(34%)	(24%)	(4%)	(13%)	(20%)	(12%)	(19%)
Yes, but only before sunset									
	4	1	1	6	7	2	5	14	20
	(15%)	(4%)	(3%)	(7%)	(29%)	(8%)	(20%)	(19%)	(13%)
No, many of the streets are									
cut off	18	17	14	49	16	19	15	50	99
	(67%)	(63%)	(48%)	(59%)	(67%)	(79%)	(60%)	(68%)	(63%)
Other	3	1	4	8					8
	(11%)	(4%)	(14%)	(10%)				0	(5%)
	27	27	29	83	24	24	25	73	156
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.34: Ease of Transportation without a Car



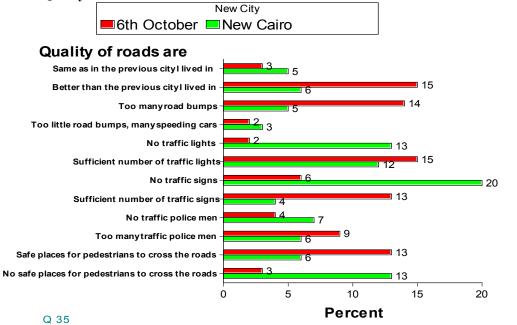
Q 34

χ^2	Degree of freedom	P value
20.176	3	0.0002

Table 1.40: Quality of the Roads

	C	Classes in S	Sixth Octo	ber		Classes in 1	New Cair	0	Grand
	Н	M	L	Total	Н	M	L	Total	Total
The same as the streets in the	4	5	2	11	3	2	16	21	32
previous city I lived in	(4%)	(5%)	(2%)	(3%)	(3%)	(2%)	(7%)	(5%)	(4%)
Better than the streets in the	17	13	18	4	11	9	6	26	74
previous city I lived in	(16%)	(14%)	(15%)	(15%)	(12%)	(9%)	(3%)	(6%)	(10%)
There are too many road	14	16	14	44	8	10	3	21	65
bumps	(13%)	(17%)	(11%)	(14%)	(9%)	(10%)	(1%)	(5%)	(9%)
There too little road bumps so	2	1	3	6	5	4	4	13	19
there are many speeding cars	(2%)	(1%)	(2%)	(2%)	(5%)	(4%)	(2%)	(3%)	(3%)
There are no traffic lights	6	1	1	8	17	19	21	57	65
	(6%)	(1%)	(1%)	(2%)	(18%)	(19%)	(9%)	(13%)	(9%)
There is a sufficient number of	16	16	17	49	1	1	51	53	102
traffic lights	(15%)	(17%)	(14%)	(15%)	(1%)	(1%)	(21%)	(12%)	(14%)
There are no traffic signs	4	2	13	19	15	18	52	85	104
	(4%)	(2%)	(11%)	(6%)	(16%)	(18%)	(22%)	(20%)	(14%)
There is a sufficient number of	12	15	16	43	7	3	6	16	59
traffic signs	(12%)	(16%)	(13%)	(13%)	(8%)	(3%)	(3%)	(4%)	(8%)
There are no traffic police men	4	4	5	13	8	11	13	3	45
	(4%)	(4%)	(4%)	(4%)	(9%)	(11%)	(5%)	(7%)	(6%)
There are too many traffic	7	10	13	30	1	1	23	25	55
police men	(7%)	(11%)	(11%)	(9%)	(1%)	(1%)	(10%)	(6%)	(7%)
There are safe places for	17	11	13	41	6	11	11	28	69
pedestrians to cross the roads	(16%)	(12%)	(11%)	(13%)	(6%)	(11%)	(5%)	(6%)	(9%)
There are no safe places for	1	1	7	9	11	12	32	55	64
pedestrians to cross the roads	(1%)	(1%)	(6%)	(3%)	(12%)	(12%)	(13%)	(13%)	(8%)
Total	104	95	113	321	93	101	238	432	744
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.35: Quality of Roads



 χ²
 Degree of freedom
 P value

 39.771
 11
 <0.0001</td>

Table 1.41: Safety of the New City

	Clas	sses in Si	xth Octo	ber	C	lasses in	New Cai	ro	Grand
Safety of the streets	Н	M	L	Total	Н	M	L	Total	Total
They are safer	4	6	6	16	2	4	3	9	25
TI	(16%)	(24%)	(24%)	(21%)	(8%)	(17%)	(12%)	(12%)	(17%)
They are more dangerous	13 (52%)	17 (68%)	14 (56%)	44 (59%)	18 (72%)	16 (70%)	18 (72%)	52 (71%)	96 (65%)
They are of the same safety standard	8 (32%)	2 (8%)	5 (20%)	15 (20%)	5 (20%)	3 (13%)	4 (16%)	12 (16%)	27 (18%)
Total	25 (100)	25 (100)	25 (100)	75 (100)	25 (100)	23 (100)	25 (100)	73 (100)	148 (100)
Missing						2		2	2

Figure 1.36: Safety of the New City

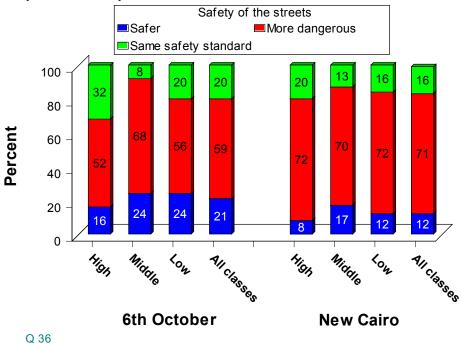
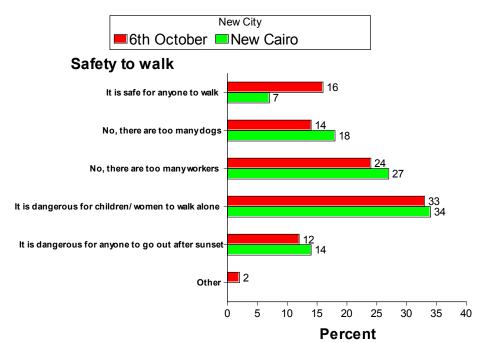


Table 1.42: Safety for Pedestrians

	C	lasses in S	ixth Octol	oer		Classes i	n New Cair	О	Grand
Safety to walk	Н	M	L	Total	Н	M	L	Total	Total
It is safe for anyone to walk	6	9	4	19	2	2	5	9	28
	(14%)	(21%)	(12%)	(16%)	(4%)	(5%)	(12%)	(7%)	(11%)
No, there are too many dogs	8	3	5	16	10	10	3	23	39
	(19%)	(7%)	(15%)	(14%)	(22%)	(24%)	(7%)	(18%)	(16%)
No, there are too many	12	8	8	28	13	11	10	34	62
workers	(28%)	(19%)	(24%)	(24%)	(29%)	(26%)	(24%)	(27%)	(25%)
It is dangerous for children									
and women to walk on the	13	14	12	39	14	12	18	44	83
streets alone	(30%)	(33%)	(36%)	(33%)	(31%)	(29%)	(44%)	(34%)	(34%)
It is dangerous for anyone to	3	7	4	14	6	7	5	18	32
go out after sunset	(7%)	(17%)	(12%)	(12%)	(13%)	(17%)	(12%)	(14%)	(13%)
Other	1	1		2					2
	(2%)	(2%)		(2%)					(1%)
Total	43	42	33	118	45	42	41	128	246
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.37: Safety for Pedestrians



Q 37

Table 1.43: Activities Conducted

	Classe	s in Sixth	October		C	lasses in	New Cai	ro	Grand
Able to do same activities	Н	M	L	Total	Н	M	L	Total	Total
Gathering/going out with	21	22	22	65	17	16	19	52	117
your friends	(36%)	(37%)	(58%)	(41%)	(37%)	(44%)	(68%)	(47%)	(44%)
Political protests	1	1		2(1	1	3
	(2%)	(2%)		1%)			(4%)	(1%)	(1%)
Walking/jogging/running	7	7	2	16	3	2		5	2
in the street at night	(12%)	(12%)	(5%)	(10%)	(7%)	(6%)		(5%)	1(8%)
Cruising with the car	14	14	5	33	16	7		23	56
	(24%)	(23%)	(13%)	(21%)	(35%)	(19%)		(21%)	(21%)
Staying out late	14	15	9	38	9	5	6	20	58
	(24%)	(25%)	(24%)	(24%)	(20%)	(14%)	(21%)	(18%)	(22%)
Other	2	1		3	1	6	2	9	12
	(3%)	(2%)		(2%)	(2%)	(17%)	(7%)	(8%)	(4%)
Total	59	60	38	157	46	36	28	110	267
	(100)	(100	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.38: Activities Conducted

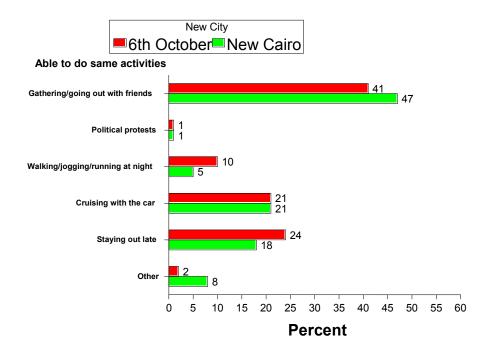


Table 1.44: Activity Rate

	(Classes in S	Sixth Oct	ober		Classes in New Cairo				
My activities rate										
has:	Н	M	L	Total	Н	M	L	Total	Total	
Increased since I										
moved to this new	5	5	7	17	11	5	4	20	37	
city	(20%)	(20%)	(28%)	(23%)	(44%)	(20%)	(16%)	(27%)	(25%)	
Decreased since I										
moved to this new	8	10	15	33	9	14	18	41	74	
city	(32%)	(40%)	(60%)	(44%)	(36%)	(56%)	(72%)	(55%)	(49%)	
Remained the same	12	10	3	25	5	6	3	14	39	
	(48%)	(40%)	(12%)	(33%)	(20%)	(24%)	(12%)	(19%)	(26%)	
Total	25	25	25	75	25	25	25	75	150	
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	

Figure 1.39: Activity Rate

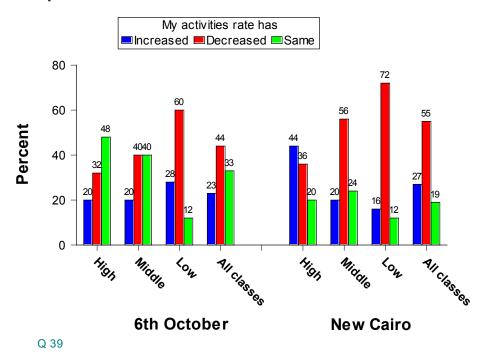
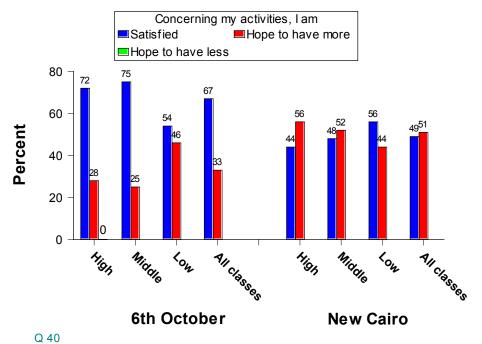


Table 1.45: Satisfaction with Social Activity Rate

		Classes in Six	th October			Classes in N	ew Cairo		Grand
I am	Н	M	L	Total	Н	M	L	Total	Total
Satisfied with my activity rate in this new city	18 (72%)	18 (75%)	13 (54%)	49 (67%)	11 (44%)	12 (48%)	14 (56%)	37 (49%)	86 (58%)
Hope to have more activities in this new city	7 (28%)	6 (25%)	11 (46%)	24 (33%)	14 (56%)	13 (52%)	11 (44%)	38 (51%)	62 (42%)
Hope to have less activities in this new city									
Total	25 (100)	24 (100)	24 (100)	73 (100)	25 (100)	25 (100)	25 (100)	75 (100)	148 (100)
Missing		1	1	2		·			2

Figure 1.40: Satisfaction with Social Activity Rate



χ²	Degree of freedom	P value
6.650	1	0.0099

Table 1.46: Feelings towards Moving to New City

		Classes in	Sixth Octo	ber		Grand			
Overall, I am	Н	M	L	Total	Н	M	L	Total	Total
Happy with moving	25	23	24	72	25	25	22	72	144
to this new city	(100%)	(96%)	(96%)	(97%)	(100%)	(100%)	(88%)	(96%)	(96%)
Regret moving to this		1	1	2			3	3	5
new city	0	(4%)	(4%)	(3%)	0	0	(12%)	(4%)	(4%)
Total	25	24	25	74	25	25	25	75	149
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing		1		1					1

Figure 1.41: Feelings towards Moving to New City

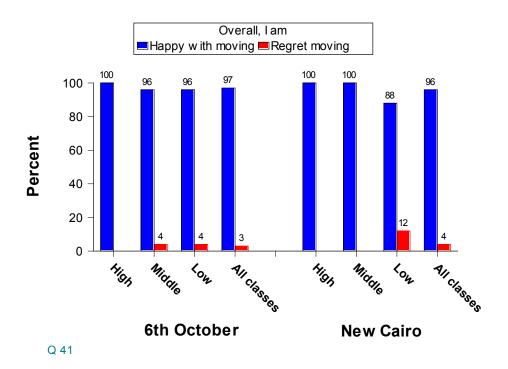


Table 1.47: Advantages of Migrating

Advantages of migrating to the new city, arranged in order of highest in both new cities	Sixth October	New Cairo	Both New cities
Clean air / less pollution / peaceful weather	34(22%)	35(28%)	69(25%)
Calm	31(20%)	22(18%)	53(19%)
Better living for children / lots of space / not crowded / less traffic	19(13%)	22(18%)	41(15%)
Bigger house / new house	6(4%)	14(11%)	20(7%)
Easier life / good housing / good work	16(11%)	4(3%)	20(7%)
There more jobs to get	7(5%)	7(6%)	14(5%)
Close to work	5(3%)_	8(6%)	13(5%)
Better economy / better salaries	7(5%)	3(2%)	10(4%)
Own a villa/an apartment	7(5%)	1(1%)	8(3%)
Close to schools/universities for children	5(3%)	3(2%)	8(3%)
Organized	5(3%)	2(2%)	7(3%)
Cheaper rent	3(2%)	3(2%)	6(2%)
Good market for buildings / a lot of construction	3(2%)	0	3(1%)
Living with friends	2(1%)	0	2(1%)
Close to Alex	1(1%)	0	1(1%)
Hospitals of better quality	1(1%)	0	1(1%)
Total	152(100)	124(100)	276(100)

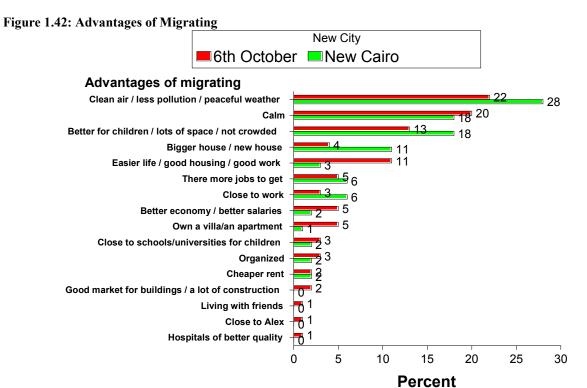


Table 1.48: Disadvantages of Migrating

Tuble 11 to Disactaneages of Highering	Sixth October	New Cairo	Both New
Disadvantages arranged in order of the highest in both cities	Sixtii Octobei	New Cano	cities
Far from relatives / from Cairo / from work	36(32%)	25(22%)	61(28%)
Services less / non-professional / less organized / little			
maintenance	9(8%)	17(15%)	26(12%)
No public transport / need a car to get around	10(9%)	10(9%)	20(9%)
Services-shops far away / no kiosks	10(9%)	9(8%)	19(9%)
Loneliness	12(11%)	6(5%)	18(8%)
High prices	10(9%)	7(6%)	17(8%)
No security / dangerous to go out at night / road bumps /			
dark streets	3(3%)	13(11%)	16(7%)
No safe transport	5(4%)	4(4%)	9(4%)
City still under construction, more sand and dust	4(4%)	3(3%)	7(3%)
Many dogs	1(1%)	4(4%)	5(2%)
Crowded traffic to Cairo	3(3%)	0	3(1%)
Government offices far or bad	3(3%)	0	3(1%)
Limited job opportunities	2(2%)	0	2(1%)
No entertainment places enough	2(2%)	0	2(1%)
Less or no public schools	1(1%)	1(1%)	2(1%)
Near graveyards	0	2(2%)	2(1%)
More busy at my work, too many students	1(1%)	0	1(1%)
Homeless people are too many in the streets	1(1%)	0	1(1%)
City is dead	1(1%)	0	1(1%)
No parks	0	1(1%)	1(1%)
No night life	0	1(1%)	1(1%)
Streets and squares with no names	0	1(1%)	1(1%)
Total	114(100)	104(100)	218(100)

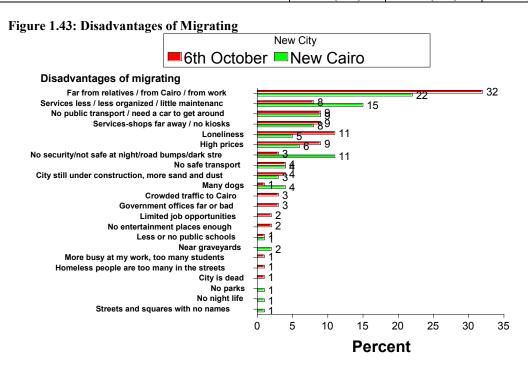


Table 1.49: Personal Information- Age

	(Classes in S	ixth Octobe	er		Classes in	New Cairo		Grand
Age group in Years	Н	M	L	Total	Н	M	L	Total	Total
20-29	5	9	6	20	10	6	4	20	40
	(20%)	(36%)	(24%)	(27%)	(40%)	(25%)	(16%)	(27%)	(27%)
30-39	5	10	14	29	8	10	15	33	62
	(20%)	(40%)	(56%)	(39%)	(32%)	(42%)	(60%)	(45%)	(42%)
40-49	13	6	5	24	3	6	6	15	39
	(52%)	(24%)	(20%)	(32%)	(12%)	(25%)	(24%)	(20%)	(26%)
50-59	2			2	3	2		5	7
	(8%)	0	0	(3%)	(12%)	(8%)	0	(7%)	(5%)
60-69					1			1	1
	0	0	0	0	(4%)	0	0	(1%)	(1%)
70+	0	0	0	0	0	0	0	0	0
Total	25	25	25	75	25	24	25	74	149
	(100	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing						1		1	1

Figure 1.44: Personal Information- Age

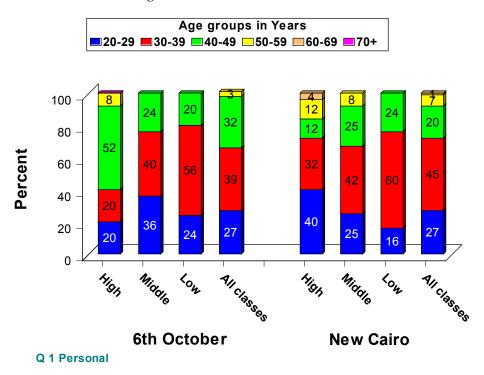


Table 1.50: Personal Information- Gender

Q2	(Classes in S	ixth Octobe	er		Grand			
Gender	Н	M	L	Total	Н	M	L	Total	Total
Male	10	18	24	52	19	16	22	57	109
	(40%)	(72%)	(96%)	(69%)	(76%)	(64%)	(88%)	(76%)	(73%)
Female	15	7	1	23	6	9	3	18	41
	(60%)	(28%)	(4%)	(31%)	(24%)	(36%)	(12%)	(24%)	(27%)
Total	25	25	25	75	25	25	25	75	150
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.45: Personal Information- Gender

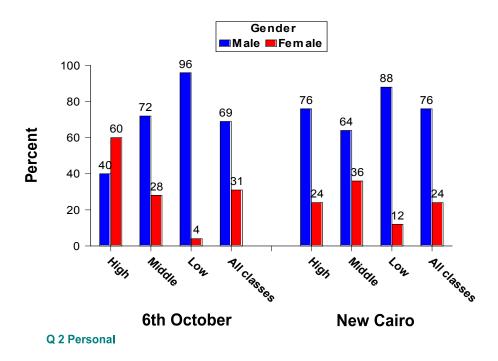


Table 1.51: Personal Information- Education

	(Classes in S	ixth Octobe	er		Classes in	New Cairo		Grand
Education	Н	M	L	Total	Н	M	L	Total	Total
Elementary			1	1			3	3	4
	0	0	(4%)	(1%)	0	0	(12%)	(4%)	(3%)
Middle School			3	3			4	4	7
	0	0	(12%)	(4%)	0	0	(16%)	(5%)	(5%)
High School		1	8	9			7	7	16
	0	(4%)	(32%)	(12%)	0	0	(28%)	(9%)	(11%)
Diploma			12	12		4	9	13	25
	0	0	(48%)	(16%)	0	(16%)	(36%)	(17%)	(17%)
Bachelors	13	18	1	32	19	21	1	41	73
	(52%)	(72%)	(4%)	(43%)	(76%)	(84%)	(4%)	(55%)	(49%)
Masters	7	6		13	4			4	17
	(28%)	(24%)	0	(17%)	(16%)	0	0	(5%)	(11%)
Ph.D.	5			5	2			2	7
	(20%)	0	0	(7%)	(8%)	0	0	(3%)	(5%)
Illiterate							1	1	1
	0	0	0	0	0	0	(4%)	(1%)	(1%)
Total	25	25	25	75	25	25	25	75	150
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Figure 1.46: Personal Information- Education

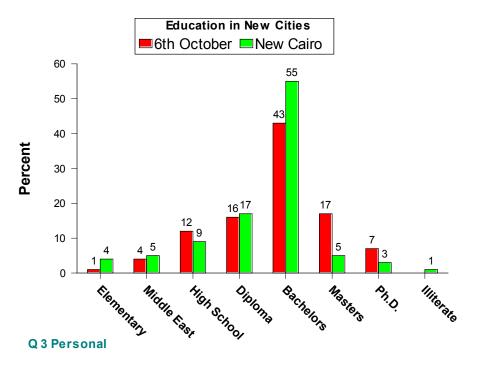
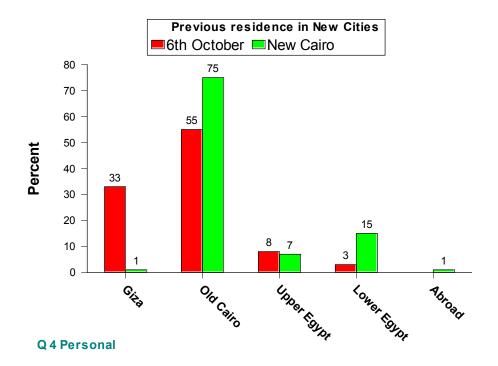


Table 1.52: Personal Information- Previous residence

	C	lasses in S	ixth Octob	er		Classes in	New Caird)	Grand
Previous residence	Н	M	L	Total	Н	M	L	Total	Total
	7	7	6	20	1			1	21
Giza	(37%)	(37%)	(27%)	(33%)	(5%)	0	0	(1%)	(16%)
	12	10	11	33	19	17	15	51	84
Cairo	(63%)	(53%)	(50%)	(55%)	(90%)	(71%)	(65%)	(75%)	(66%)
		2	3	5		2	3	5	10
Upper Egypt	0	(10%)	(14%)	(8%)	0	(8%)	(13%)	(7%)	(8%)
			2	2	1	4	5	10	12
Lower Egypt	0	0	(9%)	(3%)	(5%)	(17%)	(22%)	(15%)	(9%)
						1		1	1
Abroad	0	0	0	0	0	(4%)	0	(1%)	(1%)
	19	19	22	60	21	24	23	68	128
Total	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing	6	6	3	15	4	1	2	7	22

Figure 1.47: Personal Information- Previous residence



 χ²
 Degree of freedom
 P value

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Table 1.53: Personal Information- Occupation

Q5		Classes in Sixth October Classes in New Cairo							
Occupation	Н	M	L	Total	Н	M	L	Total	Total
Senior position	17	6		23	22			22	45
	(94%)	(37%)	0	(40%)	(88%)	0	0	(31%)	(35%)
Junior position	1	10		11	3	18		21	32
	(6%)	(63%)	0	(19%)	(12%)	(90%)	0	(30%)	(25%)
Labor position			24	24		2	25	27	51
	0	0	(100%)	(41%)	0	(10%)	(100%)	(39%)	(40%)
Total	18	16	24	58	25	20	25	70	128
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing	7	9	1	17		5		5	22

Figure 1.48: Personal Information- Occupation

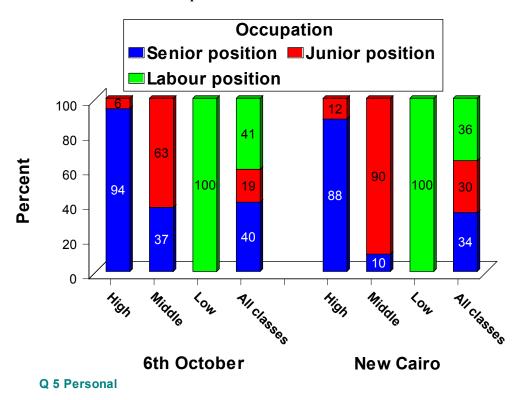
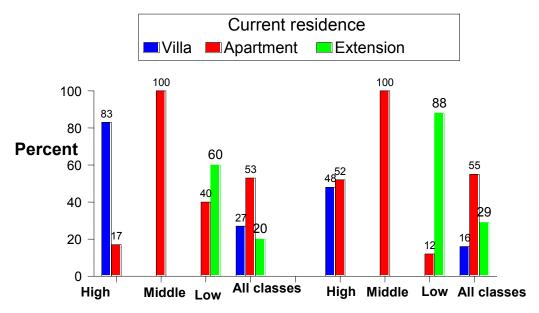


Table 1.54: Personal Information- Residence

	Classes in Sixth October				Classes in New Cairo				Grand
Residence	Н	M	L	Total	Н	M	L	Total	Total
Villa (Rent/Own)	20			20	12			12	32
	(83%)	0	0	(27%)	(48%)	0	0	(16%)	(21%)
Apartment (Rent/Own)	4	25	10	39	13	25	3	41	80
(redit o wii)	(17%)	(100%)	(40%)	(53%)	(52%)	(100%)	(12%)	(55%)	(54%)
Extension (Rent/Own)			15	15			22	22	37
(Rena o wii)	0	0	(60%)	(20%)	0	0	(88%)	(29%)	(25%)
Total	24	25	25	74	25	25	25	75	149
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Missing	1			1					1

Figure 1.49: Personal Information- Residence



6th October

New Cairo

Table 1.55: Personal Information- Nationality

Classes in Sixth October Classes in New Cairo Grand											
	Classes in Sixth October				C	Grand					
Nationality	Н	M	L	Total	Н	M	L	Total	Total		
Egyptian	24	24	23	71	20	21	25	66	137		
	(96%)	(96%)	(96%)	(96%)	(80%)	(84%)	(100%)	(88%)	(92%)		
Egyptian/Indian	1			1					1		
	(4%)	0	0	(1%)	0	0	0	0	(0.7%)		
Saudi		1		1					1		
	0	(4%)	0	(1%)	0	0	0	0	(0.7%)		
Somali			1	1					1		
	0	0	(4%)	(1%)	0	0	0	0	(0.7%)		
Egyptian/British					1	1		2	2		
	0	0	0	0	(4%)	(4%)	0	(3%)	(1.3%)		
Somali/Canadian					2			2	2		
	0	0	0	0	(8%)	0	0	(3%)	(1.3%)		
Pakistani/British					1			1	1		
	0	0	0	0	(4%)	0	0	(1%)	(0.7%)		
British					1			1	1		
	0	0	0	0	(4%)	0	0	(1%)	(0.7%)		
German						1		1	1		
	0	0	0	0	0	(4%)	0	(1%)	(0.7%)		
Palestinian						2		2	2		
	0	0	0	0	0	(8%)	0	(3%)	(1.3%)		
Total	25	25	24	74	25	25	25	75	149		
	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)		
Missing			1						1		



