Towards a PLAY Model of Youth Participation in Sustainable Urban Decision Making:

Investigating Young People's Experiences, Expectations and Empowerment in Green Space and Public Transport Planning in Dhaka City

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A thesis submitted in partial fulfilment of the requirements for the degree of Doctor of Philosophy in Political Science at the University of Canterbury, Christchurch, New Zealand.

Date: 12 January 2021

Dedication

This doctoral thesis is devoted to my exquisite parents and to our heroes, the 'Freedom Fighters' who sacrificed their lives for the independence of Bangladesh in the Liberation War, 1971.

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Date: 12 January 2021

Abstract

This thesis examines youth engagement in sustainable planning for transport and green space in Dhaka city Bangladesh. Despite increasingly large numbers of young people living in urbanising areas in the Global South (Mayo, 2001; UN-Habitat, 2013), there is comparatively little opportunity for youth voices, concerns and priorities to be heard in urban planning. Given the rapid growth of cities (Nematinasab, 2017; Wang et al., 2015) and the increasing proportion of young people who make up over all urban populations in cities especially in the Global South, I argue it is time to engage young people in planning and support them to face the challenges of urban development in the Global South.

The study focuses on Dhaka city, one of the world's fastest growing and most congested cities because approximately 52% of the population of Dhaka are under the age of 25 years (RAJUK, 2018, p. 37) but their priorities have often been over looked in previous urban planning exercises (Ahmed, 2005; Ahmed & Sohail, 2005).

The study followed a sequential mixed method where data collection and analysis were conducted in two stages. The first stage was a qualitative study of the participation of young people aged 12 to 24 years old in green space and transport in Dhaka city in two contrasting areas (a high-income, planned area and a low-income informal community-established unplanned area). Focus groups and interviews were used to understand their experiences, expectations and any opportunities for empowerment in decision making in particular. In the second phase of investigation of this study, I conducted a quantitative survey in three areas, a low-income, middle-income and high-income area to compare the focus group responses with a wider sample.

Many studies have focused on public participation and youth wellbeing but fewer studies have highlighted the importance of the relationships between participation, youth wellbeing, and access to green space and public transport particularly in the Global South. During the course of the study there was a large youth-led protest about safety of transport and the way this protest took the city by surprise adds weight to my argument that many concerns young people have about their city are currently unheard.

I develop a PLAY model that recognises Participation, Leadership and Activism of Youth in urban planning and suggest the use of local community discussion as a way of helping build the capacity of young people to be heard in decision making. The study also suggests that focus groups with peers maybe a more effective method than large surveys in eliciting youth participation and feedback particularly in low-income communities and when working with young women who may lack confidence to record their views in more traditional surveys.

I argue youth participation, leadership and activism can support young people's experiences, expectations and empowerment in urban planning.

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Please detail the nature and extent (%) of contribution by the candidate:

Hasan undertook quantitative research in the course of working for the UK Economic and Social Research Council funded CYCLES project (Children and Youth in Cities Lifestyles Evaluation and Sustainability (see Nissen et al. (2017) as detailed at page 38 and 42/44. He was a research partner in this consortium and also had a PhD scholarship funded by the University of Canterbury to support his participation. He developed a schedule of three questions (see page 63-64) which were included in an omnibus CYCLES survey which he conducted in the second phase of field work for my PhD, with 308 young people aged 12 to 24 in three areas, including both the low and high-income communities- his contribution to the article was to provide the Dhaka data and writing and editing sections related to Dhaka

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Acronyms

APA	American Psychological Association
ANN	Asian News Network
BBC	British Broadcasting Corporation
BBS	Bangladesh Bureau of Statistics
BRTA	Bangladesh Road Transport Authority
BRTC	Bangladesh Road Transport Corporation
CNG	Compressed Natural Gas
CNN	Cable News Network
CUSP	Centre for the Understanding of Sustainable Prosperity
CYCLES	Children and Youth in Cities, Lifestyle Evaluation and Sustainability
DAP	Detail Area Plan
DNCC	Dhaka North City Corporation
DSCC	Dhaka South City Corporation
ERIC	Ethical Research Involving Children
ESRC	Economic and Social Research Council
GCRF	Global Challenges Research Fund
NUA	New Urban Agenda
RAJUK	Rajdhani Unnayan Kartripakkha
SDG	Sustainable Development Goal
UGC	Urban Green Common
UGS	Urban Green Space
UHI	Urban Heat Island
UNDP	United Nations Development Programme
UNFPA	United Nations Fund for Population Activities
UNICEF	United Nations International Children's Emergency Fund

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Chapter 1 Urbanization and sustainability: Considering youth perspectives in the Global South

1.1 Introduction

This introductory chapter of the thesis discusses two interrelated challenging issues of our time: urbanization and sustainability. It considers why young people's experiences and opportunities to participate in urban decision making matter (UN-Habitat, 2013). Cities, particularly cities in the Global South, are dominated by large cohorts of young people (UNICEF, 2017, p. 20). Given that 70% of the world's youth, under the age of 24 are expected to live in urban areas by 2050 (UNICEF, 2017, p. 20), it is important to understand youth perspectives and experiences of sustainability and wellbeing, their hopes and aspirations and their concerns (Huynh et al., 2015; UN-Habitat, 2013). This study focuses on understanding youth thinking about green space and urban transport in particular, as recent studies have shown that these public amenities are important for the sustainability of a city and quality of life (Allen, 2015; Checkoway, 2011). While many studies have examined how green space (Douglas et al., 2017; Dzhambov et al., 2018; Kondo et al., 2018) and active transport (Bornioli et al., 2018; Duncan et al., 2016) have particular benefits for youth wellbeing, most studies have been conducted in the Global North, with surprisingly less research in the Global South (Rigolon et al., 2018b). Moreover, few studies have considered the relationships between planning and decision making for transport and green space and how youth voices can be actively involved in both issues.

In order to set the scene for this study the following sections illustrate the existing problems of urbanization for youth in overview and highlights the importance of this research in a Global South city. I will set out why and how Dhaka has been selected as a case study and outline how the thesis will be presented.

1.2 Context to the problem: Relationships between urban youth, green space and transport in the Global South

In a rapidly urbanizing world, a number of researchers, urban planners and political leaders have expressed concern about the impact of urbanisation[1] on young citizens (Poobalan & Aucott, 2016; Stephens, 2015). But the term 'young people' covers a broad age range. For example, while many international agencies note that adolescence is an important age of development there is a wide range of ways this period is defined. The United Nations often

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[1] United Nations (2004) defined urbanization as movement of people from rural to urban area.

refers to young people as 10-24 years, contrasted with the World Health Organization (WHO) which defines 'adolescents' as individuals in the 10-19 years age group and 'youth' as the 15-24 years age group (United Nations, 2019). The United Nations Charter on the Rights of the Child applies to those under the age of 18 years (WHO, n.d.). For the purpose of this study, I have defined 'youth' as 12 to 24 years as this age range captures both early adolescent development of the WHO's definition and emerging adults of the United Nations classification.

Young people are commonly perceived as increasingly isolated from social, political engagement, with fewer opportunities for physical activities in leisure time and little interest in public life, let alone opportunities to take part in urban planning issues (Bersaglio et al., 2015; MacDonald & Marsh, 2005; Sander & Putnam, 2010). Meanwhile, while rapid Global urbanization presents opportunities for work, education and leisure, it also presents serious challenges in terms of environmental, economic and social wellbeing of young citizens and their urban ecologies (Chawla, 2002; Lawrence, 2019). These challenges are common in all cities but are particularly relevant in cities of the Global South where there is insufficient research into the unique pressures, capabilities and opportunities for community responses that might advance sustainable outcomes for the future (Krefis et al., 2018; Nagendra et al., 2018). The rapid pace of urbanization will continue to generate major challenges in particular for young citizens. Population estimates that one billion urban youth (Gill, 2017; UNICEF, 2013) face a complex planning crisis including the loss of clean and green environments and access to green space, the impact of changing climate and declining access to public space in general (Gill, 2017; Lansford & Banati, 2018).

By the year 2050, it is estimated that 70% of the world population will be urban citizens (Reuters, 2018; UNFPA, 2011; United Nations, 2014; Wang et al., 2015). In this time of inexorable increase of urban populations worldwide, there is concern that the quality of urban life is also declining for the majority of young people (von Szombathely et al., 2017) particularly as a result of the shortage of urban green space and the pressure of congestion (Anguluri & Narayanan, 2017; Dimitriou & Gakenheimer, 2011). In the next two sections I clarify the definition of green space and public transport, which are themes of interest in this thesis and I discuss their connection to youth wellbeing.

1.2.1 Defining green space and why it matters for urban youth

Environmental scientists have defined urban green space as any kind of vegetation- i.e. garden, grassland, and plantation (Zhou et al., 2018) found in the urban environment (Kabisch & Haase, 2013; Taylor & Hochuli, 2017). Cilliers and Goosen (2016a, p. 41) identified green space as continuous vegetated areas. Cilliers and Goosen (2016a) also recognized artificially created city parks, botanical gardens, areas of street trees and even private gardens as

examples of green urban spaces. For this study, urban green space refers to urban vegetation; not the broader concept of open space including 'blue' areas of city i.e. lakes and ponds or 'grey' areas of city for instance, plaza areas, or concrete public spaces (Cilliers & Goosen, 2016b). Overall, while this thesis will mainly consider the parks and playgrounds of Dhaka city as green space, the terms will be also used to include formal and informal green areas. Formal green space tends to be defined as grass areas, formal plantations and urban forestry and planned areas of parks, and gardens that can be used by communities for a variety of recreation, social, cultural and economic purposes. Informal green space will be defined as unplanned areas. In the Global North these spaces are often railway and road side areas, or weeded and over grown areas (Rupprecht & Byrne, 2014). In the Global South, informal green spaces are often used by communities for example, in informal settlements, slums and favelas, informal green spaces can be important sources of cooling, drainage, and recreation (Rigolon et al., 2018b).

Research into the interrelated issues of access to green space in urban areas has largely been conducted in the Global North with adults and school aged children, and the study results suggest that access to spaces are part of a vital green infrastructure of a city, promoting health benefits (McCormack et al., 2010) particularly for mental health and restoration (Nordh et al., 2009) in the busy lives of city dwellers with co-benefits of enhancing social cohesion and the economic development of a city and supporting sense of agency, where young people are able to move around their community freely (Maas et al., 2009).

The qualities and attributes people value about a local green places have been argued to contribute to the experience of a higher 'quality of life' (Bell, 2000). One of the most significant systematic literature reviews of the value of local green space for youth has been conducted by Rigolon et al. (2018b) which suggests that, access to green space varies by class and ethnicity. Poor condition of parks in low-income neighbourhood areas has discouraged public access (Bakar et al., 2016). This inequality in experiences of access to green space is found around the world in other research which shows exclusion from green space compounds poor health status among low-income and minority people (Bakar et al., 2016; Danford et al., 2018).

Other studies of access to green space by youth of the Global South suggest that voices of young people are rarely included in urban planning. For example, studies of use of parks and playgrounds reveal young people are often underrepresented in physical activities outside house (Danford et al., 2018). And that like the Global North this is particularly true to marginalised communities and youth with disabilities or girls and young women and children of ethnic minorities, in ways that add to the precarious nature of young lives in cities (Dalsgaard & Hansen, 2008; Derr et al., 2013). However, there is a potential for young people to use the informal green spaces of cities such as vacant lots and nearby pockets of green space

for serenity and physical activities (Rupprecht et al., 2015). The following section discusses the connection of transport to green space.

1.2.2 Defining public transport and public amenities as an interconnected issue for youth

In this thesis, local public amenities are defined generally as: resources provided by local governments or agencies for shared use by the community (Urban Poor Fund International, 2020). While public amenities can be broad ranging from water to roads, in this study, I am particularly interested in use and availability of green space and public transport as interconnected public amenities for young citizens. Public transport is a broad topic, in this thesis, I would like to focus on walking, non-motorised vehicle for short distances and bus services which are widely used transport for long distances in Dhaka, a highly congested city in Bangladesh (see chapter 4). Experts argue that public transport is a public amenity that is particularly important for children, providing them with the opportunity to move with freedom (Gilbert et al., 2018). Similarly, non-motorized vehicles i.e. bicycles, or rickshaws not only help making the rider physically active, this kind of transport can create social interactions, closeness with nature and avoiding carbon emission, as an environmentally friendly sustainable form of transport (Gilbert et al., 2018).

A substantial volume of research in the Global North has found important connections between transportation and sustainability (Gilbert et al., 2018; Nieuwenhuijsen, 2020; Santos et al., 2010). Transport or mobility is also linked with urbanization, enabling periphery development and establishing satellite towns for example. Urban sprawl is one of the deepest challenges for policy makers often driven by the availability of cheap fuel for vehicles i.e. cars (Zhao, 2010). Though carbon intensive travel patterns is a big issue in today's climate change discussion, it is also a huge challenge for the transport planner to achieve sustainable transport that keeps air pollution low and meets the needs of local communities. Incorporating the views of young people and children in urban transport planning is particularly challenging and poorly understood aspect of urban transport planning. According to Gilbert et al. (2018) research shows that in most cities the public transport systems for children are treated as a low priority and their rights to sustainable transport are not considered.

There is disappointingly little research into young people's access to mobility in the Global South, particularly research into ways to advance their voice and access to public transport planning (Porter & Abane, 2008; Porter & Turner, 2019). Many urban planners and city decision makers in the rapidly expanding cities of the Global South have tried to focus on transportation planning and management to keep their city life vibrant, healthy and enjoyable for the diverse needs of residents (Nematinasab, 2017) but few seem to take time to listen to the voices and experiences of young people. According to Bartlett (2002) terrible traffic, lack

of public transport, inadequate public and green space and social violence make urban children and young people (both male and female) everywhere feel isolated. Streets also turn into important places for low-income young people in particular not only as a routes for getting around but as places for their hangouts and social places in absence of other green space (Bartlett, 2002; Mukherjee & Ghosh, 2019; Roy & Siddique, 2018).

This thesis begins from the perspective that the relationship between youth access to public space and public transport, as well as youth wellbeing is poorly understood in research (Nematinasab, 2017). In particular there is little study about the relationship between transport and green space and opportunities for youth engagement in decision making. In '*How do young people access green space or public areas in cities, especially in the Global South?'*, Jones et al. (2012) identified public transport networks as a key determinants for wellbeing, facilitating social inclusion and active independent mobility. Research has also shown a relationship between accessible, affordable transport and the psychological wellbeing of people because transport is facilitative of accessibility to jobs, relatives or friends and health services (Jones & Lucas, 2012). Where there are barriers to transport, research suggests this diminishes people's life satisfaction by reducing their ability to visit friends and relatives (Jones & Lucas, 2012). This in turn may reduce their expectations of transport and they are more likely to experience negative wellbeing because of the limitation of transport (Delbosc, 2012).

In this context, this study aims to understand the relationship between children and young people's well-being in terms of the interrelationships of access to green space and public transport, by investigating opportunities for youth participation in planning using a case study of Dhaka, the capital city of Bangladesh. This study is also a timely response to the serious problems regarding the sustainability of the lives of future citizens live in a city identified as highly congested in a series of international declarations including the New Urban Agenda and the Agenda for 2030, and Sustainable Development Goal 11 (SDG11). In SDG 11, there are a number of targets including target-2: achieving sustainable, affordable and safe public transport for all, especially to women and children and target-7: which emphasized good urbanization and development, providing access to green space for all, in particular for women and children and connecting young people in green space planning (United Nations, 2016). In this light it is also expected that the study will act to inform future policy guidelines for rapidly growing cities worldwide as they work to advance SDG 11 (Nissen et al., 2020). The next section discusses the significance of this study in Bangladesh.

1.3 Why study youth access to green space and public transport in Bangladesh in particular?

My interest in studying Bangladesh and the planning issues faced by young people in terms of access and mobility grew out of my own earlier work with colleagues (Hasan & Khan, 2010) which identified a significant problem of loss of access to green space, playgrounds and parks due to a process of 'green grabbing' (Fairhead et al., 2012) of young people's parks and playgrounds in Dhaka city, where public spaces which are already limited, are lost to private developers. Urban experts recently revealed that Dhaka city has 235 playgrounds in total (The Daily Star, 2019b) but of these, the general public can only access 42 playgrounds, because 141 playgrounds belongs to institutes, 24 playgrounds are owned by government staff colonies (staff quarters), 12 playgrounds are used as *Eidgah*[2] and 16 have been illegally occupied by developers. However, in reality there is justification for at least 2,400 playgrounds to meet the needs of the current 15 million city residents according to the current planning standards in Dhaka city (The Financial Express, 2019a).

In this context, existing green areas in Dhaka city are particularly inadequate for the demands of a youthful urban population (Farhan et al., 2013). According to the standard of RAJUK (1995), a minimum of 20% of land area is required for open space in a city area planning. However, the total space covered by green vegetation in Dhaka city is less than 15%, amongst this just 5% of all green space is found in old Dhaka (Dhaka South City Corporation area-DSCC) and 12% in new Dhaka[3] (Dhaka North City Corporation-DNCC area) (RAJUK, 1995). The requirement for open space suggested by the World Bank is 9.0 sq. meters but Dhaka has less than 1.0 sq. meter per person (The Financial Express, 2019a). However, by considering this real picture in this densely populated city, the standard suggested for a neighbourhood area in Dhaka city by Detail Area Plan (DAP) is 1.0 sq. meter per person requires two or three playgrounds in an area of one acre which can serve 12,500 residents in that neighbourhood (The Financial Express, 2019a).

In addition, children, teenagers and young citizens of Dhaka are the main users of recreational spaces but their priorities have often been over looked in the previous urban planning exercises (Ahmed, 2005; Ahmed & Sohail, 2005). Children and teenagers are also deprived of play facilities in their schools, as schools and communities in the city are experiencing a shortage of playgrounds (Khondokar, 2017). The school authorities frequently also contravene existing planning rules by establishing new schools just in a building without any open space (Khondokar, 2017).

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[2] Prayer field used during Eid festival prayer of Muslim twice in a year.
[3] Newly developed and expanded areas of Dhaka city particularly towards North.

This failure to plan for children's needs is contrary to the United Nations Convention on the Rights of Children (1989) which stresses that children have the right to education, health, sports and leisure time to participate in decision making about their lives. Their lifestyle are changing day by day. Children and youth choices can be innovative when they are used in recreation planning (Wilks & Rudner, 2013), and involving youth in policy making is likely to speed up the process of sustainable city planning.

The phenomena of violating child rights to play by using green space allocated for recreation for other purposes is a wide spread problem in the many areas experiencing rapid urbanisation, and one which has also been documented elsewhere as the illegal appropriation of public green space for private commercial, industrial or residential development (Apostolopoulou & Adams, 2015; Fairhead et al., 2012; Osman, 2017). A further challenge is the transformation of public green spaces to private space, a common scenario in many cities (Bollier, 2014; Flanagan et al., 2016). This 'green grabbing' is a particular problem for Dhaka where political leaders, who are predominately from a business background in recent years, have argued that public spaces are less profitable and converted those areas into commercial uses for hotels, private apartments, and shopping malls, as well as often by private companies to make such practice a source of income (Rahman, 2009).

Another way open space is privatized and removed from children's access is through branding the name of the play space with the name of a rich person or a company for fund raising; it symbolically transforms public land to at least semi-private land (Bollier, 2014) and may be accompanied by the use of private security guards or community welfare officers who police the use of the space. Other actions violate the rules and regulation of the country's planning system more broadly, for instance, the Wetland Conservation Act 2000. These are linked to incidents of financial corruption or use of sheer muscle power when playgrounds are illegally occupied by agencies owned by political leaders and businessmen. Examples of recent land grabs include the use of open spaces for commercial purposes like *Baishakhi*[4] fairs in the month of April, and for cattle markets during the holy festival in Eid-ul Azha[5], etc. (The Daily Sun, 2018; United News of Bangladesh, 2019). As a result of these pressures, children have less access to free playgrounds to pass leisure time and enjoy physical activities, in spite of the provisions of access for all set down in the Dhaka Structure Plan (Hasan & Khan, 2010).

As noted at the outset, it is widely recognised that play space, especially green play space is significant for children's mental, physical, social and cognitive development (Ahmed & Sohail, 2008; Centres of Excellence for Children's Well-being, 2003). Research has found that 5 million people die annually because of physical inactivity in daily life activities (Lee et al., 2012). The decline of physical activity is also one of the biggest burdens in low and middle-

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[4] The first day of Bengali year, 14th April each year.
[5] Muslim's festival once a year.

income countries (Sallis et al., 2015). This is a big concern for Bangladesh because inactivity of young people is progressively advancing towards upper income level countries (Hasina, 2020; World Bank, 2020b). Moreover access to green recreation spaces can be calming, and a source of restoration and recovery for children, teens and adults alike, so loss of this access can have far reaching implications for youth mental as well as physical health (Hasan, 2020; Kaplan, 1995).

I was also interested in understanding youth experiences of public transport and my interest was increased after a dramatic youth protest in 2018 about transport in Dhaka. Bangladesh has a long proud history of political activism by students who have protested for change (Rudroneel, 2018). For example, the Mother language (tongue) movement in 1952 (Chowdhury & Kabir, 2014; Rahman, 2010, p. 346), the Six point movement in 1969, the Liberation war in 1971 (Linton, 2010; Saikia, 2004), the Ganajagoron Mancha in 2013 (Immigration and Refugee Board of Canada, 2014) were all events led by young people. These student movements were backed by political parties. More recently youth public protest movements of 'quota reform' for public service recruitment process and 'safety for transport' protest in Bangladesh in 2018 have become non-political in that there were no obvious political parties initially involved (Rudroneel, 2018). At the time I undertook this study, there was a large protest by thousands of school students in August 2018 who took to the streets to protest poor safety of public transport and the death of two pedestrians (Abrar, 2018). What has been striking about the recent transport protests by school and college-going students is that it was initially sparked by spontaneous community concern, not political parties, as students called for greater safety on road after their classmates were run over by a bus on the footpath (The Daily Star, 2018c). Their demands were very simple (Rudroneel, 2018), they made requests that vehicle drivers follow the traffic rules, they created emergency lanes for ambulances and checked driver's licenses (BBC, 2018c; The Daily Star, 2018c). In addition, young protestors called for the resignation of transport workers' leader and shipping minister, demanded capital punishment for the driver of the bus who killed the students who apparently had no driving license or route permit (Abrar, 2018; Pokharel, 2018).

My interest in the study of green space and transport in Dhaka is also personal. As a rickshaw[6] passenger, as a young man I had a serious road accident on 18th February 2011 in Dhaka city. The rickshaw that was carrying me was hit by a private bus from my right side and I got thrown to the edge of a footpath. This caused inner damage to my brain and I had been in coma for three days at Hospital. As such, when Dhaka students began protesting the lack of safe transport on 29th July 2018, I felt that this was resonating with my own experiences and desire to change the situation. In addition, to my own experience of the inadequacies of

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[6] Non-motorized three wheeler.

transport planning in Dhaka and the serious impacts on people's lives, I have also observed little opportunity for engagement of young people in transport planning during my research in Dhaka despite the reality that there was a huge movement of youth protesting for better transport safety in the same city (BBC, 2018a) while I was conducting my interviews with city decision makers and youth.

This above context from my previous experiences and understanding drives my research firstly to understand how young people from their experiences are affected by access to green space and public transport in the Global South and the inter-relationships between transport and green space; secondly, to identify barriers to children and young people's expectations of access to sustainable transport and green space in one of the world's fastest growing and most congested cities; and thirdly, to investigate the existing and potential opportunities for greater participation of children and young people in planning and policy reform of green space and transport and to consider the contribution or affordance, this access can make to youth wellbeing.

1.4 Why this study matters?

This study is very significant for emerging urban economies because having young people make up more than half of the total population as an invaluable resource for any city. Involving young city residents in the decision making process of green space and transport sectors is important in terms of expanding and enriching our economic, social and environmental perspectives (Frank, 2016; Sharpe, 2014; Tisdall & Davis, 2004). Bangladesh is also aiming to achieve the sustainable goals within the timeline of 2030. In this context, involving young people in policy making and planning would be a powerful step forward.

However, there is a gap in policy making and planning for the young people in Dhaka. As I have noted earlier, their demands for recreation and physical activities are not often considered in the conventional planning and decision practices of city authorities. Over the years, there has been a gap between the execution of integrated planning process and participation of city residents, particularly with regard to the needs of both youth and sustainability. The city planning in Dhaka is dominated by the higher authorities of the *Rajdhani Unnayan Kartripakkha* (Capital Development Authority), Dhaka North City Corporation (DNCC), Dhaka South City Corporation (DSCC) and other relevant government bureaucracies. There is a little or no participation of low-income people through public hearings for any dispute resolution about planning (Swapan, 2016), let alone children and youth. For example, the participation of slum dwellers, at present in Dhaka is unimaginable in the development of plans like the Detail Area Plan (DAP) of Dhaka city. Though slum dwellers account for roughly 30% of the total population of Dhaka city (World Bank, 2007, p.

37) their voices are not heard in planning and many of these informal residents are young (UNICEF, n.d.). Finally, a recent report about the Detail Area Plan suggests that these current plans have failed to sustain the city community and the authority has misused city resident's money (Swapan, 2016).

As a result of a planning system that appears to fail the wider community and young people especially, many Dhaka residents have complained that they have less access to parks and playgrounds (The Daily Star, 2019b) and they are frustrated that their thinking is not used to inform in green space and transport decision making (Munira & San Santoso, 2017). Pressures of urban development are mounting. The previously planned residential areas Dhanmondi and Uttara for example have been transformed into largely a commercial enclave. But experts worry that the newly planned city areas like Purbachal are squeezing the open spaces into commercial plots with declining green space (The Daily Star, 2019a). A recent report claimed there is a 85% deficiency of parks and playgrounds in this newly developed planned city (The Financial Express, 2019a). Meanwhile, planning experts have also criticised the renovation mega project for green space recently undertaken by two Dhaka city corporations titled 'Jol Sobujer Dhaka' for lack of transparency and not engaging planning experts, let alone the public, in the planning and management (The Financial Express, 2019a). They also complained about the cost of the project which have been kept secret and that the project is not focusing on health and recreation needs but rather on infrastructure and beautification (The Financial Express, 2019a).

In addition, the young protesters in the transport safety movement that took to the streets of Dhaka in August 2018 have begun arguing more widely against corruption and lack of accountability and transparency in decision making and the absence of rule of law in the governance. But they have faced physical and mental challenges from the ruling party (Asian News Network, 2018; Singh, 2018), who restricted youth demands and after a week of students protest, many were beaten by police following the government's commands to contain the protest (BBC, 2018b; Islam, 2018). During the protests the government's responses to youth demands became fiercer, with Road and Transport Minister and General Secretary of Awami League, reportedly pledging strong action against the agitating students (The Daily Star, 2018b). He said in reply to the journalists' comments about allegations of physical torture used on some arrested students by police, *'Will we kiss them if they advance towards Awami League office?'* The government also shut down internet services to make the protesters more disorganised (bdnews24.com, 2018b).

Despite often being portrayed as thugs the student activists who took part in the protests about transport safety in Dhaka also did voluntary jobs, and showed the ways traffic could be controlled (i.e. creating emergency lanes for the ambulance) by better traffic management (Singh, 2018). They also demonstrated how drivers should and could follow

traffic rules, organising themselves into groups to check if drivers had their driving license and vehicle's fitness certificate (Singh, 2018).

The immediate effect of the transport protest was that some drivers went to the road transport authority office to renew their licenses (Adhikari, 2018b). The department of traffic management arranged a 'traffic week' to encourage the users to follow traffic rules. The traffic police went for strict restrictions and demonstrated how everyone was to follow the traffic rules in that week. They fined numerous drivers and owners of vehicles. After the protest government passed the Road Transport Act 2018 in the parliament (The Financial Express, 2019b) on 19th September 2018 and approved by the president on 9th October 2018 (Mamun, 2019).

These responses suggest that youth transport protests might be making a difference to urban decision making and planning. However, people are not hopeful about the long term implementation of wide spread traffic policy reform since the student calls for the bus driver's punishment or a fine was ignored (Bhattacherjee, 2018). Government first placed a road safety bill in the parliament to replace the Transport Act 1983 (The Daily Star, 2018d). But controversy continues about the minimal punishment for the drivers. Critics argue that Mr. Shajahan Khan, a former shipping minister and executive president of Bangladesh Road Transport Workers Federation plays the role of 'God father' in road transport (NewAge, 2019). He threatened to stop the business of transport by owners and workers 'if the High Court issues orders for compensation in road accident cases' (NewAge, 2019). He was silent during the transport strike in 2018 (bdnews24.com, 2018b).

From the overall discussion setting the scene of this thesis it is evident that this research focusing on children and young people's experiences of green space and transport and in Dhaka is needed and will have significant implications for supporting the economy and development of Bangladesh in the near future by helping us to understand of how to support youth wellbeing over the longer term through urban decision making.

An introduction to previous research conducted on green space and transport planning in Dhaka city

This section examines the political, geographical, social and planning considerations of the relevant authorities for green spaces in Dhaka city and accessibility of these spaces by young people, including transport planning approaches in the city, a fuller literature review is developed in chapter two.

In my previous study conducted on ten well known playgrounds in Dhaka city, I found that children and young people had little accessibility to play spaces (Hasan & Khan, 2010). Moreover, playgrounds in Dhaka city were poorly managed by the relevant authorities

including, City Corporation, Public Works Department (PWD) and Capital Development Authority (RAJUK- *Rajdhani Unnayan Kartripakkha*) (Hasan & Khan, 2010). Planning authorities in Dhaka often violate the design of the playgrounds, for example, simply by installing walkways in the open fields, hampering the usability of the play space for sports. There is an absence of future policy planning for green space that can meet the needs of rapidly increasing users. Most of the parks are situated besides arterial roads but there is rarely space for parking of cars or even bus stop (Hasan & Khan, 2010). My previous research also confirmed that there is a lack of shade, seating arrangements, safe and potable water for the users. Surprisingly, similar condition of playgrounds was found by Siddiqui (1990) in his research almost 20 years ago. The concerned authorities often excused the situation arguing they had limited funds and skilled staffing to maintain these open spaces. In this regard, this study will examine theories and approaches to find out new policy approaches that could promote more sustainable living for the children and young adults in Dhaka city.

A similar kind of study to the one I propose in this thesis was carried out to examine children's perceptions about the playgrounds in Dhaka city (Ahmed & Sohail, 2008). A survey for this study was conducted in the winter season (November-December, 2004) of Bangladesh on children aged (5-18) years as users of the play space, which considered their play time in the afternoon (16.00-18.00) and also included their parents' views. Four types of income level of the respondents were identified as: street children, children living in slums with family, children from middle-income and a higher income group. The study found that girls have less accessibility and are most likely to be excluded from using the play facilities whereas 97% boys use playgrounds and 85% of wider park users are boys. Interestingly, they also found that boys from high-income families and low-income families rarely used the local playgrounds. The researcher pointed out security concerns, inadequate maintenance of play spaces and equipment as top reasons for the inaccessibility of playgrounds. I anticipated that the situation has further worsened over the years. That study indicated the need for future research incorporating users (both boys and girls views) expectations in designing and planning of the playgrounds in Dhaka to make it more useable.

In addition, Tabassum and Sharmin (2013) emphasized the importance of accessibility to parks and playgrounds for the better quality of life of residents in an urban area, in a study conducted on six selected parks in two areas of Dhaka city considering planned neighbourhoods (Gulshan-Baridhara residential area) and unplanned areas (the residential area of old Dhaka). In the accessibility analysis of their study they measured location, road networks, distance of the catchment area, surrounding context, and the physical features of the design quality of the parks and whether there were accessible modes of transportation. They pointed out that there is a lack of recreation, food selling or restaurants and child play spaces even in the planned area they studied. On the other hand, the study highlighted the

obstacles to accessing parks in an unplanned area including: dirty roads, lack of footpaths, hidden entry points (as park gates are often occupied by vendors) and restricted access as the result of traffic jams.

Moreover, another recent study argued that the size of parks and accessibility are interrelated. Saika and Toshio (2017) in their study on the parks of Dhaka city examined the efficiency and utilization of urban green space by classifying the parks into four types: small, medium, large and extra-large according to physical size. From the findings of this study, small parks are highly accessible on a daily basis whereas extra-large parks are less visited only once a month by the user. The study recommended that small play lots or parks near their living area should be the concern for city planners in Dhaka.

In addition to the factors that restrict access for users to green space and/or public transport, Khan (2014) conducted a study on open space of Dhaka city by using a 'syntactic approach'. More specifically this approach was derived by 'space syntax' theory, first coined by Hiller and Leaman in 1974 (Edgü et al., 2015). This approach involves examining the accessibility of open space by investigating 'social structure' and 'spatial structure' of a certain area. In this study, the author selected six comparatively big open spaces based on their space areas to analyse with space syntax. In her study, Khan (2014) argued that there should be a mixture of the open space and spatial structure of the city needs to be better planned following future strategic guidelines.

There is also recognition in research of an absence of coordination among the agencies in Dhaka city regarding the management of open spaces. In a study on the open space management in Dhaka city, Islam et al. (2015) for example argued that most of the open space in the city is falling short in terms of facilities, design quality and most importantly safety and security because of poor management systems. They pointed out that ownership, spatial location and lack of planning by local authorities are the main factors in the failing management system. A new dimension of open space management system has become urgent for the proper maintenance of the open space in Dhaka city.

The reduction of green space in Dhaka and the associated growth of traffic congestion is also driven by over population as a result of rural-urban population displacement leading to the decline of ecological condition of cities over all. Byomkesh et al. (2012) carried out a study on the urbanization and green space in Dhaka city. The study indicated that there is a lack of political enthusiasm, ineffective policy making and poor management which lies behind the deterioration of green space. In light of this study it seems to be an urgent need for future research of strategic green space planning in general.

Open spaces scattered in Dhaka city are also threatened by encroachment. Nilufar (1999) in the research paper 'Urban life and use of public space' observed that these areas misused by anti-social event turned into 'dehumanized' areas. The study emphasized on

protecting these areas for effective public interaction to enhance as responsive space by using environmental laws and essential design with equipment.

Public transport has been less extensively studied in Dhaka compared to green space although the problems of public transport in Dhaka city have been studied by some transport experts (Hasan et al., 2015; Munira & San Santoso, 2017; Quddus et al., 2019). These authors highlighted the following issues: pedestrians feel there is a poor level of service, there is public dissatisfaction about bus service to achieve public acceptance of sustainable transport. Though 42% traveller in Dhaka use walking as a transport mode, the pedestrians faced difficulties in their walks due to the inadequate capacity and miserable atmosphere of footpaths (either dilapidated structural condition or walking spaces are occupied by shopkeepers), and poor safety on roads (Hasan et al., 2015). For long distance transport service, bus users felt bus services were unreliable because of inefficiency and lack of comfortability (Quddus et al., 2019). Overall, public transport users in Dhaka city reported that they were mostly dissatisfied with the existing service because of safety, harassment of women and poor time management (Munira & San Santoso, 2017).

There have been few studies of youth attitudes and experiences of public transport and those that have been undertaken in Dhaka tend to focus on the public health benefits of walking (Khan et al., 2017) rather than the needs and experiences of young people themselves. However, one recent study used text mining of social media posts (Facebook) to try to understand what young people in Dhaka wanted compared to expert planners (Anik et al., 2020). This study highlighted demand for women-only buses, separate crossing facilities for cyclists, evening lights on sidewalks, and a range of priorities for air-conditioned buses, road signs, toilets and dustbins near the sidewalk (Anik et al., 2020).

In summary this section has highlighted a number of studies of public space and transport in Dhaka those indicate that there is need for more research and particularly an approach which considers the interrelated way green space and transport impact on young people and their needs and attitudes and opportunities to participate in decision making. The series of studies discussed here have sought to describe what is currently known about youth access to green space and the existing condition of using playgrounds in Dhaka city alongside recent research into youth use of public transport in the city. This research is thus an endeavour in pursuit of new understandings about what young people expect of these facilities and how they could be engaged and empowered in decision making through participation and the likely impacts of this empowerment for sustainability and youth wellbeing.

1.5 The value of public participation and civic engagement in planning

This section briefly introduces how public participation and civic engagement are connected to planning for public amenities such as transport and green space. These concepts will be further elaborated in the literature review that follows in chapter 2 and discussion chapter 8 but they are introduced here to help advance the arguments of the thesis.

1.5.1 Public participation

Public participation is a contested term, often used to describe ways for involving the community in decision making, for example by planners, local government authorities or elected officials (Haklay et al., 2018; Rall et al., 2019; Swapan, 2016). Unlike representative decision making, in public participation people engage directly in decision making in a variety of ways from local citizen forums and participatory budgeting to town hall meetings and public conversations (Innes & Booher, 2004). However, the early work by urban planner Sheryl Arnstien reminds us that not all forms of public participation have the same outcomes, not all ways of engaging the public enable citizens to be heard and provide equal opportunities for determining decision outcomes (Arnstein, 1969) (see chapter 2 for further discussion).

Participation of relevant communities in planning is often argued to be vital in decision making. The promoting of children's participation in planning in particular has come into focus by policy makers. Mayo (2001) argued that children can make realistic and innovative suggestions for change. The young people and children benefit from opportunities to realise their value in participation in policy and planning. The courage and enthusiasm of young people can often be essential in achieving effective participation and planning (Johnson et al., 2008).

A very influential model of youth participation has been developed by Hart (2013) drawn on the ideas of Arnstien, (see Table-1.1). Roger Hart's 'ladder' of children participation suggests that children and youth are rarely able to participate fully as citizens in decision making (Hart, 1992); they are often only consulted in ways that are tokenistic or even manipulated (Table-1.1) (Hart, 2013). Hart (2013) argued that youth participation in governmental policy making is rarely taken seriously. Their art works decorate meetings but their suggestions are not often taken on board in ways that might change a planning agenda. According to Hart (2013), youth can develop their own competence and responsibility in decision making and they can contribute by participatory action research. When children are engaged in the procedures of planning, developing and implementing plans and programs, they can often be enthusiastically involved in action research by engaging in activities such as

illustration, collages, map preparation and prototypical structures, interrogating and conducting surveys, etc. (Hart, 2013).

Table-1.1: The ladder of youth participation by Hart (1992)

Steps	Themes	Types
8th	Child-initiated, shared decision with adults	Degrees of participation
7th	Child-initiated and directed	
6th	Adult-initiated, shared decision with children	
5th	Consulted and informed	
4th	Assigned but informed	
3rd	Tokenism	Non-participation
2nd	Decoration	
1st	Manipulation	

Similarly McNeish et al. (2000) have argued that from the observation in the lower three rung of Hart's ladder, children are often dominated by adults when engaging in public discussion and this also creates obstacles to their participation (Mayo, 2001; McNeish et al., 2000). According to Hart (2013) at the lowest levels of the ladder adults intentionally use children's opinion turn into their own voice marked as manipulation. Second step from the last labelled 'decoration' defined as engaging children in an occasion where they have little idea (Hart, 2013; Mayo, 2001). The third rung in this ladder, 'tokenism' shows its characteristics by its label. Only the upper levels of the ladder show real form of participation (Hart, 2013) but the best choice of how to engage young people and what weight to give to participation between children and adult will also inevitably depend on the experience, confidence, skill and perspective of the participants (Mayo, 2001). Many theorists argued that while it is difficult to achieve, young people's full participation in urban planning is important for their development as citizens. Sabo (2003) suggested that for young people, participation in urban planning enhances the skills, self-reliance and confidence of the individual, with wider indirect benefits for society. Interestingly, it also creates benefits/opportunities for the planners who can often engage with different perspective thinking from the young people, gaining new insight in a complex situation (Adams & Ingham, 1998).

Young people are naturally more creative, curious and energetic in many situations than adult planners who often have to adjust with rapid urban changes in that case a youthful, curious mind-set can be an asset in policy making (Frank, 2016). In addition, from a community perspective, Frank (2006) argued the participation of young people in policy process can enhance economic development, as well as, increase the relevance of urban social services and the quality of life and environment for all citizens.

As citizens of a community, young people may have the vision to ensure future development in a planned way to achieve a more child and youth friendly environment (Bartlett, 2002). They will become the consumer of the services in the future that planners are thinking of today (Freeman & Aitken-Rose, 2005). Their predictions are therefore vital as citizens because their social, physical and psychological change is very rapid (Frank, 2006).

1.5.2 Civic engagement

Civic engagement more generally is a wider term used when planners or elected decision makers seek to elicit citizen values, knowledge and skill in ways that combine political and prosocial contributions to community and society (Sherrod & Lauckhardt, 2009). Civic engagement is usually instrumental in that in a diverse democracy the 'engagement' of citizens is driven by planners or decision makers who seek to policy making by understanding issues of public concern (Checkoway & Aldana, 2013). The curiosity many young people have for their changing community does not automatically result in effective youthful civic engagement and may not always result in opportunities where young people have greater voice, let alone leadership in society (Checkoway & Aldana, 2013).

Building from the concept of civic engagement, many researchers note that young people can assist in local level decision making processes. In the British context for example, Willow (1997) found a strong argument for involving youth and children to get the benefits of consultation for local agencies and amenity providers as youth ways of thinking about life are often very different from adults. If their ideas are not taken into account in the decision making, it can limit the progressive impacts of good planning (Johnson et al., 2008). Recent studies of civic engagement in the Global South have stressed that communities may also be involved in a variety of ways for example, participation by visual and art work (Duramy & Gal, 2020) in making decisions and shaping informal communities in ways that are regularly overlooked in planning literature (Mbaye & Dinardi, 2019).

However, for the purpose of this study, my discussion will focus on the broader issue of youth 'participation' in general which allows for the potential of deepening youth engagement in formal, democratic and accountable ways, enabling them to play a role beyond tokenistic or instrumental consultation purposes or informal (and possibly haphazard) ways. Young people may become engaged in all kinds of informal decision making processes but I am interested in how their voices and concerns are regularly heard such as through regular methods of gathering information or getting consent from young people, to actually hear young people's ideas and support their leadership in local planning processes and their informal activism and protest.

1.6 Thesis outline

This section outlines how the rest of the thesis will be structured. In chapter 1, I have written the introduction, explaining why this thesis focuses on youth access to green space and transport, the relationships of these ideas in the context of sustainable development and the need for youth participation in planning in Dhaka specifically. In chapter 2, I will describe the theory discussion that informs this study focusing in particular on the key terms introduced here and their relationships to wellbeing. I will identify the research questions and sub-questions from the literature. I will review the methodology for this research and previous research conducted on green space and transport planning with detail discussion on mixed method and the process of this thesis in chapter 3. In chapter 4, I will describe results from qualitative analysis of how young people (12-18 years and 19-24 years old) are affected by access to public transport and green space in Dhaka and what opportunities young people currently have to experience green space and transport in Dhaka city. I will illustrate the focus group results of expectations of young people's participation in policy and planning to transport and green space in chapter 5. I will portray the results of ideas about empowerment of young people in policy making and green space and transport planning gleaned through focus group discussion in chapter 6. In chapter 7, I will reflect on lessons from the results of quantitative data collection, discussing analysis of the results of a survey conducted in a broader scale to justify my previous analysis of focus groups. I will offer some overall discussion about the implications of my study and the development of my model PLAY of youth participation in urban planning in chapter 8. Finally, I will offer reflections for future research in my concluding chapter 9.

1.7 Summary

This introductory chapter has discussed the vital topic of urbanization and sustainability and its significance and impact on young people who are residents of Dhaka now and who will also be future leaders in planning and policy making of a city facing rapid urbanization challenges, and pressures on green space and transport. This chapter also summarised previous research into the condition of green space and transport in the case study of Dhaka, the capital and most stressed populous city in Bangladesh. The next chapter will review the broader literature considering green space as sustainable common space for the city residents, political sociology of transport as a form of access and agency for young people, young people's political participation for sustainable development and finally how these approaches move us towards understanding of youthful, sustainable wellbeing.

Chapter 2 Literature review: Green space, transport, young people's voice and wellbeing

2.1 Introduction

In this chapter I discuss four different literatures informing this thesis which focuses on the experiences of youth and provision of green space, transport and the implications for youth engagement and empowerment. The first section of discussion in this chapter draws on literature about the geography of green space with a particular focus on the literature of sustainable common space and youth. The second section draws on writing about the political sociology of transport as a form of access and how transport helps the agency of young people. The third focus is the political participation literature specifically about the rights of young people to engage in local urban decision-making. Fourthly I identify an emerging school of 'urban realism'. Finally I consider how drawing the threads of these approaches together helps enrich our understanding of youth use of green space, public transport and wellbeing in the Global South. I ask: what questions does the literature review raise that are relevant for my study? These concepts will inform my own research questions and justify the study of the experiences, expectations and empowerment of youth in green space and transport planning in a city of Global South: Dhaka city in Bangladesh.

In any study, the literature review is the most important initial foundation of a thesis and helps us identify research questions (Turner, 2018). In addition, this research is conducted based on a case study of Dhaka city in Bangladesh, therefore, before closing, I also review the grey literature of policy, legislation and planning documents of Dhaka and Bangladesh (for example, National Youth Policy, Wetland Conservation Act 2000, Structure Plan, Detail Area Plan) to examine the involvement of young people in policy making and participation in planning processes. Moreover, in recent research, data analysis software has become a tool to help in storing and analysing large amounts of spoken words and the literature from document searching (Bryman, 2012). In this case, I have used Nvivo to help me to code literature topics, sort and connect ideas within many relevant literatures. In the beginning of the thesis, I also used a spreadsheet to include the journal articles, newspaper articles with links to provide a quick overview of text and data relevant to my thesis when I needed that in my thesis writing. The following sections discuss the four significant topics of this research mentioned above among them the first one is on youth experiences of green space as sustainable common space.

2.2 Green space as sustainable common space and the implications for youth research

While much has been written about urban 'commons', it is surprising that little discussion has specifically considered how using spaces in common impacts on children and young people. Urban commons literature is important because it reminds us that green spaces are more than play spaces and recreation sites, they often form part of an informal property system where a society regulates and monitors use of and access to natural resources in local communities in ways that can sustain communities outside of a formal market system (Fournier, 2013). Users of these 'common' resources such as green space, organise amongst themselves to control and manage the spaces collectively by imposing rules, cultural norms to guide social practices (Colding & Barthel, 2013).

Colding and Barthel (2013) use the concept 'Urban Green Commons' to refer to collectively managed parks, community gardens and allotment areas which are considered as Urban Green Commons (UGC). Their study found that rapid urbanization increases cultural diversity but decreases biodiversity in cities. They argue that urban commons have an important role in resilience building of ecosystem, but we know less about the role that common urban spaces play in supporting cultural diversity in a city. Further research is needed to understand how urban commons are used through studying the participation of people in an area (Colding et al., 2013). I argue that there is also a need to understand how diverse young communities use common areas.

Urban green commons ideas are also helpful for understanding the active management of urban green spaces through hybrid ownership models including the cross-over between public, private and club realms. Using privately owned green spaces i.e. roof top gardens or small land parcels nearby homes, avoids the political and administrative hassle of local management. When there is informal community level management of parks and playgrounds in a local area, it can reduce the burden of managing these spaces by local public authorities (Rupprecht & Byrne, 2014; Rupprecht et al., 2015). Moreover, following the 'commoning practice' can be a way of connecting people with nature and actively passing time for their better quality of life, when people are involved in tending and caring for green space.

In reality however, we know very little about how green space is used in common practice in large cities like Dhaka and in particular how this impacts children. It may for example result in land being used for public trading and food production at the expense of local children's play space. We also know very little about the impact of children who have no other space except public spaces like streets and parks to survive in- and the reports we do have suggest these children experience a great deal of insecurity in these spaces (Hai, 2014). Policymakers who want to encourage safe inclusive play space may need to think of who is

using green spaces and how, much more carefully given their limitations in funding and management of green spaces. Recent studies in Global North for example, suggest just because several groups of young ethnically diverse people use a green space does not mean they are interacting or that the parks are spaces of community inclusion (van Aalst & Brands, 2020).

A number of studies have focused on the way that having suitable nearby green space can encourage children and youth physical activity and improved overall health and wellbeing (Lee et al., 2015; Nissen et al., 2020; Ward et al., 2016; Wolch et al., 2014). But fewer studies of children's use of green space in the Global North or South have considered green space as a commons where youthful; communities might try to assert their rights, and use the space for recreation and perhaps also for trading or any other activities (Colding & Barthel, 2013) or where young people work together to determine to best care for their local resources and communities (Gallay et al., 2020).

However, as noted in my general introduction in chapter 1, the experience of leisure time physical activities spent outdoor in green space is less emphasised in studies on the Global South and their rights of children to participate in the management of green space as commons is rarely acknowledged (Rigolon et al., 2018b). One of the few studies is a cross-sectional study conducted in Nepal among higher secondary school going students based on multivariate logistic regression analysis to find out leisure time physical activity and sedentary behaviour. In this study, Paudel et al. (2014) suggests female participants were less active in participating physical activities and preferred passive activities sitting.

Some research about youth access to green common space suggest that there is significant differences between those who had access to nearby parks and play spaces close to residences or those brought up in a nuclear family, in those latter situations boys and girls were reported being more active, and it has been argued gendered norms influence active leisure in green space, especially for girls, however there is still little research for the Global South about these issues (Mayeza, 2017; Wendel et al., 2012). Even when we talk about green space as common space, research notes women often cannot use green space for their common engagement in family work i.e. looking after children, and cooking (Wendel et al., 2012).

In identifying the social connections of communities with green space, literature about urban green spaces as common space is useful for moving beyond only highlighting that physical activities in leisure time in green space are vital to improving physical and mental health conditions of individual youth, their family and community. Some recent theories of urban green commons have also found positive impacts on the community and society in ways that may enhance social cohesiveness. For example, some research in the Global North suggest establishing a sense of community in use of shared public places, often enhances feelings of security and civic inclusion, especially for youth (Lahode et al., 2020). This argument builds on the wider 'commons literature' which has placed great emphasis on community use of

public space (Anderson et al., 2017; Chen et al., 2016; Foley & Mather, 2016). Other research however as noted earlier is more cautious, considering where parks are used for recreation, it is not automatically likely that children and youth interact across their diverse communities, even when using shared space (van Aalst & Brands, 2020).

David Bollier defines communing as a 'social practice' normally conducted in open space of 'mutual support, conflict, negotiation, communication and experimentation' to manage shared resources (Bollier, 2016); his work and that of others in the commons tradition, suggests that without a community there is no commons or socially managed public space. Commons can be more than physical spaces, however, they can be classified to include shared natural, cultural, social and knowledge (Gibson-Graham et al., 2013). There is also an emerging literature which considers public transport to be a form of commons, where communities interact in commuting and where there maybe formal and informal systems of mobility that enable communities to get to work and access essential human services (Philipsen, n.d.).

This thesis however will focus more on the social practices that govern use of 'natural commons', for instance, vegetation or green space in Dhaka. Few studies have examined youth experiences in this context (Colding et al., 2013). For example, can youth learn about social practices for the sustenance of green space through interactions in common space? Can their experiences of playing in natural green common help them consider ways of avoiding ruining it by pollution, congestion or over use of resources?

In considering sustainable wellbeing and maintaining quality of life, many studies have also noted that green public space is valuable for young urban residents in multiple ways. First at an instrumental level many planners have noted the value of the cooling effect of having green vegetation in overheated urban areas in a changing climate (Yang et al., 2016). Researchers found that developed cities (i.e. cities of USA and China) are facing over heating (10°C) comparatively to rural area (Jansson et al., 2007; Liu & Yang, 2009; Ren et al., 2007; Sakakibara & Owa, 2005) defined as Urban Heat Island (UHI). Green urban spaces drop the temperature of UHI by transpiration but increase the humidity, regarded as natural resource in city planning (Narita et al., 2002). This cooling effect varies according to time, magnitude and places (Bowler et al., 2010; Chang et al., 2007; Lu et al., 2013). It is particularly relevant for both elderly and young children because studies have shown that urban children and infants, face challenges in low and middle-income areas to cope with rising heat impacts (Bartlett, 2008). Recent evidence (Ashraf & Faruk, 2018) suggests that extreme heat and precipitation have adverse effect on the physical activities, health and wellbeing of children and young people in Dhaka city.

The availability of green space however does not ensure the usability of that space by young people (Wendel et al., 2012). Wendel et al. (2012) suggests that negative perceptions of

usability of green spaces occurs because of poor maintenance or when youth feel unsafe to use the space (Wolch et al., 2014) and where there is congestion in the space. In addition, use of green space also depends on the age and ethnicity and cultural norms of the user (Wendel et al., 2012; Wolch et al., 2014). In the cities of developing countries, day time is often safer for the users of green space compared to night time to avoid hijacking or any illegal activity but this also depends on the availability of the guards and how many other visitors are present (Wendel et al., 2012).

Meeting the basic demands of life i.e. finding food is a burden to low-income people including children and youth, therefore, in this context, the use of green space for play is often seen as a luxury. Yet social and spatial disparities in consumption of resources as a result of unplanned and informal living are increasing in rapidly urbanized cities in the developing countries (Leichenko & Solecki, 2008; Wendel et al., 2012). The environmental injustice experiences of poor urban people in the Global South emerge because of unfair distribution of access to and use of green space (Heynen et al., 2006; Rigolon et al., 2018b; Wendel et al., 2012; Wolch et al., 2014). Poor children have rights to green space too.

From the above discussion, it is clear that few studies have been conducted in developing countries about the value of prioritizing the planning of use of common green space for children and youth. We know that access to green space is important for recreational, health or social purposes but as noted we know very little about how young people in the Global South actually access and use green space. Some researchers connected recreational activities to ecological value by incorporating this in green spaces i.e. parks and playgrounds. I have written elsewhere about the value of green space for mental wellbeing (Hasan, 2020) but in this study I am interested in the use of green space in wider ways of 'well living'; not only how people feel but how we can live collectively and sustainably in large, rapidly urbanising cities . More research is needed to understand the experience of young people in overcrowded areas of lower middle-income countries.

2.3 Youth and the political sociology of transport

In terms of transport, I have used walking, cycling and use of rickshaws as the examples for short distance travel modes and the bus for the commonly used long distance travel in Dhaka city. A huge number of research articles have highlighted the connection between transportation and sustainability (Buzási & Csete, 2015; Gilbert et al., 2018; Kelle et al., 2019; Maiyar & Thakkar, 2019; Wachs, 2010).

According to Gilbert et al. (2018), however, researchers show less prioritized interest in transport systems for children. There are comparatively fewer articles considering the rights of children and young people to sustainable transport particularly in developing cities though

they are often significant and future users of public transport and future decision makers. Sustainable transport in this thesis refers to use of affordable, accessible public transport where user has to pay the fare by him/herself (Sohail et al., 2006) i.e. bus, leguna or rickshaw depending on the geographic location in the Global South. It also includes walking and cycling as non-motorised vehicles and most eco-friendly transport (zero carbon emission) used by individuals. In recent years, low carbon emitting vehicles are often emphasized by policy makers as a way to address climate change issues and clean up urban air pollution (Gilbert et al., 2018; Nikolaeva et al., 2019).

Contemporary research studies of the concept of 'child friendly cities' (Whitzman, 2010) and 'sustainable transport' (Malone, 2016) for children have suggested that sustainable public transport for children is transport that children can use without adults help, and where children and adults also can use the same ride (Gilbert et al., 2018). Cycling and walking are also child friendly transports in nature (Gill, 2008) but often children have to use these modes of transport without the supervision of adults. Low carbon transport options like walking and cycling also provide the scope for children and young people to engage in physical activities, social interaction, contact with nature, and increases opportunity for environmental awareness in contrast to sitting in a car (Gilbert et al., 2018). There are however, a number of conditions which make it harder for cities of the Global South to implement sustainable transport innovations like bike lanes, these include lack of funding and political will and the large number of decision making bodies (Pojani & Stead, 2018). Setting speed limits on cars or slowing movement of all transport is also important to ensure child friendly mobility and sustainable transport. Children's mobility is restricted when the presence of cars hampers their basic rights to move around and this also impacts the overall sustainability of transport in cities (Gilbert et al., 2018).

In this world of rapid urbanization, walking is also often emphasized for psychological wellbeing of urban residents (Bornioli et al., 2018). Walking can bring with it, opportunities for connection to natural beauty and green space, which also benefits psychological wellbeing. There are few studies of the benefits of walking as a form of mobility for children and adolescents in Dhaka but the studies that exist confirm that this can also be the case in that city, when the streets and safe and public access is well managed and separated from buses and cars (Khan et al., 2017). In present days, however, with the focus on commercial urban planning in Dhaka, less attention has been given to enabling opportunities for children and youth to experience easy walking in green space, or even the creation of space for walking i.e. footpaths (Efroymson & Hossain, 2015).

Integrating walking with public transport systems can deliver sustainable co-benefits by reducing pollution from motorised vehicles, and consumption of gasoline (Kim et al., 2019). Additionally, walking is affordable for low-income communities. In terms of sustainability and

social viability however walking is a great example of affordable transport, when it can be conducted safely. From the perspective of health benefits, walking is also helpful for children and older aged persons. Walking integrates physical activities into everyday life and provides benefit of lower obesity of urban people (Kim et al., 2019).

Transport or mobility is also linked with urbanization, and periphery development establishing satellite towns. Urban sprawl is one of the biggest challenges for policy makers as the result of cheap fuel of vehicles, while carbon intensive travel patterns is a big issue in the context of climate change discussions, as a result transport policies in cities are both the drivers of risk and offer potential sustainable solutions (Huq et al., 2007).

Integrated transport policy has the potential for enhancing sustainability and enabling young people to move widely in their communities. Integrated transport covers a vast area including 'transport and planning integration', 'functional or modal integration', 'social integration' and 'environmental, economic and transport policy integration' (Potter & Skinner, 2000). Research in developing economies has also highlighted the need for listening more to the users of public transport, particularly women and children, if public transport is to become more sustainable (Sohail et al., 2006).

Accessibility and economic stability of the people visiting green space are measured by the type of transport mode they use (Wendel et al., 2012). High-income people can afford car whereas low-income people depend on the availability of bus or other cheap fare vehicles or walking to reach green space. Wendel et al. (2012) examined green space usability by asking the 'preference', 'perception' and 'access barriers to green space' to selected urban residents in developing countries. In their onsite individual semi-structure interviews and systematic observations of the participants behaviours, their study found gender disparities and unequal distribution of desirable green spaces so that some portion of people are deprived of the benefit of green space.

As noted in the previous section recent studies have suggested that there may be links between urban commons and the idea of transport communing, where communities develop their own rules and ways of governing public transport to ensure more equitable and affordable options particularly in the Global South- however this idea is only emerging (Nikolaeva et al., 2019) and has not been studied in relation to young people. The following section discusses the literature about youth participation and agency for policy making, planning and development in urban areas.

2.4 Youth participation and agency

This section discusses literature about young people's engagement and agency in green space and transport planning. Most of the literature in the Global North cites the importance of involvement of young people including for example, the development of 'Child friendly cities' movements (Bridgman, 2004; Derr et al., 2013) but as repeated earlier, researchers note that there are still too few occasions for young people to be involved in planning and policy making (Duhn et al., 2017). This is even though the United Nations Convention on Rights of the Child (UNCRC) and the Sustainable Development Goals both recognise how important it is that children's voices are heard in decision making (Dornan, 2017). Article 12 of UNCRC says children have a right to participate in matters that concern them, article 15 says they have the right to gather in public spaces and organise their own activities and article 31 recognises children's rights to play (Wood, 2018). However, the scholarship in the Global South has only relatively recently focused on why youth participation and agency in planning activities is needed for the economic and sustainable development of cities and there is also need for more diversity of voices (Wickenden & Kembhavi-Tam, 2014).

The UNCRC is the main platform for young people to have rights to engage in planning activities for better living environments in cities (Head, 2011). However, some of the most horrific violations of children rights are also connected to their poor living circumstances (Bartlett, 2002). Participation by children in decision making is required for social sustainability (Ivković et al., 2014). And in Dhaka City, a recent report by Save the Children has underlined how important this is (Akhter, 2018).

Head (2011) argues that young people's participation should be focused more on social inclusion. 'Social inclusion is about making sure that all people participate as valued members of a society' (Freiler, 2003; Toye & Infanti, 2004, pp. 17-18). This approach of seeing participation as a way of promoting social inclusion is more likely to ensure the participation of any disadvantaged groups of the society helps advance equity and justice in development. It requires more than the removal of barriers of discrimination in the society, rather it requires us to think about how we actively support young people so their voices are heard to ensure future sustainability. This social inclusion approach to participation also works as guidance for future development by understanding the changes needed in public policy and attitudes of planners and civic leaders for better decision making (Freiler, 2003; Toye & Infanti, 2004).

This belief in the importance of young people's participation in policy making and planning has a long history in research undertaken in Global North countries (Freeman & Aitken-Rose, 2005). This literature identifies several reasons why young people's participation in policy making and planning is important. These reasons include a rights-based approach (Head, 2011), one that focuses on improved decision-making as a result of young people's

participation (Freeman & Aitken-Rose, 2005), and an approach that emphasises the developmental benefits for young people of their participation (Frank, 2006; Head, 2011).

One reason given for young people's inclusion in urban planning draws on the rights of children and young people as discussed above. The UNCRC and Agenda 21 certified their rights to participate in urban planning and policy making (Freeman & Aitken-Rose, 2005; Head, 2011; Mayo, 2001). However, Frank (2006) agreed that there is often not a local legal basis and socio-political context to support youth to be heard in local decision making but he agrees we should strive to advance the rights of children and young peoples' involvement in the planning process. He argued that youth often have minimal political power to be heard in local level policy making and planning and to raise their voice in any rising problem to the community (Frank, 2006). The comparative lack of political power of youth highlights the importance of the term 'empowerment' in decision making. Young people are considered as a marginal group of community and often they are ignored in decision making process (Mayo, 2001). Frank (2006) suggested that they are usually regarded as 'citizens-in-training' for their partial or future citizenship status. This is contradictory to recognising the existing rights of the child and youth in participating in planning and decision making processes as young citizens now, in diverse contexts from disaster planning to community decision making (Flanagan, 2013; Gibbs et al., 2013; Hayward, 2020).

As citizens of a community, young people may have the right to participate to ensure future development in a planned way to achieve a child and youth friendly environment (Bartlett et al., 2016). Young people will also become the consumers of the services in future that planners are thinking about today (Freeman & Aitken-Rose, 2005). In this context, understanding and predicting young people's behaviours and attitudes is also vital for instrumental reasons- improving public decisions, because social, physical and psychological change is very quick (Frank, 2006).

Frank (2006) proposed that five principles or lessons that can change attitudes towards the engagement of young people in planning process. These lessons are to ensure youth have responsibility, voice, capacity, style of working and can adapt to their socio-political context.

Freedom of choice is also a very significant issue often discussed in case of planning for children and young people to connect them with nature, for instance green space. In 'Cities Alive' (Gill, 2017), a report served as a guideline for urban planners in the Global South, Gill suggested that children are powerful agents of society and their participation can improve the environment in a city. Young people are also often more creative, curious and energetic. Planners often have to adjust to the rapid changes brought about by urbanisation and listening to youth can improve decision making especially where youth are encouraged to

engage in the urban design for economic development, as well as increasing social services and quality of life and environment (Frank, 2006).

Young people's participation in urban planning is also argued to improve policy making and decisions by making planning processes more efficient. As the main consumers and users of many services now and into the future, there is an economic justification for children's participation in planning. Listening to youth can potentially enhance the diversity of an urban plan and ensure better delivery of services and programs in a large society (Head, 2011). This is believed to be especially effective in high density populated and multicultural cities (Haaland & van Den Bosch, 2015; Moos, 2016).

Johnson et al. (1998) supported this argument about encouraging young generations' voice and their contribution as a 'companions' in urban development planning. The promotion of children and young generations' participation in the development of project is argued to often enhance the cost-effectiveness of a project. As young people are often the main users of green space and one of the main users of public transport, researchers argued that it will be easier for the planners to find out the exact problem of the services from the consultation of the young adults who can prioritise the solution of the problem. It is argued that youth from the start can to minimize the renovating or maintenance costs of the play space. Besides this, their participation is considered necessary for the effective evaluation and monitoring of any project (Cavet & Sloper, 2004).

The literature agrees that there is value in involving young people in decision making, from the perspective of human rights. Social inclusion improves the decisions and the efficiency of planning. However, there are still many challenges for young people becoming involved in urban planning. Head (2011) raises three particular challenges of young people participating in large scale development and urban planning process. Firstly, it is very challenging to differentiate participation and demands of advantaged and disadvantaged young people because many middle class young people in the Global North and South are advantaged in getting their views across by the knowledge, networks and skills their have to help be heard (Balbo, 2014).

Secondly, the participation of young people in public affairs is often found to be dominated by top-down approaches from top planning managers and city decision makers. Frank (2006), like Hart (2013), found that young people are often ignored by adults assuming that they have little experience in long term decision making for a community.

Finally, there is a lack of youth friendly processes in eliciting their views for a project where youth partnerships could optimize the outcome of urban planning. In addition, in similar kind of position, Hayward (2012) explained that children are often omitted from the decision making in a rapid changing world; making children feel more socially isolated and left frustrated. Frustration also arises from social inequality and exacerbates a lack of

confidence to speak up when children are facing severe environmental and social problems (Hayward, 2012). In these situations I argue we need methods for helping youth be heard in ways that also increase their confidence.

Young people's participation – a renaissance in Global South-Dhaka

In light of the discussion above about youth participation in public space and transport planning, as I argued in the introductory chapter- it is important to note that young people in Bangladesh also have a long and proud participation in the protest and agitation within that country. There are many examples of visible and fruitful protests by the young people in Bangladesh in the country's recent history.

Just before this study began, students from public and private universities in Bangladesh protested for more opportunities to be engaged in public life in the country through a call for the reformation of the current quota system of the Public Service Commission (PSC) recruitment examination. Their demand was a reduction of reserved places from 56 percent to 10% as a quota to enable more young people to have an opportunity to compete for public service positions based on merit (Mahmud, 2018). According to a report by The Economist Intelligence Unit (2014), 5 out of 10 graduates are unemployed in Bangladesh compare to 3 out of 10 in India and Pakistan. This heated debate arose from conditions in which employment opportunities for graduates have reduced in recent years, from a 3.1% per annum intake in 2011 to 1.8% per annum in 2016 (The Economist Intelligence Unit, 2014). The vacant public service posts are filled up by the quota of freedom fighter's children and grand-children by the examination. In 2018, the Public administration minister pointed out that 350,000 job posts are still remained vacant, one official argued that these posts will be filled up by merit instead of quota after the protest (Mahmud, 2018). The students' protests showed their frustration for the long delay of the process.

Moreover, as I noted in chapter 1, in the course of conducting field work for this study, a very large youth-led protest for better safety for city transport was triggered by the death of two students who were run over by a private bus on footpath on 29 July 2018 (Pokharel, 2018). The spontaneous student protest (see figure-2.1) was against a known and ongoing problem of very poor transport management in Dhaka city and regular pedestrian deaths (Pokharel, 2018). Efroymson (2018) in her writing summarised the immediate demands of student protesters in 2018, she noted that they demanded the death penalty of drivers of the buses that had killed two students and a foot over bridge on busy road, the introduction of speed bumps to help slow traffic and the removal of unfit vehicles from the roads (Efroymson, 2018). After the protests the government has approved a new Road Transport Act 2018 but people are not

hopeful about the implementation given the drivers have not received strong punishment and there are very minimal financial penalties in the Act (Bhattacherjee, 2018).

But what was surprising about these protests in July 2018 was the enormous turn out by school and college going students, their parents and teachers who also joined to support them (Abrar, 2018; BBC, 2018a). Though the protest was generated by the bus accident and death of students' two friends, the huge number of protests revealed a wider frustration of the society against the irregular practice of rules and regulation and youth demands for greater voice in the institutions and government.

Figure-2.1: Transport protest in 2018 by school and college students in Dhaka

This photograph shows the students protest for transport safety in Dhaka, Bangladesh in 2018. The banners show the demand (from left, blue banner): 'Is asking for justice a crime?', 'Is the price of life is 5 lakh (BDT)?', 'Leave the cheating words, accept our rights', 'They were 52 (1952), they were 71 (1971), we are 18 (2018).' The image in the banner (in the right corner) shows the face with red tongue (as a symbol of blood and murderer) of the Shipping minister and the leader of Road transport workers association, Mr. Shajahan Khan. (Photo credit: research assistant)

However, while the student protests may not have led to long term immediate changes in transport there is a long sense of pride in Bangladesh about the history of student politics and movements in Bangladesh, and while young people's involvement in planning and decision making is rare there are some policies and acts that have ensured their rights are tabled in legislation even if they are ignored by policy makers in practice. I have drawn on Akhter (2018) to summarise rights young people have in relevant planning law in Bangladesh (Table-2.1).

Table-2.1: Key findings from youth relevant urban planning policies in Bangladesh

Policies/Plan/Act/Rules	Findings
National Children Policy, 2011	Ensuring proper recreational and cultural activities for children with equipment and playground in each educational institution (Section 6).
Education Policy, 2010	Given the importance on physical activities and facilities like playgrounds in educational institution (chapter 18, clause 3). Youth needs are mentioned one chapter for sports and education (chapter 19).
Detail Area Plan, 2010	No guidelines for playgrounds (quantity/quality) in Wards of Dhaka city.
Real Estate Development and Management Act, 2010	Absence of play space and facilities in high rise building.
City corporation Act, 2009	City corporation can run parks for city people (section 24.3) and supervise the behaviors of park user (8th Tafsil, Dhara 112(2)).
Private Housing Project Land Development Rule, 2004	Provide standard for parks and playgrounds, 0.2 acres/1000 residents.
Wetland Conservation Act, 2000	Restricted land use changes of park, playground, open spaces and natural water bodies; planning approval is mandatory, punishment is 5 years of jail or 50,000 BDT fine for violating this act.

Source: Akhter (2018) adapted by author

The next section discusses the connections between wellbeing, green space, transport and youth agency.

2.5 Wellbeing in connection to green space, transport and youth agency

The unexpected and large angry protest of students about poorly managed public transport in Dhaka is a reminder that public utilities like transport and green space are also very important for youth wellbeing. Wellbeing is a contested topic, defined variously as happiness, life satisfaction or quality of life (Dodge et al., 2012). Understanding the wellbeing of city dwellers particularly young people is a big challenge for policy makers in a time of rapid urban development. A remarkable literature is emerging that focuses on the relationships between green space and physical and mental wellbeing (Krefis et al., 2018) but there is still a gap of understanding of urban wellbeing green space and youth, in particular in the Global South (Rigolon et al., 2018a).

For the purpose of this thesis wellbeing will be defined from a Global South perspective which includes a wider discussion not just of how the individual feels but how their community and environment is developing in ways that have spiritual and cultural dimensions beyond just individual emotional states (Hayward & Roy, 2019). Subjective wellbeing and objective wellbeing are two types of wellbeing found in the literature. Subjective wellbeing refers to personal assessments of life satisfaction (Rose et al., 2016). Life satisfaction scales are often used in Global measures of subjective wellbeing (McLellan & Steward, 2015) whereas objective wellbeing includes assessment of the material condition of lives for example, access to basic services like education, employment, health (Ushie & Udoh, 2016).

Young people's wellbeing is attracting some interest by governments and policy makers around the world in recent times (McLellan & Steward, 2015). People's satisfaction in a neighbourhood depends on the living conditions connected to the development of the local area. Economic improvement of people in a community is related to improving the wellbeing of people that locality (Ivković et al., 2014) and vice versa. Economic development as a pillar of sustainable development ensures the sustenance of the community. This development matters for wellbeing and sustainability particularly in the Global South where many people need to have basic economic and material needs met.

Peschardt and Stigsdotter (2013) argued that dense cities are losing green spaces which significant impact on opportunities for psychological restoration on city dwellers in the Global North. Their study conducted in small urban green spaces of a densely populated areas in Copenhagen, Denmark identified substantial correlation between the characteristics of green space and users' apparent restorativeness. They pointed out a research gap for the city planners to understand the significance of green environments in urban area and its connection to mental restoration. However, it creates scope for the urban planners in the overpopulated cities of the Global South to also test the perceived restorativeness scale effects

of access to small urban green spaces by young park users (Peschardt & Stigsdotter, 2013). Perceived sensory dimensions is a new approach in well-being studies that is applied in small public urban green spaces to increase the emphasis on the value of urban green spaces for mental restoration by applying eight park characteristics: serenity, space, nature, rich in species, refuge, culture, prospect and social interaction (Grahn & Stigsdotter, 2010).

As discussed in the previous section, social inclusion approaches to public participation is also a way of tackling the complex issues of young people's wellbeing (Head, 2011). Green space is a place for social gathering which can actively encourage social inclusion, by ideally enabling opportunities for people of different ages and income levels from various locations to meet, and perhaps enjoy conversation among people encouraging a feeling of belonging in the place or area.

Public transport also contributes to social cohesion and wellbeing for various people in a city. Rather than riding on a private car, people can connect to public spaces more easily where there is affordable public transport and in the process of travelling with others may even talk and listen with other people to share their thoughts, philosophy and even current politics in a public bus. While studies suggest people do not like talking and connecting on public transport (Kim, 2012) research also shows that children and young people value local spaces and many such opportunities to connect with others (Harris & Wyn, 2009). The opportunity for shared moments of talking and thinking is important for people's mental and social wellbeing and vital for the quality of life amongst young city residents. Young people can also learn from the experiences of seniors when they have an opportunity to connect with them in a social and real life atmosphere (Hayes, 2012).

Rose et al. (2016) investigated wellbeing and agency of young people in a qualitative study with photo voice. In this study young participants of 9-11th grade explored various dimensions of wellbeing of their own and community level to identify how and when this has positive and negative impacts in their local area and living environment. However, this study was conducted in Global North and the results may vary in the communities of Global South.

From the above review of four significant bodies of literature for this thesis, I also now highlight the emergence of a new school of thought I have termed "urban realism" which has implications for the sustainable wellbeing of youth in the Global South. The term **'urban realism**' was first coined in 1920 by African American activists who were referring to youth protesting with creative art, writing and painting during the great depression as they searched for their identity and a sense of status or position in the community. This sense of youth protest has been reflected in the writing of several authors working in planning in the global North (Keith, 2013; McLendon, 1991; Zafar, 2011). However, urban realism as a term is uncommon in planning literature, but I argue it is relevant for research of youth pariticpation in planning particularly literature of Global South.

I use the term "urban realism" in my thesis here to capture the idea also articulated by Naes, that structural conditions (for example; population growth, building design, even prevailing norms) as well as individual agents can influence planning processes and deliberation or discussion (Næss, 2015). Moreover, I expand the idea of urban realism to include the ideas of critical realism which distinguishes human experiences from the observable world (Warwick, 2021). In doing so I have emphasized that citizens' experiences of their daily life in public transport and use of green space for physical activities and wellbeing are influenced by a range of structural conditions which the researcher needs to identify and consider carefully (Næss, 2015). I argue that urban realism is an emerging school of planning thought, which is relevant to the Global South because it suggests that to get a real picture of society, we need to consider the wider conditions which shape everyday life (see for example, (Tabassum & Sharmin, 2013; Uddin et al., 2018; Wickenden & Kembhavi-Tam, 2014). The next section discusses the detailed research questions raised in the literature review relevant to this thesis.

2.6 Questions raised in the literature review

This study started with the focus on the need to understand youth experiences, expectations and empowerment in green space and public transport planning in a city of the Global South in order to enhance wellbeing and sustainable urban planning for youth. In this context, the four bodies of literature reviewed here are connected and move us forward to the next step of the framework of this thesis (Figure-2.2). The strategic framework of this thesis needs to describe research questions that emerge from the literature review to have a clear idea of how to move forward to my ultimate research destination in a logical way.

Literature shown in the previous sections, suggests young people are less experienced in policy innovation and have fewer opportunities to be engaged. In this connection, young people have to observe their surrounding particularly their nearby area to gain understanding what is the actual scenario and what is needed for future development of that area will help them to have some realistic and valid expectations which will assist them to achieve the feelings of ownership and rights of the city as a citizen and advance them by empowerment in decision making of the local area and in the city in a broad scale. Carr et al. (2001) pointed out that expectations are outcome of experience measuring wellbeing but depend on the situation, affordability and time of people.

Markets and bureaucracies often determine the planning and development of a city in present days, but young citizens can and should also contribute to the process (Dörk & Monteyne, 2011). A city is a place of multiple actors of society i. e. citizens, planners, architects, developers (Dörk & Monteyne, 2011). Multiple stakeholders, legal and political processes

make city planning complex (Kirkhaug, n.d.). Planners have to understand the expectations and experiences of young residents as users of cities. The involvement of young citizen in planning process is a way to achieve the best possible outcomes and to understand the demand of a certain place.

Figure-2.2: Development of three E's of youth from literature review

Theories and concepts of urban planning and politics

| The geography of green space as sustainable common space | The political sociology of transport | The political participation of young people | Understanding of wellbeing |

3 E's of Young People's participation in planning
Experiences, Expectations and Empowerment
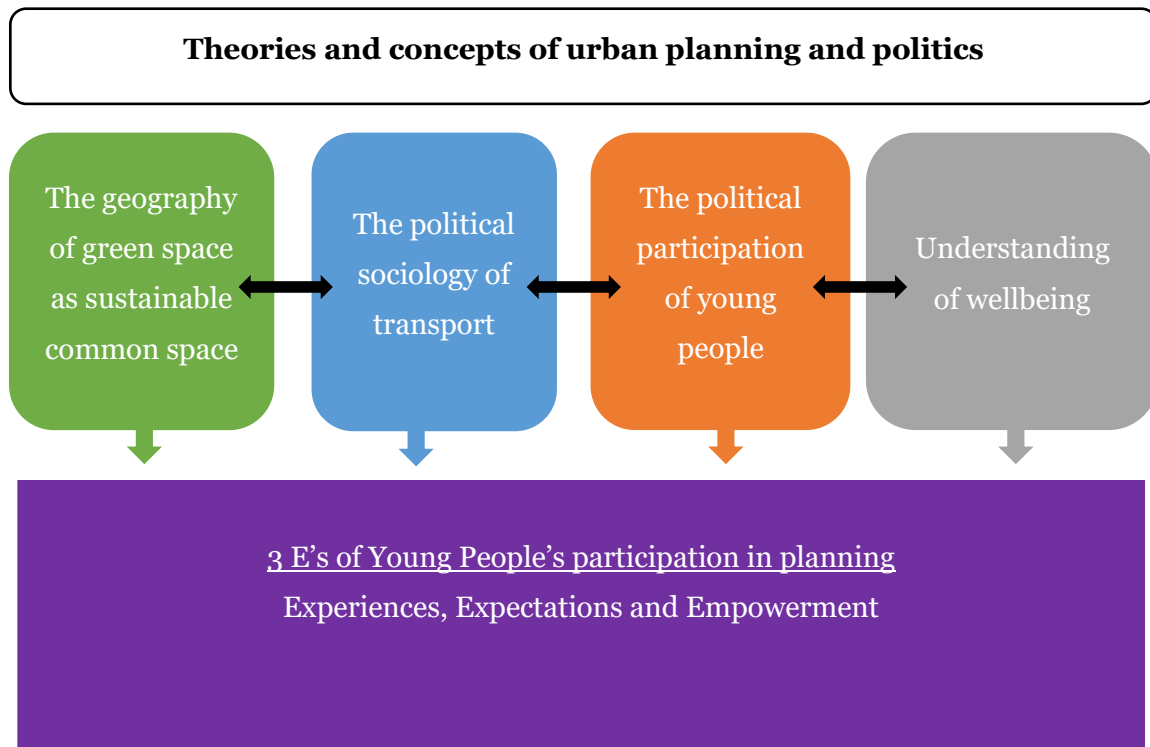
The idea of co-creation of common places and ways to getting around a city aim to minimise the gap of participation by connecting professional and laypeople (despite of their social and economic background) to improve experiences of services and to enhance lives. The role of the urban experts, city authorities in this regard are to work as facilitators to enable the young active citizens to join in this 'multi-player' process (Dörk & Monteyne, 2011).

Citizen participation is also important for a democratic city, by sharing their views and hearing citizen's demands cities can become more inclusive (Kirkhaug, n.d.). However, there are some challenges of civic activism in planning process for instance in the complexity of stakeholders types (planners, developers, citizens, etc.), where there is diverse knowledge of residents, there are challenging in managing top-down and bottom-up decision approaches, negative attitudes of the developers and miscommunication (i.e. formal or informal) that may create mistrust to the residents (Kirkhaug, n.d.).

As a result of this review of literature, I have identified three main research questions relevant to this thesis, which aims to **understand and enhance youth engagement in**

planning and urban decision making. I argue that the literature tells us we need to know about the experiences, expectations, and empowerment of young people in green space and transport planning (Figure-2.2). In this light, my research seeks to address the following research questions (RQ) and sub-questions (SQ):

Topic	Research questions and sub-questions
Experiences (Chapter 4)	**RQ.1. What are the existing socio-economic problems and issues of green spaces and transport experienced by young people in Dhaka city?** For analysis of this research question I have designed the following sub-questions: SQ.1a. What is the experience of children and young people regarding access to green space and transport in their local area and within Dhaka city? b. Do the children and young people report opportunities for social interaction in green space and transport within their neighborhood? c. Do young people experience loss of green space and lack of transport? If so what is the impact on their wellbeing?
Expectations (Chapter 5)	**RQ.2. Do young people in Dhaka have any interest in the process of green space and transport planning and designing their local area?** Within this overarching question I identity the following sub- questions which as: SQ.2a. What is their priority for passing leisure time and use of transport in their nearby area? b. Do they see any need for changes to their local area in the context of green space or transport? c. Do they want to participate in community decision making for green space and transport? Why or why not?

Empowerment (Chapter 6)	**RQ.3. How can young people be involved in planning and policy reform of green space and transport in Dhaka city?** The sub-questions for this research question: 3a. How do young people currently engage in green space and transport planning in Dhaka city? b. How can young people be involved in addressing the loss of green space and poor transport service? c. Does the experience of young people's political agency and access to parks and transport assist youth wellbeing?

2.7 Summary

This chapter discussed the bodies of literature which have informed this research. From the literature review I have developed three research questions, to understand youth experiences, expectations and empowerment in urban planning for transport and green space. To examine these research questions, I also developed sub-questions. The next chapter will discuss the methodology that this thesis used to find out the results of these research questions and to conduct analysis from the field data.

Chapter 3 - Methodology for this research

3.1 Introduction

This chapter outlines and justifies the research methods used for this study (Figure-3.1) to investigate the experiences, expectations and empowerment of youth for sustainable wellbeing in a city of the Global South. This research followed a multi-method approach, more specifically I adopted a "sequential mixed method" approach to develop a picture of the assumed problems of a city. A sequential mixed methods approach is where "one type of data provides a basis for collection of another type of data" (Cameron, 2009). In my case I collected qualitative focus group data first and used this to inform a follow up quantitative survey. Teddlie and Tashakkori (2009) emphasised the value of using both qualitative and quantitative methods in research and mentioned it as a "third methodological direction". Onwuegbuzie and Combs (2010) also supported the argument that at least one qualitative and quantitative approach should be included in mixed method research, although data can be collected and analysed separately and sequentially in both qualitative and quantitative methods (Creswell & Clark, 2017).

In this research qualitative data analysis (my interviews and focus groups) was followed by quantitative data analysis. The reasons for selecting a mixed methods study approach depend on the purpose of the study (Berman, 2017). In my study the mixed method approach was selected to triangulate and compare the results from qualitative data and quantitative data. I also used both qualitative and quantitative data to help inform my discussion of urban realism and the way structural conditions influence the planning experiences of youth in my study. In the discussion and conclusion chapter, I will argue however that on balance the qualitative data and analysis was more important than quantitative survey and analysis for this research.

This chapter will summarise the problem statement (discussed in chapter 1) of this thesis and the general research approach which examines youth participation in two interrelated aspects of urban life: green space and transport. The methods include a literature review of secondary materials (published literature and city planning reports described in chapter 2).

Figure-3.1: Flowchart of methods followed in this thesis

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┌─────────────────────────┐         ┌─────────────────────────────┐
│ Problem identification/ │  ───▶   │      Literature review      │
│   problem statement     │         │ (Library, web search and    │
│                         │         │   use of Nvivo, EndNote)    │
└─────────────────────────┘         └─────────────────────────────┘
                                                 │
                                                 ▼
┌─────────────────────────┐         ┌─────────────────────────────┐
│ Selection of the study  │  ◀───   │ Identifying research        │
│         areas           │         │ questions from the          │
│                         │         │ literature                  │
└─────────────────────────┘         └─────────────────────────────┘
            │
            ▼
┌─────────────────────────┐         ┌─────────────────────────────┐
│ Ethics approval for data│  ───▶   │        Field studies        │
│      collection         │         │                             │
└─────────────────────────┘         └─────────────────────────────┘
            │                                    │
            │                                    ▼
            │                       ┌─────────────────────────────┐
            │               ◀───    │  Qualitative data collection│
            │                       │ (Focus groups, interviews,  │
            │                       │ key informant interviews,   │
            │                       │ drawings and photographs)   │
            ▼                       └─────────────────────────────┘
┌─────────────────────────┐                      │
│ Quantitative data       │                      ▼
│ collection              │  ───▶   ┌─────────────────────────────┐
│ (Ques. Survey- Qualtrics)│        │ Data processing, storing,   │
└─────────────────────────┘         │ cleaning, coding and analysis│
                                    └─────────────────────────────┘
                                                 ▲
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                                    ┌─────────────────────────────┐
                                    │       Drafting thesis       │
                                    └─────────────────────────────┘
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                                    ┌─────────────────────────────┐
                                    │ Completion of thesis writing│
                                    │       and submission        │
                                    └─────────────────────────────┘
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The rapid changes of urban areas in the Global South require us to understand the complex and urgent conditions that influence decision making for sustainable urban planning in the Global South. I argue that many planning theories are informed by ideal planning scenarios that reflect linear models or depictions of classic planning literature of Global North. My approach by contrast is influenced by the commentary of Bolay (2020) in the book "*Urban Planning Against Poverty*". Bolay argues now is the right time to think of planning for the community through the lenses of social justice along with scientific planning methods particularly for deprived urban areas. If we really want to advance sustainable planning I argue we must include the expectations of the local youth and how those expectations are shaped by the injustices and experiences of their daily life. In preparing for research I have observed that it seems rare for young people to be included in planning and decision making processes. The dominant planning processes in Dhaka lack friendliness, and fail to encourage a sense of coherence and community connection in the city. Bolay's criticisms of planning for Global South cities in Asia, Africa and Latin America informs the study reported here of Dhaka city.

On the basis of the literature review urban realism is also significant, not only for research in Bangladesh but also in the wider Global South in studies of decision making for development (chapter-8 & 9). The world is changing rapidly and there is an urgent need to cope with the new challenges for example of COVID-19, and climate change. We need methods of study that help youth engage and adapt in this challenging world by ensuring their equitable participation in sustainable decision making (Kassimir & Flanagan, 2010).

My theoretical framing (urban realism) explicitly informs my methods. For example as discussed below focus groups and interviews are an appropriate way to listen to youth voices and this method is helpful for enabling us to identify structural conditions which shape youth experiences, expectations and their sense of empowerment in planning. Therefore, the primary data collection techniques that includes listening to young people aged 12-24 in Dhaka will use focus group discussions, semi-structured interviews, structured field observations (including use of photographs displaying use of green space and transport) and a set of questions I designed and included in a wider quantitative survey which I also conducted for CYCLES (Children and Youth in Cities Lifestyles Evaluation and Sustainability)[7]. The questionnaire survey was conducted to broaden analysis, interrogate and validate the focus groups and interviews results with young people. I also

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[7] I was working as research partner for the data collection of CYCLES (Children and Youth in Cities-Lifestyles Evaluation and Sustainability) project funded by ESRC. I received funding for data collection of my thesis from this project. I am a collaborating for CYCLES study and as a partner I developed three original questions linked to my own study and implemented an international questionnaire survey funded by the UK Economic and Social Research Council (ESRC) and Global Challenges Research Fund (GCRF) (Nissen et al., 2017, pp.4, 20-21).

accompanied this fieldwork with a set of 15 'adult' interviews with key informants, planners and government officials (conducted in April-June, 2018) to test my findings.

In the chapter that follows I now discuss how the case study sites in Dhaka were selected. These contrasting case study sites were selected to help ensure my research is valid and robust. A time line is included in this chapter which details the stages of research. This chapter also discusses the human ethics process at the University of Canterbury (see section 3.4.4) and the software used to make my analysis of data I gathered more systematic and user-friendly. The final section of this chapter, will give an idea of the whole process including the challenges and limitations faced during this field work for this study. The process I used in my method is summarised in Figure 3.1.

3.2 Research method

Before going to discuss the research approach, I would like to recap the aims and objective of this study. The aim of this thesis (identified in chapter 1 and developed and justified in chapter 2) is to understand and enhance youth engagement in planning and urban decision making using a case study of Dhaka, the capital city of Bangladesh, marked as one of the highly congested cities in the Global South. I have structured three research questions to achieve the main goal of this doctoral research that ask;

RQ. 1. What are the existing socio-economic problems and issues of green spaces and transport experienced by young people in Dhaka city?

2. Do young people in Dhaka have any interest in the process of green space and transport planning and designing their local area?

3. How can young people be involved in planning and policy reform of green space and transport in Dhaka city?

I developed these research questions after having identified themes from the literature review about youth participation: experiences, expectations and empowerment (I have already introduced them in chapter 2 and I will discuss these objectives with results in chapter 4, 5 and 6 respectively). According to the objectives and themes of this thesis (sketched in chapter 2) I have designed the research questions and sub-questions to investigate these themes more closely. These research questions were interrogated through three sub-questions for more robust and rigorous analysis of the problem. The following sub-questions are designed to help me investigate the access to green space and transport for physical wellbeing, connection to social cohesion for social wellbeing and effect of green space reduction and transport problem for sustainable living in a city. The

intent of my first research question of this study was to find out the experience of young people from their access and use of green space and transport from their daily movement in the city (see results in chapter 4). In this context, I had to understand the problems of the local young residents regarding any socio-economic barriers for using green space and transport.

SQ. 1a. What is the experience of children and young people regarding access to green space and transport in their local area and within Dhaka city?

b. Do the children and young people report opportunities for social interaction in green space and transport within their neighborhood?

c. Do young people experience loss of green space and lack of transport? If so what is the impact on their wellbeing?

The second important investigation of this research is to identify the expectations of the young city residents regarding green space and transport planning by considering their perspectives on the future of the city (Chapter 5). In this regard, I am interested in the levels of enthusiasm of youth for planning to manage future demands in a city with high congestion and rapid infrastructural development. The following sub questions were recognised to explore the enquiry of 2nd research question.

SQ.2a. What is their priority for passing leisure time and use of transport in their nearby area?

b. Do they see any need for changes to their local area in the context of green space and transport?

c. Do they want to participate in community decision making for green space and transport? Why or why not?

In searching for deeper analysis about the sustainability of wellbeing of young people in a challenging city like Dhaka, the third substantial research question aimed to investigate the capacity and engagement of young people in terms of 'empowerment' in green space and transport planning at local level (see discussion in chapter 6). In this context, the following sub-questions were examined.

SQ.3a. How do young people currently engage in green space and transport planning in Dhaka city?

b. How can young people be involved in addressing the loss of green space and poor transport service?

  c. Does the experience of young people's political agency and access to parks and transport assist youth wellbeing?

Case study selection

  In this research in a vast city like Dhaka with its huge population, it was essential to select a sample of case study areas that could be justified for analysis. In this connection, with a limited research budget, I followed the idea of Yin (1994) to select two contrasting case study areas of Dhaka city for qualitative analysis, a high-income and well planned neighbourhood and a low-income unplanned community ward. The choice of just two cases cannot reflect the wider population but do enable me to examine the experiences of youth in Dhaka in two 'most different' contexts (Yin, 1994). The case study method is often used in specific subject oriented research for instance, sociology, education and also for understanding community problems (Zainal, 2007). Yin (1984, p. 23) defines the case study research method 'as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used.'

  Case study research is useful for dealing with complex social problems (Stake, 1995) and allows opportunity for intensive analysis (Bryman, 2012). Critics argue that there are concerns of external validity of case study research. It is often difficult for example to compare the experiences of one case study with other places or to differentiate the method from other research strategies, such participant observation, but case studies are useful for both testing theory and building theory (Merriam, 1985).

  In my study, the purpose of the case study method is to conduct in-depth analysis of an emerging social and environmental problem of youth wellbeing and opportunities for youth participation in decision making and access to public space and transport in a rapidly growing Dhaka city. There is a tendency for social researchers to use qualitative approaches in case study research (Zainal, 2007). Creswell (2007, p. 4) defines, qualitative research methods as '… a means of exploring and understanding the meaning individuals or groups ascribe to a social or human problem.' The unstructured and open discussion approach of much qualitative research is helpful in case studies, but it takes time to build trust and relationship to undertake effective qualitative case study research, for example can a researcher even get access to the field to conduct their case study?

Alongside a qualitative research method proposed for data collection for this research from a social epistemological[8] and ontological[9] perspective- I also undertook quantitative research in the course of working for the UK Economic and Social Research Council funded CYCLES project (Children and Youth in Cities Lifestyles Evaluation and Sustainability (see Nissen et al. (2017)). I was a research partner in this consortium and also had a PhD scholarship funded by the University of Canterbury to support my participation. I developed a schedule of my own three questions (see later page 62) which I was able to include in an omnibus CYCLES survey which I conducted in the second phase of field work for my PhD, with 308 young people aged 12 to 24 in three areas, including both the low and high-income communities I had conducted my focus group research in, and a new 'medium income' community which I selected for a comparison (see more discussion below and at section 3.3).

This research is focused on a particular group, young people aged 12 to 24 years living in Dhaka. In this mixed method, qualitative and quantitative study, the intent is to understand how they experience participation in green space and transport, to learn about their experiences of and think about ways to empower their voices. I proposed to undertake this study through participation observation (observing the daily life routine of young people in environmental, social and cultural activities particularly leisure activities and impact of green space surrounding their living areas) and through focus group discussion, individual interviews and through a survey.

From the above discussion it is clear that the purpose of selecting these two contrasting areas in Dhaka city for in depth analysis of the study to examine two divergent areas, an upper middle-class or high-income planned area and an unplanned poorer area. The case study areas were selected based upon the socio-economic information about the area, income status of residents, social and cultural activities and daily life activities of the city dwellers (BBS, 2016; RAJUK, 2018).

Moreover, as noted above, in the follow-up quantitative survey (more details will be discussed in section 3.4.3), I added Mirpur as a middle-income residents' area (The Guardian, 2020) to understand the experiences of youth in that community in comparison to the other two income groups (low and high-income). In addition, Mirpur is a large area, therefore, I had to select participants randomly to collect data from some wards of Mirpur

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8 Social epistemology is 'an enterprise concerned with how people can best pursue the truth (whichever truth is in question) *with the help* of, or *in the face* of, others. It is also concerned with truth acquisition by groups, or collective agents" (Stanford Encyclopedia of Philosophy. (2019). *Social Epistemology*. Retrieved 18-08-2020, https://plato.stanford.edu/entries/epistemology-social/)

9 Social ontology is 'the study of the nature and properties of the social world. It is concerned with analyzing the various entities in the world that arise from social interaction, (Stanford Encyclopedia of Philosophy. (2018). *Social Ontology*. Retrieved 18-08-2020, https://plato.stanford.edu/entries/social-ontology/).

(ward no. 2-16) in Dhaka North City Corporation. The case study areas and method of research are described in more detail below.

3.3 Study area: introducing Dhaka City

This case study approach reported here adopts a place-based research orientation. From the critical analysis of literature review (chapter 2), first of all, I had identified Dhaka, the capital city of Bangladesh for its diverse and challenging characteristics as a study area from the cities of Global South. I have lived in this city for more than 18 years. Moreover, I have the chance to conduct research (relevant to green space planning) at the same time, I have also assigned my students (I have been working as a faculty member at a university close to Dhaka for more than 10 years) in some planning research projects in this vibrant and challenging city. As I know this city better than other cities in Bangladesh, my long term experiences were very helpful for me for selecting case study areas for my doctoral dissertation. I could connect the problems I was reading about with my own experiences of this highly congested city and the responses from the participants were familiar to me. I have also been a victim of this severe problems (transport in particular) of this city (see chapter 1).

Dhaka was established as the capital of Bengal in 1608 at the Mughal dynasty and this attractive city was known as Jahangirnagar, retitled to the name of Emperor Jahangir by Islam Khan (actual name Shaikh Alauddin Chisti, Subahdar of Bengal in that time) (BBS, 2012, p. 20). This city was significant both economically and politically (RAJUK, 2018, p. 36) with fertile land for agriculture and centre part of the east Bengal connected with water transport to major port of India (i.e. Kolkata). Dhaka city is surrounded by four rivers- Buriganga, Turag, Balu and Shitalakhya (Ahmed et al., 2018; Byomkesh et al., 2012; Shakrullah et al., 2015). The city may be old but its population is a youthful one. Approximately 52% of the population is under the age of 25 years and the breakdown is 8.9% in infant age groups (0-4) years, 10.1% in primary school children age group (5-9) years, 9.9% in high/junior high school children age group (10-14) years, 9.8% in youth's age group (15-19) years and 12.3% in (20-24) years age group. The older ages breakdown is as follows: 12.2% in (25-29) years, 26% in aged (30-49) years, 5.5% in at the age of (50-59) years, just 2% is estimated to be aged (60-64) years and 3.2% in old age group (60 years and above) (RAJUK, 2018, p. 37).

However, it is difficult to mark the exact boundaries of Dhaka city from existing data of planning organizations. The demarcation of Dhaka city varies according to the definition of RAJUK, Dhaka City Corporation and various databases. In 2011, the city corporation area was divided into two parts- Dhaka South City Corporation (DSCC) and

Dhaka North City Corporation (DNCC). The total area of these two city corporation in that time was 126.34 sq. km. (BBS, 2016, p. 37). However, according to BBS (2013, p. 83) the urban area of Dhaka City Corporation is 197.05 sq. km. The data from the election of the Mayor and city councillors on 1st February 2020 showed that the two city corporations, DSCC and DNCC consist of 127 administrative city wards (DSCC- 73 wards and DNCC- 54 wards) with an area of 305.487 sq. km. (The Daily Star, 2020) (see table-3.1 for detail information of Dhaka city).

In terms of religious status, according to BBS (2013), almost 90% of Dhaka residents are Muslim, 9% Hindu and the remainder are Buddhist, Christian and others. From an ethnic point of view, almost 98% population are identified as Bengali, others are minorities including Santhals, Chakma, Garos (Achiks), Oraons, Mundas, Mro, Marma, Manipuri, Zomi, and Bihari (stranded Pakistani) (BBS, 2013). As Table 3.1 shows, Dhaka city area is now expanded to 305.487 sq. km including 127 wards. Therefore, I had to select three wards in total to get in depth data and response from the residents of three different units representing this large area. The following sections discusses the three study sites in Dhaka.

Table-3.1: Demographic information of Dhaka City

City Corporation	Area (sq. km)	Ward	Population	Voters (age equal/above 18 years)		
				Male	Female	Total
DNCC	196.228	54	59,43,316	15,49,567	14,60,706	30,10,273
DSCC	109.259	73	38,83,423	12,93,616	11,59,596	24,53,150
Total	305.487	127	98,26,739	28,43,183	26,20,302	54,63,423

Source: The Daily Star (2020) adapted by author

Ward 1 (high-income area)

The first case study area is selected from the northern part of Dhaka city, an area well known for being a planned Uttara[10] residential model town (Figure-3.4). The selection of the site is based on my interest in understanding the effect of a planned area on children's lived experiences of green space and use of transport. This area is included in Zone-1 of DNCC having a total area of 6.095 sq. km. and total holding number 8,823 (DNCC, 2020). Uttara residential model town was developed in the 1970s as a satellite town and the stated intent at the time was to provide more affordable housing for the middle class, however the area's development has been controversial (Rashid, 2002), with critics noting that over time due to land transfers the development was captured by

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[10] Uttara came from the Bangla word Uttor which means North in English.

wealthier home owners and developers (Aktar, 2011). Jahan and Kalam (2012) pointed out that 50% upper middle-income respondents of their study could afford rental housing in Uttara.

Ward 33 (low-income area)

The second case study area is a low-income group inhabited area (slum dwellers) and it is an unplanned community in the city area, marked as ward no. 33 of DNCC well known as Bosila (Figure-3.5). This area is located in the west middle part of the city in zone 5 of Dhaka North City Corporation. Total area of this ward is 5.592 sq. km and total household number is 4,287 (DNCC, 2020). This area consists of Bosila, Washpur, Katasur, Graphic arts, Physical Education College, Mohammadia Housing Society and Bashbari (DNCC, 2020).

Bosila is typical of informal and slum communities that are home to 40 percent of urban people (Azad, 2011). This area is highly congested due to low cost living standards comparative to other areas. The community faces significant issues of water sanitation and housing security. Recent plans announced in 2019 aim to redevelop and rehouse residents in this area, so the need to understand how to involve youth voices in urban planning has become even more urgent (Zakaria, 2019).

Ward (2-16) (Middle-income area)

In the course of my field work, I began comparing the planned and unplanned area for Phase One of focus groups, but when I undertook a survey in Phase Two I wanted to get a broader comparison therefore, I added a third middle-income area called Mirpur (Akhter, 2018) consisting of ward no. 2 to 16 in DNCC (Figure-3.6) which covers an area of 33.278 sq. km and is shelter for 52,358 households (DNCC, 2020). It is a mixed community with poor communities typically exposed to infectious diseases and housing insecurity and wealthier middle-income families (Khalequzzaman et al., 2017) where about 50% of city dwellers in Dhaka are in the middle-income group (Islam & Zahur, 2016).

This area is famous for the national cricket stadium named after Sher-e-Bangla A K Fazlul Haque, national Botanical Garden and the Dhaka Zoo. 'Benarasi Shari[11]' which makes this area more renowned to the foreigner and tourist. The following section discusses the data gathering tools and techniques applied in the case study areas.

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[11] One kind of women dress, usually wear in the wedding day or ceremony.

Figure-3.2: Location map of Bangladesh in South Asia

Source: Google Earth (2020)

Figure-3.3: Map of the study sites in Dhaka City
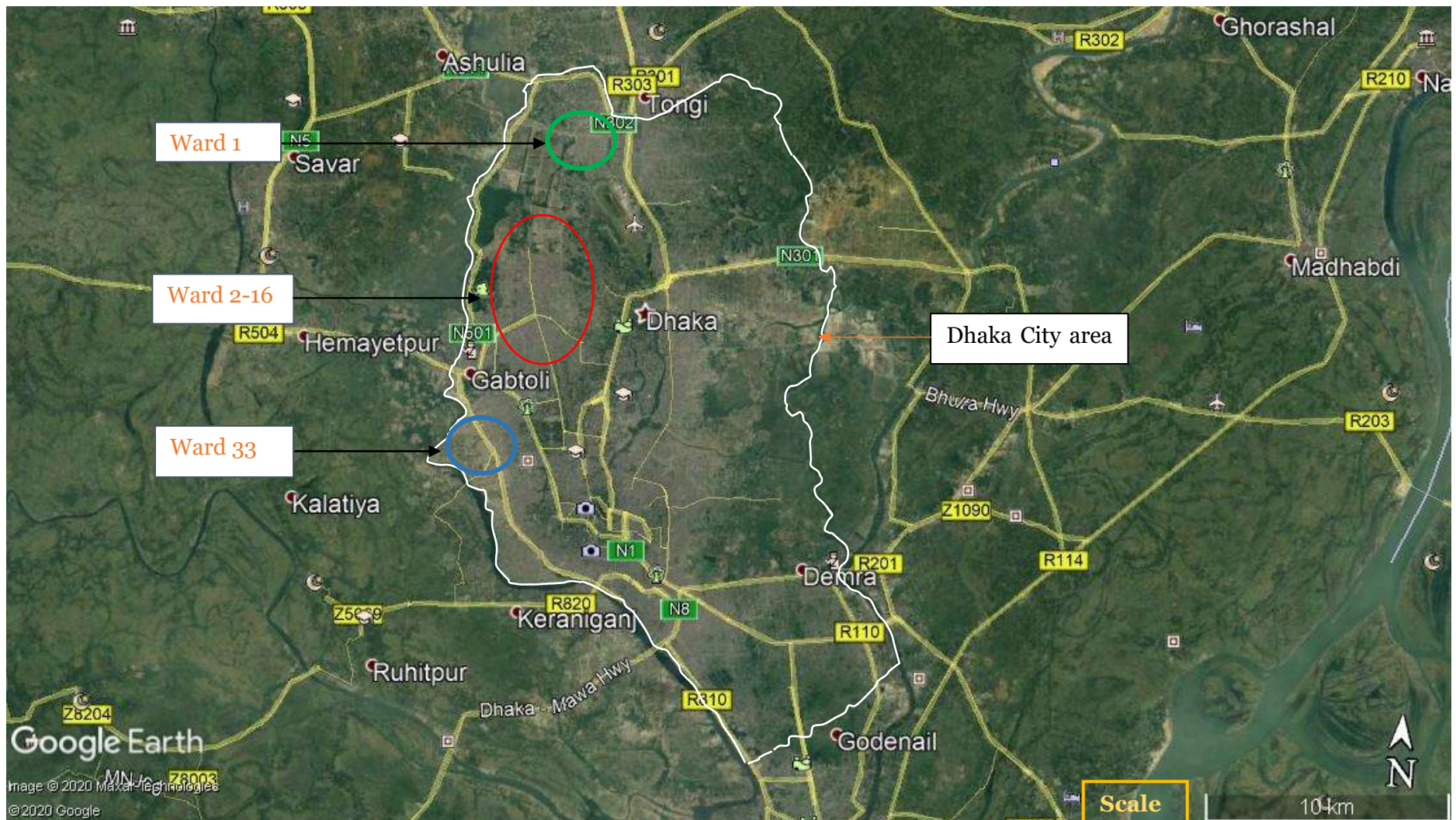
Source: Google Earth (2020)

Figure-3.4: Map of Uttara study area (Ward 1)

Source: Google Earth (2020)

Figure-3.5: Map of Bosila study area (Ward 33)

Source: Google Earth (2020)

Figure-3.6: Map of Mirpur study area (Ward 2-16)

Source: Google Earth (2020)

3.4 Data collection strategies

In this thesis, I have collected two types of data, in the first phase of my study as noted above I collected detailed qualitative information to understand young people's experiences of green space and urban transport using focus groups and interviews, photographs and drawings. This research data collection was conducted in April- July 2018 (see Field Work time line Table-3.2) with another follow up 3 focus groups in October 2018. I then returned in December 2019 – January 2020 to conduct a second survey to collect quantitative data from young people in the community drawn from three contrasting regions. The intent of the follow up questionnaire was to test my focus group insights and extend my understanding using a self-complete questionnaire developed by Qualtrics App installed in Tab.

In both Phase One and Phase Two, I had to apply for ethics approval to the University of Canterbury Human Ethics Committee (see section 3.4.4). After the approval from the ethics committee, at first, I prepared for the field survey (qualitative) in Dhaka city, Bangladesh. I had to consider a Bangladesh perspective in terms of culture and attitudes of people and society for identification and recruitment of the participants in data collection through focus groups. Face to face meetings were held to discuss my proposed research with schools and communities. These meetings were more effective rather than emailing or sending a postal or official letters. The school teachers and college principals however were very busy with teaching as well as administrative tasks and social activities and implementing both the focus groups (and later a survey) had to be conducted in a busy school year.

A similar approach was also applicable for city council officials (e.g. ward councillors). It is considered unusual to contact officials for interview requests via email and face to face contact is more culturally appropriate. The next section will briefly outline the steps I took in research.

3.4.1 Field study plan and schedule

After designing the research strategy for the thesis, the next step was to begin data collection in the field study areas. Between 1 April 2018 to October 2018 focus groups, adult interviews and field observations were conducted (see Table-3.2). I located schools in each community that might be interested in hosting focus groups and approached the school principals (see discussion in the next section). Within this data collection time, one of my co-supervisors was present while I was conducting interviews with young adult in the high-income area in mid-April 2018. The collected data (audio recorded and notes) was checked and transcribed on daily basis (I presented my preliminary results in a conference on 15-18 July, 2018 in Gold Coast, Australia). From 1st June 2018 to 13 June 2018 I undertook data transcription and re-checked my field notes (roughly while I was in Dhaka but I did more

detailed transcription of this data after returning to Christchurch at the end of July 2018). I had taken a break from data collection on 14th June 2018 because of holiday for Eid-ul-Fitr festival[12]. After that till 9 July 2018, I re-checked interviews from key informants and for final check of the whole plan of focus groups and interviews. Table-3.2 shows data collection process of this research in relation to each case study areas. I was able to conduct 9 focus groups with a total of 53 young people aged (12-18) years in Phase One-A but when I returned to Christchurch, the transport protests took place led by young people in Dhaka. Therefore, I contacted my two research assistant by email to conduct 3 additional focus groups (1 in low-income and other 2 in high-income area) with 14-16 year olds (n=15) in October 2018 (Phase One-B) in order to reflect on how these protests influenced our general focus group discussion about transport and urban planning, if at all.

Table-3.2: Data collection process

Steps	Date	Target group	Data collection Method
Phase One-A	1 April 2018 – 30 April 2018	Age: 12-14 years (school students) n= 17	9 Focus groups with drawings and photographs
		Age: 15-16 years (school students) n= 18 Age: 17-18 years (college students) n= 18	
	1 May 2018 – 14 May 2018	Age: 19-24 years, n= 28 (University students, employed/ unemployed, business, others)	Student interviews
	15 May 2018 – 31 May 2018		Key Informant Interviews (KII) n= 15
Phase One-B	October, 2018	Age: 14-16 years (school students) n= 15	3 Focus groups
Phase Two	9 Dec 2019 – 20 January 2020	Survey Age 12-24 years, n=308 (selected to reflect different income level, education, profession, gender and religion)	Questionnaire survey

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[12] Muslim's annual religious festival.

It is worth considering the constraints on conducting field work in a Global South city like Dhaka. Many events occur which result in research time being very tight (Table-3.2). Some pressures are typical of doing field work in all urban communities, for example, I faced difficulties interviewing young high school participants because the Higher Secondary Certificate (HSC) examinations were occurring in my field time (a public exam for college students) and whole April month was booked for that purpose. Other pressures are culturally nuanced. For example, the month of Holy Ramadan (13th May 2018 to 14th June 2018) being Muslim's fasting month, meant officials were less interested to take any extra burdens such as attending to interviews and there was a concern about impacting on students' time. Other field work constraints are environmental and should be considered as increasingly problematic issues for a Global South City like Dhaka. For example, April-May are the warmest months in Bangladesh as temperature go near or high 35° C (Weather Atlas, 2020). In the mid of the year, month of June-July are the monsoon season with torrential rain and flooding in Dhaka city. All these constraints are important issues to consider when undertaking the timing of field work.

3.4.2 Qualitative research- Phase One

As mentioned in the previous section the first step of data collection was qualitative. In this data collection process, I conducted focus group discussions with drawings and photographs from participants, interviews in two contrasting areas and key informant interviews with policymaker, planning experts. I also took photographs from the site and did field observation. They are briefly described below.

Focus groups

My first step of qualitative survey for this research was focus groups (Appendix-03) with young people (age 12-18 years old). The focus group technique involves at least four participants in a small group for interviewing and discussion (Bryman, 2012). Specific themes or topics are discussed in depth and it can save time from individual interviews. Focus groups are a good source of viewing participants' interactions on a certain issue. In individual interviews only one participant's opinion is expressed but in focus group participants can establish their own view point by probing his or her logic (Kitzinger, 1999). This technique also helps the researcher to understand community sense or collective response of certain issue of an area. Focus groups are also particularly helpful for interviewing children when there can be power imbalances between older interviewers and respondents, as they have peers to support them and encourage them to think of what they want to say (Kitzinger, 1999).

Though the technique of focus groups is widely used in qualitative research it has some limitations. Firstly, the researcher has less control over the proceedings than individual

interview. Secondly, it is often difficult to organize the session and get timely response from the participants. Difficulties also arise in data analysis for time consuming transcription of the recorded of data. One hour of focus group discussion may take up to eight hours for transcription (Bloor, 2001). The next section will discuss the selection criteria of the focus group.

Selection criteria of the focus groups

The participants' age limit of this focus group discussion session was 12-18 years old. This age group was very young to discuss an unfamiliar topic but contemporary for them. Therefore, I selected this age group for focus group to make an easier venue to them by setting with their class-mates but living in the same area for their spontaneous response. First of all, I had to contact to school or college authority to seek permission for the focus group event arrangement (Table-3.3). Then I informed them of the criteria for selecting the participants and asked them to contact the guardians of children on my behalf to inform them about my research and my interest in a group discussion with their children. In conducting research data collection in Dhaka, it was important to meet the participants in face to face conversation to feel confidence and build trust about the research procedure. In this connection, I was aware about not to open their confidentiality (identity) in a public setting but just ask general questions. Moreover, consent from a guardian and their children for participation was very important here for the selection procedure.

Potential participants were identified based on study criteria by visiting schools and colleges personally first. An information letter was supplied to the participant considering the unpredictable weather and regular scenario of traffic block in Dhaka city, students who live nearby school and college were given top priority to start and complete the session on time, and it was held at a local public space, for example, school, park or community sports ground. The venue selection depended on the priority of the participants' safety and comfort. If an event was organized in a school's space, permission from the school's Principal was mandatory.

First of all, I conducted a pilot survey to test the run of the focus group with five (5) young people of (14-16) years of age who are studying in the high school nearby study area. After this initial survey, I cross-checked my questions and discussion topic by evaluating the response from the participants (appendix-4). I had a good chance to redesign the work schedule and divided the target group of this survey, young people into age limited groups of (12-13), (14-16) and (17-18) years of age (Table-3.4). At this stage, young people are engaged mainly in education rather than searching for employment so it was easier to conduct focus groups through schools. From each ward, two age range of participants of age (12-13), (14-16) years involved mainly in school education and age (17-18) years of college students were

selected for focus group discussion, assuming that (12-16) age group is for school going children and (17-18) age range for college going young participants. Each age range group was comprising of at least (4-6) members. I conducted 12 focus group in total (6 from each area), 2 of them were conducted in high-income area in October 2018 after the transport strike. In total, I interviewed 68 young people through focus groups.

Table-3.3: Stages followed for contacting to participants

Steps	Activity	Outcome
Step-01: Communication	Contact school/ college admin/ Headmaster/ Principal	1. Approval of place/room 2. Discuss appropriate way to contact interested local children's parents
Step-02: Connect to participants	Contact to the parents and children	1. Talk with the parents of children either face to face or by phone and then provide information about the research project both orally and on a note form 2. Give them at least 2 days to consider about the research project and discuss it with their child
Step-03: Consent	Contact the parents and children after 2 days	1. If the parent gives verbal or preferably written consent-yes, then confirmation of event date, time and place and at the interview ensure the child also agrees 2. (If no then search for another participants)

In this survey, the gender of each group depended on the availability of consent from the participants and their parents, if their age were under 18 years. But in mixed gender groups, a gender balance was essential to ensure equal importance of the participants. However, I found more female participants volunteering in the first 4 focus group sessions in the high-income area. Therefore, I emphasized on a better gender balance in the next 2 focus groups sessions in the same area. In the sessions, I had arranged to conduct at girls' discussion with a female research assistant and I also informed the course teacher from that particular school and college where possible to make a more comfortable environment for discussion.

Table-3.4 shows 40 of the focus group participants identified as male and 28 were female. In addition, while I was trying to select participants from different religious background, at the end of the survey I found that all participants were Muslims.

Table-3.4: Participants number in the focus groups

Age group	Ward no. 1 (Focus groups = 6)		Ward no. 33 (Focus groups = 6)		
	Male	Female	Male	Female	**Total**
12-13	0	5	6	0	**11**
14-16	8	12	13	6	**39**
17-18	0	5	13	0	**18**
Total	**8**	**22**	**32**	**6**	**68**

In focus groups, the minimum time required for the group discussion was 60 minutes with 15 minutes refreshment break. During the session as the facilitator I provided culturally appropriate refreshments to the young participants but not any kind of gift or money. I also trained 3 student facilitators to help me conduct 5 of the focus groups under my supervision.

Drawings and photographs in focus groups

In the course of my focus groups as an ice breaker to start the conversations, I began by asking younger participants to draw the kind of transport they used every day and what they often did when they played (see two examples). We then discussed these drawings and I found these were a good way of starting discussion with groups (Yuen, 2004).

In this study, I also used photographs as an important data collection tool. Alam et al. (2018) identified that photography can be in several ways as a form of participatory photography through techniques like: photo-voice, auto-photography and photo-elicitation. Participants' age (14-18 years) were requested to take photographs of their favourite green space and transport they use in their daily life. According to Burningham et al. (2020) photographs taken by participants should be handled with care and in a flexible way considering ethical guidelines in research. In this research the participants who did not use or did not have their own smart phone used their parents' cell phone and sent the photographs to me by email or brought them with storage device (i.e. pen drive) or sourced images from the internet that they felt represented the places they liked to play and visit, and shared them before the focus group session started. Then I transferred the files to my laptop and displayed to them for discussion starters for the focus groups with older students.

In addition, I did field observations by visiting the study areas in the planned area, Uttara (sector 4, 5, 6, 7, 13 and 14). One of my research assistants had been living in this area for long time. I lived near to low-income residents' area ward no. 33 during the survey, therefore, I also had a good chance to visit nearby playgrounds and parks, and the local living areas of many of the participants. I took photographs from these areas to aid my memory. For

direct observation of parks and playgrounds, permission was required from the relevant authority to access the parks and take photographs (i.e. welfare society or security guards in Uttara). Direct field observations gave me a real picture or image of the problem in the up-to-date time. Photographs worked in this case as an evidence based visual data which described and answered a lot of problems and questions than just writing text. They helped me to analyse and to make triangulation of the transcribed data (focus groups and interviews). Moreover, from direct observation I could talk with local guards and users to know their opinions and comments directly.

Interviews

One to one interviews were another significant data collection technique in qualitative research (Qu & Dumay, 2011). From my experience, I found that it was a very useful technique to understand the attitudes of older students and young adults aged 19-24 years and their immediate local area problems and issues, which are rarely documented by the city authorities. In Phase One of data collection for this research, I also selected adult young people age 19-24 years old (for a consent form see Appendix-5) for individual face to face interview to understand their experiences about the current status, issues and problems of parks and playgrounds near their living area and also their opinions for future changes needed in terms of planning and policy making about congestion, traffic and the general area. The participants of this age group were a mixed group of students who combined paid employment with studying, unemployed, businessman and job holders. This mix of employment and experience of this age group helped me to identify the actual problems of the community and city.

I conducted 28 interviews from the case study areas, among them 13 from low-income area and the rest of them were from high-income area. These participants were contacted through local universities, student associations and by talking to young people at tea shops nearby their institutions or their hang out places, identifying myself as a researcher and asking if I could talk to young adults in public parks or playgrounds. In the interview time while wearing a tag of the University of Canterbury, I first (or my research assistant) informed them about my research project in brief. Then I (or my research assistant) started the interview after participants' oral consent and they were informed that we could stop at any time. I recorded these interviews in an audio recorder. At the end of each interview every participant signed in the consent form that was printed in hard copy that they agreed to the interview being used in the study. In half an hour time in each semi-structured interview, participants were able to share their feelings. Many said they found this opportunity to have others listen to them. After returning to my office at the University of Canterbury, I stored the recorded data in my password protected laptop assigned from the University of Canterbury and other documents (consent and transcript) and data can be retained for ten years (see appendix 1 and 2).

Key informant interviews

In addition to focus groups and interviews with youth I conducted interviews with key informants who were adult experts on certain information areas, including policy making, planning or development and local youth activities (Marshall, 1996). I wanted to interview experts with specialization relevant to children issues, green space and urban planning. This expertise was the main criteria for the selection of personnel in 15 key informant interviews (Table-3.5). In this connection, I interviewed local 2 ward councillors (1 male and 1 female), 5 urban planners and 4 policy analysts of Dhaka city, 1 representative of international children's NGO, A local journalist from a leading newspapers (working on city report) and a sports ground user.

Table-3.5: Key informants list

Sl.	Designation	Office
1.	Program Officer	Work for Better Bangladesh (WBB)
2.	Urban Designer	Vitti, Architect Farm
3.	Planner	Rajdhani Unnayna Kartripakkha
4.	Planner	Rajdhani Unnayna Kartripakkha
5.	Planner	Dhaka North City Corporation
6.	Planner	Narayangonj City Corporation
7.	Planner	Real Estate developer
8.	Program Officer	Save the Children
9.	Councillor (Woman)	Ward no. 1
10.	Councillor (Man)	Ward no. 1
11.	Chief Executive Officer	NGO
12.	Professor and Transport planning consultant	Jahangirnagar University
13.	Professor and Land use planning consultant	Jahangirnagar University
14.	Cricketer	Shyamoli Cricket Ground
15.	Urban planning consultant	JICA, World Bank

Source: Field survey, 2018

The local representatives of City Corporation (ward councillor) were presented in the interview as decision makers of the selected areas (Ward 1 and 33). Urban planners from DSCC, DNCC, RAJUK, and Urban Development Directorate (UDD) were significant in this event for their knowledge and expertise of that particular area. The questions guiding this type of interview (see appendix-04) were open (but relevant to my research questions and sub-

questions) to enable an opportunity to listen to his/her opinion about the problems the city faced meeting the needs of young people in providing amenities and to understand the future plans of the authority. The times for the interview depended on the availability of key personnel but no interview was longer than 50 minutes, mostly 30-40 minutes. A token of gift was offered to the expert but not exceeding the budget limit of the researcher.

In the initial stage I made a phone call to the respective person to arrange a session for conversation and to confirm their current projects/interests were allied with my research interest focus on youth participation in planning. I met 3 councillors (1 from Ward 33 and other 2 from Ward 1). But unfortunately, I could not secure an interview of a councillor in low-income area (Ward 33) though I contacted the office several times. In the second phase of data collection while I was again in Dhaka, I found him arrested for corruption and illegal land grabbing (bdnews24.com, 2019; The Daily Star, 2019d). The next section will discuss about the data storage, processing and analysis.

Data processing, storing, cleaning, coding and analysis

Data management and processing are important steps for data analysis in a research project (Padgett, 2012). In this process, the storing of the consent forms, transcripts, field notes and audio recording of this research were handled carefully in the University of Canterbury storage. Because of funding arrangements, I also followed ethics procedures for data storage at the University of Surrey in UK. The wider CYCLES study from which this thesis was funded (ESRC and GCRF), is subject to European Union data privacy protection laws and all data were stored in a password protected storage. For this reason any field research data was stored confidentially in the researcher's computer with strong password. Different names or codes were used instead of the participant's name in the transcripts, thesis, research paper and any publications of report. Data that did not identify any individuals was shared with the UK CUSP team on an ESRC secured encrypted platform so the findings of my study can also contribute to a wider study of seven countries can share responses to a set of common questions about demographics, attitudes to life in the city, and quality of life. The following sections discuss the transcription of data.

Transcription and cleaning of data

Transcription is a process of transferring the audio recorded data into text for documenting the answers to the research questions and the interaction of the participants scientifically (Hammersley, 2010). The whole focus groups and interviews were audio recorded after the consent of the participants during the qualitative survey. The recording was helpful to recheck the field notes taken during discussion time (Hammersley, 2010). I transcribed these recordings in Microsoft word file in my password protected laptop. A

pseudonym was used for all young participants on all transcripts and publications. The transcripts were prepared carefully after an initial rough write up in the field to avoid any kind of sensitive information or content that might breach the privacy of the participants i.e. removing names and using pseudonyms. The researcher was committed to the guideline of Ethical Research Involving Children (ERIC guidelines, UNICEF) and Human Ethics Committee (HEC) of the University of Canterbury (Table-3.6).

I tried to prepare drafts of the focus group transcripts during the data collection period and cross-checked these with the participants by research assistant where possible. I could not send final transcripts to the participants for final cross-check as many of them do not use email. Contacting by postal mail from far away of the study site is time consuming and expensive as well as not reliable to receive the response from the participants in a limited time frame. I also faced challenges in creating Bangla to English translations, to convey the meaning, emotion, claim of the respondents in a cross-cultural research. Finally, all transcript documents were cleaned by cross-checking recording and made ready for coding the texts and analysis.

Qualitative data analysis

In qualitative data analysis for this research, I was informed by ideas of 'phenomenology', which sees reality as a social construction in the sense that through interactions as human beings we come to understand meaning though our social, political, economic contexts and over time (Dee, 2008). Phenomenology is the study of how individuals experience, 'phenomena' or the 'ways we experience things,' and it places emphasis on people's subjective interpretation and views (Eagleton, 1983; Groenewald, 2004; Stanford Encyclopedia of Philosophy, 2013).

Phenomenography, is therefore a general research approach I used to identify participant's opinions and experiences about their community, transport and green space. However, other empirical research approaches can be used alongside a phenomenological to study community understandings of the phenomena (Sartor, 2018; Seamon, 1982). For example in this thesis, I have used secondary literature, and field observations to add to my understanding of the way young people experience their urban environment. In analysing the data of this qualitative research I followed a process of thematic analysis (see coding), using the modified grounded method, some initial themes had been identified in my literature review for example: experience, expectation, empowerment, youth agency and wellbeing. I used my field interviews, focus groups to enrich these topics. At the same time, other topics were identified through analysis of the discussion and interviews.

A pure grounded theory is a research method that seeks to discover or generate (not verify) theory (Dee, 2008). It builds from recording the views of participants and coding their

ideas and replies to develop theory. In my study, I used a modified form of grounded theory, this means as a researcher I have already identified some broad relevant theories and ideas in my literature review that I intended to examine in relation to green space, participation and wellbeing and young people's responses.

Grounded theory is linked to phenomenology because of its closeness to understanding how people interpret and make sense of their world and experiences (Dee, 2008). Research on health beliefs of children and young people in UK for example used grounded theory (Callery et al., 2003). This approach emphasised locating the phenomena or understanding the experience of young people and building theory from this concept. In undertaking my research planning I was also influenced by other studies that have used modified forms of grounded theory to understand youth urban experiences for example the study of young people in leisure time (Piggott, 2010) and the study of youth aged (11-25) years old who were using public space undertaken by De Backer (2019). These kinds of studies have shown the value of listening to young voices, and learning from their experience which adds nuance to existing theory- but there are still surprisingly few such studies from the Global South.

Coding

This section discusses how coding and thematic analysis from the texted documents were conducted. Coding refers to collecting 'chunks' of text or key words into conceptual containers (Padgett, 2012). After the data collection by focus groups and interviews, the coding of the raw data was done to build insights into what green spaces mean for young people and how they use transport.

Coding manually using pen, pencil and highlighter after printing all transcripts of focus groups and interviews. I also used Nvivo software and uploaded the transcripts for analysis and to cross-check the findings. I found that participants' responses were often very short to some questions. Therefore, it was not always possible for me as a researcher to find enough detail answer to understand the actual scenario (see chapter 4, 5 and 6). For example, there was a tendency of the participants particularly in low-income area to hide their local area's problems and shyness about talking about this with other participants in focus group sessions.

Similarly, some people were reluctant to share general demographic data about family income that was requested from the wider CYCLES study which I was also drawing on (see later section for discussion of the survey phase of the study), this was a problem when participants for many reasons preferred to highlight only good side of their living standard and their nearby area. However, as a researcher I found I obtained a more spontaneous response from the younger group (12-14 years old) rather than the adult age group participants (19-24 years old) (see chapter 4, 5 and 6). As the author of this thesis, I grouped all coded points to identify emerging discussions themes. My approach was a modified form of

grounded discourse analysis because I began sorting the coded points under the very broad themes I had established through the literature review- which were 'experience', 'expectation' and 'empowerment.' The field data was used to add richness to these thesis and challenge them (see chapter 4, 5 and 6 with results). The following section discusses the questionnaire survey.

3.4.3 Questionnaire survey- Phase Two

Phase Two of my data collection process was questionnaire survey. I prepared questions for this survey based on the previous qualitative focus groups and interviews and to follow up on issues raised (see questionnaire in Appendix-4). In Phase Two, a follow-up questionnaire survey was conducted in the winter season of Bangladesh from 5 December 2019 to 20 January 2020 in three selected areas (low, middle and high-income) of Dhaka. This time the weather was comfortable in the beginning of the survey but a cold wave occurred in the end of December 2019 and some days in January 2020. In total, 308 participants from (12-18) years and (19-24) years were engaged in this survey. In this case, I was implementing a larger survey developed for the CYCLES study funded by UK ESRC, and included within this, 3 specific questions for my own PhD. In developing my questions and implementing the wider survey I drew on insights from the focus groups to explore the discussion in more depth with a wider cohort of young people.

I used the opportunity of the omnibus survey I was conducting as a research partner with CYCLES (Nissen et al., 2017) about young people in Dhaka. I reflected on my focus groups and I asked three additional questions in the survey of 12-24 years olds in Dhaka. I decided to broaden the case study sites following Yin (1994), by adding a middle-income community to compare to the low and high-income area to better understand the scenario of youth access to and experience of green space and transport planning in Dhaka. The questions I developed for the quantitative survey were as follows.

1. **Thinking about play grounds or parks near where you live, please select one option to show how satisfied or dissatisfied you are with the:**
   Attractiveness of the space
   Facilities in the space (e.g. drinking water and seating)
   Behavior of others in the space

2. **Thinking about how you travel in your local area, please select one option to show how satisfied or dissatisfied you are with the:**
   Pedestrian's access to footpaths
   The behavior of others using the footpath

Rickshaw passenger's safety and security

3. Thinking about bus travel in Dhaka City, please select one option to show how much you agree or disagree with the statements below:
Buses run to schedule
I can usually find a seat
Bus drivers/ conductors are courteous/respectful
Bus drivers drive safely
Other passengers are respectful to me

In addition, I selected the following questions/statements from CYCLES survey for this thesis to understand the thinking of young people regarding their empowerment in city planning process:

I believe that I can make change in the city.
I participate in planning or decision making for the community.
People are listening to us.

The survey was conducted in Dhaka, Bangladesh on 5th December 2019 and ended on 20th January 2020. After preparing a final version of the full questionnaire and applying for ethics, I had to translate the text into Bangla as the participants were comfortable answering questions in Bangla (or in their own mother tongue or local voice) rather than in English. I found that I also gained experience in how to ask questions that people could understand from my previous qualitative survey. I used both Tab (electronic devices) and paper based questionnaires in this survey depend on the preference and availability of the participants. Participants in the low-income area (i.e. slum area) were happy to answer on paper based questionnaire as they could see the whole sections at a time (Figure-3.7). They also gained some confidence and trust in seeing the whole questionnaire at a time. They also observed that there was nothing in it against their benefit given the precariousness of their surrounding living space, there was some initial concern I might be from a local government authority. Many said afterwards that they found it focused on their wellbeing and were comfortable to answer.

An advantage I found in administering a paper based questionnaire was that I could conduct the survey with more participants than with a Tab (only one person can use one Tab in a particular time). Using paper based surveys is a method which saved my time as I had to complete 308 questionnaire surveys in a relatively short time (5 December 2019 to 20 January 2020). However, the problem was I had to input/upload the paper based data into the Tab

again to store in the prefixed storage with password protected server. Therefore, I had to manage time for this and also for the cross-checked paper based data.

Figure-3.7: Participants in the questionnaire survey venue at a college

The photograph shows the class room of a college students in the low-income area who were participating in the paper based questionnaire survey. I made them comfortable by discussing what they would have to answer in the questionnaire and also to feel the environment easier they attended in this survey with their classmates here. But I requested them to sit individually to keep away and not influenced by others answers or peer pressure. I took the photograph from behind of the participants to follow ethical guidelines.

Qualtrics software was used for inputting the data from this questionnaire survey and I had to manually input data for the Bangla along with English version. The survey process was challenging to complete in a short period of time as I mentioned in the previous section. I had to ensure the accuracy of the collection of data according to the criteria and research questions. I had recruited three (3) research assistants and eight (8) enumerators for contacting participants and trained them in how to input and upload the paper based data into Tab. These research assistants also helped the participants in understanding the questions and the process when using paper or Tab to understand questions. I was in contact regularly with

the research manager at the University of Canterbury to make sure the data is stored and managed accurately following ethical approval for data collection from the HEC of the University of Canterbury (Appendix-2).

Quantitative data analysis

I returned to my office in Christchurch on 4th February 2020. During the questionnaire survey, I was in close contact with my principal supervisor and with our lab research manager for help discussing the inevitable technical problems for making iPad works in the field and to discuss progress on the survey. Quantitative data analysis was conducted after 'cleaning' all the questionnaire survey data. I focused on the comparative analysis of respondents' opinions and used a Likert Scale to assess their attitudes to using green space (i.e. park, playground) and public transport (i.e bus, rickshaw and walk), see the questionnaire survey (Appendix-4). At first, I conducted descriptive statistical analysis by using SPSS version 26 and MS Excel to cross-tabulate the data on the basis of area-income based comparison (low, middle and high-income), age based comparisons from young to adult (12-14, 15-17, 18-21, 22-24) and gender based comparisons (male/female) (Pears et al., 2003) about their experiences and expectations of the existing service facilities of green space and transport. In the second step, I did binary logistic regression analysis by using SPSS version 26 to examine the significance of the participants age, gender and deprivation connected to green space (Astell-Burt et al., 2014; Coombes et al., 2010; Thøgersen-Ntoumani & Ntoumanis, 2006; Uddin et al., 2018; Zuniga-Teran et al., 2019) and public transport. I conducted the quantitative survey to justify my previous qualitative data and provide a more robust analysis for future reform of policy to achieve sustainable wellbeing for young people (see chapter 7 for results). In the next section I discuss this process as triangulation of data, which was conducted to improve the validity and reliability of this research.

Triangulation

Triangulation is the process of understanding of a phenomenon in a comprehensive way (Carter et al., 2014). I had used both qualitative and quantitative data drawn from focus groups, expert interviews, and student interview and field observations for triangulation to improve the validity of my research. My research budget was limited and my sample sizes were very small in a vast city like Dhaka, however, triangulation of this research enhanced my confidence in my data. I was able to compare the data of different age groups and genders by two sources (focus groups and interviews), then I cross-checked the data with expert views from the data extracted from key informant interviews and secondary sources (my reading). Final triangulation was also achieved with the comparison of qualitative findings and

quantitative findings of the data. All analysed data were presented in graphical and tabular format with a report in the next chapters (4, 5, 6 and 7).

3.4.4 Ethical considerations for data collection

After selecting the case study area of this research based on the research questions (chapter 2) and problem statement (chapter 1), I applied for ethics approval to Human Ethics Committee of the University of Canterbury to conduct Phase One qualitative survey in Dhaka. As the major respondents of this study were children (under 18 years of age) and young people (age up to 24 years), ethical considerations were important and mandatory for collecting data from them. The ethics application for this research followed ERIC guidelines of UNICEF (Table-3.6). I received the approval (for focus groups and interviews) from the HEC on 23rd March 2018 (HEC 2018/10) (see appendix-1) before going to Dhaka. Later on, I applied for ethics approval again for Phase Two of the study to conduct questionnaire survey in Dhaka. I received the quantitative (questionnaire) survey ethics approval on 25 November 2019 (HEC 2019/158) (appendix-2) before the return journey to Dhaka city on 2nd December 2019.

Table-3.6: Ethical guidelines for research with children-United Nations Children's Fund

Steps	Activity	Outcome
	The researcher should-	
Step-01	Introduce himself/herself in a very simple way by creating 'home environment to the participant.'	Participants feel comfortable.
Step-02	Speaking to the participants in a friendly way.	Participants can express their view and opinion.
Step-03	Use of simple sentences and words in information sheet and conversation.	Participants feel less tired and more confident to read and understand what he/she has to do.
Step-04	Help the participants to understand the discussion topic.	Participant can share their choices without any stress.
Step-05	Ensure safety and security to the participants.	Parents will feel tension free.

The next section discusses the unexpected problems faced during the data collection.

3.4.5 Challenges and limitation of data collection

The data collection process was planned and designed after consultations with my supervisors but I encountered some limitations regarding the survey process when I was in the site. During the qualitative survey, it was often very difficult to contact participants from schools and colleges. The Phase One data collection period was in very busy month of the year for the college students who had Higher Secondary Certificate[13] (HSC) exams during that time. The authority of this HSC exam also included some schools for using as centre or exam venue for the students as a result, it was often difficult for me to find a venue for the assigned survey event. Moreover, the data collection period was in the warmest season of the year (April-July) in Dhaka, Bangladesh. It was very difficult to arrange the event without stable power supply for using electric fan to cool down and make the room comfortable for the participants. There were also some times when students misunderstood the drawing or photography task however this also led to some interesting insights which will be discussed in chapter 8.

As researchers in the field, both I and my assistants faced other problems of recruitment in Phase Two of the questionnaire survey. First, parents of many participants in low-income area were not interested in signing the consent form. They feared eviction from their slum community if they signed any form. Some also felt uncomfortable if they did not know how to sign (some could not write). Interestingly, one person was attracted to participate but he helped others rather than to fill up his own questionnaire (field note from research assistant). Second, some female participants (a total number 58) of class eight in one school were also very interested to participate in the questionnaire survey but under the wider recruitment strategy agree with CYCLES, I could recruit only 10 participants from any one school. I managed the situation by asking for 'odd roll numbered' students and I identified 11 of the 58 student volunteers this way but it was really tough for the investigator to ignore the participation of enthusiastic respondents.

3.5 Thesis writing

The final step of this methodology was writing the analysed data by describing and interpreting in MS word text format using comments from the respondents, presenting data from the comparison. Qualitative data was presented in text form with some drawings, photographs and from focus groups and interviews. While quantitative data was presented in chapter 7 with graph and table connected to chapter 2, 3, 4, 5 and 6. All the results with discussion are described in chapter 4, 5, 6 and 7 respectively. Finally, the overall discussions

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[13] Board exam by Education board under the Ministry of Education for the college students, starts in April each year, last for month long with theory and practical exam.

in chapter 8, and recommendation for further research and conclusion are drawn in the chapter 9.

3.6 Summary

This chapter outlined the research techniques used for developing the research questions, my methods for collecting data, storing and coding it for analysis. Having set out the methods used to conduct the study in two contrasting communities for qualitative survey and three other more comparative areas by income level for quantitative survey in Dhaka city, I now turn to discuss the results of the findings, first I report on young people's experiences of green space and transport in the next chapter (chapter 4).

Chapter 4 Experiences - Young people's experiences of green space and transport in Dhaka city

4.1 Introduction

The experience of young people in terms of their opinions, observations and choices are vital for improving future planning for a diverse city (Head, 2011). Understanding youth experiences can also improve the cost-effectiveness, evaluation and monitoring of a project (Cavet & Sloper, 2004). Experience is defined in Oxford dictionary as the, 'actual observation of or practical acquaintance with facts or events' (The New Zealand Oxford Dictionary, 2005). Experiences can also be understood as activities and learning processes such as, '[the process of getting] knowledge or skills from doing, seeing, or feeling things' (Cambridge Dictionary, 2019). These two common definitions clearly capture the value of real life scenarios and learning from youth observations and from 'doing', 'seeing' and 'feeling' which has been highlighted in work such as that by Depeau (2017) who aims to listen to children's stated observations in their own words. In this thesis, I will examine the reported experiences of young people in green space and transport in Dhaka city.

The first step of analysis of evidence gathered in the thesis in this chapter is to understand how young people 'experience' or are affected by access to green space and transport in cities in the Global South. In this case, I will report on my findings about youth experiences of parks, playgrounds and roof top gardens in Dhaka city and the understanding of young city residents about use of transport. In this connection, I will also present the results of following research question (RQ.1) and sub-questions (SQ.1a-c) in this chapter.

RQ.1. **What are the existing socio-economic problems and issues of green spaces and transport experienced by young people in Dhaka city?**

SQ.1a. What is the experience of children and young people regarding access to green space and transport in their local area and within Dhaka city?

b. Do the children and young people report opportunities for social interaction in green space and transport within their neighborhood?

c. Do young people experience loss of green space and lack of transport? If so what is the impact on their wellbeing?

Research with students of all ages suggests that experiences of children and young people are city specific, they greatly depend on the socio-economic, cultural, environmental and political context which varies from place to place (Gill, 2017). This argument is supported by the comparison of experiences of youth living in a high-income area and low-income area in this thesis. Overall, literature about Dhaka suggests that the income level of parents influences youth urban quality of life experiences (Conger et al., 2010). In low-income communities, young people tend to stay close to home for physical activities as they cannot afford the prices of travel or access to more distant play space (Ziviani et al., 2008). My results support the idea of Ziviani et al. (2008) about inequity of access to parks and play spaces experienced by young residents in Dhaka city.

In this study, young people of the two most different Wards (the high-income planned area, Ward 1 and low-income unplanned area, Ward 33) in Dhaka city shared their experiences in focus group discussions and interviews. A total of 96 participants took part in these focus groups and interviews and they were aged (12-18) years and (19-24) years respectively (see chapter 3). There is an imbalance of gender in some age groups but a broad overall balance. The breakdown of gender by Ward and age is shown in (Table-4.1).

Table-4.1: Participants' number in focus groups and interviews

		High-income (Ward 1)		Low-income (Ward 33)			
	Age group	Male	Female	Male	Female	Total	
Focus groups (n=12)	12-13	0	5	6	0	11	11.46%
	14-16	8	12	13	6	39	40.62%
	17-18	0	5	13	0	18	18.75%
Interviews (n=28)	19-24	15	0	12	1	28	29.17%
	Total	**23**	**22**	**44**	**7**	**96**	**100%**

Source: Field survey by author (2018)

My research findings supports the literature which suggests one of the first most fundamental measures of the experience of access to urban green space by young people is 'presence and absence of green space' (Heckert, 2013) in their local area or even in their city. Children cannot access green space if there is none. In this study, there was a lack of green space observed in both Wards (Ward 1 and Ward 33) but it was particularly marked in the low-

income community (Ward 33) (Table-4.3) where the demand in Dhaka city (discussed in chapter 1) as identified by urban experts should result in 2,400 playgrounds for 15 million city residents (The Financial Express, 2019a) but the reality is there are fewer play areas.

Experience of urban green space has also been measured in other ways, for example by 'proximity' (Heckert, 2013) for residents and users. The ideal scale of this kind of assessment is half a mile (a quarter to 1 km) distance or equivalent of 10 minutes' walk to publicly available urban green space (Heckert, 2013). As noted in chapter 2, proximity of parks and playgrounds to living areas is also shown to increase physical activity (Wang & Wu, 2020) enhance social and psychological benefit (Bohn-Goldbaum et al., 2013) for the youth. Proximity of parks in this qualitative study was measured by asking the respondents about their nearest parks and playgrounds that is discussed in the research results in a table (Table-4.2) where they also mentioned their willingness to visit.

Participants' views are reported here along with my field observations and photographs taken by students I interviewed and myself as a researcher during my field work in the assigned sites. Evidence from the daily newspapers (i.e. The Daily Star) also added value to findings and analysis by providing local context to city planning debates. The following section reports on the experiences of young residents about access to green space in their local area.

4.2 Young people's experiences of access to green space

In this section, I will display and compare the results of high-income area (Ward 1) and low-income area (Ward 33) about access to green space based on the participants' comments and views. The focus group results from the high-income area support the findings of research that people feel green areas are peaceful and calm and help the body in relaxation and mental restoration as well as increase the monetary value of a space (Pietrzyk-Kaszyńska et al., 2017). The playground in sector 3 (Ward 1) is full of grasses, looks green and attractive (Figure-4.1). The residents of this area appeared to have a pleasant time in the afternoon by walking and sitting here. My focus group participant in the high-income area, Maya (Female, 15-16 years, Ward 1) said,

I like the park. It is beautiful. A graveyard beside the park is more beautiful. Two types of parks are available here for walking and playing. I visit the walking park which is full of trees and flowers. Sometimes I visit there alone or with my parents as well as with my friends. (Maya, Female, 15-16 years, Ward 1, FGD-5)

The young female respondent's comment reflects that the area she lives in has an attractive park (with trees and flowers) and this encourages her to visit. Visiting alone means she has the confidence to spend time there without any help of parents or a guardian though she also visits with her parents and friends. She enjoys passing a good time with family members and friends there. These experiences of green space can enhance family and group bonding and mental wellbeing (also discussed in the section of social cohesion and mental wellbeing in later this chapter).

I have observed that trees were available in many of the streets of the high-income planned study site (sector 6, Ward 1) beside the drainage system and in front of the housing in this area (Figure-4.2). Trees provide cool environments absorbing the heat in hot summer days which will be important in a changing climate (Bowler et al., 2010). Besides the parks and playgrounds of the high-income planned area, I also observed vegetation in front of houses (Figure-4.2) and in the footpaths and road dividers. This informal green space (Pietrzyk-Kaszyńska et al., 2017) adds to the sense of the area being greener than other places.

Figure-4.1: Playground at Sector- 3

A rare view of greenery of playgrounds in Dhaka. I took the photo from sector 3 of the high-income planned area (Ward 1) during field work in 2018.

Figure-4.2: Vegetation on street, Sector-6

Comparatively more trees were visible in the planned high-income area (Ward 1) (as shown in the photograph at the top) than in the low-income community area (Ward 33). One of the possible reasons is identified from the observations, the high-income area is already developed whereas the low-income area is under construction for housing, destroying the vegetation. (Source: Participants, Female, 17-18 years, Ward 1, FGD-4)

Figure-4.3: Neighbourhoods without any green space (Ward 33)

This photograph shows typical neighbourhood in the low-income area (Ward 33) in Dhaka (a city of Global South). A drainage system, footpath and most importantly for my study, any green space, are absent here. (Source: Participants, Male, 12-18 years, Ward 33)

However, in the low-income area, young residents have less availability of green space in terms of vegetation or presence of trees in their locality. They have to spend some time on streets and local tea stalls for conversation without having a green space near their house to spend time with friends. The area is unplanned and 'built up' with housing erected in an 'illegal way' without following planning and building standards (interview comments by Real Estate Developer; Town Planner, RAJUK). The buildings in this study area are very congested and access to enter air and light is difficult in some areas, let alone green space. I could not find any vegetation in the locality of low-income area I visited (see also Figure-4.3). Hence, the residents of this area face the possibility of a very unhealthy life in my observation.

On the contrary however, in the low-income area, young people I interviewed in the focus groups reported they had heard from older aged residents who proudly expressed that this area (specially Mohammadpur which is not far away from my case study area, Ward 33) has a long tradition of a 'sporting mentality' amongst neighbours, and that there was an

availability of playgrounds in this area a few years ago. One participant (Noyon, Male, 19-24 years) supported this comment and mentioned knowing of 7 parks and playgrounds in his nearby area which shows this area had previously had enough green space but these playgrounds were not present in my study area, when I visited Ward 33.

> *This area has enough parks and playgrounds. Shyamoli Shishu Park, Jannatbagh playground, Tajmohol road Eidgah field, Rajiya Sultana Park, Shyamoli Club playground, Shahid Park, Adabor Football playground. (Noyon, Male, 19-24 years, Ward 33, Int-7)*

What is interesting about this reported comment above is that in reality, these play spaces are actually dispersed in other Wards (surrounding Ward 33) and not close to their living area, therefore, participants have to visit these places by cycles or rickshaws and very few (2 out of 13 of young adults) participants I interviewed reported visiting there. One participant (Rizvi, Male, 19-24 years) believed to the contrary that there is a lack of parks in their neighbourhood (close to house) and the playgrounds are beyond the capacity of users (considering 100 people at a time as users).

> *No, there is no park in (our) neighbourhood. There is a shortage of space to build that (parks or playgrounds). The stress on (an) existing playground is very high. Less space is available to play in the field. There is a playground (here) but that is not suitable for 100 people/users. The area is too small. Some young people can play there. (Rizvi, Male, 19-24 years, Ward 33, Int-2)*

This comment was supported by another participant in Ward 33 who also mentioned that there is no formal green space. Formal green spaces are included in official planning document or government organization's demarcated space (Pietrzyk-Kaszyńska et al., 2017).

> *No they are no officially declared playgrounds. They are actually unused land (vacant) but we can play there. (Asif, Male, 15-16 years, Ward 33, FGD-6)*

The comment also revealed the vacant plot in the low-income area which is used as a play lot by the young respondents and mentioned by the real estate developer and planner in my key expert interviews, is located in a low lying area (flood prone and with ponds and ditch). A developer filled up the area for housing without the approval from RAJUK (Real Estate

developer interview). As a result of these kind of actions there is less availability of green space in the low-income unplanned area.

There is more to the issue of youth experience of green space than just a lack of space however. Table-4.2 also shows that comparatively few participants in focus groups visited nearby parks and playgrounds even when there is availability. The young participants identified the reasons for being less interested in visiting is that they cannot do physical activities there such as playing football, running and jumping. Their comments support wider research that has found that lack of attractive landscape, design and materials in the green space creates less enthusiasm for use (Wang & Wu, 2020). In this context, lack of proper urban planning or town planning specially land use planning marked as connected to reduction of physical activities of young people (Ziviani et al., 2008) .

Table-4.2: Participants interested to visit nearby green space

Age group	Ward 1		Ward 33	
12-18 years	19 (n=30)	63.33%	10 (n=38)	26.31%
19-24 years	8 (n=15)	53.33%	2 (n=13)	15.38%

Source: Author (2018)

From the above focus group conversations and interviews with participants, it was difficult to get a clear picture of experience of access to green space, as some participants said there are more playgrounds in their area but some others replied opposite. In my experience and observation on the ground however the situation of less green space is normal for an area with high density of population, there is simply less opportunity for people to find separate space without housing. The question is why the young people do not make more use of playgrounds if there are some? Is it just because the areas are unpleasant or are there any inequality or social and environmental justice issues that are inhibiting the experience of young Dhaka residents? The next section discusses the opinion and experience of young women participants regarding their access to green space.

Experiences of roof top green space – insights from female participants

Some young women informed me that they were using local parks but not in as large a numbers as males I spoke with, older young women mentioned using parks especially in the high-income areas (Ward 1). However, female respondents reported being more interested in using roof top places where they can spend leisure time and gardening if possible (depending on the permission of house owner if they are living in a rented flat).

Figure-4.4: Roof top green space with trees and swing

Source: Participants (Female, 17-18 years, Ward 1, FGD-4)

Figure-4.5: Gardening in the roof top and in the balcony

The above photograph shows children are gardening in the roof top of their house in high-income area. The below photograph shows some ornamental plants in the veranda for mental refreshment in the relaxation time.

(Source: Participants, Female, 15-16 years, Ward 1, FGD-3)

Figure-4.6: Jackfruit tree in the backyard

Source: Participants (Female, 15-16 years, Ward 1, FGD-3)

The roof top green space concept is not new. It started in the 19th century as roof top gardening in the urban area to mitigate the daily vegetable needs while the rural agricultural lands are decreasing due to rapid urbanization, population growth and climate change (Paschapur & Bhat, 2020). As we are facing the same challenges of ruining agricultural land and mixing of toxic chemical in foods stored for long days, roof top gardening has become popular for house owners in both study areas (Ward 1 and Ward 33) in Dhaka city (Safayet et al., 2017). Moreover, gardening provides both mental and physical wellbeing for the visiting of the site and doing some works in the garden. Physical wellbeing also achieve from using stairs to reach on the top of house, walking on the top surface and taking care of the garden. Female participants reported they like to visit roof top in the afternoon to have some quality time with friends and family in Bangladesh (there is also safety and security issues that will be discussed later in this thesis).

One of the most marked outcomes of the focus groups was the gender differences in how girls and young women accessed green space and public space in general versus boys and young men. In the high-income community this gender difference was most marked with 12 of female participants (in the high-income area) saying that they are not allowed to play or use public spaces. Considering 'the shortage and access to park and playgrounds' and 'social concern' of young women being at risk of harassment in public place, female participants in

both areas (Ward 1 and Ward 33) like the roof top garden as a preferred green space to pass leisure time (Figure-4.4). In discussion, it was suggested that this is comparatively a safer place to them instead of spending time in the parks if there is any access.

Figure 4.4 shows the arrangement of roof top gardening can aim to create a sense of green space by using trees planted in plastic drums and this arrangement is also to avoid the water penetration from soil going into the roof. Another photograph in Figure-4.4 shows the arrangement of swing used to spend leisure time in fresh air by females in this house. Shamima (female, 13-14 years) reported she is happy with this place and its decoration as a place to spend some time with family and friends while nearby park and playground have less facilities.

I love to go to roof top for passing time. There is no seating space or park nearby the house. My roof top garden is well decorated and well arranged. (Shamima, Female, 13-14 years, Ward 1, FGD-1)

The comment by the respondent shows the attraction of the place increased by aesthetic beauty and the elements that are needed by young users (i.e. swing, seating space) but those were absent in their nearby park. Another respondent, Ritu likes gardening (Figure-4.5) in the roof top. It gives her a feeling of ownership by taking care of the trees. She planted trees as a source of passing good time there.

I like roof top, I have planted trees there by myself. (Ritu, Female, 13-14 years, Ward 1, FGD-1)

The female participants in the high-income area took photos from their desired green space areas (as a part of discussion in focus group session) where they spend more time instead of visiting parks. The photographs show that they prefer to spend leisure time in the balcony (Figure-4.5), roof top and in the back yard (if available) of their houses (Figure-4.6). A balcony was reported to be a good place for them to use time reading books and also take care of the space in their passing time. A balcony was also reported to be a comfortable place for female respondents in rainy days when they cannot go outside place (i.e. park) for leisure purpose. The Figure-4.6 shows a jackfruit tree in the back yard of a participants which is becoming rare in city areas in Bangladesh.

However, not everyone has access to rooftops, there is a problem about using the roof top if the user has to use this space in a rented flat. Some female participants said that they can only go to the roof top after obtaining the permission from their house owner or parents. There are reasonable cases of incidents (for example, suicide by jumping from the roof or harassment by male tenants) on the roof top but not all young women had access to these

areas. Emi (Female, 15-16 years, Ward 1) a female participant complained that the house owner locked the door so they could not use the roof top.

> *When we were new in the building we could not go to roof top. The door of roof was locked by the house owner. When we first came to the house, the house owner said that there is a risk to open the door for others, even for drying clothes on the railing. (Emi, Female, 15-16 years, Ward 1, FGD-3)*

Young female respondents in the low-income community (Ward 33) also reported their interest to pass time in the roof top if it was available.

> *I have planted flowers in a flowerpot on roof top. I love to spend time there. (Maria, Female, 15-16 years, Ward 33, FGD-1)*

> *We spend maximum leisure time in our house on roof top with friends and family. There are some flowers planted by land lord/house owner. (All, Female, 15-16 years, Ward 33, FGD-1)*

From the above discussion, urban planners may assume given the priority of users, that the attraction of the roof top, is the only the reason for the young women to spend time there, i.e. because they enjoy this space but in my study I was interested in whether there any other social and environmental reasons for that behaviour (see more discussion in chapter 8). The next section will discuss the availability of service facilities in the parks and playgrounds as indicated by users of these places and from my field observation.

Availability of service facilities

Youth experience of service facilities in or near green space such as mini food shops, seating spaces, water supply, sanitation, walkway, sports equipment in the green space were also considered in my study. Availability of these service facilities have great impacts on the experiences of users of park and playgrounds as noted in a study of 'space-behaviour relationships' (Wang & Wu, 2020). Bohn-Goldbaum et al. (2013) support this argument that the quality of a park and closeness from house has psychological and social benefit for young people but so too do the services and affordances (opportunities to interact with others for example) provided in those common spaces (Nissen et al., 2020).

Figure-4.7: Water supply pump and office of the welfare society

The photograph shows the positive side of parks in the high-income area, sector 6 (Ward 1) connected with water supply pump. The welfare association (Kollayn Somiti) office is also connected to the park, therefore, there is a possibility to look after the park closely by the authority.

Water supply, particularly potable water is an essential service which makes the use of a park and playground more sustainable (Bohn-Goldbaum et al., 2013). But children and young people's experiences of access to water in my study appeared to vary by Ward and by income. Users can get their emergency water from a water tap and water is necessary for the maintenance of parks and playgrounds. The obvious positive affordance of the park in the high-income area (sector-6, Ward 1) in the photograph (Figure-4.7) is a water supply pump which is available beside the park and close to the welfare society office (below in the Figure-4.7). However, not all parks had water, young respondents I interviewed did not volunteer experiences about the availability of water in every playground or park in this area. The condition is much worse in the low-income area these findings will be discussed in the problems and issues section (see also Figure-4.8).

Another needed service for the user of parks and playgrounds is toilets. However, across all focus groups my respondents did not mention these services and I could rarely find any public toilets in the parks I visited in Ward 1 or the low-income Ward 33. Pedestrians and users of this park in sector-6 (Ward 1) could use the toilets of the nearby mosque. However, this service is closed except for prayer time and females have a problem in using the local mosque toilets with males as there are no separate access for them. Shyness in focus groups may have prevented young people mentioning the lack of toilets. In their study of children's play areas in Dhaka city Ahmed and Sohail (2008) argued that girls are almost entirely excluded from public playgrounds and lack of access to toilets was a reason.

My field observations supported the impressions from focus group discussion that there is inequality in how young people in my study experienced access to green space. In sector 7 (high-income; Ward 1), I found a park for this planned area was under construction. The park area is comparatively bigger than other parks of this area. The surrounding environment now looks better after the changed landscape design with new walkway (Figure-4.9), dustbin (Figure-4.9), lamp post and seating space. The walkway was widen and levelled suitable for wheel chair users. The drainage system of this park is well designed.

Meanwhile equipment quality and safety is important for the functionality of park and playground to increase the usage behaviour of physical activity (Bohn-Goldbaum et al., 2013). Diversity of equipment also encourages users' physical activity and visits to play spaces (Bohn-Goldbaum et al., 2013). From this perspective, this play area appears to satisfy the requirements youth might expect of a pleasant visit.

Figure-4.8: Poor condition of toilets and water supply (Ward 33)

The photograph above shows the dilapidated condition of water supply and toilets of Sonali Sangha playground in the low-income area (Ward 33). The photograph below shows the damaged water tap in the same playground. Water quality is also a major issue here for the users of the playground. From my observation maintenance is over looked by the authority here.

Figure-4.9: Walk way and waste bin (Sector-7)

The beautification of the parks and playgrounds are a long awaited demand by many local Dhaka residents. The photo shows the improvement of a park in the high-income planned area (Ward 1) with design including a walkway and waste bin to keep the park clean and hygienic for the users.

Figure-4.10: Corner shop at Mohammadpur playground

In sector 4 (Ward 1) there is also a lake with a good walkway for the joggers but jogging is only allowed for retired persons and high officials living here as mentioned by the young participants who commented that this is patrolled by the guard here. In sector 5 (Ward 1), only a park is available with a lake for the users but the walkway is too narrow for users in my observation.

The discussion above gives us a scenario of more available facilities in high-income planned areas comparing to the low-income area. From my observations, mini shops or tea stalls are very popular with young people (age above 15 years) for gathering or gossiping in both case study areas of Dhaka city, these sites work as a place of social cohesion. These kind of shops can be fixed or moveable on a cart or wheeled and they are not always associated with green space, they are usually placed beside the road, playground or park. Refreshments are available in these shops for anyone interested to use them after physical activities or sedentary in a park and playground. I found a mini shop at the corner of the Mohammadpur playground in Ward 33 (Figure-4.10) but it was closed during my visit in the afternoon. However, more shops were available surrounding this playground. Other parks in Ward 33 did not have such facilities during my visit.

In a conversation with a cricketer (key informant) he expressed his opinion (Box-4.1) about the life of the young generation in Dhaka and the existing conditions of playgrounds of low-income community as he lives there.

Box 4.1: Observation and experience from a cricketer

Some of my friends like to spend time in Facebook, some of them often visit Shyamoli playground (far away from Ward 33). They can play and watch matches here, it has been open for all. But construction work is going on in this ground now. We have another green space in Intellectual graveyard near my house (outside of my study area). Though construction of building is going on in the Bosila area (Ward 33), we can spend time at Mansurabad Bridge (not a green space) in the evening. There are also some vacant plots (not green space) in that area but there is still a crisis of playgrounds. There is also construction work going on in the Dhaka Uddyan area (Ward 33) so the air becomes polluted because of dust in the surrounding area. I do not feel safe here (pollution). There is a cricket coaching centre in the Sonali Sangha playground (Ward 33), those who are admitted there (with certain payment) can use the facilities of the ground. (Key informant interview no. 14)

After observing the existing scenario of green space from the experiences of young participants I have found some problems and issues to discuss for future policy making and planning which I will review here.

Problems and issues found in analysis of youth experiences of green space

This section discusses the inadequacies of parks and playgrounds found in the two study areas (Table-4.3). I asked participants their experience of playgrounds and parks near their house or living space. In addition, I also visited the case study areas (Ward 1 and Ward 33) by walking and by rickshaw. Key problems identified in focus group discussion and in my observation include: 'shortage of facilities to enhance the experience of using green space', 'poor safety and security issues', 'difficult access and availability problems', 'pollution and violation of planning rules' (using parks for markets for example).

Another problem of using these parks in both case studies is that there is significant overcrowding and complaints from many of the participants of the study about too many old users (age above 40 years) crowding the spaces in holidays. The problem of lack of understanding of adult and young users need for green space and playgrounds was obvious to me. Amin (Male, 14 years), a young participant from the high-income area talked about the introduction of a recent fee payment to become a club member to enter the playground in sector 3 (Ward 1).

Table-4.3: Problems and issues of green space identified from field observation

Problems and issues	Ward no. 1	Ward no. 33
Availability/ name mentioned by participants and observation	Sector 3, 4, 5, 6, 7, 13, 14	Shyamoli Shishu park, Jannatbagh playground, Tajmohol road Eidgah field, Rajiya Sultana Park, Shyamoli Club playground, Shahid Park, Adabor Football playground (But they are far away from my study site).
Average distance to a park in case study sites (max)	10-15 minutes by walking	30-40 minutes by walking
Shortage of facilities (water supply, toilet, lights, dustbin)	Sector-14	Sonali Sangha playground
Pollution (dust, waste dump)	Sector-14	Rayerbazar Intellectual Martyrs (Out of study site)
Restricted access (for women and students)/ permission needed (from guard/authority)	Sector-3, 4, 6	Rayerbazar Intellectual Martyrs
Sandy or grassless and wet (outfield)	Sector-13, Staff colony	Sonali Sangha playground, Mohammadpur playground, Shyamoli playground
Unsafe equipment (sliding, swing)	Sector-3, 4, 13	N/A
Unsafe space (play area, seating, walking)	Sector-3, 5	Mohammadpur playground
Lack of security	Sector-5	all
Time limit to use	Sector-5, 14	N/A
Violation of planning rules	Sector-5	N/A

Source: Author (2018)

We could access to sector 3 playground but now there is a restricted entry for us. Only members of Friends Club can enter that ground. Members have to pay fees to become registered and to use the ground. (Amin, Male, 14 years, Ward 1, FGD-6)

Drug taking in the enclosed and dark spaces of parks and playgrounds is also becoming a severe problem in some areas in Dhaka city (Anam, 2014). Ananta (Male, 19-24 years, Ward 33) supported this in interview when he mentioned about the risks associated with drug taking and the violence that could occur in his local playground (Ward 33). Drug related violence like hijacking, harassment of women in public spaces (known as 'eve teasing'), creating gangs is a recognised problem in Dhaka (Atkinson-Sheppard, 2016).

But some land (plots) which are vacant are used as open spaces though these lands are also used as illegal working site for drug taking. Sometimes murders also have occurred in these places. (Ananta, Male, 19-24 years, Ward 33, Int-8)

Low-income community areas are vulnerable to crime (Atkinson-Sheppard, 2016). Anata's comment informs us that some parks are not only a place of drug peddling but that there is also fear of violence and killing amongst young people here.

One user (Yakub, Male, 14 years) complained about the environmental factors which is also limited youth experiences of green space, including local flooding in the high-income area (sector 5, Ward 1).

We cannot go to the park in the rainy season, the water level goes up (because of poor drainage system). The park is at lower portion than the road, so we cannot go there during rainfall. There is shade there to keep safe from rain but the water flows from road to park. At the same time, the water level of lake goes up creates haphazard (muddy) situation. (Yakub, Male, 14 years, Ward 1, FGD-6)

The play area in the high-income planned area (sector 14) is predominantly occupied by a cricket academy (Figure-4.11) and participants I interviewed confirmed that the academy has no legal rights to use this ground as this ground is open to public. But the cricket academy has managed to use this area as a result of support from 'welfare society' which is in charge for the local problem solving of the sector wise local residents. Moreover, this ground is also misused by arranging commercial fairs for one month and religious prayers during Eid festival. Again events that are not normally permitted but have been enabled by the local welfare society, which is a group of the elected local business people residents who have been

living for a long time in the area. Local councillor (Ward 1) in an interview for this research informed me that they rented the ground to earn some money for the maintenance of the ground as he got less support of budget from the government in this purpose.

This is not new in Dhaka city, the problems of limited access to green space for children has been reported in the Kalabagan Children's Park and the Dhanmondi playground where other organisations exclude youth and local people from entering the green public grounds (Anam, 2014).

Some respondents I interviewed also reported other problems with their experience of access to playgrounds (see also Figure-4.12):

There is also a problem of time limits there. Maximum time the senior(s) gather the place in the morning so we cannot go there at that time. In Friday, we have time but we cannot play there because of them (seniors). If any one goes to the ground at 6 am, he will not get that. At 6 am, only seniors like our father's age people go there to play. There is also a cricket academy, they occupied this ground from 10 am to 4 pm. We are given time from 4 to 6 pm, then closed. It's very difficult to cover our game within two hours. (Shafi, Male, 14 years, Ward 1, FGD-6)

In addition the cost barriers faced by users was revealed in the low-income areas that was taken in the field note after the conversation with a user (Box 4.2).

Box 4.2: Field notes from a user of a playground

> A user of the Sonali Sangha playground informed the researcher that the membership fee to use the facilities of the playground and cricket coaching centre is 1000 BDT/month (18.51 NZD; 1 NZD = 54 BDT). The members can play 4 days per week then other use rest of the week. The authority arranges tournament here and mainly use for cricket coaching purpose by coaches- C and M. Cricketers can come from other distance places.

Participants in the low-income area (Ward 33) also report experiences of risk as a result of absence of green space to play. Some informants mentioned that without having a playground nearby their house they have to play on the streets which can cause accidents. Moreover, in this area, young people have to go far away from their houses by walking and by rickshaw for passing time in the Rayerbazar Intellectual Martyrs. There is also a possibility of accident for the children as they have to cross busy road to reach the parks or playgrounds.

Figure-4.11: **Illegal use by cricket academy and politicians at Sector 14**

The photo shows the obstacle created in the playground for young people. Some of the young people interviewed in focus groups expressed frustration that green space was taken over by other groups and organisations- here for example in high-income area (Ward 1). A local cricket academy as set up on a public space. I observed that establishing market sited on the playground has created damage to the ground by using materials (bamboos) which remain on site and creating many holes across the park. As a result of these informal activities young people outside the academy have less opportunity to use this playground.

Figure-4.12: The time limit to use a park

Time limit to use the park is likely a significant barrier for young people. The photograph shows the time (Morning: 6am-11am; Afternoon: 4pm-7pm) to use the park in sector 5 of high-income area (Ward 1).

We love to live here, love all these things here. We like to play here. We have no other places to play but on street. Our nearby playground is at Rayerbazar. We can go there by walk. It takes 10 minutes to reach there (by rickshaw). The area is full of dust from construction works. Often accidents happen on road near Intellectual Cemetery. (Farid, Male, 14-16 years, Ward 33, FGD-3)

In addition, the waste dumped close to the playground construction works near the playground in the low income area (Ward 33) creates dust source of air pollution.

The area is full of dust for construction works. (Farid, Male, 14-16 years, Ward 33, FGD-3)

In the high-income area, there is a problem of waste dumping and management in the parks and playgrounds of this area and also misuse by users. Rasul (Male, 15-16 years) observed that people dump their waste in the parks and playgrounds.

There is a park there. It is beautiful but visitors eat and dump their food waste there. Therefore, a dustbin should be established there. The place should be clean from waste. (Rasul, Male, 15-16 years, Ward 1, FGD-5)

However, the playgrounds in high-income area while more accessible for young people than in the low-income (Ward 33) also presented safety problems. These spaces were not always well maintained and their affordance values, i.e. for gatherings, and recreation seemed reduced by this (see also my contribution to research on green affordances in Nissen et al. (2020)).

Some of the children and youth I interviewed reported parents discourage their children from going to parks because of unsafe equipment, this is also noted in studies of what reduces youth outdoor activity and enthusiasm for play (Bohn-Goldbaum et al., 2013).

In focus groups, children confirmed that playgrounds are often policed by local security to ensure children do not access them, as Afrin notes below.

The Guards in some playgrounds do not allow us (students) to enter inside in school time or other time (afternoon). (Afrin, Female, 15-16 years, Ward 1, FGD-3)

The Welfare Society (Kollayan Somiti) of sector 4 (Ward 1) restricts students' entry to the playgrounds in school and college time, young people are not allowed with their school or college dress to use this play area or park. There is possibly a great concern from the parents of students about their misuse of school and college time in parks. Few young female participants were observed using the playground. Even when I was taking photos of this public space one guard requested me not to take any photo of the space and facilities. One participant (Sadia, Female, 15-16 years, Ward 1, FGD-3) expressed her bad experience in a local park. She said,

Even I went there (park) with my mother but they (Guards) were blocking us and they did not allow us to enter inside. My mother said I am with her what is the problem? Then the guard said ok, if you can keep the school bag in your house then you can enter here.

The next section will discuss children and young people's reported opportunities for social interaction in green space within their neighbourhood.

Social cohesion and wellbeing

The results of this study confirm that while young people often cannot access parks easily or are frustrated by their experiences in them when they do have a positive experience of green space it appears to be highly valued (Pietrzyk-Kaszyńska et al., 2017). In interviews many young adults were enthusiastic about green parks in ways suggest that these spaces do positively impact on physical and mental wellbeing of residents near their location. Social gatherings in a sense of meeting people of various age have great impact on society. Participants agreed that interaction between seniors and juniors helps to understand meaning of life and motivation in life in positive way (Khayer, Male, 19-24 years, Ward 1). Aged person's experiences in life can support young people in realizing the problems they may face in their career in near future.

> *Social gathering creates respect for seniors by juniors. (Khayer Male, 19-24 years, Ward 1, Int-5)*

A young adult participant in high-income area identified practising good habits in a sense of active in sport events from childhood can have great impact later of life (Barek, Male, 19-24 years, Ward 1, Int-1).

> *Yes, I think this (physical activities) is very much needed for young people. If we do not practice good habits, it will impact in our next life. We can have an idea from the observation of an addicted person. (Life) is gradually affected by habit of that person. Sports is such a kind of thing, needed for everyone, especially young people. If we practice it from childhood, it will help us for the wellbeing of our body and mind. (Barek, Male, 19-24 years, Ward 1, Int-1)*

Some of the young participants I interviewed also informed me of an unexpected problem they experienced with regard to social cohesion. Some people from the local community sit by the park or on the nearby footpath beside street like to do chatting. Children I interviewed reported they have also heard bad comments from these user. These comments suggest that having green space is not enough, how people use that space also influences the experience of a place for a satisfying social gathering space for children and youth. Some comments from the participants suggest young people can experience social exclusion from parks:

We cannot sit under the shade of a tree, not beside the lake, not in the park, even beside the road. Not only that some people pass bad comments to us (if we sit for chatting). (Shafi, 14 years, Ward 1, FGD-6)

We cannot sit on the footpath, either the guard of police will remove us from the spot. (Amin, Male, 14 years, Ward 1, FGD-6)

Some participants indicated an urgent need for a social meeting place for mental restoration to avoid the stress of busy life. They mentioned just a place is needed for them for conversation with their mates even in absence of green space (Farhan, Male, 19-24 years, Ward 1, Int-6).

We have no place for social gathering. It would be great if we could have some space for chatting. Mental wellbeing and development are connected to conversation with people of different levels. Social gathering depends on the mentality of the people. It matters more than the availability of the green space. (Farhan, Male, 19-24 years, Ward 1, Int-6)

One of the significant findings from the conversation with young people about their park experiences is 'leadership building and social inclusion' that is encouraged by using green space (see also in chapter 8). Meeting with peers and sharing opinions appears to create confidence for some young people. It helps them in decision making in their own life after gaining experience from likeminded people. Much research suggests that gathering in a playfield boosts leadership skills and team work. Moreover, passing time with friends under open sky and breathing fresh air, especially in conditions of high air pollution also helps to reduce mental pressure and depression in daily life. This was noted specifically in a focus groups discussion by Asif (Male, 15-16 years). Meeting with friends in a playground reduces screen time of behind electronic devices. He felt young people become introverted without gathering with friends and neighbours and can fall into a personal crisis and are more likely to experience depression and anxiety.

Playground helps to socialize between children and young people in a society. But without playgrounds they have to spend more time in the house. Those who have access to social media can connect to others. But some families do not allow them to connect to social media. They cannot interact with each other. Without sports we are falling

into depression. We can meet other in the fresh air outside home. (Asif, Male, 15-16 years, Ward 33, FGD-6)

Rakib (Male, 19-24 years), a young adult participant from low-income area (Ward 33) speaks up about growing up, learning about leadership by spending time in the playground and thinking about future leadership. But lack of green space creates obstacles for social meeting and he felt the lack of opportunities to get together hampers the social cohesion and responsibility build up among children and young people.

No, there is not enough parks and playgrounds in our area. But this is necessary for social gathering. Otherwise leadership can't grow and thus we fall behind in future. (Rakib, Male, 19-24 years, Ward 33, Int-12)

According to an urban expert I interviewed many working in local planning community recognise that deficiency of greenspace and public space planning can have adverse impacts on the quality of life of young people (Planner, Narayangonj City Corporation), '*We are now thinking of sustainable development of cities so we cannot avoid (providing for) low-income people for the case of inclusiveness of all*.' He also expresses his concern about youth, '*living in virtual world of children and young people,*' he expressed concerns this makes them isolated from family at the end from society. They have '*few chances to discuss their thinking, choices and demands with any family members or peers*' in conversation he also suggested this is leading to serious mental health issues.

If we think of inclusive planning including people from slum areas and high-income people, the place to meet people is public space but we have shortage of public space in our country. That's why children are becoming individualistic. They are growing up in the virtual world. Without social cohesion, they also have lack of social responsibility. They are involving to addiction, isolation which turn them to suicide. (Planner, Narayangonj City Corporation)

Some of the key informants I interviewed talked about the impact their work has on the experiences of youth and the conflicts in their role where there is an authority that is in charge to implement development controls, but also engaged in land development creating conflicts of interest. No plan is fixed, every plan is always under review and changes with the current demands of the city and people as this informant explained.

Of course, when we had the Structure plan and 1959 (Dhaka) Master plan, there was an intention to have green network, (a) blue network may be not specifically as an urban designer. I could read those plans that's the reason the Detail Area Plan (DAP) was coming and going to happen, we were making a huge movement. I was a part of the review committee, two tier review committee. I thought that a 'one year war' was only because we wanted to make sure that the urban... this space planning and its network, would keep as continuity and proportionate distribution.... The DAP was enacted but there was no authority to protect it. The old RAJUK (development authority) came with an additional responsibility to enact the plan but unfortunately they had a conflict of interest. They were doing planning and allocation of spaces to rich people to pressure our power play and money and taken over the rights of richness and augustness of these spaces of children and young people. (Architect and Urban designer)

The same urban expert interviewed for this study mentioned about the value of green space. He reflected the wider nostalgia I heard repeated by some young adults that the ruin of society in the form of loss of 'social values,' 'social norms,' 'social integrity' and 'social fabric' is reflected in lack of safety and security for women in green space (see chapter 5). He argued that social exclusion of women in particular from using a city service like transport or parks will create obstacle in the inclusiveness of sustainable development for all.

Dhaka city is failing shortage of green space gradually as illustrated in chapter 1. The next section will discuss the loss of green space in the local area and its impact on their wellbeing from the experiences of young people I interviewed.

Reduction of green space in a transition time

The major responses from the young participants during the focus groups and interviews about their unpleasant experiences of green spaces noted: 'over population,' 'population density', 'misuse of city plan' and 'land grabbing.'

Over population is the main problem for the reduction of green space. Trees were cut for the widening of road. Heatwave and pollution are the negative impact of loss of green space. (Soumya, Male, 19-24 years, Ward 1, Int-9)

Participants from both areas reported experiencing the reduction of green spaces and urban vegetation. Though it was worse for the poorest Ward 33. Speedy urbanization pressure

results in severe problems of inadequate infrastructure, degradation of natural and environmental spaces, traffic block and accidents in Dhaka (Siddiqy, 2017). Soumya (Male, 19-24 years) commented that '*trees in local parks are being cut for development projects.*' This loss of vegetation brings risks as (Siddiqy, 2017) notes, exacerbating urban heat waves and pollution in local areas. High density population is creating congestion in the planned area mention by the focus groups creating experiences of over-crowing.

> *Population is increasing day by day, people are coming to Uttara (Ward 1). It is creating population congestion here. (Shafi, Male, 14 years, Ward 1, FGD-6)*

High density of population creates demands for housing in both areas. People in low-income area can occupy a space and make a house with cheap cost or rent a room from already built houses with common facilities in slum areas. However, in high-income area RAJUK initiated housing projects have been commissioned to meet the demand of high-income people. Many of the young people I interviewed high and low areas were well aware of the pressures driving loss of access to green space. For example, Rezaul volunteered this observation by mentioning industrialization and urbanization.

> *Industrialization and urbanization are the main reason for the reduction of green space. (Rezaul, Male, 19-24 years, Ward 1, Int-10)*

The concerns that young people had about the increase of population is backed-up by research, into 'rural-urban' migration (Siddiqy, 2017) estimated by a study 300,000-400,000 migrants are coming to Dhaka per year (Ahmed et al., 2018). This is also happening because of climate change, river bank erosion, social disorder in rural area due to loss of earnings exacerbates this migration. Rakib (Male, 19-24 years, Ward 33) also supported this comment by mentioning housing projects.

> *Population is increasing day by day. People use the land for housing purposes. (Rakib, Male, 19-24 years, Ward 33, Int-12)*

> *Over population and population density. (Saddam, Male, 19-24 years, Ward 33, Int-13)*

> *Empty space (is) grabbed and rented by powerful or political people. (Rizvi, Male, 19-24 years, Ward 33, Int-2)*

Rizvi (Male, 19-24 years, Ward 33) also identified a significant point that political leaders are destroying the green space in a way to make it for business project by renting the space. This is very common in Dhaka as I have mentioned in chapter 1 and enclosing public space can create risks for other residents in that area as a result of drug use as this urban expert commented.

Without elected local government, we failed to protect 'Community Park', defined community park. All playgrounds are alternatively used for services like Community Hall or public toilet. In the name of community we have destroyed our green spaces, children's play lot. In fact, last but not the least I would like to say Mayors and (Ward) councillors in the name of development instead of parks and playgrounds, they made shops, and they kept them for commercialization. This space is common for drug addicts. (Architect and Urban designer)

This section has considered the compromised experiences many young people had access to green space and using it effectively, it has highlighted the inequality of youth experiences of access to green space in Dhaka which is part of a wider problem of environmental injustice in city (Ahmed & Meenar, 2018). The next section will discuss the young participants' experiences of transport in Dhaka. The type of transport they use, their assessment of good or bad experiences about the transport services and transport management in this city.

4.3 Youth experiences of transport use in high and low-income communities

Transport is an essential part of daily life activities for moving from one place to another or to reach an assigned or pre-planned destination and for advancing work and social connections, and health and recreational opportunities especially for children and youth but the youth experience of transport is also very poorly understood (Porter & Turner, 2019). Integrated public transport is also useful for the travel comfort of the users, encouraging great travel (Rahman & Timms, 2019). Integrated public transport starts by the ease of walking to reach a particular point of another transport mode like a rickshaw, bus and car. Considering the travel route in integrated public transport, Dhaka city road network consists of 200 km primary, 110 km secondary, 50 km feeder roads, or 2,640 km of narrow roads and only 400 km footpath; while footpaths are occupied by vendors often without the permission of the city authority (Rahman, 2018).

In examining the experience of public transport of young residents, this study finds that the young residents of Dhaka city I interviewed use transport including walking, rickshaw (Figure-4.13), bicycle (Figure-4.13), motorcycle, CNG[14], leguna[15], bus, ride sharing (Uber, Pathao) vehicle, and cars in their travel, depending on the time, purpose and availability of these transport modes. This study has separated this type of travel into two parts according to the distance they travel by vehicle, i.e. short travel distance (walking, cycle, rickshaw) and long travel distance (motorcycle, CNG, leguna, bus, ride sharing vehicles Uber, Pathao, and cars). Young people in the low-income area mostly use walking for short distance journeys (Ahmed et al., 2018). Their daily necessities are available near their houses. They buy groceries from local shops and from mobile and stable street hawkers therefore, they can go there by walking. Many agreed that walking is better for their physical fitness and also it is the cheapest transport to them.

Table-4.4: Participants travel mode to visit green space

Age group	Travel Mode	Ward 1	Ward 33
12-18 years	Walk	17	9
	Rickshaw	2	1
19-24 years	Walk	4	2
	Bicycle	1	-
	Rickshaw	2	-
	Motor bike	1	-

Source: Field survey by author (2018)

In Dhaka city, 50% of travel is by rickshaws and other non-motorized vehicles and 60% of the travellers travel on foot (Siddiqy, 2017). Young participants like to walk to parks, playgrounds and they go to school by walking (Table-4.4). In busy times, they use bicycles or rickshaws. Whereas for long distance, the participants in the low-income area use CNG, leguna, and bus because these modes of travel are cheaper than private cars or ride share schemes.

However, in the high-income area (Ward 1), people use their own cars for long and short distance travel. They also use ride sharing vehicles and buses for emergency and long distance journeys. Whereas, for local area mobility for example, visiting nearby shops, parks and playgrounds they walk. Participants (both male and female) admit that walking is good for their health but feel insecure at night. 'Walking helps to minimise expense for travellers

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[14] Three wheeler vehicle run by gas, eco-friendly vehicle.
[15] Gas ran four wheeler

who live close to another mode point in main road' (Soumya, Male, 19-24 years, Ward 1, Int-9).

Figure-4.13: Rickshaws are common transport in the locality

Source: Participants (Female, 15-16 years, Ward 1, FGD-3)

A cycle was drawn by a young participant in the low-income area. There are no designated cycle lanes in Dhaka. Recently, a cycle lane was designed in Sher-e-Bangla nagar area but the length is very short and it has some obstacles for safety, particularly at road intersections. Low-income people and school and college students in their area use cycles for daily activities. Young people in the high-income are using cycle for physical amusement. (Source: Participant, Male, 12 years, Ward 33, FGD-1)

Usually, I prefer to walk within local area. I have found that it is better for health. I think walking at night is not secure here. No one has to use Rickshaws. The area is close to main road so other transport services are available here. (Soumya, Male, 19-24 years, Ward 1, Int-9)

Young participants use combined forms of transport or integrated transport depends on the affordability, availability and purpose. Palak (Male, 19-24 years, Ward 33) from the low-income community supported this argument.

I use a public bus or local bus to go to university. I have also used rickshaws after a bus ride. (Palak, Male, 19-24 years, Ward 33, Int-5)

The participants often use rickshaws to reach destination faster than walking. In emergency situations, some high-income participants reported use ride sharing Uber, Pathao. Some participants, mostly young adults, reported the importance of ride sharing vehicles.

I have to use rickshaws, because no other facilities for transport are available here. I use buses to move outside the sector. I use only Uber, Pathao when needed for emergency service. (Farhan, Male, 19-24 years, Ward 1, Int-6)

Usually, I do walk. I use rickshaws when I have less time. I use buses for long distance, I use Uber, CNG for emergency purposes. (Rashed, Male, 19-24 years, Ward 1, Int-8)

In the conversation with the participants, many expressed the connection between wellbeing and transport. The next section will discuss the connection of social gathering and wellbeing using transport which was raised in discussion.

Transport users' experience of wellbeing

Travelling is important for the happiness in people's lives (Morris, 2015). Travelling by public transport is also linked to social wellbeing in a sense that sometimes people can express and share their opinion about politics, the current economic condition of country and even about the world in a conversation with passengers sitting beside them. From my observation I have found this several times in public bus or local bus in Dhaka. This is good way to pass time when people are blocked in frequent traffic jams in Dhaka. This creates bonding often starting a conversation with a common issue say traffic jams or criticizing of government like I have observed people here in New Zealand often start talking with the weather to a stranger.

Public transport, i.e. local buses are cost saver for the low-income people and students and access to buses benefits their economic wellbeing. Young participants reported that bus journey are popular for them for excursions and visiting any recreational place with friends, shared journeys can work as social cohesion. In addition, buses are often essential modes of transport for visiting relative's house for a big family with many members (Afifa, Female, 17-18 years).

I use local bus to go outside Uttara (Ward 1). Previously I used CNG. I have experienced that four family members can go by one bus. (Afifa, Female, 17-18 years, Ward 1, FGD-4)

One participant (Jasmine, Female, 17-18 years, Ward 1, FGD-4) said that she visited Savar (her grandparents' house) by bus where other transport mode seems expensive. Public transport can also increase social cohesion among users (although see later discussion about risks for young women) instead of using individual cars. Less use of cars decreases the carbon emission level helps the environment. Therefore, this service is also indirectly contributing to the social, environmental and mental wellbeing of the city residents.

Eco-friendly active transport of walking where it is safe can be directly connected to physical wellbeing avoiding life threatening diseases (i.e. cardiovascular, obesity, diabetes) (Zulkefli et al., 2020) and mental health (Bornioli et al., 2019). Walking in a natural setting or parks enhance the mental refreshment and eases the pressure from a stressed life. The intention to walking by pedestrian can be enhanced by the greenery of the walking path (Bornioli et al., 2019). Participants in high-income areas said several times about enjoying their walking for good health and wellbeing (Rezaul, Male, 19-24 years, Ward 1). However, in the low-income area walking is a more common practice not only for good health but for necessity.

I walk for physical and mental fitness. (Rezaul, Male, 19-24 years, Ward 1, Int-10)

Moreover, cycling is another physical activity once upon a time neglected to the high-income society on the streets but recently young cyclists are building teams or cyclist groups to make cycling more enjoyable and contribute to their good health in Dhaka. Amongst young women in the high-income community, especially students, cycles are becoming popular and women cyclists are contributing to a change in the attitudes of society although there are still many issues of safety and congestion that make cycling an affordable but risky option (Sarker et al., 2020).

Rickshaws are also a popular mode of transport in both of the areas contributes economic benefit to both passengers and pullers. This is also contribute to the pollution less environment to the congested city. Rickshaw journeys can be a pleasant way to spend time for young people renting for an hour in Dhaka city.

User experience is important for choosing the right mode of transport for future use (Bornioli et al., 2019). Therefore, the experience of young participants and the way transport impacts their wellbeing should contribute to future policy research and guidelines, building from their experiences and expectations of transport (Rahman et al., 2016). Moreover, transport is relevant to sustainable goals, public transport can make social, economic and environmental contributions including safer travel, lower-carbon or emission free travel and good public transport can support the sustainable economic growth of the country (Delbosc, 2012). The next section discusses the reason and problems of transport faced by the young participants.

Transport problems experienced in low and high-income areas

Transport problems i.e. traffic jams are very typical in the developing countries of the Global South. Dhaka, a mega city, falls far short of providing sufficient public transport or mass rapid transit (Ahmed et al., 2018). In a congested city Dhaka faces severe problems experienced by the young users which include: 'obstacles on the footpath', 'lack of availability of the vehicles in pick up time' and 'bad weather (i.e. rain)', 'poor traffic management', 'high fare of the journey', 'availability of the seat', 'accidents for reckless driving' and the most important is the 'harassment of the female passenger' in the bus (comments from focus group participants).

In the low-income area (Ward 33), specifically, a few participants informed me that they use bicycles to go to school and college. Young female participants (Nayema, Faria) in the same area use motor bikes with their father and elder brother to reach the destination. However, some participants in the high-income area also use motor bikes to cope with the traffic jam (Mahmud, Male, 19-24 years, Ward 1). But they often run motorbikes on the footpath illegally creating additional obstacles and risks to the passer-by.

My father drops me at school with his bike. (Faria, Female, 15-16 years, Ward 33, FGD-1)

I like to use motor bike. Good side of biking is, I can travel in a short time. It saves my time. Bad side is, it's very accident prone. (Mahmud, Male, 19-24 years, Ward 1, Int-13)

Some footpaths are occupied by hawkers and the goods of shops create obstacles for pedestrians. Walking is also insecure for participants at night. Without street lights in the narrow and dark lane are suitable for the hijackers. Participants in the low and high-income area said that bus routes and bus stops are often far from their houses. They had to use walking or rickshaw to catch the bus. They faced problems in the rain and dust of the road in busy times. In addition, some bus users said that they were delayed by the traffic jams at busy times when trying to reach their destination.

In public bus, I can't maintain my time which makes me as late comer in office. (Nahin, Male, 19-24 years, Ward 33, Int-10)

Availability of transport was a big concern among the participants in both areas (Ward 1 and Ward 33). Young people, especially women who use 90% public transport (Navlakha, 2019) reported they faced lots of problems in the safety and security of transport use. In 2017, ride sharing vehicles introduced a service for women (Navlakha, 2019) to save them from public transport harassment but bikes are less available during busy times. The problem in high-income area and low-income were more or less the same in terms of lack of availability of transport and seats in the vehicle.

Depends on my necessity. Maximum time I use rickshaw. For long distance I use public bus, CNG. Personal cars create jam here. Bad side of rickshaw is rent varies time to time and person to person. There is no fixed rate here, it should be fixed like Gulshan area. Good side is, no other option in public transport in local area, so rickshaw is very helpful in quick service. (Rezaul, Male, 19-24 years, Ward 1, Int-10)

I use Rickshaws, rent more or less high. Bad side of the area, no other vehicles available in urgent time. (Rahim, Male, 19-24 years, Ward 1, Int-7)

Dhaka is a city of rickshaws, unofficially the number counted 0.8 to 1.1 million among them 1 million are illegal contribute to 7.6 million persons per day trip (Ahmed et al., 2018). Rickshaw pullers like to bargain with the wealthy people (Rahman & Timms, 2019) but in the peak time with all the passengers. The rickshaw fares vary depending on peak time and weather of the locality. Interestingly, the rate also goes higher for rain and hot days. This was reflected by the comments of Rezaul, Rahim and Rasul (Male, 15-16 years, Ward 1).

Young participants said that they had received very poor service and responses from the authority after any complaints. Literature shows there is a shortage of traffic police to control traffic. Some of the young residents I interviewed were also frustrated about this:

When I go by rickshaw, they (rickshaw driver) want to take a race with cars. Accidents occur in this travel time. They go fast in the narrow road. They do not even stop in the intersections. They disobey the traffic rules. I have survived few times from this kind of terrible journey. (Rasul, Male, 15-16 years, Ward 1, FGD-5)

There is a lack of school buses in both areas (Ward 1 and Ward 33). School children have to depend on their parents and guardians to reach school. In high-income area, they use cars but there is no parking area in school and also there is no space for on street parking as a result the cars block the road.

Private car users drive roughly. School coming cars create (traffic) jam. Need a central system to carry neighbours' school children. (Rashed, Male, 19-24 years, Ward 1, Int-8)

Air pollution is a serious problem in Dhaka due to old and over used vehicles. The fitness issue of vehicle and lack of regular checking of driving license were raised in the transport movement protests (discussed in chapter 1). After the Safety for Transport Movement, government authorities decided to recruit a rover scout to work as a volunteer and to help the traffic police in traffic control. High-income area respondent Shafi (Male, 14 years, Ward 1, FGD-6) reported about his experience,

Rover Scout has got the authority from the President to control the traffic. But bus drivers do not want to follow them. They (students) also do not get any help from the top authority like Sub-Inspector, Superintendent of Police. Our main problem is administrative. (Shafi, Male, 14 years, Ward 1, FGD-6)

Bus conductors or bus helpers also bargain with the students. Two young participants' complained about the cost of the bus. They claimed that students should pay half of the regular rate. They often have to bargain and fight with the bus conductor and helper in this issue.

The fare of bus should be reduced. (Palak, Male, 19-24 years, Ward 33, Int-5)

The engagement of children and young people in transport policy research has been very limited in Dhaka and many cities of the Global South and North. However experience of young people plays significant role as they both citizens of cities now and they are the future leaders of the country. Their experiences and views on key services like transport are important for understanding the sustainable planning for a city.

4.4 Summary

This chapter has reported on focus group discussion and interviews in a low and high income area of Dhaka. My investigation asked SQ.1a. What is the experience of children and young people regarding access to green space and transport in their local area and within Dhaka city? My investigation found that many young people are deprived of physical activities in local parks, particularly in low-income areas which they need to gain health benefits, as the green spaces are often away from their living area or in very poor condition, particularly in the low-income area. Some also feel less enthusiastic about using these spaces because of poor design and planning. There were gender differences which will be explored more in the next chapters in use of parks and transport. However, female participants were interested in roof top gardening to pass good time and most importantly they feel safe there.

The interviews, focus groups and field observations with discussion of drawings and photographs suggest that there are also marked differences in experiences of transport, which are impacted by the income of children's families (where they can live) and their gender (what transport girls and boys can use). I asked, do the children and young people report opportunities for social interaction in green space and transport within their neighbourhood? In all cases however there was limited access to public transport. Young people in both areas reported they like to walk for short distance journey. They like to go to park and playgrounds by walking if it is close to their house and some said they appreciated interactions with different ages, but others felt they were excluded by some park users. Some complained about the cost of fares of buses and young women in particular spoke of harassment in the bus, although some boys also noted this.

I also asked do young people experience loss of green space and lack of transport? If so what is the impact on their wellbeing? As noted above there were inequality differences between wealthy and poor areas. One marked difference in the use of transport was in the rise of a local ride sharing app, which is mostly used by high-income area participants. In both of the communities however, I observed congestion and serious problems getting around and these seemed unchanged on my return to the field site in 2019-20 after the transport protests in 2018. Discussion now turns to compare the student experiences of urban amenities (green space and transport) with their aspirations or expectations. The next chapter will discuss the expectations of young people about green space and public transport in Dhaka city.

Chapter 5 Expectations – Understanding young people's attitudes and aspirations about green space and public transport in Dhaka City

5.1 Introduction

In the continuation of this thesis, this chapter discusses the results of focus group discussions and interviews which aided the investigation of the second research question (RQ.2) and sub-questions (SQ. 2a-c) of this thesis.

RQ. 2.   Do the young people in Dhaka have any interest in the process of green space and transport planning and designing their local area?

Within this overarching questions I identified the following sub-questions:

SQ. 2a.   What is their priority for passing leisure time and use of transport in their nearby area?

b.   Do they see any need for changes to their local area in the context of green space and transport?

c.   Do they want to participate in community decision making for green space and transport? Why or why not?

In the course of my analysis of the responses to the focus groups and interviews about young people's expectations and hopes, I was able to identify many expectations regarding access and use of green space and public transport. In the following sections here I report on the results of questions put to youth in focus groups and interviews to shed light on the *expectations and aspirations* of young people interviewed.

Kabiru et al. (2013) has argued that youth who have high ambition in their life by living in a world of fantasy often face rude conditions in real life. But how can we make change without having hopes and expectations for something better? Young people especially at the age of 12-18 years are experiencing a rapid transition in their lives in terms of mental and physical changes. This time is also marked by changes and fine-tuning of thinking in life's aspirations, achievements and developing their own concepts of the future (Kabiru et al., 2013). Head (2011) has argued that it is important to listen to youth aspirations and expectations in urban planning, not only because of the rights of children and youth to participate but because when young people are enlisted to help develop their community this

participation also develops mental capacity and wellbeing and in turn encourages more participation which has benefits to society as a whole.   In this chapter I report on my research findings after examining the expectations of young people in the two contrasting areas (Ward 1 and Ward 33) where I conducted qualitative field work in Dhaka City.

5.2 Expected priorities for passing leisure time and use of transport

In examining the expectations of young people based on their previous experiences and aspirations, I asked an opening question in my focus groups 'What do you like to do in your neighbourhood (city)?' to the participants during focus groups and interviews. Many participants in response to this question were happy to share not only their experiences but their hopes and expectations about opportunities for recreation in their local community or area and about green space and transport. Most young participants showed interest in visiting nearby parks and playgrounds but it depended on the availability of spaces and transport services.

In the planned, high-income area (Ward 1) one young participant I interviewed informed me that 'every sector should have a park or playground according to the master plan'[16] but there is an absence of those in some sectors. Moreover, this participant was typical of some young people who were also demanding better service facilities according to the standards set out in that plan in the available green spaces (Ismail, Male, 15-16 years, Ward 33, FGD-6).

In the context of the literature discussed in chapter 1 about public participation, listening to people's choices was seen to have a great impact on more inclusive decision making as argued by Innes and Booher (2004) and Arnstein (1969). However, these planners are writing largely for the Global North and they have not considered the limits on the expectations that may be imposed on people, in this case for example, girls and young women, even in the high-income area, did not appear to expect they would be allowed (by their parents and guards) to use parks, and did not feel safe using them. Youth experiences in this study do appear to influence expectations and when young people experience limits to the quality of their local environment or transport, there appears to be a greater burden on young activists to increase the expectations of their peers about what is possible. Planning in cities like Dhaka needs to consider how youth expectations are influenced. For example, as I discuss in more depth later in this chapter, if young females do not express a desire to go to parks, this may be simply because they do not expect to be able to use parks, rather than an expression of their free choice.

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[16] Prepared by RAJUK

The following sections will now also reflect on the argument of Johnson et al. (1998) and Mayo (2001) about young people's understanding of and expectations about participation in physical activities and use of public transport to explore their 'social attitudes and behaviour', 'use of time', and 'alternative use of entertainment' in green space and public transport. The following section will briefly set the context to discuss these issues.

5.2.1 Expectations, social attitudes and attitudes to social cohesion

Social attitudes of people is a big concern in Dhaka, a mega-city of 90% Muslim inhabitants in Bangladesh (BBS, 2012). Conservative attitudes to the role of women in society, even in Dhaka where residents like to follow modern cultural trends, is still experienced. And these conservative values may also influence expectations of youth and behaviour from dress code or fashion or style for not only for religious reasons but also because of wide spread attitudes about how women can become safer on the streets, as often suggested by mothers and elder sisters (Ali et al., 2015). But women in Islam are honoured in society (Wright, 2000). Moreover the challenging situation of women has recently developed in more serious ways since the 1990's. Surprisingly in the 1950's young women in Dhaka city in middle and higher income communities (college and university students) regularly participated in protests for language (mother tongue) movement in February 1952 and most importantly, they also contributed in our liberation war in 1971 (Rahman, 2017).

The conservative social attitudes and expectations placed on women which limit their opportunities and choices have been changing slowly as people are becoming more educated after the independence of Bangladesh in 1971 but it is surprisingly that such a conventional mind-set of male dominance persists given that two women have been administering this country as a Prime Minister since 1991, alternatively and repeatedly. Young women are prioritised more than boys in education sector with support coming in the form of free of cost text books, tuition fees and exam fees until class 12 (college level) under the Female Secondary School Assistance Project (FSSAP) (Sosale et al., 2019). Government is also planning to make this opportunity available for women to the undergraduate level. Women in Bangladesh are increasingly becoming job holders, entrepreneurs, and engaging in businesses particularly in the informal sector; this makes them busier outside the home, and increasing their contribution to the economy of this country (Khatun et al., 2015). Gender equality is an expectation of all sectors according to the Bangladesh constitution 1972 (Wright, 2000) while world recent reports show outstanding progress in women's lives in the last 20 years (DhakaTribune, 2019; USAID, 2020).

However, the results of the focus groups and interviews with older students for this thesis suggests that in everyday life the expectations of teasing and harassing of young women either inside or outside the home is a regular problem that is limiting women's everyday use

of public space and transport. This kind of discrimination was reflected by the participants in the discussion and conversation. Young women participants in the high-income area complained about the social attitudes of neighbours restricting them to play in the house. Many reported they could not participate in any physical sports outside home even with their younger brothers. They also reported that they got less support from their parents and less encouragement to do sport as they got older. However, some participants did say that they could play in the parks or playgrounds when they were under twelve years of age.

> *I want to share one of my experiences, when I was at class eight, my exam had just finished, I started playing badminton with my younger brother in my previous house. All of a sudden I found that two women from top floor of other building were looking at us and throwing comments in a bad manner. They thought (of) me as a disobedient. (Emi, Female, 15-16 years, Ward 1, FGD-3)*

These observations from young women like Emi, inform the attitudes of people in a way that means local Dhaka society effectively prefers allocating more public space for play for boys than for girls. In my observations and interviews, parks and playgrounds were dominated by young male users, consequently young female users had less access to these places than males. Some female participants however aspire to less or zero discrimination when using green space and transport but because they expect harassment, many in, especially in the high-income areas, reported that they tend not to use these spaces.

> *I cannot go outside even the rooftop. My brother and parents do not allow me to go outside. I have to give answer to their questions what purpose is there? Whom am I going to meet (there)? When I want to go downstairs. The door (in the roof top) is locked by house owner. I have to pass time with younger brother in our flat. I have to spend time in house. (Rumana, Female, 15-16 years, Ward 1, FGD-3)*

In contrast to the experiences of Rumana, some young women in the low-income community reported that they were familiar with their neighbours and as a result it appears that they expected to face less harassment (Maria, Female, 15-16 years, Ward 33, FGD-1) than the participants in the high-income area.

> *Local people know us. (Maria, Female, 15-16 years, Ward 33, FGD-1)*

Many young participants, male and female in both high and low-income areas also experienced a lack of social cohesion in their neighbourhood. They aspired to know their

neighbours but many older students reported less bonding opportunities and many said they had little time to pass with neighbours outside homes, in the parks and playgrounds (chapter 4). This risks creating age and understanding gaps between elder and younger residents in an area. Some respondents reported observing the conflict between seniors and juniors using the limited space of the playground in the high-income area (sector 14, Ward 1). Some young participants recommended that there were separate times for park use by age.

In the high-income case study area, some participants' comments support the argument that people coming from other areas of the city and country (due to migration and transforming residence for better living) have less opportunity to meet with their neighbours (Bork-Hüffer et al., 2016). They feel alone and isolated, unable to participate in any event organized by local people (Jahan, 2012). This may influence their expectations and fears about using public green space.

On the contrary, the young women participants in the low-income area seemed hesitant to voice strong views against problems they faced from the locality or express their expectations. Akhter et al. (2020) wrote that women in poorer economic communities often feel silenced or shamed to speak at any issues (more discussion in chapter 8).

5.2.2 Expectations of time for physical activities and entertainment

Time is a very important factor when we consider how young people expect to engage in any kind of physical activities in green space. In focus groups, young participants informed me about their feelings of having less time to participate in activities like playing games, riding bicycles or spending time in parks and playgrounds than they hoped or would prefer. The participants like Sadia, (a Female, 15-16 years, Ward 1, FGD-3) in the high-income area reported she had to spend a long time studying. The shortage of time due to pressures to study was reported more often by participants in the high-income community focus groups than by the participants of the low-income area. Many high-income participants reported parents and educational institutes are continuously pressuring them to involve time in study purposes rather than in other activities.

> *Of course we feel pressure (to study), it's just for enhancing our honour (social status). If I do not prepare my task or homework in time, it can downgrade my result. Then everyone will be questioning me why I have not done well (in the exam). Also the class teacher will ask me what the problem is, 'you have got so many holidays why you did not complete your home tasks.' (Sadia, Female, 15-16 years, Ward 1, FGD-3)*

This pressure to study, appears to have also influenced patterns of behaviour and expectation about use of public space. Many students in the high-income focus groups

reported they had to spend more time inside house activities, playing games on the mobile and laptop. They would like to spend time in restaurants (dating with boyfriends/girlfriends, passing time with friends) but not in the park. Whereas, in the low-income area (Ward 33), many young people reported they loved to eat street foods in their leisure time. In the discussion sessions however, young people in the low-income areas said that they found less or no option for passing quality time with friends and family in green spaces nearby their houses. They raised problems of access these parks and playgrounds at the same time (as discussed in chapter 4).

Overall many of the participants agreed that they had to spend more time in studies and this reduced any expectation they would be able to enjoy in physical activities whether in house (i.e. Gymnasium or club) or in the green space (i.e. parks and playgrounds). Wealthy participants had not only engaged in school and college education but also they had to spend busy time in coaching centres to improve their academic results. But their study at higher level often had less impact in their professional life (i.e. public service recruitment).

I have no time to spend for hang out because I have to maintain the schedule of coaching just after finishing my school. Then again I have to complete reading or preparing my homework. (Sadia, Female, 15-16 years, Ward 1, FGD-3)

Our education system is the main problem. (Emi, Female, 15-16 years, Ward 1, FGD-3)

Participants who had just finished their academic studies or graduated and were searching for job said they also spent more time in job recruitment coaching and study and had little time for recreation. They were worried about the employment and they said they had no time to think about physical activities. Shafi (Male, 14 years, Ward 1, FGD-6) gave an outstanding example of this situation,

There is also a problem in the education system. High ranked students ('A' category) want to become Doctors, Engineers. They work under low ranked (students, 'B' or 'C' category) officials (Administration, recruited by public service commission). 'D' category students become politicians. They become our law maker. We have political problem and law and order problem. (Shafi, Male, 14 years, Ward 1, FGD-6)

Many students' expectations are framed in a wider context of frustration with the public administration system in Bangladesh itself and a feeling this needs to be reshuffled to enable merit appointments and upward mobility for youth which may also influence their

expectations and hopes for participation in decision making. At the moment many students are less interested in politics because of their frustration with these wider issues.

5.3 Expectations of change in the context of green space and transport

The discussion in the previous section identified some aspirations and expectations of young people. These were often negative and there may be a gap between aspirations for more access to green space and expectations of harassment, congestion and poor services which discourages use of green space and public transport. However in discussion students also considered some of the changes they felt were needed for the use and proper management of green space and public transport. They have expectations of the kind of actions that should be taken to ensure safety and security, improve planning and management of green space and transport and manage the behaviour of users. These expectations and hope for change are described below.

5.3.1 High demand of safety and security

Security is a big concern for the participants I interviewed, when visiting their nearest park in Dhaka and this finding is confirmed by another Dhaka based study that reported 35% respondents feel insecure accessing and using public space (Siddiqy, 2017). In addition, my study showed safety is a big concern for young female participants. They complained about safety and security not only in the parks and playgrounds but also during their patrolling on streets. Some reported that mothers of the young participants in the high-income area in particular had to restrict their children from going outside, even to visit their relatives' house.

My family is very conservative. I have to think of safety and security. My parents are always in tension when I go outside. The environment is not secured outside on the road and in the park. If the authority could ensure the security then I can go there. My family does not allow me to go outside. (Mira, Female, 15-16 years, Ward 1, FGD-3)

Mira (Female, 15-16 years, Ward 1, FGD-3) was dissatisfied with this situation and was asking for security from the local authority for a planned and well-guarded park area, managed by the local welfare society. Maya (Female, 15-16 years, Ward 1, FGD-5), also expressed her anxiety about being bullied by male if she visited nearby park. She was very worried about the negligence of security guards and wanted a regular monitoring of the park by a higher authority or use of surveillance devices to enhance for security.

Every day I like to go to play in the walking park. I do not like the young people who are nattering there. That is irritating. They are disobedient. They are bullying which is not good for females. We need a safe environment for females. The guards are not aware. They should be conscious. (Maya, Female, 15-16 years, Ward 1, FGD-5)

Other participants like Shafi, (Male, 14 years, Ward 1, FGD-6) also discussed the uncomfortable environment created by political pressure and violence from the student wing of ruling party (Chhatroleague). They reported that parks and playgrounds are often used by local political leaders for business purposes. They are not only using the playgrounds but also create damage in the ground by making holes for pillars to erect tents for their meetings and political gathering (chapter 4). This has been continuing for decades and echoes studies that report low-income informal communities are often treated as 'vote banks' pressured to vote for local leaders in return for specific services (Deuskar, 2019).

Shafi a participant in the study reported other users have less opportunity to use the playgrounds for sports. He observed students' political leaders of the ruling party (for example, Chhattroleague) showing their power to dominate others in using the parks and playgrounds. The conflict with others also create some incidence of violence. Other participants reported concern that this ground was used for drug peddling (Hyder, Male, 14 years, Ward 1, FGD-6).

Some young people has the tendency to show muscle power and political power. They show themselves as emerging leaders, think like a king. (Shafi, Male, 14 years, Ward 1, FGD-6)

The place where I go to play at Sector 14 (Ward 1). Everyone has the rights to play there. But I have seen some young people who have back up (support) from higher level (political leaders who) do not give access to general people to play there. Sometimes I have found at sector 5, young people are addicted to drugs. In the lake side, we go for walk and see some unsocial work there. If anyone wants to restrict them (spoilt young people), they try to attack in a group to that person. The law enforcement is not working there because they have backup from top level (political power). (Hyder, Male, 14 years, Ward 1, FGD-6)

5.3.2 Improvement of planning and management

The conversation during the focus group and interview sessions revealed that some young people are interested and do want to visit local parks and playgrounds and pass quality time with their friends. Many also reported that they wanted improvements in the quality of services and implementation of their demands could make public transport and parks more attractive to them for use, but they had fairly low expectations that these changes could or would be made. This finding is supported by studies that say the visual preferences of participants have a great impact in their visiting behaviour (Wang & Wu, 2020). Quality improvements can be done by doing the basic things like cleaning the play areas and walking areas and keeping the space waste free. Policing buses and encouraging new norms of public behaviour. Renovation of parks and playgrounds with variation correlates with increased used by participants' especially girls' usage (Bohn-Goldbaum et al., 2013).

The first and most important change needed according to young people I interviewed appeared to be the improvement of planning and management systems of green space and transport by the government authority. Many observed that parks and playgrounds are not child and elder friendly (chapter 4). They have less facilities for the safety of youth and children. The poor management of the playgrounds by the concerned authority means many are also in poor condition (chapter 1, review of previous research in Dhaka) (Islam et al., 2015). The replies from respondents suggest that they hope city planning would include their views- the followings are examples of the replies students gave which suggest they hope for more opportunities to participate in local decision making than are offered:

We need badminton court. (Sadia, Female, 15-16 years, Ward 1, FGD-3)

I want to say there should be two playgrounds separately for boys and girls. I had an incident with boys in a playground, so I cannot go there. (Afrin, Female, 15-16 years, Ward 1, FGD-3)

I think a coffee shop as a spot is needed to spend time. A library is also essential here to read books for widening mind. (Barek, Male, 19-24 years, Ward 1, Int-1)

The limited access to playgrounds in the low-income area creates practically acute pressure on the users and spaces. The revival of play spaces and proper maintenance are urgent needs for this area as expressed by some of my participants. Rizvi, a male participant of low-income area was concern with the access and usability of his local playground.

The stress on existing playground is very high. It takes 30 to 40 min to reach the playground. There is a shortage of space to play in the ground. The playground is not suitable for 100 plus users. (Rizvi, Male, 19-24 years, Ward 33, Int-2)

In the high-income area, some girls informed me they like to play Badminton in the winter. They had actually wished in the focus group, for more badminton courts near their house (Sadia, Female, 15-16 years, Ward 1, FGD-3). They also wanted separate playgrounds instead of mixed ones with boys (Afrin, Female, 15-16 years, Ward 1, FGD-3). A time shift of use could be a solution in this case but the girls I interviewed who raised the issue were firm in fixed one of their own time to use the courts. This they felt, will ensure them free of harassment from boys. Other facilities that were expected or at least hoped for by some (male) students I interviewed included a gym.

If there were any Gymnasium attached to playground that will be better. There are expensive private Gym here, everybody cannot afford that. Cultural events would be good to organise in the playground. (Noyon, Male, 19-24 years, Ward 33, Int-7)

Noyon (Male, 19-24 years) asked for gymnasium near the playground that should be cheaper price and useable to all.

A 'tree plantation' was also reported as necessary in this low-income area by one of the students I interviewed (Palak, Male, 19-24 years, Ward 33, Int-5), alongside important basic services like water taps and washroom.

'Tree plantation' is needed (in the area) as well as maintenance is needed in the parks. (Palak, Male, 19-24 years, Ward 33, Int-5)

The area has less trees. There is no space to sit on even no park or playground. (Forkan, Male, 14-16 years, Ward 33, FGD-3)

Meanwhile, alongside greener planting in parks, many students expected and in fact demanded a change of behaviour by users of public transport services in Dhaka city, a demand that is discussed in the next section.

5.3.3 Expecting undesirable behaviour in transport use

The conservative attitudes of some residents and the lack of attention to harassment of women in particular is a big issue in planning and management in Dhaka. Many students wanted urgent behaviour changes to make transport safer for pedestrians, rickshaw passengers and bus users. One participant (Sabur, Male, 15-16 years, Ward 33, FGD-6) shared his bad experience on the street.

We have also problems about our mentality. For example, I was going with my sister by rickshaw. Comment from elder person, or junior passes eve teasing (from side). Two days ago, one of my friend (female) went to Chayanot (a cultural institute in Dhaka) for class. She was wearing Shari[17]. One elder women commented, "Are you a Muslim?" She was facing bullying from that women in the bus, she was actually insulted. It means that if you are a Muslim, you should wear Borka[18] to move outside. She could say our society is polluted so you have to be careful about that dress. She insulted her in front of all other passengers. We have to change this kind of mentality. (Sabur, Male, 15-16 years, Ward 33, FGD-6)

Another young female participant complained about the harassment on the bus. The 'assistant of drivers' stands in the door of the bus and often has the tendency to touch females when they get on the bus, they do it without any reason but justify it if asked by saying they are helping to get passengers on a running bus. The bus drivers and passengers do not follow any bus time tables and, the drivers are always busy in overtaking other buses and blocking their spaces to get as many passengers as possible. There is often fighting among the bus drivers to collect passengers as they have to deposit a certain amount of money to the bus owners.

One female participant reported she was travelling with her mother but even having her mother with her could not save her from the ill comments of the bus assistant. Dhaka city is highly congested so the same situation is experienced in the buses, female passengers report they often cannot save them from others touching them in a tight space (Mazumder & Pokharel, 2019; Ullah et al., 2019).

After a highly reported rape incident in Delhi[19], India (BBC, 2012) there was greater public awareness about the ill motives of some drivers and helpers and the risks of are high, many young women fear sexual harassment as female passengers, especially those who have to travel at night in Bangladesh. Wider studies suggest the most common victims of sexual harassment

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[17] Women's garment in Bangladesh, unstitched and 4.5-9m in length
[18] Women's dress cover all most all parts of body, mostly used by Muslim women
[19] A women was gang raped by bus driver and his assistant

in Dhaka are garments' workers who move alone at night (Ali et al., 2015; Khairuzzaman, 2019). In my study male and female participants reported concerns with the behaviour of other bus passenger,

> *Usually, I use local bus. It is often crowded and (I'm) harassed in the bus. But fare of the bus is low comparatively other vehicle. (Nabil, Male, 19-24 years, Ward 33, Int-3)*

Young women participants I interviewed in both study areas said they expected well designed footpaths, at least walkable and safe for walking at night and from 'eve teasers'. Eve teasing is defined as a social problem in South Asia, a kind of sexual harassment of women by men in a public space (Talboys et al., 2017).

5.3.4 Changes needed for transport management

Much of my study was conducted prior to the student transport protests in Dhaka in August 2018 but the focus group interviews captured some of the mounting tension that students and young people feel about public transport and their hopes and expectations for better services. One of the big challenges for transport in the city is availability of vehicles and time spent in traffic jams (Siddiqy, 2017). Private car use was a big concern expressed by youth in both high-income and low-income area. It creates jams in peak times of the day for school students and people going to offices. Afroza (Female, 13-14 years, Ward 1, FGD-1) expressed her frustration about this problem even though she said she was getting used to it day by day. However, another adult young respondent (Sanjamul, Male, Ward 1) was not prepared to accept the ongoing problems and called for greater strictness in following traffic rules and regulations.

> *Traffic jams are regular scenario. (Afroza, Female, 13-14 years, Ward 1, FGD-1)*

> *Strict management of traffic rules can reduce the jams. Big changes can be done by (the) City Corporation, RAJUK and government. Immediate steps can be taken by senior and by Kollyan Somiti. We have to do something for better life here. (Sanjamul, Male, 19-24 years, Ward 1, Int-1)*

Traffic management is a big issue in this city. Planning implementation is needed. Some young participants I interviewed were interested in doing voluntary work for traffic management to promote safety of movement (Shafi, Male, 14 years, Ward 1, FGD-6). But the

problem they reported that the young people who worked as Rover Scout[20] had less support from the traffic administration.

Rover Scout has got the authority from the President to control the traffic. But bus drivers do not want to follow them. They also do not get any help from the top authority like SI (Sub-Inspector), SP (Superintendent of Police). Our main problem is administrative. (Shafi, Male, 14 years, Ward 1, FGD-6)
Often accident(s) happened on road near (the) Intellectual's graveyard. (Farid, Male, 14-16 years, Ward 33, FGD-3)

In the high-income area, a participant (Rasul, Male, 15-16 years, Ward 1, FGD-5; Mahmud, Male, 19-24 years, Ward 1, Int-1) demanded a separate lane for cycling to reduce the jam. Nowadays, bicycle is becoming popular to the young people.

I think rickshaws and cars should not use the same lane. Two separate lanes are required. We need traffic police on the road to control the traffic. (Rasul, Male, 15-16 years, Ward 1, FGD-5)

Walking was the most used transport system in both areas. However, walkways in the low-income area are not well constructed and maintained. As noted in chapter 4, some respondents reported that water logging, due to drainage system failure, causes unbearable problems for pedestrians. This area is also under construction and construction materials create dust exacerbating local pollution and air breathing problems (Momin, Male, 12 years, Ward 33, FGD-2). Trucks used for construction purpose in daytime in this area also created risks of accidents for school going kids. Some students expressed their hope this could be addressed (Farid, Male, 14-16 years, Ward 33, FGD-3).

Road repair and trucks running create dust. (Momin, Male, 12 years, Ward 33, FGD-2)

Private car and other transport are increasing, they create jam. I think a side lane for cycle, motor cycle will be helpful to reduce the jam. (Mahmud, Male, 19-24 years, Ward 1, Int-1)

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[20] Scouting was established in 1914 in East Bengal now Bangladesh; Chief Scout is the president of Bangladesh (Wikipedia. (2020). *Bagladesh Scouts*. Retrieved 20-11-2020, https://en.wikipedia.org/wiki/Bangladesh_Scouts)).

Public bus services are overcrowded in the morning even in the seating service passenger have to stand up in the bus. Some students had ideas and hopes for solutions

[There are] many passengers in the bus during crowded time, but there should be no extra passengers in seating service. (Amir, Male, 13-14 years, Ward 1, FGD-1)

In case of emergency treatment, participants use ambulances for medical purpose, for quick service they also use ride sharing Uber, Pathao and CNG. Most importantly, they asked for the proper maintenance of road for regular and stable traffic flow.

Roads are in a deplorable state. Yet within a year of construction, roads begin to crumble and break. So road repairing is very necessary for us. We are suffering more from these dilapidated roads in our area. (Nahin, Male, 19-24 years, Ward 33, Int-10)

Roads should be built in proper way so that we can move smoothly. (Rakib, Male, 19-24 years, Ward 33, Int-12)

From the observations and views of the participants, the road network in Dhaka is very limited and in poor condition. The poor condition of road creates overload of vehicles with slow movement on the streets turns into traffic block. Dhaka's transport system was never in a manageable condition (Rahman & Hoque, 2018). Poor traffic management is a regular scenario here for the disobeying of the traffic rules and mismanagement of the traffic signals. Policy makers are still struggling with the proper guideline for this vibrant city. The next section will discuss the participants' willingness to participate in planning and management of green space and transport in their community.

5.4 Expected participation in community decision making for green space and transport

Participants in the planned area showed their interest in planning and policy making about green space and transport. Some expressed interest in the idea of socializing young people into decision making for the community. Some structural changes were also recommended by the young participants in both areas. Moreover, they asked for good planning and regular update of planning. They expected political pressure-free development in there are even though they were frustrated with decision making (chapter 4). Faria (Female, 15-16 years, Ward 33, FGD-1) illustrates this with her comments after experiencing the poor and unplanned condition of her area, she demanded proper planning.

We need good planning. (Faria, Female, 15-16 years, Ward 33, FGD-1)

I wish to improve the space in full greenery, drug removal, and socialization of people here. (Ashik, Male, 19-24 years, Ward 1, Int-1)

In this case in the high-income area, Ashik (Male, 19-24 years, Ward 1, Int-4) prioritized greenery, followed by stability of law and order and social cohesion among people. Khayer (Male, 19-24 years, Ward 1, Int-5) wanted to share the responsibility of decision making in their area, a reflection of the concept 'Urban Green Common' (chapter 2). He wanted to initiate voluntary work to take some responsibility.

It does not matter who is doing wrong. We have some responsibility in our local area. Besides this, there are some designated people in the organizations to perform their duties. (Khayer, Male, 19-24 years, Ward 1, Int-5)

Farhan (Male, 19-24 years, Ward 1, Int-6) shared his future plan emphasized on structural change in his area. He also mentioned that he hoped for 'political hamper-free' development (chapter 4) when he will be in a political role. In the interview, he showed his leadership desire by joining a political party and willing to become a ward councillor of his area.

I think some structural changes (infrastructure) are necessary. For example, drainage system and widening of road. If I have the power, I will not do any political hamper. (Farhan, Male, 19-24 years, Ward 1, Int-6)

The planning update is necessary by time. (Najmul, Male, 19-24 years, Ward 1, Int-14)

Najmul (Male, 19-24 years, Ward 1, Int-14) urged a vital change. He demanded regular planning updates by the authority. Population pressure is increasing in this highly congested city creates stress on the basic city services (i.e. water supply) (Roy et al., 2019). As a planning expert, I was struck by his comment and his reasonable expectation that regular review and monitoring of plan is urgent for successful implementation of the local city plan.

5.4.1 Young people's demands about changing the system

Many young people I interviewed expressed a desire to change the planning process, their comments echo the research by Vromen and Collin (2010) who suggest that for some youth, participation is like changing and improving the world and there are high expectations

that taking part in decision making can make a difference in the society. Students in Bangladesh have a long tradition of protest and have seen achievements from their demands. The 'transport safety protest' by young (16-18 years) school and college students and 'quota reform' by adult young age group (age above 20) are recent examples of student action to demand change (chapter 2). To change traditional thinking Emi (Female, 15-16 years, Ward 1, FGD-3) a female participant raised her voice,

> *Sport activities are very important (for physical and mental health). We are girls, but we want to play like boys. We have the preferences for playing sports. (Emi, Female, 15-16 years, Ward 1, FGD-3)*

Emi wanted to create a balance between male and female in society by removing discrimination and ensuring social justice in the community. Sadia (Female, 15-16 years, Ward 1, FGD-3) also showed her social concern regarding the restrictions on females moving freely outside house. She argued that from the next generation the change will be inevitable.

> *We are very much concerned about safety and security. We could move easily till class four. But after growing up, I have found it is very difficult. For example, my younger sister, she cannot go even to roof top. She is growing up with restrictions. (Sadia, Female, 15-16 years, Ward 1, FGD-3)*

Participants from a religious institute in the low-income area were also very concerned about the street vendors whose earning life were at risk in any eviction from the footpath. These vendors were creating obstacles to pedestrians in the walkway, therefore police evicted them from the footpath. Jobbar (Male, 17-18 years, Ward 33, FGD-4) among the participants felt social justice needed for the vendors. He demanded rehabilitation of hawkers from the city authority.

> *If we can rehabilitate the street hawkers will be a solution to the problem. They have the rights to live on in this city so they need a place to sell their products. There is no certain place for them. Police often evict them from the street and again they return to the same place. (Jobbar, Male, 17-18 years, Ward 33, FGD-4)*

In the course of my focus groups and field interviews I was struck that many young participants were thinking of the society and community and wanted to see problems managed in a planned way. They had given some wonderful and innovative solutions, and it is helpful

for policy makers to think about their opinions. The next section discusses the view of young people in planning process if they have experienced so far.

5.4.2 The opinion of young people in planning process

This section discusses the answer to the focus group and field interview question 'do you have any opinion about the process of planning and designing your local area?' The findings reflect the participants thinking about the process of planning in their locality. Many said they think that the top level decision makers should understand the problem and needs of the local area first then they can work better for the improvement of the area, by connecting with people in the community. The consciousness and the future vision of the officials are must for the sustainable future of the society.

While many young people like to pass time on social media (i.e. Facebook, YouTube) (Amir, Male, 13-14 years, Ward 1, FGD-1; Zulkar, Male, 17-18 years, Ward 33, FGD-5; Balam, Male, 15-16 years, Ward 33, FGD-6) as an alternative to the lack of green space and physical activities that was discussed in chapter 4, my observation and talking to participants, they also reported that social media can be a tool or platform for expressing their opinion. But the government has recently taken serious control of how young people used social media to express their demands (ICT act) on social media, such as Facebook, YouTube. For example after the transport strikes, the government regulated media and slowed down internet to disorganize the protesters circulation of Facebook post and photo (Manik & Abi-Habib, 2018).

In my view, listening to the youth I interviewed, young people are expected to build their own awareness of local issues as well as take action based on their own initiative. But there is very little support or none, from the city for this work. For example, Rasul (Male, 15-16 years, Ward 1, FGD-5) wanted to take steps to inform all residents in the community and then to city Mayor about the problems in his area. Specially he mentioned the risk of walking in the dark and at night though this area has security guard in each sector and well lighted.

First of all, I would like to inform all to take the initiative. We need to inform the city Mayor. I would like to inform him about darkness of the park in the night. So we need lights in the park. People walk there and face problems. People also enter into the trees. This should be restricted. We should create awareness. (Rasul, Male, 15-16 years, Ward 1, FGD-5)

But Maya (Female, 15-16 years, Ward 1, FGD-5) had a different view from many others. She thought government was less efficient as a way of solving the emerging problems in society and a city. She suggested appropriate awareness for them should be the first priority then the people.

First of all, I have some other thoughts. They said they would go to the Mayor. But he neglects our problems. The government of Bangladesh is not conscious. If the government becomes conscious, our whole country will be changed. I think it should be conscious first. (Maya, Female, 15-16 years, Ward 1, FGD-5)

Other students felt that the attitude of political leaders needed to change. The following comment illustrated the important point about the need for politicians to think for the future and beyond just profit- making thinking.

I do not know about the mentality of the political leaders, mayors. I do not know how much they can change their mentality. If they could change their mentality, the road condition and other development work should not be in that situation. (Sabur, Male, 15-16 years, Ward 33, FGD-6)

Regular monitoring by the Ward councillors and the Mayor were also expected from some of the young city dwellers I interviewed.

Mainly, mayor and councillor in our area can do the job. First of all, the political leader should be conscious about the problem. If they do that is implementable because the political support is strong here. If the mayor keeps his eyes on the development of this area that would be helpful. The social media has less focus on this area. That's why there are more political groups here. (Balam, Male, 15-16 years, Ward 33, FGD-6)

Some students felt that officials' responsibilities should be under surveillance and accountability and transparency was expected from them.

The service man of electricity and gas feel that they have no duties and responsibilities (negligence). They realise that they are not accountable to the public. So they are not giving us proper services when we file any complain to them. If we tell them the problem we face another problem or harm. The top level officials also show ignorance. Another reason is corruption. I have found all around corruption; power, corruption and greediness. (Ismail, Male, 15-16 years, Ward 33, FGD-6)

The local Welfare society in the high-income area was expected by some students to solve the local problems in road repairs, and drainage, supported by the city organization.

Big change can be done by City Corporation, RAJUK and government, immediate steps can be taken by senior and by Kollyan Somiti (welfare society). (Sanjamul, Male, 19-24 years, Ward 1, Int-15)

Some of the students I interviewed reflected a current tendency is to ask Prime minister about everything that is needed. As it seems for many young people and older citizens she is the only 'superwomen who can serve all' (DhakaTribune, 2020; Ziauddin, 2015). A few also expected the local Mayor to solve everything (Ananta, Male, 19-24 years, Ward 33, Int-8). This may reflect a growing focus on individual leaders we see in many cities around the world but expectations that the Prime minister could solve Dhaka's problems was best reflected by the comment of Rakib (Male, 19-24 years, Ward 33, Int-12).

I think the Prime minister can do anything in Bangladesh. So she can change anything in this area. Mayor can change the system of everything in our community. (Rakib, Male, 19-24 years, Ward 33, Int-12)

The difficulty with a youth focus on a single leader is that it leaves others with responsibility off the hook, for example what is the responsibility of the assigned person or department working in different service organisations? One participant was frustrated about the planning and lack of awareness of people in Bangladesh. According to Nizam (Male, 19-24 years, Ward 33, Int-11) example from foreign countries would be a good practice of planning. He gave the example of proper land use planning in two Asian countries, Malaysia and Thailand.

Yes, I have seen lots of city planning in Malaysia and Thailand. The cities of these countries are growing with very effective plan. They already set up their every buildings and places with their use type. Administrative building set up in administration areas, shopping areas built up in commercial areas. Mosque and prayer hall also built up with their specific places. But in Bangladesh the planning process can't shine at all because people are not aware of proper planning. Their thinking and mind set should be changed. (Nizam, Male, 19-24 years, Ward 33, Int-11)

(The) Mayor can change the system of everything (road, drainage system) in our community. Actually political people hold such kind of power to develop any community. (Ananta, Male, 19-24 years, Ward 33, Int-8)

A tension between youth wanting to take action and the majority dependency of 'top-down' approach of the governance system in the city of Dhaka.

5.5 Summary

This chapter informed us about the expectations of young people based on their hopes and the experiences of barriers or limitations they have found from their experiences in their daily lives in local areas. Returning to my opening research question that guided this section of my study RQ. 2: Do the young people have any interest to the processes of green space and transport planning and designing their local area? We can answer yes, many participants in my focus groups, interviews and survey demanded the right to play in the city, and that is supported by the UNCRC. This can be done by proper planning of the city following the zoning rules of dividing cities according to land use for example, residential, commercial and industrial dividation. But at present town planners have limited development budgets, and there is little interest or opportunity for involving youth in decision making and the functioning of the place properly.

I also asked the following sub-questions SQ.2a. What is their priority for passing leisure time and use of transport in their nearby area? b. Do they see any need for changes to their local area in the context of green space or transport? And finally c. Do they want to participate in community decision making for green space and transport? Why or why not? Many other participants wanted to use parks or transport but expected better safety and security ensured by regular monitoring of law enforcement. They felt insecurity and harassment hampered regular use of green spaces and transport facilities by city residents and reduces the social cohesion, with adverse impacts on youth mental and physical health.

The responses from the participants reflect the problems of the need for changes of social attitudes, the opportunity and limits on using digital platform in planning and providing feedback to the authority, right to play, law enforcement by regular monitoring, proper planning and management including zoning and experience from abroad and most importantly the safety and security of the users. Participants acknowledged the need to change the existing social attitudes against female users of green space and transport before they can be fully included in the planning processes. Many young participants were shocked by the behaviour of other users of community and the harassment of females even though there have been two women ruler of this country for three decades.

Some young participants I interviewed reported they often use Facebook as a platform for to express their opinions regularly but given a government crackdown on media use, there is some risk for participants expressing dissent in this way and after my interviews I wondered if there should be training and demonstrations for them about using this platform in a safe

and constructive way for the fruitful achievement of their demands and for sustainable policy and ways of making by relevant authorities aware of public feedback Young users of parks and public transport are vulnerable to the conditions and rules of the ruling party. For example the Communication act was also (mis)used by the government during the transport safety movement organised by young people to silence student demands.

But what was also striking in some of the interviews reported here was the uncertainly amongst many youth I interviewed about who should take action, a superwoman Prime Minister, the local Mayor or citizens themselves. The next chapter will bring us to the next step of this thesis, understanding ways to empower young people's voice in urban planning.

Chapter 6 Empowerment - Supporting young people's participation in policy making and planning for Dhaka city

6.1 Introduction

I began this thesis asking how young people can be engaged in decision making process and planning regarding access to green space and public transport for sustainable urban planning and their wellbeing. This chapter discusses the results of focus groups and interviews to answer the following research question (RQ. 3) and sub-questions (SQ. 3 a-c) related to my overall aim.

RQ. 3. How can young people be involved in planning and policy reform of green space and transport in Dhaka city?

The sub-questions for this research question are:

SQ. 3a. How do young people currently engage in green space and transport planning in Dhaka city?

b. How can young people be involved in addressing the loss of green space and poor transport service?

c. Does the experience of young people's political agency and access to parks and transport assist youth wellbeing?

In this chapter I report on youth discussion about their involvement or participation in any planning activities or decision making processes and what helped young people to engage this process and consider the impact (if any) it had on their wellbeing. In focus groups and interviews I asked participants whether they had any chance to take part in local planning and decision making of activities (i.e. informing the local councillors about planning problems and their future thinking, or writing articles in newspaper or in Facebook about the problem and their opinions) (see interview /focus group question schedule Appendix-3). Very few participants and exclusively only those from the high-income area had confidence to express views about these kind of initiatives, even though in earlier conversation many students had volunteered their ideas about things that worried them and things they wanted to change. Youth (19-24 years) from the low-income area did not report having participated in any local decision making process. Research tells us that young people from low deprived location have knowledge about planning and can contribute to debates about environmental justice, access

and equity to green space, and discrimination among high-income and low-income communities for example (Heckert, 2013) therefore, it is troubling if few youth felt they could have a say.

The effective engagement of young people in decision making and planning can be achieved in many ways through workshops in their educational institutes, through local community organisations and by establishing networks with local government (Bartlett, 2002, p. 6). Given few people had actually participated in local decision making, in this chapter, I report on ways that the children and young people who said they wanted to be involved in decision making talked about how that could happen and I will report on the views of key expert interviews with three urban planners, two faculty members and experts, two consultants in urban planning and four community advocates for children in Dhaka city. The findings from these discussions of youth empowerment are discussed below.

6.2 Awareness of the city planning process

This section reports on the answers to the following question that I asked young people in focus groups and interviews, 'Have you ever participated in a planning process/activities (public hearing, activities- column writing/informing planning organization/complain, performing street/ in-house activities-agitation/protest, poster/leaflet circulation, blogging)?'

Firstly, as noted earlier I was surprised by the extent of informal student engagement in the protests of school and college youth about 'safety for transport' and the agitation of young adults (university students) for 'quota reformation' (discussed in chapter 1 and 2) that occurred during my fieldwork. The first protest began right after my initial focus groups and interviews and other one occurred during my second period of focus groups and interviews data collection (April – July 2018). What was most striking about this was that despite the widespread street protest, when I asked my participants about their opinion of any changes needed (i.e. planning and designing or future change needed) in their area I found very few volunteered transport issues in their response without my prompting (Ward 1) and perhaps most strikingly 11 out of 13 of the adult young participants (age 19-24 years old) in the low-income area reported they had nothing to say about changes they would like to see in local planning. However, younger participants (12-18 years) in the high-income area were more responsive and at least a few even knew the name of their local councillor and his office.

In their responses participants of the high-income area talked about general awareness of planning process and suggested that not many other young people are interested in planning and policy making because of: 'lack of knowledge or ignorance', 'mostly (being) introvert(s)', 'thinking of personal choice and benefits', 'lack of social bonding to get information', 'lack of understanding what is happening nearby' and 'less thinking about social

problems'. Besides these reasons, some suggested lack of youth participation was because of: 'lack of information sharing' and understanding the role of planners or 'job descriptions' are not circulated in the community and for many the young people I spoke to they felt responsible people/official have less interest in hearing the problems of the community. The students also commented on political patronage or the tendency for nominations of Councillor[21] and Mayor to come from those with a business background who are selected by the ruling party and critics argue their commitment to the public is less significant than their ability to earn money or gain the personal benefit (The Business Standard, 2019). Students captured some of the concern about feeling shut out or disconnected from local decision making in discussion:

No one knows (who is the responsible person), house owner will repair the house. (Sanjana, Female, 12 years, Ward 1, FGD-2)

No one knows who to tell the problem to? (Farida, Female, 12 years, Ward 1, FGD-2)

I do not know who the responsible person in this area is. We can go to DNCC together (with people who have same problem). (Maisha, Female, 17-18 years, Ward 1, FGD-4)

The comments above give us an idea that some young participants in the high-income area at least (Sanjana, Female, 12 years, Ward 1, FGD-2; Farida, Female, 12 years, Ward 1, FGD-2) are concerned to have a say but unsure about the exact person they should go for their problem because they have not had experience of this on previous occasions. They reported that their parents were much more concerned about the problems in their local area. But young respondents at least know the office name (DNCC), where to go for any planning or utility service related problem and issues. There is a knowledge gap and information gap in the participants thinking and awareness. In reply to my questions, 'who is responsible to solve and improve the condition of the area?', Afrin (Female, 15-16 years, Ward 1, FGD-3) and Sara (Female, 12 years, Ward 1, FGD-2) informed me that in their view the 'Mayor, City Councillor, Member of Parliament (MP), Kollyan Somiti (Welfare Society)' are the responsible people and authorities but they were not sure about how to approach them for their local area. They also did not appear to think about making direct contact with the responsible person rather they appeared to feel they would need to use another contact person or method such going through a more senior person. The following comments from the high-income area focus groups (Afifa, Female, 15-16 years, Ward 1, FGD-3; Sara, Female, 12 years, Ward 1, FGD-2; Jasmine, Female,

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[21] Responsible person in each Ward, previous this post name was Ward Commissioner.

17-18 years, Ward 1, FGD-4) were noticeable about the connection of the participants to the authority.

> *I have no idea where to go. I can go to Kollyan Somiti (welfare society). I can take suggestion from seniors. (Afrin, Female, 15-16 years, Ward 1, FGD-3)*
> *I know one named Nasiruddin, people come to him and share their problem. (Sara, Female, 12 years, Ward 1, FGD-2)*

> *Shamim Dewan is the councillor, we can meet him with seniors. We can verbally inform him by a political person. (Jasmine, Female, 17-18 years, Ward 1, FGD-4)*

Possible reasons for this lack of knowledge or the information gap maybe that young people are aware of the problems but lack supportive mobilisation to have their voice heard. For example a peer organisation (even for example in Dhaka the transport street protests themselves) and access to higher education are traditionally important aspects of mobilising youth voice (Abrahams & Brooks, 2019). Therefore it is not enough to just ask people what they think- young people may need help to form opinions and mobilise themselves to articulate these. When I was asking about awareness of planning issues, youth wanted to share their problems in local areas. Most young participants responded quickly about the drainage problems (i.e. water logging) for example. The drainage system is very serious and in some parts of Dhaka city, it is blocked by plastic bags and unexpected solid waste. This was verified by my own observations when visiting this area during fieldwork. The lack of proper waste management, waste trade (Rahman et al., 2019), narrow drainage system and illegal encroachment of canals are also responsible for serious water logging even after just one hour rainfall. The waste water often over flows on the streets and nearby houses damaging the structures in a slow process. The low-income area was built up on a catchment area of the river Buriganga. Illegal encroachment by filling of sandy soil in the nearby ditches causes seasonal flooding and is a risk for residents. Participants from the low-income area suffered from this in the rainy season (Jobbar, Male, 17-18 years, Ward 33, FGD-4).

> *The area is low lying so water store in rainy season. This area is flooded and water logged for rain. (Jobbar, Male, 17-18 years, Ward 33, FGD-4)*

> *We faced water logging in rainy time/season in our area. Drainage infrastructure and system needs to be improved. (Shamima, Female, 13-14 years, Ward 1, FGD-1)*

The low-income area is unplanned but surprisingly the participants of the planned area also reported experiencing the same problems of poor drainage system in their area (Shamima, Female, 13-14 years, Ward 1, FGD-1).

A second important problem noted in chapter 4 was pollution, waste and noise. The low-income area is unplanned and congested and these are serious issues for underprivileged residents. In reply to the question to the participants in the low-income area regarding whom or where to find a solution for this problem and other problems in their area, like the high-income residents youth knew councillors had a role,

Local powerful person are Ward councillor Rawshan Ara (Women) and Rajib (Tarequzzaman Rajib). (Maria, Female, 15-16 years, Ward 33, FGD-1)

Commissioner (councillor). (Momin, Male, 12 years, Ward 33, FGD-2)

Rajib Commissioner (councillor). Commissioner Rajib is the president of school (committee). (Sadat, Male, 12 years, Ward 33, FGD-2)

To commissioner, name Rajib, Tarequzzaman Rajib. (Raton, Male, 14-16 years, Ward 33, FGD-3)

To commissioner (councillor). (Sahin, Male, 14-16 years, Ward 33, FGD-3)

We go to Member of Parliament (MP) in our area to inform any problem we face. We can easily access to his office. We feel comfortable to go to his office rather to councillor office. (Jobar, Male, 17-18 years, Ward 33, FGD-4)

Councillor Tarequzzaman Rajib. Shah Alom is close to Rajib. (Noman, Male, 17-18 years, Ward 33, FGD-5)

This information suggests many young people may feel it is the role of higher authorities to find the solutions to the problems in their area. But they are unsure how to empower themselves, for example with the help of senior member or person of the community to work for solutions or better conditions in their area or community. The next section will discuss the level of interest young people in participating expressed about becoming more engaged in the planning process.

6.3 The level of interest in participation by young people in local decision making

The concept and understanding the process of urban planning is new to people in Bangladesh (Rahman, 2015). There is wider interest and understanding of planning at the ministry level recently, after the huge scale planning project 'Bangladesh Delta Plan 2100' (bdnews24.com, 2018a). However recent evidence (i.e. COVID-19, cyclone Amphan) shows that centralized government has concentrated all power in to the hands of the Prime Minister, critics argued this resulted in planners and local decision makers avoiding their own responsibilities in their particular departments or organizations or at local level (Ahmed, 2020). This was in someway not unexpected for young participants I spoke to, some of whom felt all decisions for the country are made this way, for example according to a young participant in the low-income area (Rakib, Male, 19-24 years, Ward 33, Int-12).

I think the Prime minister can do anything in Bangladesh. (Rakib, Male, 19-24 years, Ward 33, Int-12)

However, knowledge and participation in the planning processes are not far beyond communities. The problem appears to be in part that familiarity with the importance of planning by the general population is not enhanced by the government. Some recent urban planning projects (i.e. housing projects) have helped make city residents aware of the necessities of planning in daily life and why this helps for a more sustainable life for the future. But there is still a lack of engagement of young people in the planning processes, as commented by a real estate developer I interviewed.

There is no option or space for young people in the rules (planning policies/act). (Real Estate Developer)

There is another issue behind why young people are less engaged in planning processes which may begin from the early age in the life of their family. Traditionally in Bangladesh parents have a far reaching impact on youth decision making processes for their own lives, let alone youth engaging in the decisions about the big issues of society. Many parents dominate youth in their choice of education and employment, and this was a strong point of discussion in the focus group sessions with participants. Most participants of both areas expressed the view that they had little idea or no idea about planning processes (Arnob, Male, 15-16 years, Ward 33, FGD-6). According to Hayward (2012) children can feel socially isolated and frustrated when they are neglected or excluded in decision making process. In addition, Maya

(Female, 15-16 years, high-income Ward 1, FGD-5) said that she was feeling less confident to participate in decision making processes as she knows less about that. In this context it is not unlikely that she is unfamiliar with even knowing the location of City Corporation office. Whereas Ashik (Male, 19-24 years, Ward 1, Int-4), a young adult expressed his unawareness regarding the planning and management but commented that he knows that his local welfare society values the opinion of every member of that particular sector,

> *I am very young. I do not know where the city corporation is. (Maya, Female, 15-16 years, Ward 1, FGD-5)*

> *I have no idea. (Arnob, Male, 15-16 years, Ward 33, FGD-6)*

> *So far not enough (participation in the planning process). I am not aware of this but welfare society (Kollyan somiti) can do their job in this regard. Every member of this society is asked for their opinion in a general meeting then they take the decision. Normally, outside people (non-resident) are not involved in this. (Ashik, Male, 19-24 years, Ward 1, Int-4)*

Khayer (Male, 19-24 years, Ward 1, Int-5) confirmed that he participated in a protest for changing the recruitment system of public service (Quota Reform). But he has no knowledge about public hearings or formal decision making and he likes to post comments on Facebook.

> *Recently, I have participated in a protest (Quota Reform). I have not heard about public hearings. But if there is any problem (i.e. a crisis of power supply and gas supply) there is an announcement by mic (in our area). Often the Imam of the Mosque (in our neighbourhood) announces an issue (if any) and we discuss this with the announcer. I like to post comments on Facebook. I have shared some content on the Facebook. (Khayer, Male, 19-24 years, Ward 1, Int-5)*

Khayer (above) comments that any issue or problem in their area is announced by the Imam of mosque. This can be announced by microphone and when this is done, for example immediately depends on the level of emergency. Some announcements may wait for the Friday when all Muslims come together for Jumma prayer announcements can be combined with discussion by Mosque leaders to take a decision how to solve or mitigate the problem.

Social media seems to be important as a preferred method of participation but some youth I interviewed like Soumay (Male, 19-24 years, Ward 1, Int-9) felt shy to comment on

Facebook because his friends laugh at his sharing content. However, he also took part in "Quota reform" protest.

I have participated in the "Quota Reform Movement." I am not engaged to any organization. I have not heard about (any) public hearing. I can go to Welfare Society for any problem. I do not write on Facebook or blog, people will laugh at me. I have not circulated any political leaflet. (Soumya, Male, 19-24 years, Ward 1, Int-9)

The participants in the low-income area had a much more limited responses to the questions of participation than the high-income area. Many had no idea about the planning process, as explained by young adult participants, Nahin (Male, 19-24 years, Ward 33, Int-10) and Shayan (Male, 19-24 years, Ward 33, Int-6).

No, I have never participated in a planning process or activities. (Nahin, Male, 19-24 years, Ward 33, Int-10)

I have no idea about that. (Shayan, Male, 19-24 years, Ward 33, Int-6)

From the above findings a question raised in my mind: given youth are so aware of local problems why are the young people not engaged in planning and local decision making? I have observed that many urban young people I interviewed appeared to feel isolated and even threatened by some surrounding conditions. Participants expressed frustration about their inability to get the proper service from the city council, and that they could not even find the responsible person or the office when they needed them. Frustration may also come from social disparity enhancing the lack of confidence of some young people to take action when facing adverse social and environmental problems (Hayward, 2012).

No one has the power to change the system of a country. Everything is getting worse in our country. So we should broaden our outlook (for future change). (Nazim, Male, Ward 33, Int-11).

However, Rahim (Male, 19-24 years, Ward 1, Int-7), Rashed (Male, 19-24 years, Ward 1, Int-8) and Mahmud (Male, 19-24 years, Ward 1, Int-13) felt that they should be responsible to do their own duty as a citizen. This can be by 'talk', 'writing letter' and most importantly 'involving (themselves) in politics' directly. Rahim said he can talk directly to welfare society about any emerging problem shows he is aware of where to go to mitigate problem. While

Rashed can write directly to office after suggestion from senior person. Mahmud is more enthusiastic to lead from the front for any problem.

I can talk to officials in Kollayan Somiti (welfare society) in any emerging problem. (Rahim, Male, 19-24 years, Ward 1, Int-7)

I can write a letter to the authority after mentioning the problem. I can talk to a senior person. I can also visit our sector somiti (welfare society) office. (Rashed, Male, 19-24 years, Ward 1, Int-8)

I am involved in politics and I like leadership. When I will become commissioner, I can do that easily. (Mahmud, Male, 19-24 years, Ward 1, Int-13)

Young voices and enthusiasm are essential as a companion for development and for the cost effectiveness of any project (Johnson et al., 1998). From the above discussion it is evident that young people have the interest in engaging in local decision making and planning processes but they are waiting for an opportunity, for a response and enthusiasm from concerned authorities and support to help them participate. The next section will discuss the processes young people said they might like to use to engage in planning.

6.4 How do young people want to engage in planning?

This section reports on answers to the question 'how do you want to be involved or participate in decision making processes?' The scenario of young people's participation in the planning processes has shown that there is little current involvement by youth in local decision making but in my study young people were also asked how they would want to contribute to these processes. Some replied for example 'informing to the city leader or Mayor about the problem'. Probing in discussion about how this might be done realistically, some thought this can be achieved either by creating a 'group' amongst themselves and going to 'senior members' of the community to get suggestions about the process and then launch their opinions to high officials.

We, students can write to social authority but it is time consuming. Political leadership is important here. A Member of Parliament can do something here. (Asif, Male, 15-16 years, Ward 33, FGD-6)

We can say it to the leader of the community. (Sajal, Male 15-16 years, Ward 33, FGD-6)

I asked students if they had taken any action before, for most the answer is *'No.'*
Me: Have you told anyone (about your concerns)? Or taken any initiative?

No. (Sajal, Male 15-16 years, Ward 33, FGD-6)

Awareness among people regarding the need of the parks and playgrounds should be build up at first. Then we can easily get a good, well-functioning, usable parks for the betterment of our mind and thinking. (Nizam, Male, 19-24 years, Ward 33, Int-11)

Nizam (Male, 19-24 years, Ward 33, Int-11) from the low-income area and Sanjamul (Male, 19-24 years, Ward 1, Int-15) from the high-income area talked about the need for awareness building and changing their own self first. Here changing own self means changing their mentality i.e. to dump the waste in correct place or bin, follow the rules of traffic, and take care of parks and playgrounds in their area.

First of all, we should change ourselves, then we can convince our government. (Maya, Female, 15-16 years, Ward 1, FGD-5)

Everyone has to be aware by himself. Awareness can help reduce the misuse of the park and any addicted person. We can talk directly to the person if not work then to park's guard or committee for the betterment of the park. (Sanjamul, Male, 19-24 years, Ward 1, Int-15)

Head (2011) pointed out that youth participation with creative thinking can diversify the plans and policies of large communities. The most important thing some participants said was they want to change themselves first, this means they felt a change of attitudes is vital for a great move forward. Secondly, some youth I interviewed mentioned about 'raising voices' by themselves for any certain issue in their locality. They felt one way to do this was to write it to the proper authority (if they know who that was and were confident) for the exact service they need. In an expert interview I conducted an architect stated that he felt youth could create their own play arrangement.

Children do not need any intervention children think their own way to transform their components for their recreation. (Architect and Urban designer)

In focus group discussion however young people didn't all agree that creating their own solutions can be led by children or youth, at the initial stage some felt the participants have to know where to go for a solution. Tanisha (Female, 15-16 years, Ward 1, FGD-5) wanted to create a group with friends but first she would like to inform the Mayor about the problem then talk to welfare society. She was also interested to take suggestions from her seniors. Shihab (Male 15-16 years, Ward 1, FGD-5) also supported Tanisha's idea to create a group.

First of all, I will inform the Mayor. We have Kollayan somiti (welfare society) near our area. Besides this, we can create a group or invite our friends in a group. I can also talk to seniors to make any change. (Tanisha, Female, 15-16 years, Ward 1, FGD-5)

I can create group and write (a) letter to government. (Shihab, Male 15-16 years, Ward 1, FGD-5)

Government, Chattroleague, club member, authority. (Alo, Male, 19-24 years, Ward 33, Int-4)

Local political leaders. (Palak, Male, 19-24 years, Ward 33, Int-5)

While in the low-income community, in an interview with Alo (Male, 19-24 years, Ward 33, Int-4) he also said he would like to inform the authority. He mentioned the need first to inform government then private organizations i.e. through the student wing of ruling party (Chhatroleague) whereas Palak (Male, 19-24 years, Ward 33, Int-5) would like to inform local leaders directly. However, participants who studied in Madrasa[22] reported they were unable to involve themselves in politics as this was restricted by their institution. They were worried about raising their voices. Momin a student in the low-income area also commented (Male, 17-18 years, Ward 33, FGD-4) on very conservative values that women leadership in an Islamic country is not acceptable. However, in reality we could note Bangladesh is following the principle of secularism, as a result, the prime-minister, education minister, the speaker of the parliament and even the opposition leader are women in Bangladesh.

We cannot involve in politics here. But we like to support the party who follows the rules of Islam. Women leadership in a country is not supported in Islam. They may be thinking of 'Khilafot movement'. (Momin, Male, 17-18 years, Ward 33, FGD-4)

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[22] Learning institute for Arabic language

Someone has to raise the problem and visit commissioner office to talk to him. (Rajib, Male, 14-16 years, Ward 33, FGD-3)

Me: Can you remember someone raising their voice to solve any problem?

Yes, our road was low and it was elevated after the community people visited commissioner office. (Rajib, Male, 14-16 years, Ward 33, FGD-3)

Rajib (Male, 14-16 years, Ward 33, FGD-3*)* from deprived community wanted to wait for others to raise their voices rather to do it by himself. He gave an example about his community people's concern to elevate a road and how they visited a councillor's office for this reason. Farhan, (Male, 19-24 years, Ward 1, Int-6) mentioned an important point about the need to raise social awareness in a form of social work and creating clubs for arranging cultural programs. He is also writing in blog about his local area.

I think we need to enhance social awareness. If there is any problem we can talk to Welfare Society. I try to do some social work and I am engaged in a debating club. I circulated leaflet for local organization as a university student. I am writing blog in "Green Noakhali." (Farhan, Male, 19-24 years, Ward 1, Int-6)

Facebook posting is popular among young people in Bangladesh (Ashik, Male, 19-24 years, Ward 1, Int-4) but the government often takes strong action if anything posted against government's decisions. This was happening during the 'Safety for Transport' protest movement in the course of my study and many students were aware of the strengths and limits of speaking out on Facebook (chapter 2).

Sometimes, I use Facebook for public awareness type posts. I did not approach directly to the authority or organization but I (raise the issues) to some people in the neighbourhood. I have not participated in (distributing) leaflets or putting up posters. (Ashik, Male, 19-24 years, Ward 1, Int-4)

Everything is getting worse in our country. So we should broaden our outlook. (Nizam, Male, 19-24 years, Ward 33, Int-11)

One young adult participant (Nizam, Male, 19-24 years) spoke strongly told about his view of the poor decision making systems existing in Bangladesh but he suggested to broaden our thinking, we need to improve the systems not just deal with individual problems and

ignoring assigned duties and responsibilities. His comments support wider research suggesting young people are asking for easy and friendly language and space for participating more widely in decision making process, they also demand inclusion of fun activities in this process (Vromen & Collin, 2010). Therefore, the serious issue of planning should be made easier to them to participate in the planning process to feel 'we' or belong to the city. An example of young people's voice being included more creatively in decision making was given by an urban designer,

> *I can give you an example of Golapbagh field. The area was occupied by the equipment and materials of Sayedabad flyover construction (me: yes, I know that it was my undergraduate thesis field study area in 2008). Young people protested against the use of their play space by the authority. Children and young student stood on streets. They came to 'Press club'. We joined them as we do a government movement. They invited us. I participated in on three occasions. Almighty has given me the opportunity now to design the playground (ha ha ...). And I ensured that they have the voice. In front of the Mayor they said this is what we want. I think this is the gift of Almighty for our opportunity. I am sure this how you make sure your (young people) rights. (Architect and Urban Designer)*

An example of the empowerment of children and young people's voices and concerns was also found in the field observation I conducted- I observed protest banners in a local playground. These banners (Figure-6.1) show there is local demand by children for more parks and playgrounds in this area at sector 13.

The next section will discuss the results of interviews with experts and their thinking of ways of engaging young people in planning.

Figure-6.1: A protest banner showing the demand for play space for children
(Sector 13, Uttara)

These photographs were taken from sector 13, ward no. 1, showing the protest for saving the play space for children. It demanded not to lease the vacant space for commercial purpose by destroying the aesthetic beauty of the playground and the sector.

6.5 Empowering young people in green space and transport planning in Dhaka: The experts' view

This section reports on the experts' (key informants of this thesis) opinions about the involvement of young people in green space and transport planning in Dhaka city. As noted at the opening of the thesis adults often ignore young people in decision making assuming their age limit for any experience (Frank, 2006). Very few people I interviewed could give a practical example of involvement of young people in policymaking which they were aware of. One architect had followed a legal case of children's access to a playground:

I think that is what we felt and we started a movement with one field, Dhanmondi road number 8 (Dhanmondi Math or playfield). And it went on (from then when) a club had taken over this field from public access. They filed cases and we had also fought and it took around one year for the court to make a decision. That movement generated so

much hype that whole country became aware of the rights of the youth and children to this open spaces and planning. And I believe and I like to believe that connection of that movement which ended up the failure even in the High Court (three courts successively felt ashamed to discontinue this case declaring it 'not possible them for continue'). So even though we failed to get justice on that (issue) from the High Court I think I can strongly say (it will be have influence) later on when the election will come between two Mayors continuing their campaign. (Architect and Urban Designer)

The above comment show us the importance of child rights and how a movement to retrieve a playground from powerful political hands in this case (a club who illegally occupied and restricted access to young people) can increase public awareness about youth rights even when the individual case is not successful. The movement to protect the play area boomed and was supported by the civil society and general public. This movement was transferred to other playgrounds in Dhaka. In this connection, the urban designer mentioned that young people should be engaged in planning process because of their rights to participate. He also commented on the high court decision on a playground retrieval and the involvement of young user. He said it for justice to be served the young people should have the playground open for them to use. Moreover, the city Mayor should also take action in the future maintenance of playground and to protect youth access to the area.

In another interview a transport planning expert also mentioned about the failure of that young people's playground movement, he felt it was due to a poor chain of command and networking of political practitioners who failed to solve or find any way out, leading to emergence of protest by opposition.

(My) Philosophy is if (even a) few people are united, people can do anything. But a large number of people can do nothing if they are not united. There is a chance of failure if there is a lack of 'Chain of command' or 'networking' –this (lack of a proper/successful movement) happened to Arab Spring. Public movements lack of networking in Ganajagoron Mancha[23], who will lead political adaptability-those who are doing this can have options in their mind or can take immediate action. In the Quota reform, this also happened. They gave different speeches and directions in different time. As they were not united they failed to maintain or provide students security. (Professor and transport planning consultant)

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[23] Youth movement demanding capital punishment of liberation war (1971) criminals.

The next section discusses about the availability of children's participation in current city plan in Dhaka.

Policies for children's participation in the city plan

My interviews with experts confirmed that there was very little opportunity for the participation of children and young people in the city plan in Dhaka. However, the recent 'Structure Plan' which has been announced for Dhaka has included scope for children's engagement (RAJUK, 2018). In this regard, I put the following question to an urban designer who was interested in youth engagement. But I could not get an exact answer from him.

Me: What is the policy for participation of children in the city plan?

Yes of course. What we are adapting actually we are the pioneer firm urban design in Dhaka. First project was Dhanmondi lake and lake city. Gulshan lake and lake city development. We have done Hatirjheel lake integrated development. (Architect and Urban Designer)

The architect farm 'Vitti' and the NGO 'Work for Better Bangladesh (WBB)' engage young peoples' participation in their green space project. I also had the opportunity to talk to an Architect and Urban designer from *Vitti* who is designing park playground in Dhaka city. He also mentioned the importance of public participation particularly young people's engagement by public hearings and by youth writing their feedback and comments to share their views and ideas.

What we started in 1996 was public participation, is there any club, association or society (connected to park and playground) and (we) try to understand what they want. (We held a) public hearing and kept a Laser book for comments, we try to understand (public views). Now we are doing urban resilience project calling a couple of schools which are catering to the local area's people and children, to get the views and ideas. (Architect and Urban designer)

In discussion however this architect mentioned there is still a lack of ways of involving local people in operational management in the form of transforming power to them to feel ownership of public spaces or services. A co-management approach can be appropriate for a highly congested city engaging community where the city authority has less manpower, finance and lack of resource to look after a certain service facilities (Nguyen et al., 2018).

Unfortunately, (the city) is not a good in co-management. We try to establish (this kind of approach), we have done it in Dhanmondi. We were trying to establish that co-management approach. The City Corporation already taken over the project and at the end of the project will be operated by local people and authority together as a co-manager. If we ensure their participation in operational management maybe they will have more power. (I think) it is more suitable for them and (can be a way) to transform the power. As I told you they do not need any equipment. They said we will make our own way. I said yes, you are trying the right way. What you are doing they will not wait for the infrastructure. (Architect and Urban Designer)

In this context of engaging young people in planning, another urban planning expert expressed the importance of including planning lessons for children right from the base of education (from the primary level). He mentioned that learning from childhood about the basic rules of local decision making is an easy way that will sustain longer term benefits of sustainable wellbeing. From his own experience he commented on the lacking of government understanding the significance of the planning problems, and the need to include this in curriculum.

Including local planning knowledge for children from school level. Transport rules, how to cross the road, how to use footpath, how to get on vehicle. (Encourage them to think about) where should be the (best) location of school? What is their responsibility? What is the duties in planning approaches for each person? This kind of work is done by different NGO's (i.e. Amrao Shishu). But government cannot implement them in the main platform of education. Actually there is a lack of willingness. Government thinks of this as a little or minor problem, they have other major issues to solve first. (Urban Planner, Consultant, JICA, World Bank)

Me: it's a kind of ignorance

Exactly. (Urban Planner, Consultant, JICA, World Bank)

The value in involving children in the designing process

I was trying to find out the significance of young people's participation in the planning from the point of view of experts by asking them the following question.

Me: Is there any value of involving children in the designing process? Why or why not? (If yes: how would you go about it and why?). Again the views of experts were mixed, some thought youth participation was fairly limited to behaviour changes:

> *Some kindergartens are individually trying to incorporate in their education system. Say for example, English medium school. They are teaching many things like Civic responsibility. Kids can learn from conscious parents but others cannot. Society is suffering much for this, vastly. They are offering basic learning from the child level. The school environment is different. They come to know how and where to take off shoes. How to sit on bench. Not bothering with behaviour. They (children) have developed this in a systematic way to learn by the age of ten. They are giving a demo of driving lessons to children, that's why they learn sign signal of road/traffic. (Urban Planner, Consultant, JICA, World Bank)*

Some experts expressed their views more strongly about the importance of hearing young people's opinion in designing processes for future planning using new digital tools. I was asking a planning expert about this in an interview session. He informed me that some initiatives have been taken in private school to educate children and to offer some basic training and behaviour lessons in ways already followed in the Global North. In the meantime there are also small level initiatives that have been taken by WBB to encourage young people in planning activities by 'Minecraft.'[24]

> *We have organized a workshop for the children to design 'Boishakhi Playground' by using 'Minecraft.' This was attracted by the kids. It is helpful for them to develop common sense and mental growth. They also learn leadership, group work, and management by games. It is not possible from reading a book. It creates openness to them to design park and playground. This project will be end in August 2018. This playground will under the monitoring of DNCC engaging local community. (Program Coordinator, WBB)*

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[24] A sandbox video game developed by Mojang.

The workshop arranged by WBB for designing a playground named 'Boishakhi Playground' was in Ward 34 (low-income area), close to my study area Ward 33, inhabitants are in the same income level (low-income community). The outcome of the workshop mentioned by program coordinator was building leadership, team work and management lessons by the young people after engaging them in an attractive computer exercise. The interviewee felt it was a great opportunity for the low-income area children to get a sense of stewardship of a space by creating their own design which also builds self confidence amongst them. After the project completion, the operational management will be led by DNCC and with the engagement of local community. There will be two benefits for the user, one for using the playground for physical activities and secondly, observing and monitoring the space and inform the authority if there is anything needed to repair and maintenance. The significance of children and young people's engagement for their well-being not just for economic reasons was strongly endorsed by an urban designer I interviewed,

> *Absolutely, absolutely (loudly). From western proverb 'if we make park and charge them 5 taka and give them right, right based activity.' We have always business in our mind, in a back of our mind. We are motivated for their wellbeing, we are motivated for their inclusiveness one of the so called practicality take away the august honest approach. (Architect and Urban designer)*

The biggest barriers for the inclusion of young people in city planning processes

One of the key informants, a local Professor and urban planning expert, argued that the obstacle of including young people in the planning process in Bangladesh is the so called 'top-down approach' of decision making in countries of the Global South. The views from top level officials are still given high importance in planning procedures. The preferences from the community or problem area are neglected in the upper level of the government. Head (2011) strongly argued that young people's participation in public affairs are dominated by the 'top-down' approach from high officials.

> *Our policy making, processing and implementation are in the hands of government officials (top level), the Secretariat prepares drafts of documents, and the Minister only approves that. Then where is the involvement of young people here? In fact, if you consider government as a policy maker. There is no engagement of young people in the biggest policy environment. Then what? Young people are ignored totally. (Professor and Urban Planning expert)*

Concerns about the 'ignorance' of young people was also reflected in the comments of this Professor and Urban Planning expert. He also mentioned that policy are prepared by a secretary of certain ministry and minister only approve the documents. He also informed that the less willingness of engaging young people in the future decision making by them in a project. He has given an example of the negligence and problems happened in a project where the opinion of young people that was mandatory in the decision making process but was not reached to top level.

Netherlands are doing research on Sex workers access to water supply and sanitation in the South of Bangladesh. In this kind of sector, participants must be young. Some issues are connected to lifestyle, public health, and daily living. In this issue oriented research, there is an involvement of young people. At least their opinions are channelized in the top level. But this is talk Mehedi, 'channelized' does not mean that it (youth views) will be reflected compulsorily into the policies. Many of the young generation or young population are ignorant about policy making. (Professor and Urban Planning expert)

One of the experts (the Architect and Urban designer) also raised the problem of lengthiness and review of previous plans, and the need to develop these in a timely way. This expert also blamed the profit making mentality of the politicians and businessman. Experts, he felt, have worked to understand the problems and to empower young people in current urban planning process, for example in a workshop searching for inclusiveness of all income level user.

Comprehensively we forgot to have any master plan on record to follow to provide for us. In those days we had one master plan, 1959 master plan was not for an independent country. You cannot progress without having a proper master plan. In 90's we realised that. But unfortunately, our first master plan started in 1997. A Structure plan which is supposed to be followed by a Detail Area Plan (DAP) in 2010. It took 13 years to come up with a plan. By that time we tried to protect open spaces, greenspaces and the right of the children and right of the youth. It was always business which dominated all the definition of uses in all of the city. Even because of elected local government we failed to protect community spaces or community parks. (Architect and Urban designer)

Similar frustration was expressed by other local community advocates about how difficult it is to involve the public, especially low income communities because of social resistance:

We have a workshop with parents in Banani area for making a playground useable for women. They (local community) told us not to connect low-income family's children with their kids. (Program Coordinator, WBB)

One of the most striking findings from key informant interviews was with a program coordinator (WBB) about the mixing of high-income level young people with low-income level, this is seen as a threat to vital status maintenance problem for their parents. Wealthy parents are not allowing their children to play with poorer children ignoring the concept of 'social inclusion' where all people participate as esteemed members of a society (Freiler, 2003). This will hamper inclusion of all income level people to achieve sustainable goal in city planning.

The need for child friendly green space and transport to support Sustainable Development Goals (SDGs)

My interviews and readings suggest the lack of serious attention to youth engagement in designing of neighbourhoods, impacts the daily life of children and young people. In the course of my field work I had a chance to attend in a workshop arranged by 'Save the Children' with young participants, and afterwards an urban expert have expressed the following observation.

Housing is not currently suitable for living for the children (participants of the project). Housing should be within the distance of ½ km to ¼ km from school that is the standard. They will not have to cross main road, a park should be in their school. But there is no park in their neighbourhood. Besides this buildings have to follow setback rules. A certain portion surrounding their building should have space to allow light and air to enter, so that kids can grow up well. But these things are absent. Other facilities (community facilities, community service) should be near in the neighbourhood perspective of urban planning so that children can access them. These things are absent. For example, a kid cannot go freely to school with school bag. His or her father or mother has to go to school and return. Then again go to private teaching/ coaching and return. That's why there is no individual mobility and he or she cannot use public transport. He or she has to depend on others. As a result, parents are generating travel/trips. (Planner, Narayangonj City Corporation)

My observations and research suggest that there is a lack of suitable land use planning in general including lack of consideration of the child friendliness of the city and the sustainable quality of life for the children. Young people have less access to green space for

physical activities. Obesity is becoming serious problem for high-income and low-income people in developed and developing countries in terms of health issues for SDGs. Some of the experts also commented:

Obesity is becoming common from over eating (junk food). Not taking any physical exercise, increase the belly portion. They have shortage of calcium, vitamin 'D'- 80 % source is sunlight. A kid cannot move in the sunlight which is causing the deficiency of vitamin 'D.' (Planner, Narayangonj City Corporation)

While in transport policy making there is also an ignorance of young people mentioned in the comments of Professor and Urban Planning expert.

Majority shareholders in transport are bikers, the majority of the drivers are young generations. But have you ever seen any involvement of young people in transport policy? There is no policy developed from their perception. I have not known (any). (Professor and Urban Planning expert)

As this expert points out in Dhaka there is still a lack of involvement of transport workers and users who are young and make up the major stakeholder in transport policy making as well as green space. As a professor and Transport expert, this interviewee urged the importance of involving young people in transport policy making as they as the 'true observers of problem' and they can be 'open and honest' in giving advice on decisions. In this context, he suggests transparency and accountability is also needed for good governance and also connected to the empowerment of young people and listening to them.

6.6 Summary

The discussion from this chapter provides some initial thoughts about ways to empower children and young people in planning activities, and the extent to which this is still lacking in Dhaka city in Bangladesh. I began asking do young people in Dhaka have any interest in the process of green space and transport planning and designing their local area? Within this overarching question I identified the following sub- questions: SQ.2a. What is their priority for passing leisure time and use of transport in their nearby area? b. Do they see any need for changes to their local area in the context of green space or transport? c. Do they want to participate in community decision making for green space and transport? Why or why not? There is much public discussion in Bangladesh about whether children and young people are growing up in a family or society without having feelings or strengths of self-

dependency and self-confidence, let alone interest in community decision making processes in a broader scale. However in my qualitative research I did find many young people had an interest in green space and local transport planning but did not know how to become involved. Moreover, there are also some barriers to them raising their voices against any local service or about a problem or complaint to the local authority. For example, young people of this contemporary generation like to express their views on Facebook but authorities may not take it positively, and there are cases of crack downs on youth expressing their views because of arguments some are spreading rumours or defaming government organizations. Moreover my focus group interviews support wider research that many low-income communities and especially young women do not feel encouraged or that they have the freedom to speak out (Ahmed & Bhattacharjee, 2019).

From the above discussion in the two different case study areas, it is clear that many young people want to empower themselves to participate in planning for example by informing authorities by 'writing to an authority', 'raising voices', 'creating awareness', 'creating groups', 'changing my own bad habits,' 'changing the usual system by adding innovative ideas' and 'taking advice from seniors'. Their comments and views showed their interest in participation but they need an institutional set up or support to help them rather than doing it individually.

The experts agreed that young people were not included or their opinions were not taken into account in previous planning processes. The systems of planning activities in Bangladesh are following a traditional top-down approach, decisions are imposed from the higher authority without listening to the problems of the local people. As a result, the whole processes tends to be expensive and fails to meet the needs of local residents.

Future goals in the planning system should be to find ways of including local young people in policy making as well as the operational management of planning implementation processes, mainstreaming planning education particularly the 'language of planning' early, in a user friendly and simple way, providing training and support about how to use the service facilities and finally reviewing of the previous plans to make them more user and youth friendly.

The next chapter will describe the findings from a quantitative survey of young people which I undertook in the low and high-income area (and in a medium income area) to explore the focus group results and impressions from interviews with a wider sample.

Chapter 7 - Findings from the questionnaire survey

7.1 Introduction

This chapter reports on the outcomes of the quantitative analysis step of this study which was based on a questionnaire survey that was informed by the focus groups, interviews and photographs and drawings in Phase One of field survey of this thesis. The questionnaire survey was conducted to gain a broader understanding of youth perspectives on access to green space and public transport and planning activism in Dhaka from a wider cohort of the community. The development and content of the questionnaire were discussed in chapter 3 of this thesis. I included three specific questions for my thesis which I embedded in a wider survey of children and youth in Dhaka. I conducted this survey in conjunction with CYCLES, the Children and Youth in Cities Lifestyle Evaluation and Sustainability study and I implemented it in the survey in three case study sites, the high-income area (Uttara, Ward 1) and low-income area (Bosila, Ward 33) and I also included a middle-income community known as Mirpur (Ward 2-16) to compare with the high and low-income community results. See the maps locating these areas in chapter 3 (Figure-3.3 to Figure-3.6). Alongside general demographic information collected for the CYCLES study (see appendix-4), the three specific questions/statements I developed were included in this omnibus survey, they were (recapped from chapter 3):

1. **Thinking about play grounds or parks near where you live, please select one option to show how satisfied or dissatisfied you are with the:**
   Attractiveness of the space
   Facilities in the space (eg. drinking water and seating)
   Behavior of others in the space

2. **Thinking about how you travel in your local area, please select one option to show how satisfied or dissatisfied you are with the:**
   Pedestrian's access to footpaths
   The behavior of others using the footpath
   Rickshaw passenger's safety and security

3. **Thinking about bus travel in Dhaka City, please select one option to show how much you agree or disagree with the statements below:**
   Buses run to schedule

I can usually find a seat

Bus drivers/ conductors are courteous/respectful

Bus drivers drive safely

Other passengers are respectful to me

In addition, I selected the following wider questions/statements from CYCLES survey to compare and correlate with my study, these related to students' sense of agency and self-efficacy or their belief and confidence in their ability to make changes in their community:

I believe that I can make change in the city.

I participate in planning or decision making for the community.

People are listening to us.

I applied 'Crosstab' and 'Binary logistic regression' in SPSS version 26 and MS Excel 2016 for analysis of responses to examine the association between green space and transport with age, gender and deprivation (Richardson et al., 2010). In this chapter, first, I will present the descriptive results in figures and tables. I will mention the results of variables by presenting deprivation measures by area-level (low, middle and high), and by age group (12-14; 15-17; 18-21 and 22-24 years) and gender (male/female) as the basis for comparison where appropriate. In case of area level presentation of results in the graph and interpretation in the text, I will apply the term high-income (Ward 1) area to equal low deprivation and the low-income (Ward 33) area will be called a community of high deprivation, but for the middle-income area, the label will be the same, i.e. a mid-deprivation community. In interpreting the results from tables where respondents were asked to answer using a 5 point Likert scale of strongly disagree to strongly agree , I will combine the results of strongly disagree and disagree as 'disagree', similarly for strongly dissatisfied and dissatisfied I combined the results and reported the comments as 'dissatisfied' in the text. I will do the same thing for opposite results, meaning I report on the combination of strongly satisfied and satisfied into 'satisfied', to have a clear idea of the responses of the young participants of this study.

After presenting the descriptive results, I will present odd ratios for age, gender and deprivation connected to green space and public transport in Dhaka as reported in this study. These results will be designated and interpreted in the last section prior to summary of this chapter. The next section discusses the demographic frequency data of this survey.

7.2 Demographic frequency data

The total participants of this questionnaire survey were 308, among them 146 (47%) were female (Figure-7.1).

Figure-7.1: Gender of the respondents
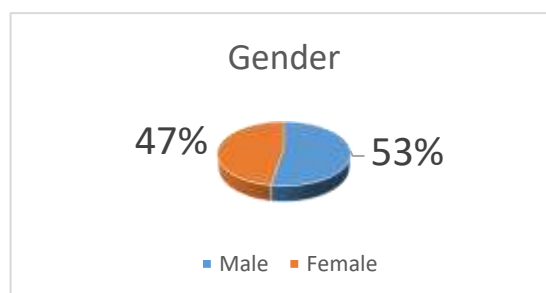
As discussed in the methodology chapter 3, a middle-income level area was added in this questionnaire survey for broader analysis.

Table-7.1: Participants in the survey from three different types of area level

Deprivation	Number of respondents (n)
High	100
Middle	108
Low	100
Total (N)	**308**

Table-7.1 shows almost a balanced number of participants drawn from high, middle and low-deprived areas for this study. While the sample is small it is reflective of the income distribution proportions of the city of Dhaka as a whole (Ahmed, 2014). In addition, participants of this study were comparatively evenly represented by age within the range of 'young people' as defined by the United Nations (United Nations, 2019) (12-24) years old. This age group was further divided into four groups (12-14), (15-17), (18-21) and (22-24) years for detailed investigation of the results and to compare the views of younger children and young adult age groups. Youth under 18 years, have no voting rights in Bangladesh according to the article 122 of Bangladesh constitution (Ghosh, 2018). Youth aged 19 and older have voting rights, and are therefore regarded as active citizens according to the Bangladesh constitution. Moreover, while the survey is small, it is also comparable to the wider distribution of ages in Dhaka city itself according to RAJUK (2018) who estimates that the population breakdown in Dhaka city is close to this distribution of age groups surveyed (10-14 years, 9.9%), (15-19 years, 9.8%), and (20-24 years, 12.3%).

Table-7.2: Number of participants according to age group and gender, N=308

Age groupings		Gender		Total
		Male	Female	
12 to 14 years	Count	23	45	68
	%	33.8%	66.2%	
15 to 17 years	Count	40	47	87
	%	46.0%	54.0%	
18 to 21 years	Count	35	25	60
	%	58.3%	41.7%	
22 to 24 years	Count	64	29	93
	%	68.8%	31.2%	
Total	Count	162	146	**308**
	%	52.6%	47.4%	

Table-7.2 above displays the cross-tabulation of age group and gender of respondents. The highest number of female participants who took part in the survey (n=47) were in the younger age group (15-17 years) and the highest male participants (n=64) were in the 'young-adult' age group (22-24 years). During this survey, I found that young female participants in the middle-income area were very enthusiastic and happy to share their thoughts in focus groups but it was more challenging to obtain responses from young women in low-income communities even where a female research assistant was used to help facilitate the groups and I recommend future studies over-sample young women from low-income communities to ensure their voice is heard. The next section reports on the respondents view about green space in their neighbourhood as revealed from the survey.

7.3 Use of green space or parks, playgrounds and roof top gardens

In the questionnaire survey, I was asking the participants about their use and satisfaction with the availability of parks and playgrounds near their housing or living area or community and their satisfaction levels about using green space (see questions at the beginning of this chapter or in the appendix-4). They responded by completing a 5-point 'Likert scale' ranging from 'very dissatisfied' = 1 for the negative answer and 'very satisfied' = 5 for the highest positive reply to the statement. The findings are displayed in the following sections.

Accessibility of green space

In examining the accessibility of green space, first I tested the scenario of youth satisfaction with access to green space based on income level from three different areas in Dhaka city. It was measured to check if there any difference in the perceptions of availability of green space across the three areas as a part of my comparison of youth experiences in these communities.

Figure- 7.2: Responses about access to green space in three different areas
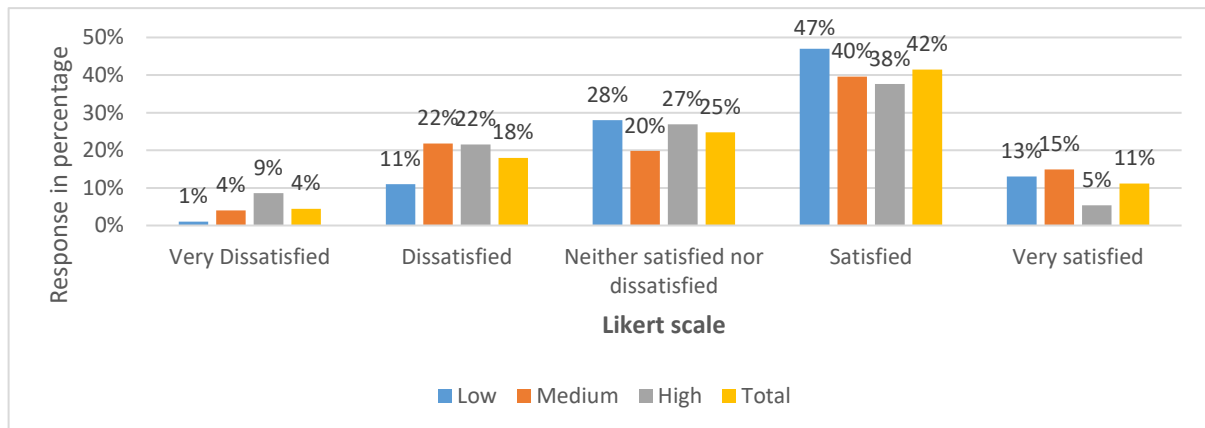
The Figure-7.2 above illustrates the satisfaction responses by community income deprivation level (where high-income area Ward 1 = low deprivation) in Dhaka city where maximum participants (low deprivation 60%, middle deprivation 55%, and high deprivation 43%) expressed satisfaction about their access to green space. This findings support my analysis of focus groups and interviews for this research that the high deprived young participants were the most unhappy about the access to parks and playgrounds but the respondents who lived in the least deprived area were most satisfied about that as they have access to more parks and playgrounds than the unplanned areas.

I have examined the same thing with different age groups of young participants and I present the results by dividing them in to four age cohorts to find out whether there were any differences in a particular age group regarding their satisfaction or dissatisfaction with their access to green space and by community. Particularly, I was more interested in hearing if there was a senior-junior difference of satisfaction about access to green space (chapter 4). In the focus group sessions, some young participants (age 12-18 years) had informed me they felt there was less opportunity to use of green space because it was dominated by 'senior users (aged above 40 years)'.

Table- 7.3: Satisfaction of different age group about access to green space

Age group		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
12 to 14 years	Count	2	15	10	28	13	68
	%	2.9%	22.1%	14.7%	41.2%	19.1%	
15 to 17 years	Count	6	17	24	30	10	87
	%	6.9%	19.5%	27.6%	34.5%	11.5%	
18 to 21 years	Count	9	14	20	14	3	60
	%	15.0%	23.3%	33.3%	23.3%	5.0%	
22 to 24 years	Count	17	25	18	30	3	93
	%	18.3%	26.9%	19.4%	32.3%	3.2%	
Total	Count	34	71	72	102	29	308
	%	11.0%	23.1%	23.4%	33.1%	9.4%	

In this case, young participants of (12-14) years age group (Table-7.3) reported higher satisfaction level (41.2%+19.1% = 60.3%) than other groups. This indicates that this group feels they have less to complain about in terms of the access to green space to participate in activities in parks and playgrounds near their house. However, it differs from responses obtained in my focus groups and one to one interviews where young-adults (19-24 years) were more satisfied than the younger participants (12-18 years) in the focus groups. This may be because younger participants are more active users than the older age group where older age group are busy with preparing for job interviews and other employment or they are less interested to visit green space than younger age groups even if green spaces are available near their house. The next important test was to examine the gender differences in accessibility to green space.

In examining the satisfaction level of males compared to females, I have found that a greater proportion of females (51.4%) reported that they are 'satisfied' with access to green space than males (34.5%) (Table-7.4). The results again should be treated with caution as they may suggest female feel less confident to complain about the accessibility of parks and playgrounds near their house in a formal quantitative survey. It is very unlikely that young women are satisfied with green space given findings reported earlier (chapter 4 and 5) where females reported in focus groups that they were often less satisfied about the access and use of green space outside home, but that many young women and girls are happy with their access to green space (roof top gardens). Again this finding shows the benefit of conducting both

quantitative and more detailed qualitative focus groups in settings where students feel more comfortable to give their opinion.

Table-7.4: Satisfaction levels about access to green space by gender

Gender		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
Male	Count	24	40	42	42	14	162
	%	14.8%	24.7%	25.9%	25.9%	8.6%	
Female	Count	10	31	30	60	15	146
	%	6.8%	21.2%	20.5%	41.1%	10.3%	
Total	Count	34	71	72	102	29	308
	%	11.0%	23.1%	23.4%	33.1%	9.4%	

The next section discusses one of the most important findings about the visual beauty of green space in the view of young participants.

Attractiveness of green space

Research suggests the aesthetic beauty and appeal of green space influences users' preferences to visit and engage physical activities in public green spaces (chapter 4, pp. 71). Therefore, I examined participants' responses about their satisfaction with the attractiveness (i.e. aesthetics, greenery) of local parks and playgrounds to understand their opinion across three different income levels of young Dhaka residents.

Figure-7.3: Satisfaction with attractiveness of parks and playgrounds by community deprivation
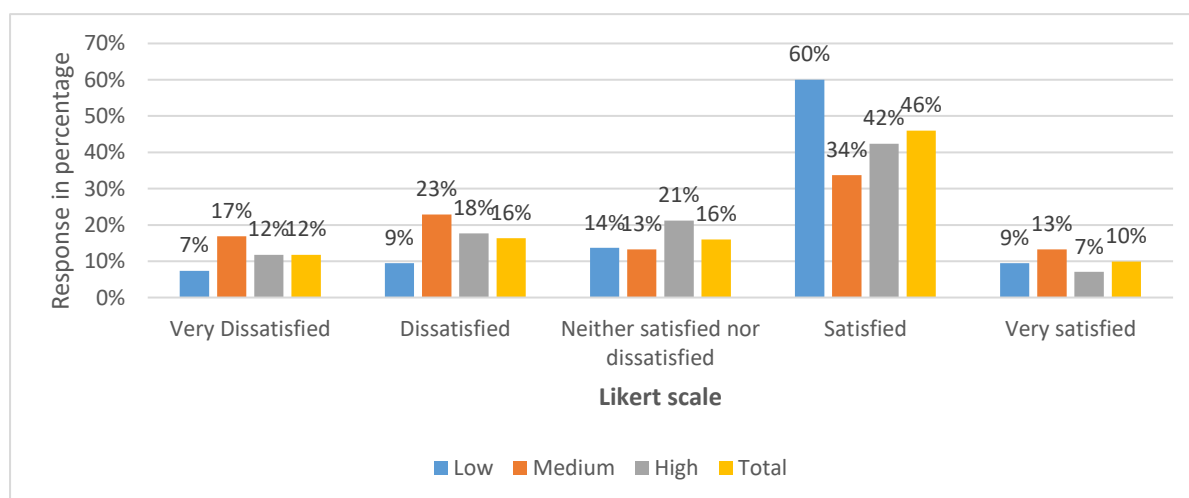
The Figure-7.3 above displays a surprising scenario about the attractiveness of park and playgrounds from what we might have expected given earlier responses to the focus groups and interviews (chapter 4, pp. 70-75). The highest number of participants of the least deprived area (high-income) (69%) expressed the strongest satisfaction with the attractiveness of parks and playgrounds near their area (Figure-7.3). The most highly deprived area expressed over half of the respondents show satisfaction (56%), and this is very different from the views expressed in focus groups. The views reported in the survey also differed from my own field observations. I found dilapidated condition of parks and playgrounds from the direct field observation which had supported the comments made by young users in the qualitative survey in low-income area.

Why the difference? This maybe a thought for policymakers; where young people are dissatisfied with their local green space but enthusiastic about the opportunity to participate in a formal survey (particularly in a deprived low-income community) respondents may be trying to please the researcher. In addition, or alternatively, some low-income participants in precarious housing arrangements maybe anxious about how their complaints would be used by authorities, even when they have been reassured of anonymity and so they may withhold strong criticism. This also reminds me however of the comment of the urban designer I interviewed who argued that children often have very modest expectations of green space and often only need a space where they can perform physical activities by managing the equipment in their own way (chapter 4). I have also examined levels of satisfaction amongst different age groups to identify any differences in their thinking.

Table- 7.5: Satisfaction of different age group about the attractiveness of parks and playgrounds

Age group		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
12 to 14 years	Count	6	13	8	26	7	60
	%	10.0%	21.7%	13.3%	43.3%	11.7%	
15 to 17 years	Count	8	8	14	40	10	80
	%	10.0%	10.0%	17.5%	50.0%	12.5%	
18 to 21 years	Count	8	9	11	24	4	56
	%	14.3%	16.1%	19.6%	42.9%	7.1%	
22 to 24 years	Count	9	16	11	35	5	76
	%	11.8%	21.1%	14.5%	46.1%	6.6%	
Total	Count	31	46	44	125	26	272
	%	11.4%	16.9%	16.2%	46.0%	9.6%	

Table-7.5 indicates that all age groups were more likely to report that they are satisfied with the attractiveness of the parks and playgrounds, among them the greatest proportion (62.5%) of respondents were 15-17 year olds shows more satisfaction about attractiveness of green space than others. This finding suggests there may be some merit in the argument of the urban designer I interviewed that children only need a space to play, although as urban planners and advocates for children, we may wish to advocate for better quality of space. We do need to listen to children and young people who also value being able to determine how that space is used.

Table- 7.6: Satisfaction level based on gender about the attractiveness of parks and playgrounds

Gender		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
Male	Count	14	25	24	64	13	140
	%	10.0%	17.9%	17.1%	45.7%	9.3%	
Female	Count	17	21	20	61	13	132
	%	12.9%	15.9%	15.2%	46.2%	9.8%	
Total	Count	31	46	44	125	26	272
	%	11.4%	16.9%	16.2%	46.0%	9.6%	

In observing responses to the same statement by gender, I have found more or less the same results from male and female respondents. Both males (54%) and females (56%) reported that they are broadly 'satisfied' with the attractiveness of their local parks but interestingly females showed more satisfaction than male with the attractiveness of parks and playgrounds (Table-7.6). Again this finding contrasts with the qualitative focus group results which indicated that they (female respondents) use parks comparatively less often than males. Therefore, this also suggests that there may be sampling bias perhaps as respondents seek to provide answers they think they should say about their community in a formal survey. In addition, 36 out of 308 participants did not share their views in this statement.

Facilities in green space

I also asked young people about the facilities and services in their local parks or playgrounds (i.e. water taps, toilets and seats/benches). More than half of the least deprived area said they are 'satisfied' (52%) with local services compared to the views of residents in the mid and high deprived area, where people were less likely to be happy with the facilities in their public spaces (Figure-7.4). The respondents in middle and high deprived areas reported

more or less the same level of satisfaction with the facilities in their local green space. However from my field observations, I could not find any water taps or toilets in the parks and playgrounds in either areas (i.e. Mohammadpur playground). This problem was also reflected by the young respondents in high deprived area (low-income area) in the focus group sessions (chapter 4, pp 83). So again, when decision makers are thinking about how to elicit participation and responses from the community they may want to think about the possibility that sampling bias (as respondents try to please the surveyors or self-censor their comments) may make survey's less insightful in comparison to responses from local focus groups where students are speaking with peers.

Figure-7.4: Satisfaction with facilities in green spaces in three deprived areas
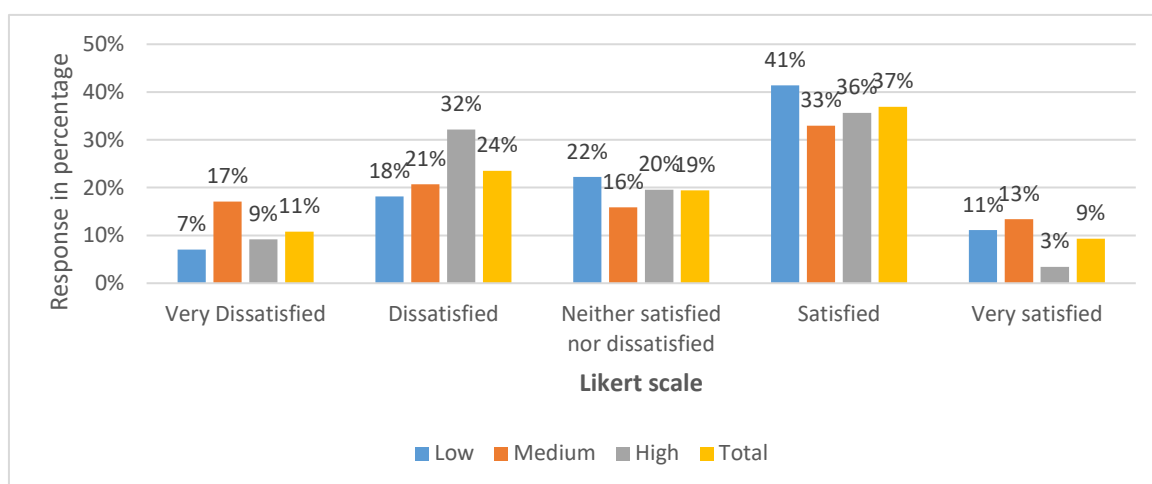
Table-7.7: Satisfaction of different age groups about the facilities in parks and playgrounds

Age group		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
12 to 14 years	Count	5	13	11	24	9	62
	%	8.1%	21.0%	17.7%	38.7%	14.5%	
15 to 17 years	Count	11	16	17	31	10	85
	%	12.9%	18.8%	20.0%	36.5%	11.8%	
18 to 21 years	Count	6	13	13	20	3	55
	%	10.9%	23.6%	23.6%	36.4%	5.5%	
22 to 24 years	Count	7	23	13	27	3	73
	%	9.6%	31.5%	17.8%	37.0%	4.1%	
Total	Count	29	65	54	102	25	275
	%	10.5%	23.6%	19.6%	37.1%	9.1%	

In my literature review of Dhaka city (chapter 1, pp. 12), I have found that young people are the maximum users of local green spaces. In this connection, I have examined the experience and expectations of facilities in nearby green space by different age groups of respondents.

In Table-7.7 responses suggest that a greater proportion of young participants (under 18 years) are satisfied (12-14, 53.2% and 15-17, 58.3%) with the service facilities of their parks and playgrounds. However, again these results differ from the views of respondents in the focus group sessions who more readily expressed their dissatisfaction with the lack of facilities in both areas (chapter 4).

Table-7.8: Satisfaction level of males/females about the facilities of parks and playgrounds

Gender		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
Male	Count	14	39	31	47	12	143
	%	9.8%	27.3%	21.7%	32.9%	8.4%	
Female	Count	15	26	23	55	13	132
	%	11.4%	19.7%	17.4%	41.7%	9.8%	
Total	Count	29	65	54	102	25	275
	%	10.5%	23.6%	19.6%	37.1%	9.1%	

In comparing the gender differences and satisfaction, as noted above female participants reported more satisfaction (51.5%) than males (40.3%) about the availability of facilities in parks and playgrounds (Table-7.8). This result differs from the scenario of the focus group sessions where a few (female) respondents complained about the minimal or zero availability of toilets in these places however maximum participants did not mentioned this service (chapter 4). Some of them were also expected about swing in the park.

Users' behaviour in green space

The Figure-7.5 below illustrates that residents of three different areas said that they are satisfied (low 64%; middle, 52%; high 50%) with the behaviour of others using the green space where the respondents of low deprived area are comparatively most 'satisfied' or very satisfied with the behaviour of others (a total of 64%) than other areas which is opposite to the previous findings (chapter 4, pp. 86) in focus group comments where some respondents in the least deprived community (high-income area) said that they felt uncomfortable with unknown persons who came from outside in this community.

Figure-7.5: Satisfaction with the behaviour of others using park and playground
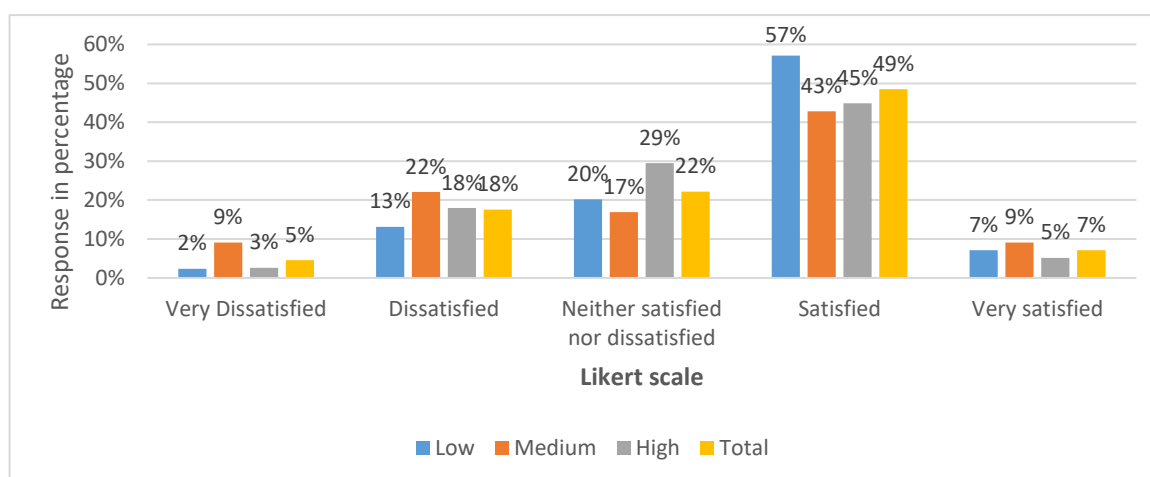
In the focus group sessions conducted in the qualitative step of this study, some young participants (12-18 years) in the high-income area were also frustrated by the dominance of adult users in local parks which they felt were depriving them of opportunities to use the parks and playgrounds and violating their rights to play (chapter 4, pp.86). In this context, I undertook further examination of the survey responses to understand the behaviour of park users at different ages.

Table-7.9: Satisfaction level of age group about the behaviour of others in parks and playgrounds

Age group		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
12 to 14 years	Count	2	13	12	20	9	56
	%	3.6%	23.2%	21.4%	35.7%	16.1%	
15 to 17 years	Count	6	12	11	40	7	76
	%	7.9%	15.8%	14.5%	52.6%	9.2%	
18 to 21 years	Count	0	9	13	21	2	45
	%	0.0%	20.0%	28.9%	46.7%	4.4%	
22 to 24 years	Count	3	9	18	40	0	70
	%	4.3%	12.9%	25.7%	57.1%	0.0%	
Total	Count	11	43	54	121	18	247
	%	4.5%	17.4%	21.9%	49.0%	7.3%	

Table-7.9 above indicates that the satisfaction levels of youngest age groups varied with some saying that they were less satisfied (51.8%) about the behaviour of others than young-adult age groups (22-24) (57.1%). But a significant proportion of very young respondents also

said that they were very satisfied with the behaviour of other users in parks and playgrounds. This outcome supports the previous mixed responses in the qualitative focus groups (chapter 4, pp. 86) and again highlights the value of holding in-depth discussion even in very large cities like Dhaka to gain better insights into how children and young peoples' experience their city.

As discussed in chapter 4, female views are important to examine because they complained in the focus groups about harassment experienced as negative comments about for example 'eve teasing' by other users of parks and playgrounds (chapter 4, pp. 88).

Table-7.10: Satisfaction level about the behaviour of others in parks and playgrounds by gender

Gender		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
Male	Count	4	22	31	68	6	131
	%	3.1%	16.8%	23.7%	51.9%	4.6%	
Female	Count	7	21	23	53	12	116
	%	6.0%	18.1%	19.8%	45.7%	10.3%	
Total	Count	11	43	54	121	18	247
	%	4.5%	17.4%	21.9%	49.0%	7.3%	

Concerningly, Table-7.10 above suggests there was no difference between the views of male and female participants about the behaviour of other users. The majority of respondents reported that they are happy (male participants, 56.5%; female, 56%) with the behaviour of others in the parks and playgrounds. This result however is as noted earlier again the opposite scenario of the opinion of many female respondents which was shared in the focus groups, being harassed was a reason according to them for not using parks and playgrounds near their house or in their local area. Females reported that they used rooftop gardens more often in leisure time in the focus groups and this suggests that general surveys which are often conducted using pen and paper and through face to face interview in large cities like Dhaka where internet access is uneven, may inhibit free responses by young women, particularly when talking about issues of safety. Often in quantitative surveys we use multiple questions to assess a construct. So this findings is also highlighting limitations of single item questions. More research needs to be conducted about the most appropriate research method but these indeterminate findings support other studies for example, with rural women in Bangladesh about reluctance to report harassment or more serious violence issues (Yount et al., 2012). The next section will discuss the daily life experience of young participants in public transport use as revealed in the quantitative survey.

7.4 Transport usage

In this thesis, I have argued that transport has a great impact on youth wellbeing, providing a connection to the use of green space and often supporting physical activities (i.e. walking) access to social connections, employment and education. Safety is a great concern of all those who are travelling in Dhaka (chapter 5, pp. 117). Safety issues vary between the mode of travel (i.e. bus, rickshaw, and walk) (my own experience was mentioned in chapter 1, pp. 8). Road accidents related to reckless driving and chaotic experiences of crossing roads by jaywalking are regular scenarios in this city. Few people follow traffic rules and guidelines (i.e. ignoring foot over-bridges for road crossings, and many vehicles are not properly licenced and public transport is poorly regulated, see chapter 2). As discussed these concerns resulted in widespread youth protests about transport in Dhaka city in 2018 just after I completed the first focus groups for my study. In this context, I was keen to examine young citizens attitudes to transport more broadly, therefore, I established a series of questions to test youth experiences and attitudes to safety on streets, access to public transport, behaviours of bus drivers and conductors, behaviours of other passengers, bus driving, access to footpaths, behaviour of others using footpaths, safety and security using rickshaws. The findings are discussed below.

Safety on streets

I asked the participants about the safety of roaming on streets in Dhaka city. The Figure-7.6 below suggests that comparatively speaking, young people living in the middle deprivation community are more satisfied with transport, over half of the respondents (51%) reported this compared with others. Whereas this contrasted with findings in the high deprivation community (41%) and low deprivation area (32%). This finding is more or less same to the current road accidents in Dhaka city that was reflected in the road for safety protest by school and college students (chapter 1 and 2).

Figure-7.6: Satisfaction level of respondents about the safety on street
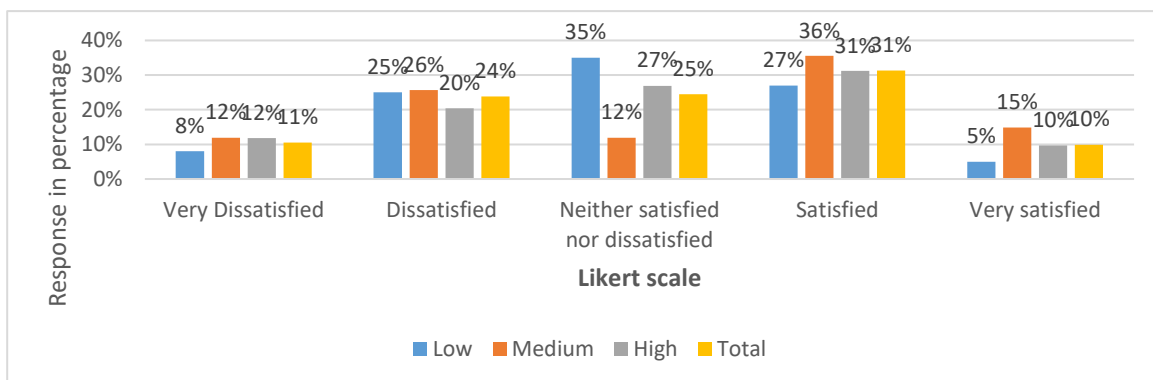
The survey was conducted shortly after the road safety movement protests as discussed in chapter 2, and I have examined satisfaction with transport by different age groups to explore youth views about this vital issue in Dhaka in more depth.

Table-7.11: Satisfaction level of age group about the safety on street

Age group		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
12 to 14 years	Count	5	11	15	25	12	68
	%	7.4%	16.2%	22.1%	36.8%	17.6%	
15 to 17 years	Count	5	23	25	29	5	87
	%	5.7%	26.4%	28.7%	33.3%	5.7%	
18 to 21 years	Count	11	13	13	18	5	60
	%	18.3%	21.7%	21.7%	30.0%	8.3%	
22 to 24 years	Count	11	24	21	30	7	93
	%	11.8%	25.8%	22.6%	32.3%	7.5%	
Total	Count	32	71	74	102	29	308
	%	10.4%	23.1%	24.0%	33.1%	9.4%	

Table-7.11 indicates strikingly that over half portion of young age group (54.4%) reported satisfaction about the road safety. Given the widespread street protests and the focus group sessions, (where many women were concerned about the safety and security of journeys outside their home), we can assume that many young people maybe- self censoring when they reply to this formal survey. This is perhaps understandable given the government crack-down on youth protests (chapter 1, pp. 10) but it adds more reason to think carefully about the way that young people's views are elicited in local decision making. Therefore, I have investigated the responses about road safety by male and female participants to look for any differences in their opinions.

Table-7.12: Satisfaction level based on gender about feeling safe on the streets

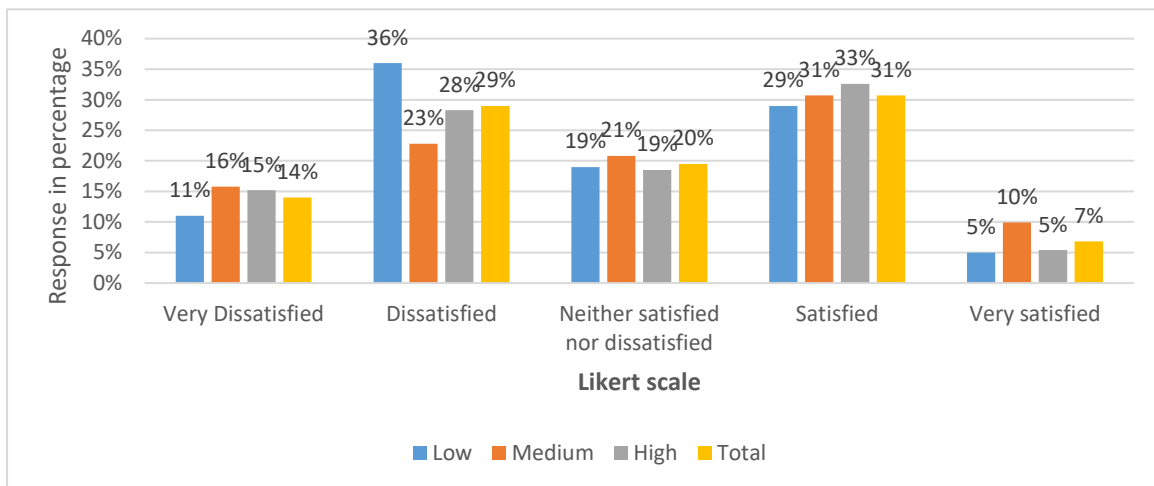| Gender		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
Male	Count	17	39	39	52	15	162
	%	10.5%	24.1%	24.1%	32.1%	9.3%	
Female	Count	15	32	35	50	14	146
	%	10.3%	21.9%	24.0%	34.2%	9.6%	
Total	Count	32	71	74	102	29	308
	%	10.4%	23.1%	24.0%	33.1%	9.4%	

Table-7.12 confirms that similar proportion of females reported that they are satisfied (43.8%) than males (41.4%) about safety on streets. This indicates that both are concerned about the safety on streets as females are out and about in this day in Bangladesh and many are often busy with outside activities i.e. children's schooling, shopping for the kitchen or working in the market, or getting to other jobs. However, the result is surprising given the current situation of road safety in Dhaka where females are the highest victims of hijacking on streets (chapter 5, pp. 88). I am assuming that young women are travelling with their parents or a support person given current insecurity on road, this is a possibly reason for feeling safe in the streets as responded in the survey. Again however this finding most probably indicates a method issue with face to face surveys conducted one to one, where young people are reluctant to express strong negative views on an issue that has become highly politicised and women in particular may be reluctant to indicate their feelings of insecurity. Again using both the quantitative focus groups and the larger surveys is important and thinking about research anonymity matters. This indicates that new thinking or new consultation methods are needed to find out the views of young people in Dhaka about controversial issues. I also conducted focus groups after the protests to see if students were more likely to note problems when their awareness had been raised by street activism, and I found the positive side that they were enthusiastic to change the system of transport management (pp. 118).

The literature on the transport services (chapter 1 and 2) in Dhaka identified the mismanagement of transport and unavailability of public transport were problems and this was also reflected by the opinions of the young respondents in the focus group sessions (chapter 4). The next section discusses the findings of the respondents in the questionnaire survey about their access to public transport in general.

Access to public transport

I asked participants about their satisfaction with access to transport i.e. service availability close to the door in three different socio-economic areas. Figure-7.7 below displays the results and indicated that a greater proportion of participants in the low deprivation area (47%) responded indicating dissatisfaction about the availability of transport. In comparison the response from the middle deprivation area (39%) and high deprivation area (43%) indicated that dissatisfaction was comparatively low. This result is similar to the findings of previous focus groups and interviews with participants. In those discussions low-income participants were more likely to mention that they were having to walk further and use other cheap cost transport service (i.e. leguna) because of less availability of buses (chapter 4, pp. 101). On the other hand, high-income people can more easily afford to use door to door transport services (i.e. car, Uber, Pathao) as the expense is more reasonable for them.

Figure-7.7: Satisfaction level about access to public transport in three areas

In the focus group sessions, young aged participants who had to maintain attendance at school and college classes were also more dissatisfied and their comments were similar to the young-adult age respondents who said that they were often late into the office due to lack of access to proper transport services (chapter 4, pp. 101).

Table-7.13: Satisfaction level of age group about access to public transport

Age group		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
12 to 14 years	Count	5	15	18	20	10	68
	%	7.4%	22.1%	26.5%	29.4%	14.7%	
15 to 17 years	Count	10	23	16	32	5	86
	%	11.6%	26.7%	18.6%	37.2%	5.8%	
18 to 21 years	Count	12	17	14	14	3	60
	%	20.0%	28.3%	23.3%	23.3%	5.0%	
22 to 24 years	Count	15	31	12	33	2	93
	%	16.1%	33.3%	12.9%	35.5%	2.2%	
Total	Count	42	86	60	99	20	307
	%	13.7%	28.0%	19.5%	32.2%	6.5%	

However, in investigating the age group, through the survey, (12-14 and 15-17) years olds respondents reported comparatively higher satisfaction (over 43%) (see Table-7.13) with access to transport whereas nearly half (49.4%) of the adult respondents (22-24) years expressed dissatisfaction about their access to public transport. Again it is difficult to interpret these findings because students may have felt inhibited from speaking out given the experiences of retribution for school students who had recently protested, or some may have

felt that there were some recent improvements in services as a result of changes made after the protests. More research would have to be undertaken to explore these responses in more depth.

Table-7.14: Satisfaction levels based on gender about access to public transport

Gender		Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Total
Male	Count	26	45	29	55	6	161
	%	16.1%	28.0%	18.0%	34.2%	3.7%	
Female	Count	16	41	31	44	14	146
	%	11.0%	28.1%	21.2%	30.1%	9.6%	
Total	Count	42	86	60	99	20	307
	%	13.7%	28.0%	19.5%	32.2%	6.5%	

Table-7.14 above shows an interesting scenario of satisfaction and dissatisfaction about the access to public transport in this sample. Females (39.6%) reported higher satisfaction than males (37.9%) overall about access to public transport whereas female (39.1%) and males (34.1%) showed similar in dissatisfaction of access to public transport. Therefore, it has been difficult to come to an exact assessment based on these findings, I think it would be better to encourage for more research. However, from my surveillance in local bus journeys males can ride on buses or any vehicles much more easily than females who are more likely to be harassed. This slightly reflected in the result where young women showed some dissatisfaction about access to transport (see 7.14). Again this was not higher as expected maybe because of their journey accompanied by their parents or any supporting person i.e. friends or relatives.

Young people's responses about the schedules of bus services

Traffic jams are a common scenario in the highly congested Dhaka city as discussed in chapter 2. In this case, I have examined attitudes of youth to the traffic problems of time management by asking participants about the schedule of bus services, i.e. availability of bus in the station, stopping (to pick up passengers) in a frequent manner or arriving at the destination point in time.

Table-7.15: Attitudes about the adequacy of bus services by respondents of different age groups

Age group		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
12 to 14 years	Count	3	24	9	19	1	56
	%	5.4%	42.9%	16.1%	33.9%	1.8%	
15 to 17 years	Count	24	28	11	15	1	79
	%	30.4%	35.4%	13.9%	19.0%	1.3%	
18 to 21 years	Count	17	15	4	19	4	59
	%	28.8%	25.4%	6.8%	32.2%	6.8%	
22 to 24 years	Count	25	33	5	28	1	92
	%	27.2%	35.9%	5.4%	30.4%	1.1%	
Total	Count	69	100	29	81	7	286
	%	24.1%	35.0%	10.1%	28.3%	2.4%	

Table-7.15 indicates that large portion of respondents of age group (15-17, 65.8%) are unhappy with the schedule of bus services. They are very concerned about the timing of bus as they have to attend school activities (i.e. class, quiz, and exam) in time. This is also a serious problem for the young-adult age groups (22-24) years that was reflected in their responses (63.1%) and supports the comments in focus groups that this is most likely to be due to the problems of maintaining their job schedules.

Table-7.16: Satisfaction level about the schedule of bus service by gender

Gender		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Male	Count	45	49	12	47	4	157
	%	28.7%	31.2%	7.6%	29.9%	2.5%	
Female	Count	24	51	17	34	3	129
	%	18.6%	39.5%	13.2%	26.4%	2.3%	
Total	Count	69	100	29	81	7	286
	%	24.1%	35.0%	10.1%	28.3%	2.4%	

Females presented with more concerns about the schedule of bus service in the focus group sessions particularly in the low-income areas. This encouraged me to do more analysis of the problem by gender. Table-7.16 confirms that over half of the female participants (58.1%) are not happy with the bus services but a surprisingly large proportion of male participants (59.9%) also expressed frustration about the poor schedule of bus services in Dhaka city. In

this case, they had to search for alternative options (i.e. rickshaws, legunas, ride sharing bikes) where available.

Previous investigations of this thesis using focus groups that was discussed in chapter 4 mostly focused on the transport service on road or outside the vehicle. Now I would like to investigate a most important service inside buses: the availability of seat in bus which is an urgent issue in media that arose during my study particularly for women, children and older citizens for either short or long bus journeys.

Availability of seats in bus

Unfit buses, mechanical problems and overcrowding in buses are as usual scenario in Dhaka city that often argued about by local transport planners. But in this study, I was struck in focus groups that some young respondents, particularly young women (chapter 4 and 5) commented that they were uncomfortable in buses because they could not find a seat. I have investigated the comfort of the passengers by asking about the availability of seat in the bus.

Figure-7.8: Responses about the availability of seat in bus in three areas
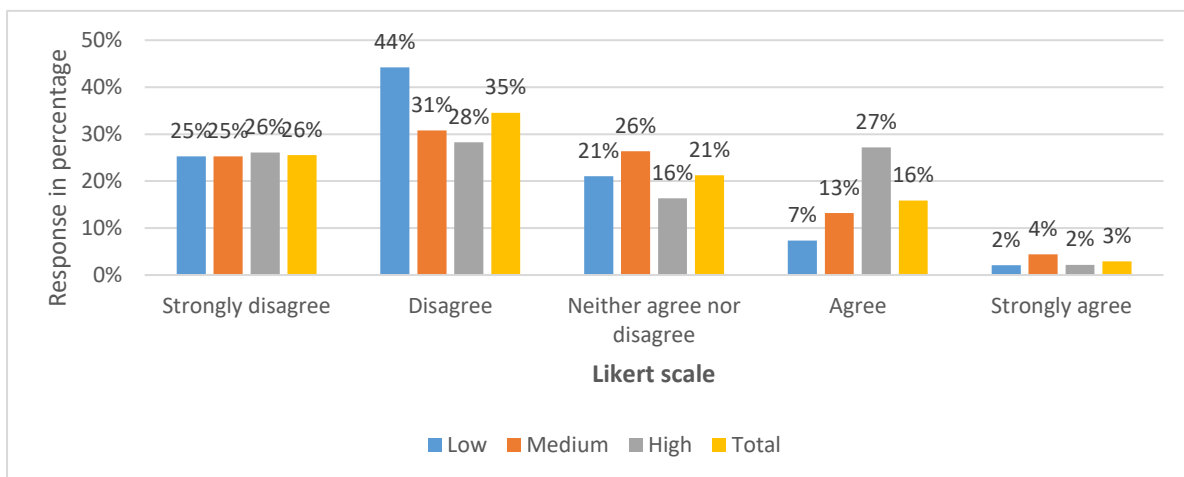
In examining the facilities available in the bus, the Figure-7.8 above suggests a significant portion of the least deprived residents who took part in this survey are complaining about the unavailability of seats (69%) compared to others (middle deprived community, 56%; highly deprived community, 54%). Overall however, most of the passengers from these three areas are unhappy in this regard. From my observation, most of the buses whether local or fixed ticketing direct services, are often crowded and these survey findings are in keeping with public debate that 'seating services' have turned into 'cheating services' because the bus fare is kept same for the standing travellers (Adhikari, 2018a; Mamun, 2017). I also examined the responses of different age groups to explore their views about comfort on buses and thoughts for future planning.

Table-7.17: Satisfaction level of age group about the availability of seats in the bus

Age group		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
12 to 14 years	Count	9	18	17	14	2	60
	%	15.0%	30.0%	28.3%	23.3%	3.3%	
15 to 17 years	Count	18	30	18	12	2	80
	%	22.5%	37.5%	22.5%	15.0%	2.5%	
18 to 21 years	Count	16	16	12	13	2	59
	%	27.1%	27.1%	20.3%	22.0%	3.4%	
22 to 24 years	Count	29	39	13	9	2	92
	%	31.5%	42.4%	14.1%	9.8%	2.2%	
Total	Count	72	103	60	48	8	291
	%	24.7%	35.4%	20.6%	16.5%	2.7%	

Table-7.17 above indicates that significant portion of young-adult age groups (22-24) years old are unhappy (73.9%) about the availability of seats in the bus than other age groups. I have also examined the availability of seat for the male and female to see is there any gender discrimination in this purpose.

Table-7.18: Satisfaction level based on gender about the availability of seats in the bus

Gender		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Male	Count	46	53	29	27	4	159
	%	28.9%	33.3%	18.2%	17.0%	2.5%	
Female	Count	26	50	31	21	4	132
	%	19.7%	37.9%	23.5%	15.9%	3.0%	
Total	Count	72	103	60	48	8	291
	%	24.7%	35.4%	20.6%	16.5%	2.7%	

Table-7.18 above demonstrates that male and female both expressed frustration about the availability of seat in the bus. In this case, a greater proportion of males (62.2%) are prepared to express dissatisfaction than females (57.6%) about the availability of seating. However, according to the common understanding and consent of Bangladesh Road Transport Authority (BRTA), Metropolitan Transport Authority and the representative from women's right movement, all buses have to ensure 9 (but for minibus it will be 6) priority seats for female, disabled and children passengers (Khan, 2018) and that has to be marked or

designated in a certain portion of bus (usually in the front of the bus and close to the front door). If anyone disobeys or wrongly occupies these reserved seats they will be fined 5000 BDT (84.74 NZD)[25] according to Road Transport Act 2017 (Jahan, 2017; Khan, 2018). Moreover, at the time of this study, there was a fully women friendly bus service offered in Dhaka but it is unlikely to have influenced respondents views as media reports noted it could not run properly due to mismanagement of the service by the authority (The Financial Express, 2020).

In considering the wider perspectives of young people about public transport services I also asked young people about the behaviour of the bus drivers and conductors to know more from the young participants about their experience and expectations in this service.

Behaviour of bus drivers and conductors

In the focus groups, several young respondents said that they felt bus drivers and conductors (assistants) often misbehaved with the passengers during travel. They commented about 'reckless driving', 'stopping the bus in unmarked or haphazard places', 'charging incorrect bus fares' and 'not listening to the requests of the passengers'. Figure-7.9 below illustrates that most of the respondents to the survey said they are unhappy with the behaviour of bus drivers or conductors, among them significant portion (over half of the participants) were from low deprived areas (60%) but others (middle, 52%; High, 49%) were also showed that they echoed with the misbehaviour of bus drivers and helpers. Interestingly, over one third portion of highly deprived residents (39%) show neither agree nor disagree response in this regard.

Figure-7.9: Response about the behaviour of bus drivers and conductors

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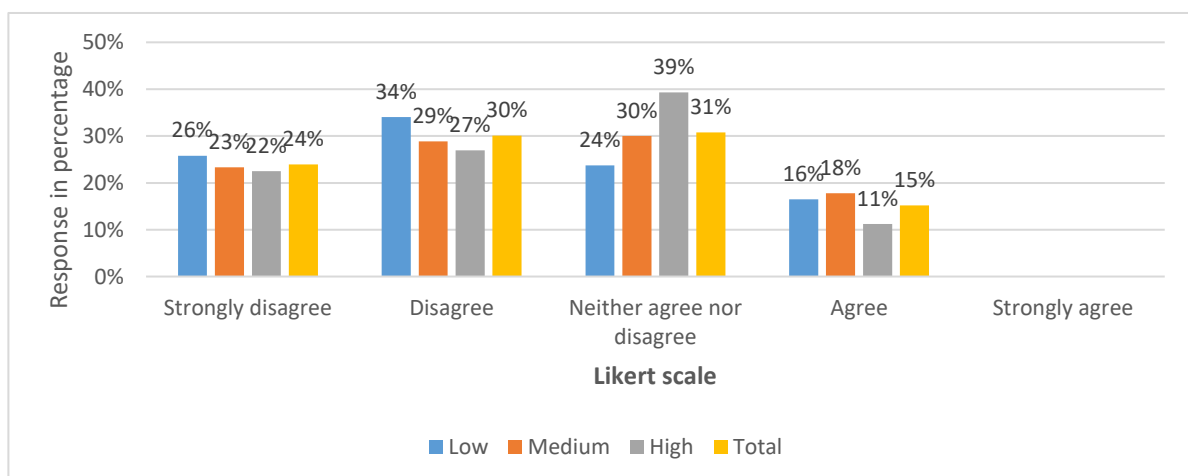
[25] 1 NZD = 59 BDT (Exchange rate on 25-11-2020).

I was very interested to find out the differences among the children, teens and young adult responses about the behaviour of bus drivers school and college students were regularly reported in media at the time of the study as having arguments with bus conductor regarding the bus fare and this problem was also mentioned during focus group sessions.

Table-7.19 shows that major portion of adult age group (61.3%) disagreed that bus drivers and conductors were respectful and this was a more significant proportion of respondents than other age groups.

Table-7.19: Satisfaction level of age group about the behaviour of bus drivers and conductors

Age group		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Total
12 to 14 years	Count	11	14	20	11	56
	%	19.6%	25.0%	35.7%	19.6%	
15 to 17 years	Count	14	27	23	17	81
	%	17.3%	33.3%	28.4%	21.0%	
18 to 21 years	Count	13	20	19	8	60
	%	21.7%	33.3%	31.7%	13.3%	
22 to 24 years	Count	29	28	27	9	93
	%	31.2%	30.1%	29.0%	9.7%	
Total	Count	67	89	89	45	290
	%	23.1%	30.7%	30.7%	15.5%	

We can also see some gender differences in the responses to the questions about interactions with bus drivers and conductors- the majority of female respondents disagreed or strongly disagreed that bus drivers and conductors were respectful.

Table-7.20: Satisfaction level based on gender about the behaviour of bus drivers and conductors

Gender		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Total
Male	Count	39	51	47	25	162
	%	24.1%	31.5%	29.0%	15.4%	
Female	Count	28	38	42	20	128
	%	21.9%	29.7%	32.8%	15.6%	
Total	Count	67	89	89	45	290
	%	23.1%	30.7%	30.7%	15.5%	

Table-7.20 shows male respondents expressed higher displeasure (55.6%) about the behaviour of others than female respondents (51.6%). This is possibly a method issue- again young women and girls may feel inhibited about speaking their minds regarding their experiences with staff on buses and young men are frequently in dispute about the fares with the conductors and their preferred spot to stop. The next step of this investigation was to ask about the views of the young respondents about their experience and expectations about the bus driving as frustration with bus driving had triggered the wide spread youth protests during this study.

Bus driving

Bus driving is a horrible experience in Dhaka, road accidents are a regular scenario. There is no or less follow up of existing traffic rules and regulations by traffic police (Chowdhury & Fahim, 2019). Bus Drivers have been described as 'killers' on road because of their frequent reckless driving (Akhter, 2019; Bari, 2020). Some drivers have no legal license to drive. The socio-economic impact of poorly regulated public transport is reflected in the Figure-7.10 where low-deprived young people very strongly or strongly (78%) complain about bus drivers unsafe driving and their views are supported by middle-deprived residents (71%).

Figure-7.10: Responses about the bus driving from three areas
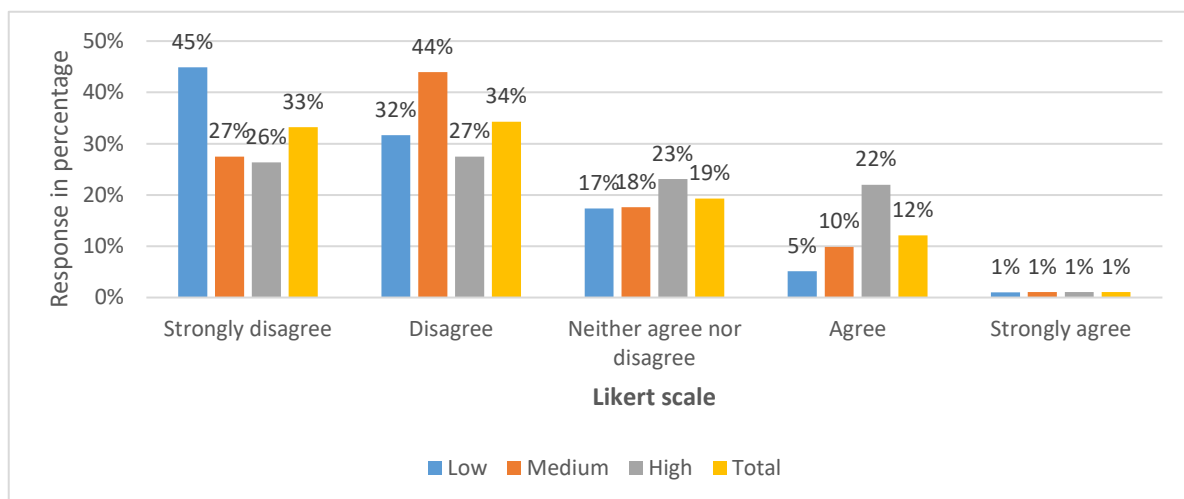
Attitudes to bus safety was also examined to understand responses of different age groups and the results suggest that very young respondents are less likely than everyone else to strongly disagree that bus driving is unsafe. There are many explanations for this and it would need further study, for example very young passengers may be inclined to respect bus drivers' authority or be the most reluctant of all young people to express disapproval after the clamp down on young transport protestors.

Table-7.21: Age based responses about safe driving

Age group		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
12 to 14 years	Count	14	16	10	20	0	60
	%	23.3%	26.7%	16.7%	33.3%	0.0%	
15 to 17 years	Count	25	29	20	8	0	82
	%	30.5%	35.4%	24.4%	9.8%	0.0%	
18 to 21 years	Count	20	21	11	6	2	60
	%	33.3%	35.0%	18.3%	10.0%	3.3%	
22 to 24 years	Count	37	37	14	3	1	92
	%	40.2%	40.2%	15.2%	3.3%	1.1%	
Total	Count	96	103	55	37	3	294
	%	32.7%	35.0%	18.7%	12.6%	1.0%	

Table-7.21 shows that all participants reported that they do not feel safe given driving behaviour in Dhaka. I have also examined this statement by gender to understand the reported attitudes of male and female respondents respectively.

Table-7.22: Satisfaction level based on gender about the safe driving

Gender		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Male	Count	56	57	35	11	3	162
	%	34.6%	35.2%	21.6%	6.8%	1.9%	
Female	Count	40	46	20	26	0	132
	%	30.3%	34.8%	15.2%	19.7%	0.0%	
Total	Count	96	103	55	37	3	294
	%	32.7%	35.0%	18.7%	12.6%	1.0%	

Table-7.22 indicates that both male and female are feeling unsafe. However, male respondents expressed comparatively higher levels of dissatisfaction (69.8%) than females in this regard. Comparatively males are the majority of bus users in Bangladesh which may explain the intensity of their comments. The next question was to investigate the responses about the behaviour of other passenger in bus.

Behaviour of other passengers in bus

Some young passengers in the focus group sessions complained about the misbehaviour of other passengers. In this context, I asked a larger sample of youth about the behaviour of other passengers in the bus.

Figure-7.11: Responses about the behaviour of other passengers in the bus
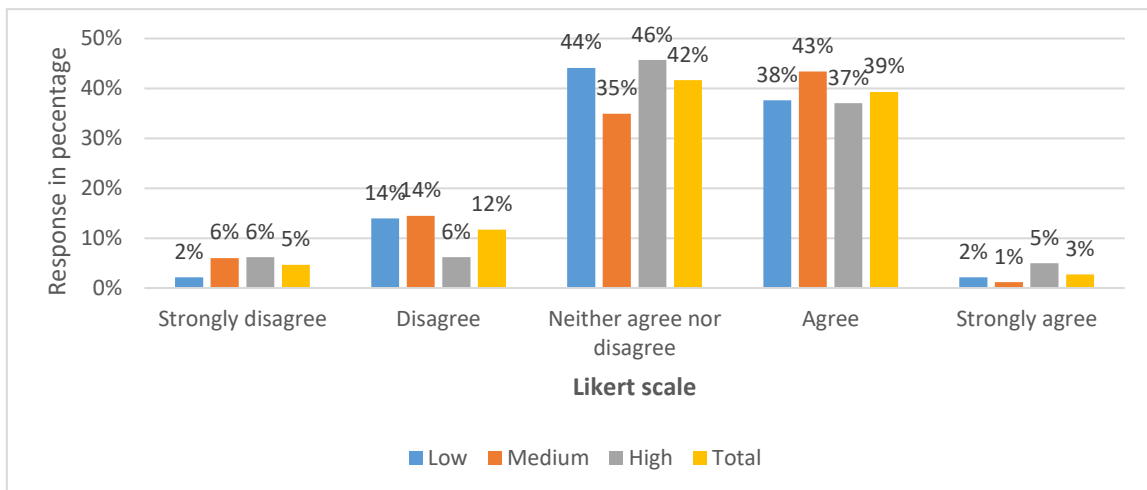
The Figure-7.11 above displays that most of the passengers from different areas are more or less happy with the behaviour of other passengers. However, high portion of the passengers from the deprived areas (Low deprived community 44%; middle deprived community 35%; highly deprived community 46%) did not agree or disagree with this comment.

Table-7.23: Satisfaction level of age group about the behaviour of other passengers in bus

Age group		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
12 to 14 years	Count	1	5	18	26	1	51
	%	2.0%	9.8%	35.3%	51.0%	2.0%	
15 to 17 years	Count	4	12	25	32	4	77
	%	5.2%	15.6%	32.5%	41.6%	5.2%	
18 to 21 years	Count	1	10	24	19	1	55
	%	1.8%	18.2%	43.6%	34.5%	1.8%	
22 to 24 years	Count	6	3	47	27	1	84
	%	7.1%	3.6%	56.0%	32.1%	1.2%	
Total	Count	12	30	114	104	7	267
	%	4.5%	11.2%	42.7%	39.0%	2.6%	

Table-7.23 represents that over half (53.0%) of young age group (12-14) years are happy with the behaviour of other passengers than other age group. However, over half of adult age group (22-24) years (56%) are in the middle point as they could not give us any specific response in this regard.

Table-7.24: Satisfaction level based on gender about the behaviour of other passengers in bus

Gender		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Male	Count	7	17	62	62	6	154
	%	4.5%	11.0%	40.3%	40.3%	3.9%	
Female	Count	5	13	52	42	1	113
	%	4.4%	11.5%	46.0%	37.2%	0.9%	
Total	Count	12	30	114	104	7	267
	%	4.5%	11.2%	42.7%	39.0%	2.6%	

Table-7.24 shows that male and female are more or less happy in this regard, males are comparatively happier here (44.2%) than females (38.1%). However, most young females (46%) did not want to express a view. This result is in keeping with other studies that have shown females are reluctant to express their thoughts about the behaviour of others in surveys (Hamilton & Morris, 2010; Murdoch et al., 2014; Tourangeau & Yan, 2007), and are more likely to complain about misbehaviour or harassment in focus group sessions where they feel safer. Given a lot of transport in cities in the Global South is by foot, my next step was to examine the participants' views about the access to footpath.

Access to footpath

Participants in the previous qualitative survey complained about the walking on footpath (i. e. narrow space) dilapidated condition with full of waste and wrong design for the wheel chair user and most importantly occupied by goods from the nearby or attached shops (chapter 4). The Figure-7.12 indicates that major portion of users in the middle-income area are happier (58%) than others with their access to footpaths.

Figure-7.12: Satisfaction level of participants about the access to footpath
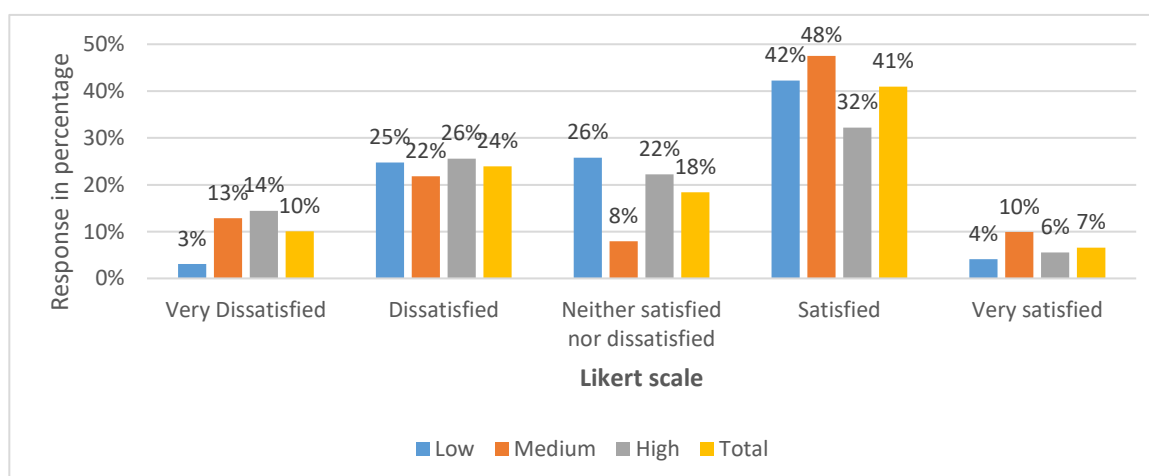
Table-7.25: Satisfaction level of age groups about access to footpaths

Age group		Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied	Total
12 to 14 years	Count	7	12	11	27	9	66
	%	10.6%	18.2%	16.7%	40.9%	13.6%	
15 to 17 years	Count	2	23	22	31	6	84
	%	2.4%	27.4%	26.2%	36.9%	7.1%	
18 to 21 years	Count	5	12	14	27	1	59
	%	8.5%	20.3%	23.7%	45.8%	1.7%	
22 to 24 years	Count	15	24	10	41	3	93
	%	16.1%	25.8%	10.8%	44.1%	3.2%	
Total	Count	29	71	57	126	19	302
	%	9.6%	23.5%	18.9%	41.7%	6.3%	

Table-7.25 shows that a large portion of respondents (54.5%) from (12-14) years group are more satisfied than others about the access to footpath. This young age group are mainly school going students they are happy to find the allocated foot path space is enough for them on their travels to school.

Table-7.26: Satisfaction level based on gender about the access to footpaths

Gender		Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied	Total
Male	Count	17	42	28	65	8	160
	%	10.6%	26.3%	17.5%	40.6%	5.0%	
Female	Count	12	29	29	61	11	142
	%	8.5%	20.4%	20.4%	43.0%	7.7%	
Total	Count	29	71	57	126	19	302
	%	9.6%	23.5%	18.9%	41.7%	6.3%	

Table-7.26 displays that male (45.6%) and female (50.7%) both are more or less showing satisfaction about the footpath. However, half of the females surveyed are satisfied with the footpath. This result is contrary to the responses of them in the qualitative sessions. The next significant investigation was to identify the responses about the behaviour of other footpath user.

Behaviour of other footpath users

In case of investigating the behaviour of other footpath users, I have found that there is no significant change in the response of the different deprived areas (low, 41%; middle, 36%, high, 39%), comparatively satisfaction level show by them (Figure-7.13). However, a major portion of middle-income area respondents' (44%) reported dissatisfaction about the behaviour of other footpath users.

Figure-7.13: Responses about the behaviours of other footpath user
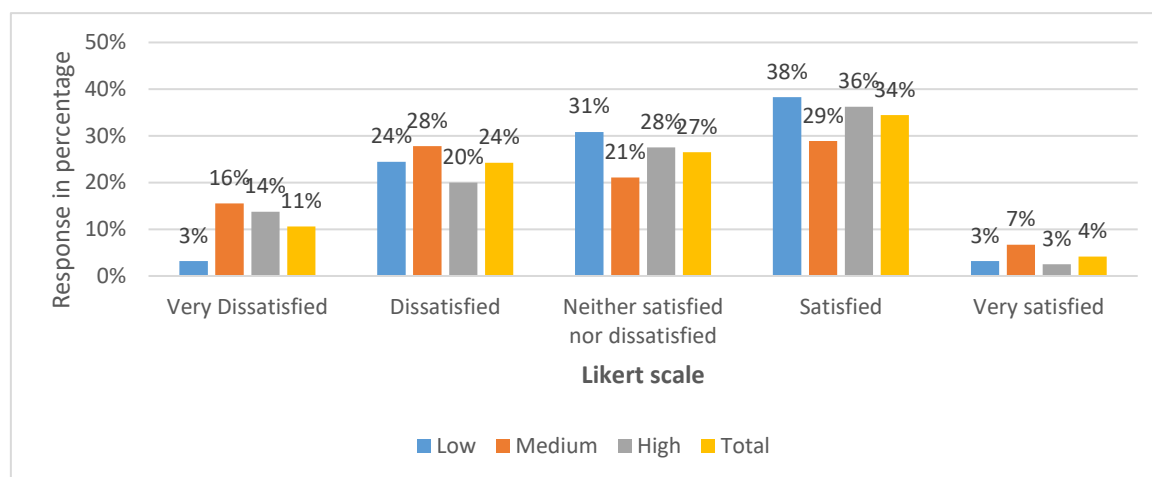
I have also examined this by different age group to compare their responses.

Table-7.27: Satisfaction level of age groups about behaviour of other footpath user

Age group		Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied	Total
12 to 14 years	Count	4	11	15	25	4	59
	%	6.8%	18.6%	25.4%	42.4%	6.8%	
15 to 17 years	Count	6	12	21	36	4	79
	%	7.6%	15.2%	26.6%	45.6%	5.1%	
18 to 21 years	Count	5	15	19	12	1	52
	%	9.6%	28.8%	36.5%	23.1%	1.9%	
22 to 24 years	Count	13	29	21	22	2	87
	%	14.9%	33.3%	24.1%	25.3%	2.3%	
Total	Count	28	67	76	95	11	277
	%	10.1%	24.2%	27.4%	34.3%	4.0%	

Table-7.27 indicates that young age group (15-17 years old) are more happy (50.7%) with the behaviour of other footpath user than adult age group (18-21) years (25%). However, 31 out of 308 participants did not respond to this question. I assume these respondents have taken the behaviour as normal or easy going or they have less importance in this issue while walking in a footpath of highly congested city.

Table-7.28: Satisfaction level based on gender about the behaviour of others using footpaths

Gender		Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied	Total
Male	Count	18	37	42	48	6	151
	%	11.9%	24.5%	27.8%	31.8%	4.0%	
Female	Count	10	30	34	47	5	126
	%	7.9%	23.8%	27.0%	37.3%	4.0%	
Total	Count	28	67	76	95	11	277
	%	10.1%	24.2%	27.4%	34.3%	4.0%	

Interestingly, females reported being more satisfied (41.3%) than male (35.8%) about the behaviour of others using footpath (Table-7.28). However, in the previous qualitative survey, female complained about the eve-teasing and ill-comments of other user on footpath. The next fundamental investigation was on the responses about the security and safety of rickshaw passengers, most used vehicle in Dhaka city (chapter 5, pp. 116).

Safety and security of rickshaw passengers

The rickshaw is the most preferred mode of transport reflected by the responses of the participants in the qualitative survey (chapter 5) but many noted safety and security issues i.e. fears of hijacking. In this context, I investigated the safety and security of the rickshaw passengers across the three areas and again by gender and age groups.

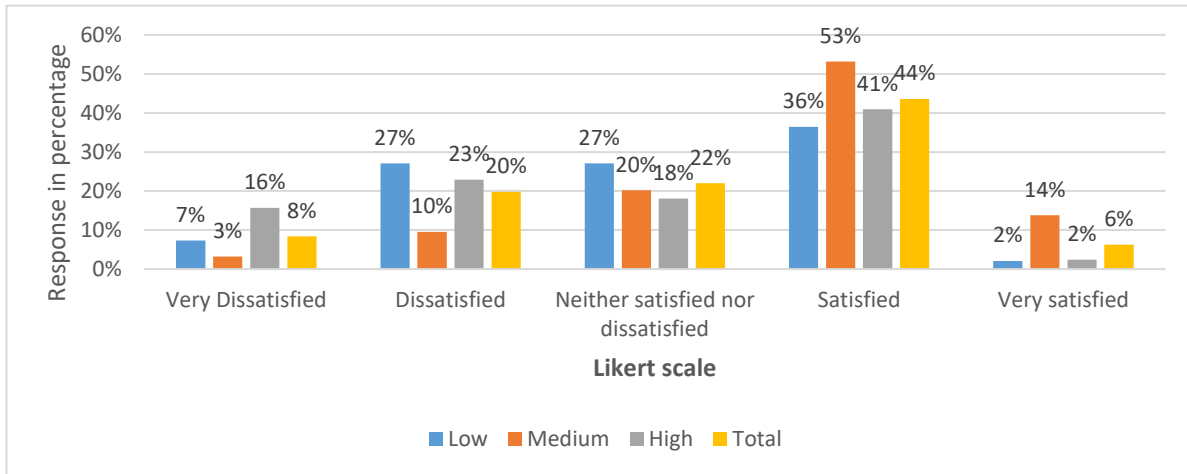**Figure-7.14: Rickshaw passengers' safety and security in three areas**

Figure-7.14 indicates that the major portion of participants from mid-deprived area are satisfied (67%) with the safety and security of the rickshaw rides compared to other areas. This is possibly because the middle-income community are more likely to use rickshaws while young residents in the wealthiest area use ride share systems like Uber.

Table-7.29: Rickshaw passengers' safety and security of different age group

Age group		Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied	Total
12 to 14 years	Count	5	8	16	27	4	60
	%	8.3%	13.3%	26.7%	45.0%	6.7%	
15 to 17 years	Count	7	15	18	35	2	77
	%	9.1%	19.5%	23.4%	45.5%	2.6%	
18 to 21 years	Count	5	12	11	26	3	57
	%	8.8%	21.1%	19.3%	45.6%	5.3%	
22 to 24 years	Count	7	20	17	41	8	93
	%	7.5%	21.5%	18.3%	44.1%	8.6%	
Total	Count	24	55	62	129	17	287
	%	8.4%	19.2%	21.6%	44.9%	5.9%	

Table-7.29 indicates that over half portion of young (12-14) participants (51.7%) and young adults (22-24 years) participants (52.7%) expressed almost likely similar satisfaction levels about the safety and security of rickshaw journey.

Table-7.30: Rickshaw passengers' safety and security by gender

Gender		Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied	Total
Male	Count	9	32	33	67	11	152
	%	5.9%	21.1%	21.7%	44.1%	7.2%	
Female	Count	15	23	29	62	6	135
	%	11.1%	17.0%	21.5%	45.9%	4.4%	
Total	Count	24	55	62	129	17	287
	%	8.4%	19.2%	21.6%	44.9%	5.9%	

Table-7.30 shows that male participants (51.3%) expressed the same satisfaction as female participants (50.3%) about the safety of rickshaw journeys.

From the above findings, the most striking point is that there are significant gender, age and income differences in experiences of transport and green space but the survey method has proved less satisfactory than focus groups and interviews in eliciting the views of young people especially young women, perhaps because of sampling bias, where young people seek to please the interviewer or feel too shy to speak out- in either case this suggests we need to think carefully about how to engage youth in local decision making . The next section discusses the involvement of young citizens in decision making and planning for the community.

7.5 Youth engagement in planning and decision making

In the focus group and interviews, the majority of young participants interviewed for this study said that they are not involved in the planning and decision making for their community. In this context, I have examined the empowerment of young people in planning and decision making in three different areas to make comparisons for broader analysis with a wider sample.

The Figure-7.15 illustrates that a large portion of the highly deprived residents (64%) report feeling less involved in planning and decision making compared to respondents from other areas. Participants from mid (61%) and less (56%) deprived areas also to some extent disagree with the statement about their opportunities for engagement in planning and decision making in their local community. These results are again contrary to the responses of young participants in the least deprived area (high-income area) from focus group discussions where they were more responsive about wanting to have a say than youth from the highly deprived area. This reinforces the problem that it is not only age, but socio economic status which discourages engagement and may make people feel shy to speak out about wanting more opportunities to be heard. Certainly young people across all focus groups had ideas about

changes they would like to make in their neighbourhood –but survey sampling methods may not show this accurately. To test this further I also investigated the responses by age.

Figure-7.15: Responses from three different areas about participation in planning or decision making for the community
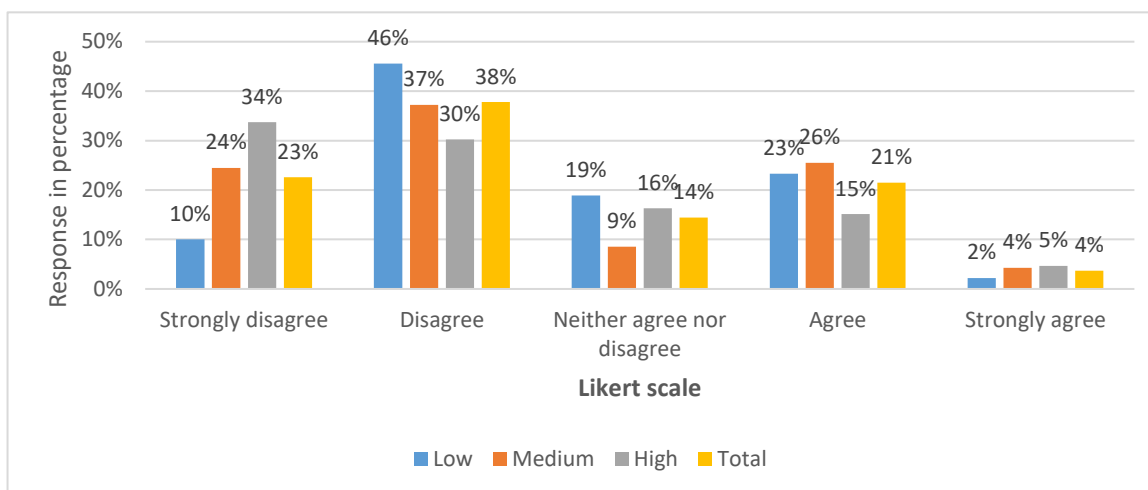

Table-7.31: Age based responses about participation in planning and decision making for the community

Age group		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
12 to 14 years	Count	14	16	6	19	6	61
	%	23.0%	26.2%	9.8%	31.1%	9.8%	
15 to 17 years	Count	14	26	13	18	3	74
	%	18.9%	35.1%	17.6%	24.3%	4.1%	
18 to 21 years	Count	13	26	11	10	0	60
	%	21.7%	43.3%	18.3%	16.7%	0.0%	
22 to 24 years	Count	22	40	11	13	1	87
	%	25.3%	46.0%	12.6%	14.9%	1.1%	
Total	Count	63	108	41	60	10	282
	%	22.3%	38.3%	14.5%	21.3%	3.5%	

Participants of different age groups expressed the view that they were not involved in planning or decision making for their community. Table-7.31 shows that a higher portion (71.3%) of young-adult age groups (22-24) years felt that they were not involved in decision making and this may also be because this older age group also had more awareness and desire to be involved. This proportion of the sample is significant and alarming for the society of Bangladesh as a whole as these young adults are upcoming decision makers with knowledge and experience. In the context of future decision making for the sustainable development of

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their local community then I feel the significance of women engagement and examined their responses regarding this issue.

Table-7.32: Gender based participation in planning or decision making for the community

Gender		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Male	Count	37	57	26	28	5	153
	%	24.2%	37.3%	17.0%	18.3%	3.3%	
Female	Count	26	51	15	32	5	129
	%	20.2%	39.5%	11.6%	24.8%	3.9%	
Total	Count	63	108	41	60	10	282
	%	22.3%	38.3%	14.5%	21.3%	3.5%	

Table-7.32 suggests that both male and (61.5%) and female (59.7%) respondents felt excluded from decision making for the community although wider research suggests that it is young females in Bangladesh who are most likely to feel they are listened to less often, despite Bangladesh having a number of women serving in top political leadership roles (Jahan, 2019).

Listening to young people

One imperative aspect of this part of my investigation was to find out the sense of agency and self-efficacy of young people by asking their experience of being listened to by concerned people and authorities in planning and decision making of their local community. I asked youth participants' experiences about the statement, 'people are listening to us (like me)'. Some young residents from the high-income area (low deprived) reported in focus groups that they felt people are listening to them but this comment was rare from the young people in the low-income area.

Figure-7.16: Responses of people are listening to us in different Wards
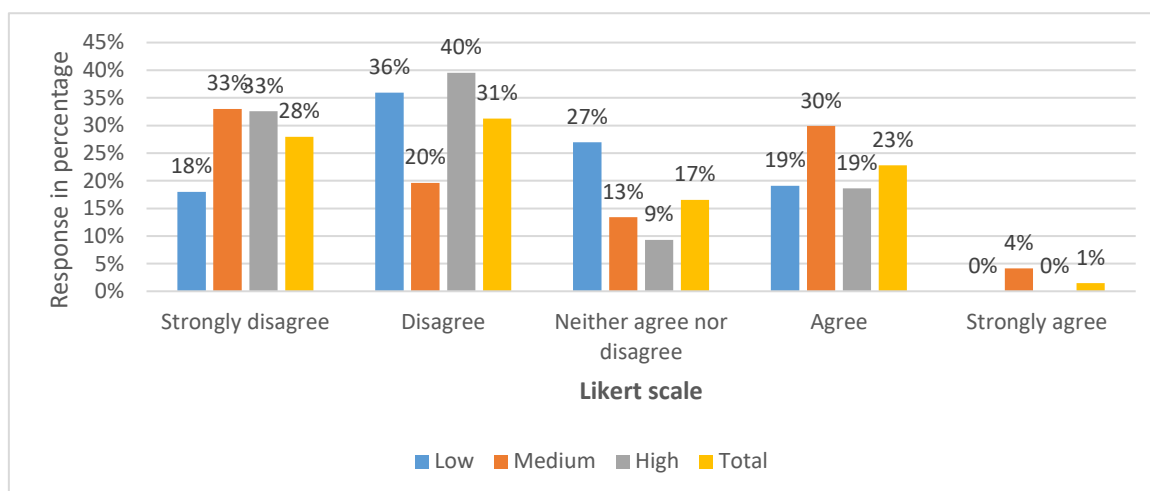
Here, the figure-7.16 illustrates that overall young people do not feel listened to. A major portion of residents in the poorest areas (highly deprived community) reported they felt that people do not listening to people like them (73%) compared to respondents from other income areas. This suggests that socio-economic conditions do have an impact and that the voice of poor young people are rarely heard in decision making process.

Table-7.33: Responses of people are listening to us by different age groups

Age group		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
12 to 14 years	Count	11	22	5	21	2	61
	%	18.0%	36.1%	8.2%	34.4%	3.3%	
15 to 17 years	Count	18	22	20	17	0	77
	%	23.4%	28.6%	26.0%	22.1%	0.0%	
18 to 21 years	Count	17	19	10	12	0	58
	%	29.3%	32.8%	17.2%	20.7%	0.0%	
22 to 24 years	Count	32	26	10	18	2	88
	%	36.4%	29.5%	11.4%	20.5%	2.3%	
Total	Count	78	89	45	68	4	284
	%	27.5%	31.3%	15.8%	23.9%	1.4%	

In comparing different age groups, Table-7.33 indicates that significant portion (65.9%) of young adult age groups (22-24 years) responded that they feel they have less chance to express their thoughts in decision making. This is a problem as many of the young adults have much to offer and in near future they will be employees or employers who will have great impact in future decision making based on their experience and expectations. The younger age

group (12-14 years) responded (64.1% disagree with listening to them) almost the same as young adult in this survey.

Table-7.34: Responses of people are listening to us by gender

Gender		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
Male	Count	42	47	30	29	2	150
	%	28.0%	31.3%	20.0%	19.3%	1.3%	
Female	Count	36	42	15	39	2	134
	%	26.9%	31.3%	11.2%	29.1%	1.5%	
Total	Count	78	89	45	68	4	284
	%	27.5%	31.3%	15.8%	23.9%	1.4%	

Table-7.34 shows that major portion of male (59.3%) report they feel listen to less by the authorities than women. This is however highly unlikely given the focus groups and analysis that suggests that women are regularly "undervalued" in local democracy in Dhaka (Zaman, 2007). The results maybe a function of both age and gender. Recent surveys suggest that in younger age groups at least, the gender gap is closing between men and women (Hossain & Tisdell, 2005) but while women are increasingly represented at many levels of politics they are not given equal opportunities to participate in everyday life and young women's lack of ability to control their mobility is central to this problem. I quote this argument from the Daily Star which conducted a public survey in the news media about the experie3nces of young men and women in Dhaka (Jahan, 2019):

In our survey, much higher rates of young men, compared to young women, reported enjoying freedom of choice in all crucial aspects in life—choosing educational institution, occupation, friend and spouse, freedom of physical movement and spending money. And, we see the starkest difference in case of freedom of physical movement; only 40 percent young women believe they can move freely, half as much as young men.

Lack of freedom in physical movement for young women is particularly troubling. As we have seen already, young women are lagging far behind young men in the most important aspects of life—higher education and skills and participation in the economy. Being able to move freely is essential for women to access education, training, social network and employment. And physical mobility is exactly where young women are struggling the most.

This comment about the importance of freedom of movement for the empowerment of women is a very significant one for this study and my results suggest that the community planning in Dhaka is dominated by men's decisions. Women may also feel cautious as noted earlier, expressing strong opinions in a one to one survey, compared to speaking with peers in a focus group.

The final investigation I conducted was about the perception of the different aged participants about making change in their city for the future. In discussion in focus group sessions, many young people showed enthusiasm and this was also supported by the transport for safety protest, it showed that if they are determined young people could reform whole systems of the country particularly transport systems (chapter 5).

Table-7.35: Responses of I believe that I can make change in the city by different age group

Age group		Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Total
12 to 14 years	Count	1	1	8	28	23	61
	%	1.6%	1.6%	13.1%	45.9%	37.7%	
15 to 17 years	Count	2	3	11	41	22	79
	%	2.5%	3.8%	13.9%	51.9%	27.8%	
18 to 21 years	Count	2	1	11	29	12	55
	%	3.6%	1.8%	20.0%	52.7%	21.8%	
22 to 24 years	Count	3	10	15	45	17	90
	%	3.3%	11.1%	16.7%	50.0%	18.9%	
Total	Count	8	15	45	143	74	285
	%	2.8%	5.3%	15.8%	50.2%	26.0%	

Table-7.35 indicates that all of the age groups particularly the youngest age group (12-14) years agree that they can make a difference in their city (83.6%). This view was also supported by some of the comments of the participants in the focus group sessions and yet the results still feel surprisingly in that many young people also report they feel that they are not heard and not considered in decision making. We can only speculate on the reason but it may be that young people were feeling empowered and encouraged by the recent remarkable youth led transport protests across the city.

From the above discussion, it is clear that participants are willing to participate in planning activities of green space and transport and many feel that they could make a difference if they were listened to. This study needs more statistically significant tests of the impact of age, gender and deprivation to understand how youth leadership and activism in

decision making might be encouraged. The next section discusses three key arguments based on the statistical significance of the survey data.

7.6 Testing the statistical significance of three key arguments

I used binary logistic regression analysis to explore the effects of 'access to green space', 'safety in bus journey' and 'willing to change in the city' to support the development of my PLAY planning model. First I calculated unadjusted odds ratios for age, gender and deprivation. Then I entered all three demographic variables into the model concurrently to calculate adjusted odds ratios. The alpha set at 0.05 to determine statistical significance. The results of these tests are given below in the tables 7.36 – 7.38.

Unadjusted odds ratios (Table-7.36) shows that older participants (18-24 years) are *less likely to be satisfied* than the reference group (12-14 years) with their access to green space. After adjusting for gender and income all age groups were *less likely to be satisfied* with their access to green space, compared to 12-14 year olds. Unadjusted odds ratios show females are *more likely to be satisfied* with access to green space (unadjusted OR: 2.00, 95% CI: 1.26-3.16, p = 0.003) than males but there was no significance in this findings after adjusting for age and deprivation (p = 0.164). Participants in the highest deprivation area are *less likely* to report being satisfied with access to green space compared to those in less deprived areas.

The second analysis was very important in terms of experience of high risk of travel in Dhaka city. Especially after the transport protests by young people. Table-7.37 shows that young adult age group (22-24 years) are *more likely dissatisfied* (unadjusted OR: 11.00, 95% CI: 3.53 - 34.28, p = 0.000) with the statement 'bus drivers drive safely' than 12 -14 years olds. Compared with males, females are *less likely dissatisfied* with the statement that bus journeys are safe in both analysis (unadjusted OR: 0.39, 95% CI: 0.192 – 0.77, p = 0.007). Similarly amongst the participants living in the highest deprivation area, there was a reduced likelihood (unadjusted OR: 0.22, 95% CI: 0.08 – 0.57, p = 0.002) of participants dissatisfied that 'bus drivers drive safely'.

The final analysis I conducted was to find out the perception of the participants about their contribution to the city in terms of leadership and activism. Table-7.38 shows that a trend of efficacy to decrease with age although this only reached statistical significance for the older age group. Compared with 12-24 year olds 22-24 years are *less likely* to agree (unadjusted OR: 0.43, 95% CI: 0.19 – 0.98, p =0.044) with the statement 'I feel like I can make a difference in my city' than younger age groups (12-14 years). Unadjusted analysis shows that females are *more likely* to feel they can make a different in their city (unadjusted OR: 1.77, 95% CI: 1.01 – 3.10, p =0.046) compared with males but this effect was negated after adjusting for age and deprivation. There was no significance in the results by level of urban deprivation.

Table-7.36: Access to green space

	Dissatisfied	Satisfied	**Crude odds ratios**				**Adjusted^ odds ratios**			
			Odds ratio	95% CI		*p* value	Odds ratio^	95% CI		*p* value
	n (%)	n (%)		Lower	Upper			Lower	Upper	
12 to 14 years	27 (39.7%)	41 (60.3%)	1.00				1.00			
15 to 17 years	47 (54%)	40 (46%)	0.56	0.30	1.07	0.078	0.44	0.21	0.93	0.030*
18 to 21 years	43 (71.7%)	17 (28.3%)	0.26	0.12	0.55	0.000**	0.19	0.08	0.45	0.000*
22 to 24 years	60 (64.5%)	33 (35.5%)	0.36	0.19	0.69	0.002*	0.30	0.14	0.63	0.002*
Male	106 65.4%)	56 (34.6%)	1.00				1.00			
Female	71 (48.6%)	75 (51.4%)	2.00	1.26	3.16	0.003*	1.45	0.86	2.44	0.164
Low dep	51 (51%)	49 (49%)	1.00				1.00			
Medium dep	51 (50.5%)	50 (49.5%)	1.02	0.59	1.77	0.943	0.81	0.43	1.52	0.519
High dep	68 (73.1%)	25 (26.9%)	0.38	0.21	0.70	0.002*	0.29	0.15	0.57	0.000**

^Adjusted odds ratios - age, gender, and deprivation entered into model

*Significantly different from reference group (*p* < 0.05); ** Significantly different from reference group (*p*<0.001)

Table-7.37: Bus drivers drive safely

	Crude odds ratios				Adjusted^ odds ratios			
	Odds ratio	95% CI		*p* value	Odds ratio^	95% CI		*p* value
		Lower	Upper			Lower	Upper	
12 to 14 years	1.00				1.00			
15 to 17 years	4.63	1.87	11.44	0.001*	3.74	1.38	10.11	0.009*
18 to 21 years	3.25	1.30	8.14	0.012*	3.58	1.23	10.39	0.019*
22 to 24 years	11.00	3.53	34.28	0.000**	9.49	2.55	35.30	0.001*
Male	1.00				1.00			
Female	0.39	0.192	0.77	0.007*	0.36	0.15	0.82	0.015*
Low dep	1.00				1.00			
Medium dep	0.53	0.18	1.52	0.236	0.90	0.27	2.98	0.867
High dep	0.22	0.08	0.57	0.002*	0.26	0.09	0.73	0.011*

^Adjusted odds ratios - age, gender, and deprivation entered into model

*Significantly different from reference group (*p* < 0.05); ** Significantly different from reference group (*p*<0.001)

Table-7.38: I believe I can make a difference in my city

	Disagree	Agree	Crude odds ratios				Adjusted odds ratios			
			Odds ratio	95% CI		*p* value	Odds ratio^	95% CI		*p* value
	n (%)	n (%)		Lower	Upper			Lower	Upper	
12 to 14 years	10 (16%)	51 (84%)	1.00				1.00			
15 to 17 years	16 (20%)	63 (80%)	0.77	0.32	1.85	0.561	0.78	0.31	1.98	0.599
18 to 21 years	14 (25%)	41 (75%)	0.57	0.23	1.43	0.232	0.52	0.20	1.36	0.183
22 to 24 years	28 (31%)	62 (70%)	0.43	0.19	0.98	0.044*	0.36	0.15	0.85	0.021*
Male	43 (29%)	107 (71%)	1.00				1.00			
Female	25 (19%)	135 (81%)	1.77	1.01	3.10	0.046*	1.34	0.74	2.44	0.335
Low dep	21 (23%)	72 (77%)	1.00				1.00			
Medium dep	17 (17%)	80 (83%)	1.37	0.67	2.80	0.385	1.48	0.69	3.19	0.315
High dep	29 (35%)	53 (65%)	0.53	0.27	1.04	0.063	0.50	0.25	1.00	0.050

^Adjusted odds ratios - age, gender, and deprivation entered into model

*Significantly different from reference group (*p* < 0.05); ** Significantly different from reference group (*p*<0.001)

7.7 Summary

Conducting the statistical analysis reported in the final section of this chapter was important because it gave an opportunity to explore focus group and interview comments with wider youth experiences of participation and levels of satisfaction with transport services and public space in local areas. This chapter has described the main outcomes of a quantitative survey of 308 young Dhaka residents to explore the issues raised in focus groups in more depth and with a wider sample. In comparing the previous responses of the participants in focus groups I found some contrary answers particularly from the young women participants regarding for example the 'safety on the streets', and 'behaviour of others in buses and on footpaths'. Some of these differences may be due to the impact of survey methods, in the larger survey, respondents were questioned as individuals in face to face interviews with research assistants (students I recruited from my home university). While the interviewers were also students and were briefed on confidentiality and research ethics, respondents especially women may have felt a little shy to reply in one to one settings compared to focus groups particularly on deeply political disputes about transport which had recently erupted in the media or respondents may have tried to give answers that they assumed might please the interviewer. However, in examining the statistical significance of the study, I have found that younger age group participants are significantly more likely to agree that they can make change the city especially when considering green space and public transport. This rationalizes their willingness to take up leadership and lead activism for a more sustainable future urban planning of Dhaka. In the next chapter I turn to reflect on the overall discussion on the results of this thesis.

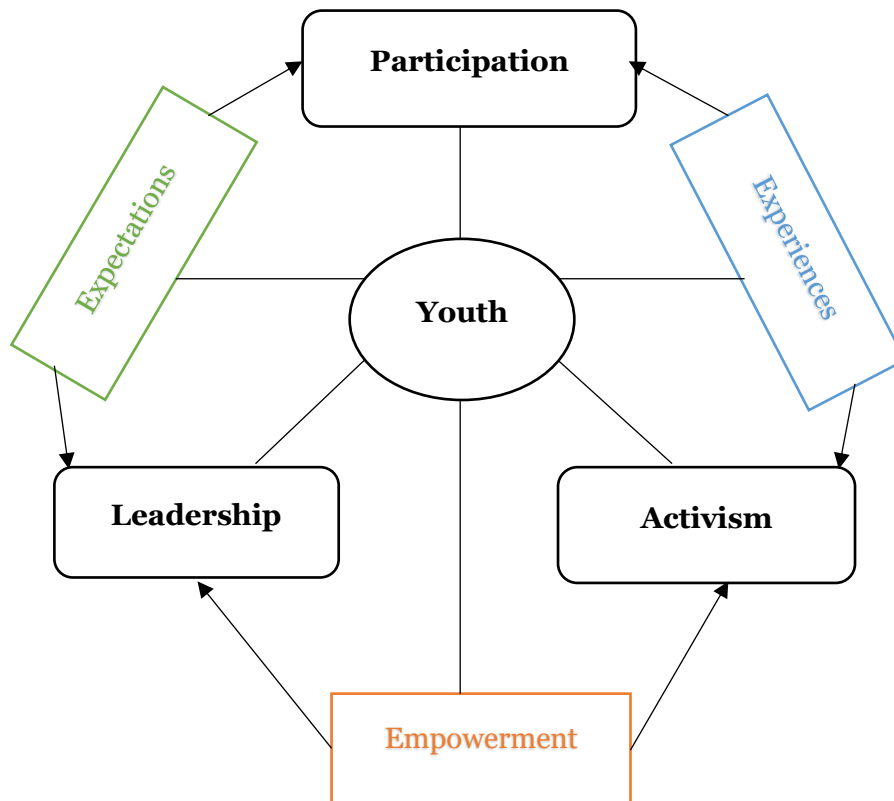# Chapter 8 Discussion - Towards a PLAY model of planning

8.1 Introduction

This chapter discusses the interpretation of the results of focus groups and interviews findings reported in chapters four, five, and six and the quantitative survey data analysis detailed in chapter seven. This discussion of research, informs my model of Participation, Leadership and Activism of Youth (PLAY) in urban planning and decision making for sustainable wellbeing in a city of the Global South (Figure-8.1).

This thesis has followed a systematic, mixed-method research strategy where qualitative methods (focus groups and interviews and field observations) were followed by quantitative survey and analysis. As noted in the methods chapter (chapter 3), participants' in this research were aged 12-24 years. In the qualitative phase of the study the participants were interviewed in two ways, the younger age group, (12-18 years) were interviewed in focus groups and young-adult participants (19-24 years) were interviewed in face to face interviews. Experts were also interviewed about their insights into youth participation in urban decision making. As illustrated in the previous chapters, the young participants of the qualitative phase were drawn from two contrasting communities (a high-income planned area and low-income unplanned areas) of Dhaka city.

In the quantitative phase, youth participants were surveyed from the high-income, low-income and from a 'middle-income' area which was added for triangulation of focus groups and interviews with a larger sample of young participants from Dhaka city. In this process, this study employed comparative analysis, comparing the results according to income level of people (low, middle and high), gender and age. Theoretical insights from this study are now discussed in this chapter. These insights have been developed following a 'thematic analysis' (Khoshkar et al., 2018), 'modified grounded theory' (Dee, 2008) and 'phenomenological' approach (Sartor, 2018), in that I drew insights from the literature and the results of my research questions, interviews, survey, and field observations to inform my argument about how planning can be enhanced by working with the activist and leadership potential of young people for sustainable wellbeing.

```
                        Participation

  Expectations                                    Experiences

                           Youth


         Leadership                        Activism


                       Empowerment
```

The PLAY model in practice:

Participation (Face to face discussion)

Leadership (Older peer/mentor led conversation)

Activism (Identifying issues and taking actions)

by **Youth**

Figure 8.1 sets out how my PLAY planning model was developed from reviewing literature and my data about youth experiences, expectations and empowerment in transport and green space planning. The Play model emphasises the importance of recognising and valuing participation, leadership and activism by youth in urban planning.

8.2 The emergence of three E's of this research

This thesis developed the concept of three E's of youth participation in urban green space and transport from the terms 'experiences', 'expectations' and 'empowerment' of young people identified through the review of literature (chapter 2) and the results and analysis reported in the four chapters (four, five, six and seven). While searching for literature I found very little research about engaging young people in urban planning written in the context of cities of Global South. I have summarised the flow of the development of these terms from overall discussion in Figure-8.2.

Figure-8.2: Emergence of the model 'PLAY'
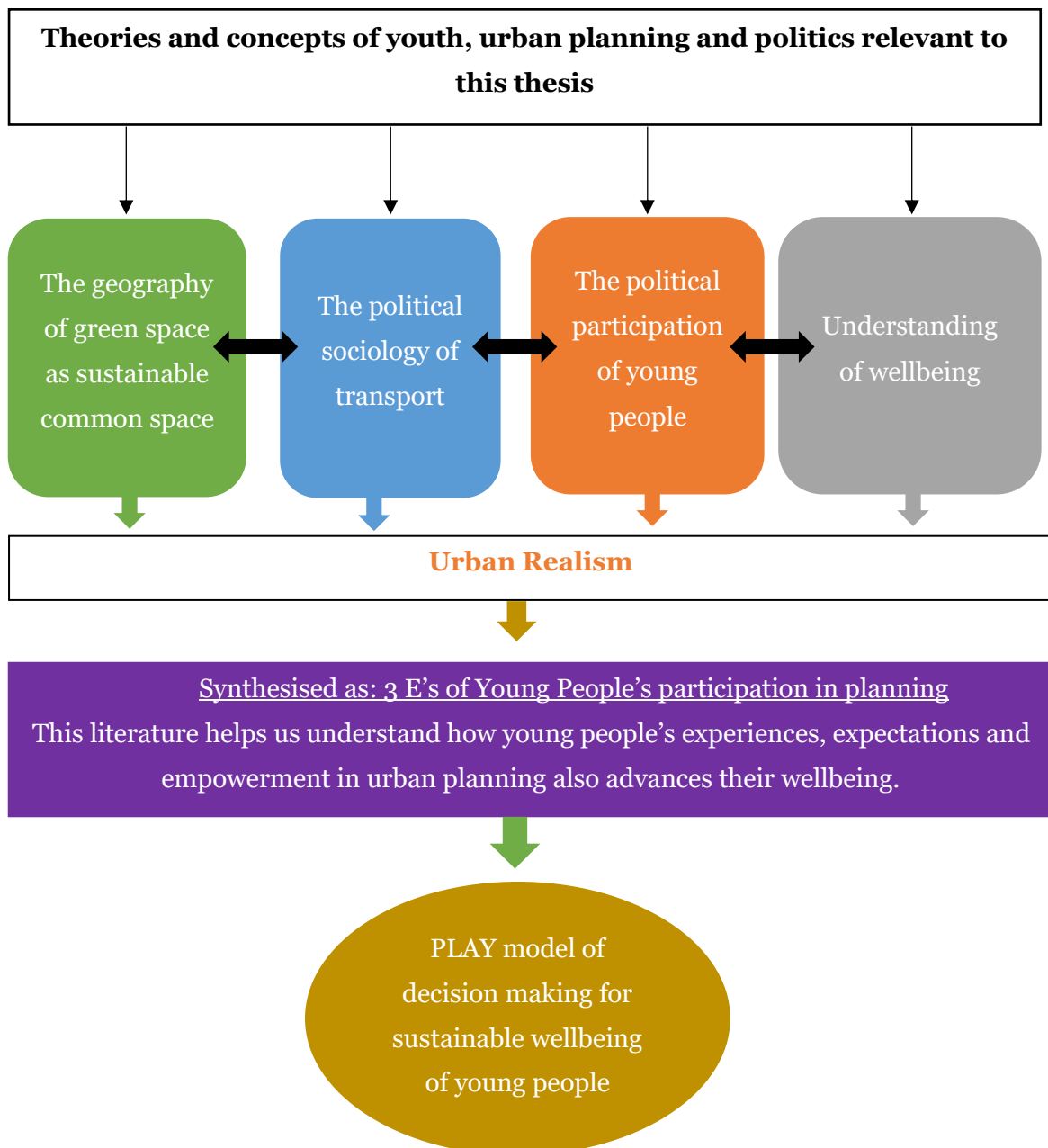
Youth *'experience'* of green space and transport is gained with time and knowledge of everyday activities and performances of a person (Carr et al., 2001). Child development literature suggests that the experience of a 24 year old is expected normally to be more self-aware than that of a child who is 12 years old for example. From my own experience as an urban planner and an adult researcher however, I am aware that we are always developing our understanding, in my case to understand an experience I first have to visit a place (to conduct a reconnaissance survey in planning terms) to understand the problems and learn about the temporal and spatial changes and community needs and concerns by talking to people in that area. In this research, young people's experiences of nearby sites (of green space) and of transport were taken into account and they were given opportunities to express their experiences, first by discussing photos or drawing about what they can see, do and feel and then by reflecting as a group about these experiences (chapter 4).

Analysis by Carr et al. (2001) also suggests **expectations** emerge in mind of a person which build from their previous experiences of using a service. In my study I also noted that the comments of peers, reports in the media and actions like the student protest can also raise expectations about local services including transport services. For example, seeing previous issues and hearing about problems, can also inform youth expectations. Expectations can also be raised however when people have a chance to compare their current experiences to better options or better opportunities (Carr et al., 2001). In this research, rather than presenting young people with different options, students discussed their own experiences and expectations in focus groups, often beginning discussion with photos, internet images or drawings and the comparisons were made by me as researcher, analysing the focus group and interview results to understand the expectations and experiences of participants from the high-income planned area and low-income unplanned area. One of the first striking insights for me from comparing youth experiences and expectations across their communities, was that many of the young participants I interviewed in focus groups in the high-income area reported that they had no time and little expectation of using their local parks and playgrounds because of exam pressure or family expectations about gendered play. Similarly they used public transport less often, preferring rise share schemes for example. By contrast participants in low-income area focus groups and interviews said they have time to use spaces but had very low expectations because they do not have enough parks and playgrounds and those they did have, were poorly maintained. In focus groups and interviews in the low-income area and young people also expressed frustration with transport services.

The idea of youth **empowerment** was defined in this thesis through my literature review (chapter 2, pp. 27) as a sense of self-competence, skills and ability that is developed through positive youth experiences and expectations. This was a challenging part of this thesis as children and young people, particularly those living in informal or slum settlements

typically have less political power (particularly whose age were under 18 years) in Bangladesh in urban decision making processes and therefore, they have limited opportunities to raise their voices about any emerging problem (Rashid, 2009). However, in the course of this thesis students (mostly middle class) took to the streets to protest about transport and despite government actions to end the demonstrations, the number of students protesting was striking.

At the beginning of this research, I commenced with the assumption that young people are less physically active in using urban green spaces, particularly in the cities of Global South where these spaces are decreasing because of rapid urbanization and mismanagement by the designated authorities and relatively disinterested publics. I also anticipated that the interest of young people was low about participating in planning and policy making process (even if there is any possibility that they could have a say in the development of their locality). In this context, this study was developed initially to consider a research gap about how we could go about engaging young people in policy making to achieve sustainable development goals particularly around green space and transport (SDG target 11.2 and 11.7) in Dhaka. As noted however, I was surprised that many young people I interviewed in focus groups at least, were frustrated about in their inability to access parks or public transport either because of social expectations or poor services, and many students as noted above, did want to be heard and this was demonstrated more widely when they took to the streets to not just protest about poor urban transport but to reorganise that transport.

The following sections will discuss the key outcomes of this research based on the research questions and sub-questions of this thesis and why my own assumptions were challenged and how the findings have informed my PLAY model of urban planning.

8.2.1 Young peoples' participation in green space and public transport

As discussed in chapter 2 from previous research findings, young people are perhaps some of the most important stakeholders who have a right to have a say about the sustainable future of a city. The observations and thinking of young people are significant and hearing their thoughts is important for advancing city decision making and urban planning for sustainable wellbeing. Wellbeing as used in this thesis refers to the overall sense of satisfaction of living in a city with physical, mental and financial support for residents. Opportunity to participate in urban life includes both engaging in play and recreation and in community decision making. At the start of this thesis (chapter 2 and 4), I noted that participation in physical activity in green space is recognized as helpful for physical and mental wellbeing of young residents (Ziviani et al., 2008). Previous research has shown that the benefits of physical activities for high-income countries in city planning but it is comparatively recent that

these studies also have included low-income countries (Kinsman et al., 2015). There is still less attention in listening to the voice of young people's priorities in the Global South. There is also comparatively little understanding of the role that transport plays in the wellbeing of youth in the Global South. Therefore, in this research I was interested how wellbeing of young citizen is enhanced by their involvement in decision making in planning for green space and public transport.

However, this study found unequal distribution of resources (access) and support to enable youth to participate physically or democratically in green space and public transport decision making. In the same city, opportunities varied amongst young citizens by income levels, age and by gender. A problem of social and environmental injustice arises in particular when young poor people face discrimination in accessibility to parks and playgrounds but also, as I have shown here, in earlier discussion, in lack of access to satisfactory public transport services – in keeping with the wider literature I notes significant variation based on the age, gender and socio-economic status of users (Heckert, 2013).

This research also started with the assumption that high-income areas which are generally planned areas will have better and accessible green space and transport services than low-income areas. Participants in the questionnaire survey responded and supported this statement but the responses about satisfaction with services in parks in the survey were less conclusive (chapter 7). While young people were prepared to speak out about their frustration in focus groups in a situation of trust with a facilitator, a minimal portion of respondents from the low-income area said they were dissatisfied with their access to parks and playgrounds when answering a survey. By contrast, higher income communities recorded less frustration and deprivation in the survey with access to parks. We could possibly assume that this is sampling bias where young people in low-income areas are keen to offer answers that they think might be pleasing, or because low-income communities feel more anxious about speaking out in a written survey when for example they may lack security of home ownership and their families are in precarious work. More research would have to be undertaken to test this but the findings of this study suggest that particularly in low-income communities, the method of consultation matters. The focus groups may have provided a safer and easier place for young citizens to feel **'empowered'** than an anonymous but written survey.

Participants in all high-income communities (low deprived) expressed their satisfaction about the attractiveness of the parks and playgrounds in the questionnaire survey which was carried out after the focus groups and interviews. However, overall all young people expressed less interest in the use of parks and playgrounds in the focus group sessions. Many stated that there was a lack of variation of facilities and attractions therefore young people felt bored and were less interested in taking part in physical activities in parks (Ziviani et al., 2008). Surprisingly, females reported higher satisfaction than males about service facilities in

the parks and playgrounds in the survey results (chapter 7). By contrast in the focus groups session, young females were much concerned about the safety and security and restrictions (both from family and the local playground guards) and problems of safe entry to the parks and playgrounds. Again this finding needs to be tested with more studies but it suggests that young women and girls may also generally feel more **'empowered'** to speak out in a focus groups with friends than to record their views in writing in an anonymous survey.

Younger age groups (12-18 years) also expressed their concerns about having less opportunity to use the playground as a result of senior-junior conflict, when they were interviewed in group discussions (and commented on by some in the one to one interviews with 18 year olds and older youth). The younger participants in the questionnaire survey were generally dissatisfied (26.8%) with the behaviour of other users (chapter 7). However, feelings of social connectedness can change the attitudes of people in a society to shared services like transport or spaces like green parks, and some young citizens from the low-income area said they enjoyed using these services when they felt they knew the community and other users. Community participation in planning for park and public transport use is also an informal way to build social cohesion among the users of green spaces and buses in local area and in this regard, my study suggests holding focus groups discussions can also be a form of **'empowerment'** in youth consultation. This was also supported by the young respondents in the focus group sessions (chapter 4).

After analysing the data and observing the study area, I have found that the reality nowadays is also different in other ways from what I expected reading the literature before the field work began. Many public service facilities in Dhaka city like parks are converting to profit making tools for business. The local residents and young users benefit less from these services when this happens. For example as I note in chapter 4, local political leaders are using local playgrounds (sector 14, Uttara) for arranging events like the Boishakhi fair which damage the field and create obstacles for the young park users. Management of services is another problem with local planners claiming they are pressured by the shortage of finance and skilled manpower which is limiting their ability to respond to public concerns and needs (Councillor, Ward 1, chapter 4, pp. 88).

Social and economic injustices for youth in participating in planning for transport and public space

Social and cultural barriers and injustices are visible in this study. The findings in this study support wider literature that low-income young people are deprived of adequate services of transport and public space that high-income communities have greater access to. Lack of safe walkways with unaffordable facilities also   deprive low-income people from the opportunities of physical activities (Ziviani et al., 2008). Safety is a big concern in the Dhaka city for anyone traveling on individual or public systems. Individual travellers use walking, and cycling as a common mode of transport particularly in low-income and middle-income areas.

Middle and low-income residents in this high density city alike also have to take the bus to reach their workplaces. Females face a big problem using bus services safely due to the behaviour of drivers, conductors or helpers and even from other passengers. The participants raised their voices in some focus groups which I arranged following the student protests about safety on street, lack of availability of vehicles, traffic congestion/schedules of bus services, unavailability of seating, behaviour of drivers and conductors, poor driving, and harassment and annoying behaviour of other passengers, difficulties in footpath use, and problems of rickshaw use. The fact that students spoke up more readily after the transport protests may also suggest that peer activism helps empower others (Bisafar et al., 2018).

I argue from the findings of this research that there is no doubt about the problems of participation and limitation of access by young people to green space and transport in Dhaka. Female respondents in particular talked about social barriers and fear from their parents if they move outside of their residence to use parks or public transport. I was struck that many young women in the high-income community reported being restricted to using roof top gardens. By contrast, young women in the poorer communities had to get move around the area for work and school so reported fewer restrictions.

8.2.2 Changing the whole system: Young peoples' leadership in planning based on their experiences

It is often argued that young people are visionary and their imaginative power can take them to new thinking for the long term and quick responses to emerging issues (chapter 2, pp. 27). However, young people I interviewed are often inexperienced in facing the challenges of the social and environmental problems and in lobbying for political change. Their thinking is big but often their aspirations and expectations exceed the reality of their difficult experiences and a lack of empowerment. Even after their protests in Dhaka city about transport (and action to control the traffic and check driving licenses), some young people I interviewed felt youth did not get any support from top officials and the police (Shafi, Male, 14 years, Ward 1, FGD-6).

In my observation, this energy of informal youth leadership could be better used to inform institutional processes of urban decision making. Young people I interviewed in focus groups surprised me. Many were enthusiastic to change the 'whole system' of the country, the road safety protest movement that emerged in the streets in August 2018 in Dhaka proves a justification to this statement. Many young people I spoke with did have deep concerns about urban planning and want to be heard about system-wide issues. The main concern to the young residents in the conversations I had was to ensure safety and security of enhancing the usability of green space and transport in their community. The thinking of children and young people suggests that in their street protests they were experimenting with possible solutions of an emerging problem of serious traffic congestion and they acted without any hesitation where adults have failed to manage and negotiate with high officials as well as the community to implement effective transport regulations (chapter 2). Social attitudes of others towards young people, children and especially young girls and young women however emerged as a big concern and as a barrier to their participation in transport and green space decision making and engagement.

Age is also a factor limiting opportunities for young women to participate in physical activities (Emi, Female, 15-16 years, Ward 1, FGD 3). Many young females interviewed in focus groups, particularly in the high-income area said they cannot go outside freely after age 12 years. Young people at this current time seem willing to remove these barriers but they are falling short of any institutionalization way forward where for example the government might help young women's and men's voices to be heard. For example, during the transport safety movement, the school and college students volunteered to take on the roles of traffic police but they did not get help from the traffic authority to perform their duties and their protest actions authorities turned against student protest. So while youth efforts were effective in clearing the streets and enabling transport to flow more freely for a short time, these efforts could not be sustained.

The attitudes of adult city residents is also deep concern for some members of the younger generation I interviewed in this study. Changing the system of the society by changing the manner in which we treat and listen to children and young people is a big challenge for Dhaka's policymakers. Bangladesh has a long history of student protest but there are also social and cultural problems that are creating obstacles to young people speaking out about important everyday issues. Some participants mentioned that friends also laughed at their comments on Facebook when they were protesting about local issues like transport by posting their opinions there. Clearly taking leadership on these issues means standing again the norms of your peers sometimes.

8.2.3 Thinking a way forward: Activism as empowerment of young people

Access to public space enhances the quality of life of young people and use of public transport and public space itself can be a form of 'civic empowerment' (Nematinasab, 2017). The empowerment of young citizens as active agents for change is not only about voting power or about taking leadership on key issues but also about everyday actions. Finding ways to encourage the involvement of youth in informal governance systems to enhance the effectiveness of systems in a densely populated city and community like Bangladesh is important. Students protesting for transport safety was a positive example of youth led empowerment in planning and policy making of Dhaka city. But the reaction of city authorities and government was not supportive (chapter 1).

Inclusiveness of all people is a must for achieving sustainable future wellbeing for the city residents. It is the right of young city residents to raise their voices to achieve their basic demands in life. In this connection empowerment of young people will be needed to ensure UNCRC and SDG target 11.2 and 11.7 are achieved. However, the barriers to assuring this inclusion is achieved include the top-down approach which is still prevalent in developing countries in the world. The top officials in developing countries are involved in all in decision making for their country, city or even local area (Swapan, 2016). The budgets of projects are provided from the central government, therefore, they have the dominance in this process. The reflection of a top-down approach is visible from the comments of the participants. Many young participants felt that in Bangladesh all decisions are waiting for the consent of prime minister (chapter 6). It seems to be from their perspective that everything is under the command of the government but there is little understanding of how youth voices could be heard.

Critics of Bangladesh governance would support this concern and there are some fears that a collapse of the governance system is likely if there is no balance with central and local views and if decision making is only driven by a top-down decision making approach (Swapan, 2016). In this context the activism of youth and their desire to be engaged and heard needs nurturing and capacity building. Without attention to everyday participation it is unlikely that we can easily bring the prospects for community development to the fore and working without the community is not always as cost effective as a bottom-up decision approach.

My interviews with local planners suggests that some felt that there is also a problem of a shortage of skills and responsible people to undertake assigned duties. There are people who can manage tangible problems, for example drainage system blockages in a local area. But there is a need for people who are also well educated about the intangible problems of sustainable decision making and urban planning (i.e. minimizing the knowledge gap and understanding of planning and thinking long term about the issues facing a large city like

Dhaka). Empowering young people to think long term about these intangible issues and building on the interest of everyday activism by encouraging local problem solving could have a long impact in the life of the city and future generations.

Poverty and lack of knowledge of planning are connected to lack of power however, especially among low-income people. The confidence levels of youth seemed especially low from low-income residents who were reluctant to suggest decisions to their local authority even if they were empowered to raise problems in focus groups. During the course of my study, I heard about a councillor of the low-income area who was illiterate (he was arrested for corruption in 2019 (bdnews24.com, 2019; The Daily Star, 2019d)) and locals reported he could not understand the value of educational institutes (field note from a conversation with a college principal). This small example adds to the problem of empowering low-income students to have a say in the planning of their local community spaces and transport systems.

In the high-income area of my study the local college campus was beautiful with developed gardens. The principal looks after the beautification of the area (field note from a conversation with a college principal). Some of the local community I interviewed however said they felt the mind-set of the authorities also needs changing and that local authorities need to similarly see their responsibility for looking after the society and creating an example for others.

Some of the young participants I interviewed, agreed that their empowerment as active citizens is needed for participation in planning and management of their local area because they have less opportunity to participate in these duties and many felt that they were ignored by the local authority if they try to speak out (chapter 6). The transport safety movement by school and college students in Dhaka was remarkable and serves as an example for higher authorities of the importance of listening to young users' opinion for the betterment of their community and the way youth activism can encourage other young people to take think about issues in their community.

The next section discusses some thoughts from the young participants of this study.

8.3 Lessons learned from the young respondents

Bangladesh aims to advance the sustainable goals within the timeline of 2030. In this context, involving young people in policy making and planning would be a powerful step forward. This research began with the assumption young people were not interested in participating in planning or even using green space and that there is a huge shortage of green space in Dhaka city. The results of interviews, focus groups, my observation including of street protests and the survey surprised me and more significantly led me to develop a model of PLAY, for youth empowerment in urban planning and decision making.

This study confirmed that there is less accessibility to parks and transport for young people particularly young women and low-income communities in Dhaka and this affects their sustainable quality of life. However, there are many reasons behind young people having less access to parks and playgrounds and good quality public transport. I have found the following concerns were often raised in responses from participants (Box-8.1).

Box-8.1: Summary of responses from participants about barriers to participation

The reasons limiting youth access to green space and sustainable transport experiences include the following: 'Population increase (migration from rural area and other cities)', 'transition of space (Conversion of vacant green space and vegetated land into housing)', 'illegal development (Occupying low land and land filling)', 'political pressure (using land for commercial purpose)', 'political power exercise and violence', 'lack of time (busy in study and other purposes)', 'safety and security (males and specially females)', 'poor management (lack of maintenance and development)', 'lack of social cohesion (less conversation among the neighbour)' and 'lack of knowledge; inequality, where there are differences between experiences of rich and poor, and lack of or support to speak out'.

These barriers to youth participation in decision making have not emerged all of a sudden in this city but they have a severe impact on the wellbeing of young people. Urbanization is a huge challenge for young people in the Global South (Poobalan & Aucott, 2016; Stephens, 2015). Population increase is seen as a main factor for urbanization and one of the biggest obstacles to maintain quality of life in cities (Xu & Hou, 2019). Migration from rural area to urban area is another of the reasons for population congestion in Dhaka city. This over-population increases pressure on the limited land and services. The participants' experiences in this research showed how much they lack opportunity for 'civic engagement' to their city.

The small focus group discussions amongst students however illustrates Frank's (2006) idea 'citizens-in-training.' There were young people who showed an interest in participating in the process to 'remove the misuse of green space and transport system', reduce the 'unexpected'/unwelcome behaviour of others users (both in green space and public transport)', most importantly a few said they wanted to change the 'whole system' or the 'administrative setup' which they found deplorable, with some expressing concern about 'negligence' of regular duties and responsibilities (chapter 6). Some participants expressed frustration on the service providers for their negligence in duties and responsibilities.

The transport protests by the school and college going students should open eyes from the bottom to top levels of decision making amongst officials about the need for a massive

change in transport systems and the keenness of students to be involved, but the actions taken to date by authorities are still far behind the expectations of student protestors and users of transport services. The department of traffic police initially arranged for a 'traffic week'. The traffic police went for strict restrictions and insisted drivers follow road traffic rules. Dhaka Metropolitan Police Commissioner noted that 90% people violated traffic rules (The Daily Star, 2018a). The police fined many drivers (29,618 cases filed against bikers in Dhaka) and owners of vehicles (5,572 vehicles in Dhaka) (The Daily Star, 2018a). However, focus group participants reported that after the student led protest movement the traffic situation returned quickly to the problems of the previous time.

> *No one follows the rules, the drivers become reckless again .... A few days ago there was a movement, the government said about change (in transport system) but I could not find any change. I think there will be no change. (Maya, Female, 15-16 years, Ward 1, FGD 5)*

Young participants interviewed in this study appeared to agree that transport is an 'administrative failure' of government. However, the Transport Safety Act came into force in 2018 and government is hoping to introduce reform in the administrative capacity in the transport sector (World Bank, 2020a, p. 8).

While I advocate greater youth involvement through a PLAY model of urban planning I note that time pressures and restrictions from family and education pressure are a big issue limiting opportunities for many young people involved in this study to participate in activities outside house (Mira, Female, 15-16 years, Ward 1, FGD 3). Many participants wanted more time for leisure or quality time with friends and family. Parents feel it is unsafe for their children to participate in the life of the city and are reluctant to allow them outside without any major reason i.e. school, college or coaching.

> *Often my family allows me to visit friends' house in holidays but there is a time restriction. (Mira, Female, 15-16 years, Ward 1, FGD 3)*

The comment from Mira above shows the reality of the society pressures and constraints whether it is in high-income area where youth should feel safer than low-income area for their capability and opportunity.

My thesis was also inspired by the UN Convention on the Rights of Children (1989), how can we ensure children have rights to participate and be heard? Despite the inequalities and restrictions, many young people want to empower themselves and participate in planning in a way of informing authority by 'writing to authority', 'raising their voice', 'creating

awareness', 'creating group', 'changing own bad habits' and 'taking advice from seniors' (chapter 6, pp. 149). They understand and recognise the need to do something for their locality, their city in particular but they need institutionalizational support for a systematic process from authorities to help advance and apply their thoughts.

The urban designer I interviewed suggested the thinking of 'co-management', 'co-design', and 'co-planning' processes should be considered as ways of engaging young people to achieve both the empowerment of the young people and effective output of the project but he felt it was unlikely that there would be much support for this.

> *Unfortunately, (the area) is not a good in co-management. We tried to establish it in Dhanmondi (playground). We were trying to establish that co-management where City Corporation had already taken over the project and at the end of the project it will be operated by local people and authority together as a co-manager. (Architect and Urban designer)*

If young people are to participate in local decision making, perhaps their engagement could be rewarded with token but significant payment or as part of their wider school studies for example.

One of my interviewees discussed a workshop, Work for Better Bangladesh (WBB) in which some planners and youth advocates argued one positive way of empowering and engaging children in planning activities is through online games like 'Minecraft.' Children learned the skill of leadership, management, developing common sense and most importantly their mental growth.

> *We organized a workshop for the children to design 'Boishakhi Playground' by using 'Minecraft.' This was attracted by the kids. It was helpful for them to develop common sense and mental growth. They also learned leadership, group work, and management by games. It was not possible from reading a book. It created openness to them to design parks and playgrounds. This project ended in August 2018. This playground is under the monitoring of DNCC engaging local community. (Program Coordinator, WBB)*

However, there are still challenges in the planning system for example, RAJUK is a planning authority which has the main duty is to prepare a plan for the metropolitan area. However, this authority neglected the planning standards for green space in a recent project 'Purbachal' (see chapter 1). The local authority started a land development project which violated rules and regulations, ignoring their inspection tasks, and failing to monitor the

activities according to city plan (Daily sun, 2019; The Daily Star, 2019c). Another example of violation of rules by RAJUK in the low-income study area (Ward 33) (Figure-8.3). In an interview with an urban designer mentioned that if development control organization does the role of land development and housing project there will be definitely a question of conflict of interest. This is a kind of 'self-destruction' of a city by its leading planning authority and in this context is it realistic to expect there can be effective youth empowerment led by authorities?

> *The old RAJUK came with an additional responsibility to enact but unfortunately they had a conflict of interest. They were doing planning and allocation of spaces to rich people to pressure our power play and money and taken over the rights of richness and augustness of these spaces of children and young people. (Architect and Urban designer)*

Given the problems of urban planning authorities like this one described in my interviews, I suggest that youth activism and peer leadership might be a more important way of also empowering youth. Although the transport protestors found, even when activism is youth led, it is still difficult to get authorities to listen and respond to youth ideas and demands, my focus groups after the student protest suggested the activism had raised wider youth awareness.

Figure-8.3: **Transformation of the low-income area without consultation**


The transition of this low-income area to housing for middle and high-income people is very rapid. The people lived here in the slum were evicted by the developers without their rehabilitation losing their rights to the city. Therefore, young people lived in this area had perhaps less voice to raise to their eviction.

Lessons learnt from the survey about future ways of engaging young people

Given my concern to empower youth engagement in planning, in this section, I also want to mention some observations regarding the survey procedure that I found during the data collection which have implications for future ways of encouraging youth participation, leadership and activism in planning. Some students made drawings or took photos of their present environment which is a reminder that in youth engagement it may also useful to start with youth aspirations sometimes rather than simply ask them to document their reality- for example, while I expected students would take photos of their local community, in reality some young participants of 12 years old group in a low-income area drew pictures of the Sundarban Forest[26] (Figure-8.4) as a symbol of natural beauty instead of sketching their (poorly serviced) green spaces or parks and playgrounds closer to their own neighbourhood where they spent their leisure time. This approach is interesting and reminds us of the power of symbolic landscapes and the way children can be inspired to know that change is possible through stories and images (Burman, 2020). This suggests that local areas are not just 'commons' areas for economic and social development as some literature suggests but they can be imaginative inspiring places.

Figure-8.4: Drawing of Sundarban forest
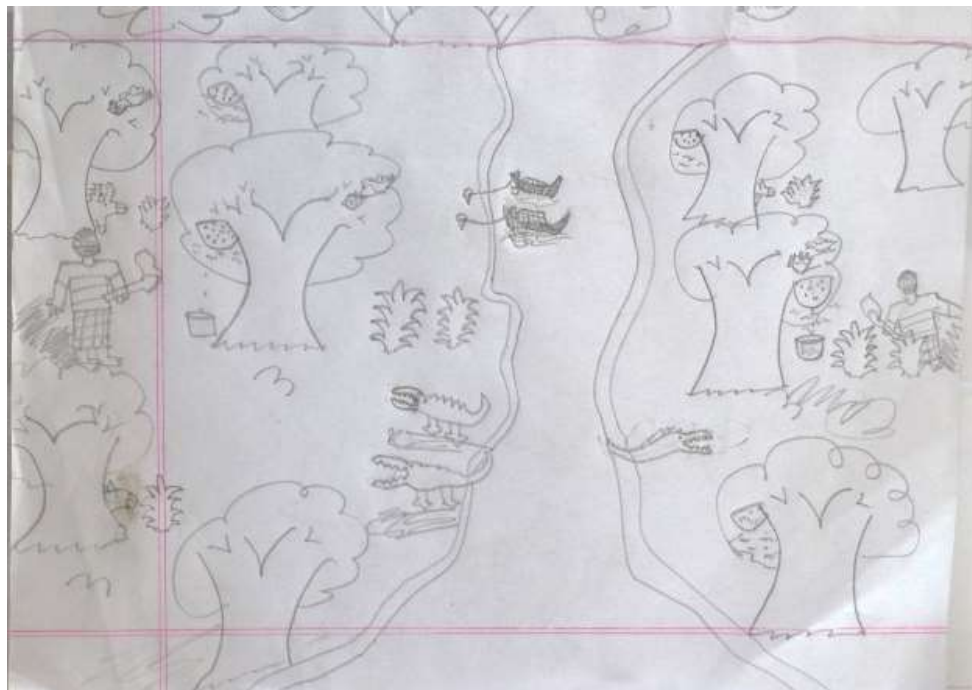
Source: Participants (Male, 12-13 years, Ward 33, FGD 2)

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[26] The largest mangrove forest and UNESCO declared "World Heritage Site" Rahman, M. M., Rahman, M. T., Rahaman, M. S., Rahman, F., Ahmad, J. U., Shakera, B., & Halim, M. A. (2013). Water quality of the world's largest mangrove forest. *Can Chem Trans, 1*(2), 141-156. https://doi.org/10.13179/canchemtrans.2013.01.02.0018

In addition, some participants of age group 17 -18 years downloaded some photographs from website instead of their local areas and also downloaded transport services (i.e. bus, leguna) (Figure-8.5) from websites rather than take photos by themselves, this may occurred because they had less time to take photos or less access to equipment, remembering that children and youth participation needs resourcing is an important start to encourage participation.

I have another interesting observation during the focus groups session. The participants from Madrsa[27] were very conservative in a sense that they (all were male) were feeling shy about answering questions as they had never participated in this kind of study and they were less familiar in conversation with people using another medium of study and instruction (i.e. Bangla, English) outside their campus. They were less familiar with the term of planning and planning rules as they were only learning recitation, memorizing and analysing the verses of Holy Quran and the legislation of Islam according to the Holy Quran. They could not watch television or surf /browse the internet as those activities were restricted in their institution. Moreover, they were following the strict orders from their school authority and their Huzur (teacher) so they could not use mobile phones during their stay in their accommodation of institution. In these cases there needs to be careful though given to ways to support the capacity of young people to participate that does not make them feel judged or less important than others, and helps them listen to the ideas of others.

In addition, some other low-income young people expressed the same problem of feeling they had less knowledge because some planning terms were not familiar to them. I have also observed the peer pressure among the low-income participants to present their locality as a nice place without any problems. These kinds of problem were exacerbated by the lengthiness of the omnibus questionnaire I administered on behalf of a wider study for CYCLES. Taking time to answer a study has impacts on low-income communities because it requires them to spend time answering questions and this interrupts their daily work demands or other business time. Participation by youth from low-income communities may come at a cost to their daily survival, and finding ways to financially support young people maybe an important consideration if we want to encourage more youth participation in the future.

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[27] Arabic educational institutes

Figure-8.5: Downloaded photo of bus and leguna by participants

These photos show the typical scenario of public transport use in Dhaka. Passengers are standing on the stairs of the vehicle in high risk position. A female has no chance to get on leguna (below photo) while other female is in tight space with male in the bus (above photo). These transport users are mostly low-income people. Source: Participants (Male, 17-18years, Ward 33, FGD 4)

Overall, data collection is a big challenge in Dhaka, Bangladesh. There is no data base for transportation, counting of trips, and level of service. Moreover, people are not very interested in participating in questionnaire surveys. Low-income people perhaps quite fairly need to ask for money if they complete a study, this is often practiced by NGO but was not possible in my study. In the course of this study I assume that some felt concerned that their information might be used against them, or in the case of many young women they appear to be reluctant to express their honest concerns in a survey and feel more comfortable talking with a group of peers to a researcher. These are important considerations that should inform youth participation.

8.4 Moving forward: Developing a PLAY model of urban planning

In reflecting on the interconnection of young people's experiences, expectations and empowerment as discussed in the previous sections, I propose a model of planning participation by young people called PLAY (Figure-8.1 and 8.5). Planning participation of young people I argue is essential for their sustainable wellbeing in a city life. This research brings the significance of young people's participation in green space and public transport to the fore. Young people are recognised as 'valued members of a society' (Freiler, 2003) and they also bring new ideas for the future development of cities with their experience, confidence and skill (Mayo, 2001). In my summary discussion I review the model 'PLAY' particularly the key elements of the model: **Participation, Leadership** and **Activism** of **Youth**.

This research focused on young people's **'participation'** including both their physical engagement with local parks and transport services and their voices raised in planning for these services. Youth participation can highlight a particular civic problem in a local area or in a city and as we have seen in the focus groups, some youth are also keen to think about systemic issues as well. The PLAY model encourages a democratic 'bottom-up' approach (Isidiho & Sabran, 2016) where youth participation helps government organizations by prioritising emergent problems duties and identifying responsibilities in a high density city. My study suggests that even in a very large city like Dhaka, small discussion groups of peers in local neighbourhoods might be the most effective way to support youth participation as young people are more likely to express critical opinions. There may also be opportunities for youth to participate through some forms of volunteering which could also help address the shortage of labour and finance.

The main point to look at here, is how to encourage the inclusiveness of youth in planning for the sustainable urban future (Argo et al., 2016). Young people who are identified as a citizens-in-training by Frank (2006), have a chance to observe the problem and try to find

an immediate solution rather waiting for the delay of the particular city authority to lead the process. But youth are not only citizens in the making, they are citizens in the city now, with rights and demands and opportunities to participate (Hayward, 2020). The PLAY model I advocate encourages participation to work in both ways in gaining experience and knowledge about how to tackle future urban problems in their community (Horelli, 1997) and in enabling youth to be heard now. In addition, participation also helps young people to understand the expectation of the local people as well as their own choices as they are also a part of the society or community. This also builds their capacity for **'leadership'**, learning and leading the community from the front by vigorous engagement in policy making processes (Checkoway et al., 2005) and learning to listen to a variety of others' views and concerns.

Leadership is considered in this model as proactive activities (learning by doing), sharing ideas with local community and generating them on the spot with the concerned authority, awareness building among people who may be less aware of the urban problems, and building social movements to work in a combination with government organizations to create change. The capacity for youth leadership can be supported by senior peers or by teachers and local decision makers but the next step of the model **'activism'** which is led by the empowerment of young people in the city about their issues and concerns.

Activism in this model can work in two ways: formal and informal. Formal activism may be approaching government institutions to work with their guidance in an organized way or it can be youth led in local communities (O'brien et al., 2018). In the informal activism young people can form groups and support each other to effect change, as they did in the transport protests. The role modelling of activists can support others to speak out and raise awareness but it comes with risk, the way the protests were supressed by authorities might also make other students more cautious about speaking out- so activism needs to be accompanied by capacity building and leadership for collective action.

As I have commented earlier, the 'PLAY' model is also informed by the literature of this thesis and my findings. Now I would like share reflections on participants' opinions here. Many young respondents interviewed in this study were very enthusiastic about changing the city and wanted to take steps forward for future engagement in planning activities but didn't know how. It was striking to me that the research process itself where young people were engaged in focus groups in local communities and in taking photos or drawing pictures and talking from these about their experiences and expectations, was a key step in empowerment. By contrast simply asking a larger number of young people what they thought about their local community in a survey was not as effective in obtaining insights into youth frustrations and experiences and hopes as the focus groups were, except in higher income areas or on issues of transport where students had observed other young people protesting or were aware of protests. The key findings of this thesis therefore are that many young people need capacity

building to help their sense of empowerment. Many youth protesters have shown they are ready to take the challenge of the rapid urbanization by designing transport systems based on their own choices. However, there is a need of support, mentoring and institutionalization of this young people's voice which could be fosters by the higher authority of local government.

My research (of 3E's) informs in my thesis or broader argument that we can and should enhance urban planning by general than engagement of youth in a PLAY model.

8.5 Summary

From the above discussion green space and public transport are connected to the wellbeing of young people yet many feel shut out of local decision making or less than satisfied with their experiences of these aspects of city life. Building on my study findings, literature and the rights based approach of UNCRC I argue that lessons from the Global South could inform the worldwide sustainable agenda, and our collective efforts will be enhanced by the use of a PLAY model of youth participation in urban planning and decision making.

Chapter 9 Conclusion - Recommendations and reflections for the future research

9.1 Introduction

This is the final chapter of this thesis provides a brief evaluation and summary of the whole thesis and a future research prospects. In the opening of my study I asked the following overarching questions with sub-questions:

RQ.1. **What are the existing socio-economic problems and issues of green spaces and transport experienced by young people in Dhaka city?**

SQ.1a. What is the experience of children and young people regarding access to green space and transport in their local area and within Dhaka city?

b. Do the children and young people report opportunities for social interaction in green space and transport within their neighborhood?

c. Do young people experience loss of green space and lack of transport? If so what is the impact on their wellbeing?

RQ. 2. **Do the young people in Dhaka have any interest in the process of green space and transport planning and designing their local area?**

SQ. 2a. What is their priority for passing leisure time and use of transport in their nearby area?

b. Do they see any need for changes to their local area in the context of green space and transport?

c. Do they want to participate in community decision making for green space and transport? Why or why not?

RQ. 3. **How can young people be involved in planning and policy reform of green space and transport in Dhaka city?**

SQ. 3a. How do young people currently engage in green space and transport planning in Dhaka city?

b. How can young people be involved in addressing the loss of green space and poor transport service?

c. Does the experience of young people's political agency and access to parks and transport assist youth wellbeing?

In answering the first research question and sub-questions after analysing the focus groups and questionnaire survey and in comparing two contrasting areas at the first stage and later three areas based on socio-economic status of the young participants, argue that there is social and economic inequality in use of green space and transport as well as a lack in the consideration of ways to integrate youth in urban decision making processes. In considering the experiences of the access to green space and transport, females in particular are facing challenges in terms of safety and security and making their voice heard. The positive side of the analysis is that some young participants reported there are opportunities for social interaction with their neighbours for example in local parks but it can be enriched by their participation and increasing the availability of green space and transport. However many of the young participants reported that their experiences of the reduction of green space and lack of transport have great negative impact in their physical and mental wellbeing.

The expectations of the young respondents were reflected in answering the second research questions and sub-questions. Undoubtedly, being a capital city with high density of population in a low-economic country and having poor condition of services and less availability of green space and transport, young participants were enthusiastic about participation and considering all these challenges, to move forward. Though many young respondents reported spending time inside house with fewer opportunities for physical activities and for shortage of time due to being over stressed by their study programs, both males and females in the study areas expect some changes in using green space and transport. Those who commented on making changes agreed that there is a need to change the attitude of the people and to encourage better planning management to improve green space and transport planning. In addition, the young participants were also expected to be involved in the decision making process in their local area for green space and transport.

In both focus groups and quantitative survey analysis shows that young participants of this study are interested in the planning and decision making processes. However from recent experiences, some young respondents of this study reported that they were often ignored in the public decision making although some informed others by writing in the Facebook, creating groups to build awareness. From the findings of this study it is evident that young people need more support for greater institutional engagement rather than individual activities. The study suggests that political activism of young people can encourage more youth interest in decision making processes for green space and transport planning. Moreover this research supports wider studies that suggest when young people especially from low-income

communities feel heard, this will in turn enhance their sustainable physical, social and mental wellbeing (Uddin et al., 2020).

9.2 Evaluation of the thesis

This study began with discussion about the challenges of achieving sustainable development goals for a rapid developing and highly congested cities in the world. Sustainable development from the initial stage is significant to young people for their wellbeing and their current and future living standards. In this context, this research investigated youth participation in two key aspects of sustainability: green space and public transport. Scholars in Global North started the study of these two terms (Bornioli et al., 2018; Douglas et al., 2017; Duncan et al., 2016; Dzhambov et al., 2018; Kondo et al., 2018) but in the Global South these issues have come light in as important in more recent time, so there is some research gaps in this context (Rigolon et al., 2018b). In this regard, this study will have high impact for the Global South because it offers detailed but comparatively rare discussion about how to achieve more sustainable future cities for youth.

Youth are a key target group in achieving sustainability. Cities in the Global South are young places, in light of that, youth participation, and activism is critical. In this context, this study aimed to understand the relationship between children and young people's well-being in terms of the interrelationships of their experiences of green space and public transport, by investigating opportunities for youth participation in planning using a case study of Dhaka, the capital city of Bangladesh.

This study is also a timely response to the serious problems identified in a series of international declarations including the New Urban Agenda and the Agenda for 2030, and Sustainable Development Goals, especially 11 (SDG11: Make cities and human settlements inclusive, safe, resilient and sustainable). In SDG 11 there are a number of targets including target-2: achieving sustainable, affordable and safe public transport for all, especially to women and children and target-7: which emphasized good urbanization and development, providing access to green space for all, in particular for women and children and connecting young people in green space planning (United Nations, 2016). In this light it is also expected that this study reported here will inform future policy guidelines for rapidly growing cities worldwide as they work to advance SDG 11 (Nissen et al., 2020) (see chapter 1, pp. 12).

After a literature research and data analysis I identified the way youth experiences, expectations and empowerment can inform their interest and activism in planning for more sustainable living. I developed a PLAY (Participation, Leadership Activism and Youth) model of urban planning where youth capacity for engagement in local decision making is supported by leadership and activism and where I argue youth participation is encouraged through small

group conversation and activities with peers. This includes both discussion and volunteering to address specific issues youth want to change.

9.3 Recommendation and future reflection

Before starting this PhD research in Dhaka city, I assumed that the young people were busy on their mobile phones, internet browsing and playing games on the digital devices inside their houses and they were either not interested or not involved in physical activities outside home, say visiting parks and playgrounds or other green spaces. I was pretty sure about their absence in political decision making and their reluctance about raising their voices against some of the worst decisions or systems of government, because as a planning lecturer at a university in Dhaka, I was aware that young people's voices are rarely heard in the formal planning process (Morshed, 2019). But I also assumed that young people in general had a little interest in urban planning and decision making, infrastructure issues and well-being of their own communities and lives.

However, during and after my focus groups and interviews, and witnessing the emergence of large spontaneous movements of young people in Dhaka initially protesting for the 'employment quota reform' in public service recruitment (April, 2018) and then more directly related to this thesis, a large movement of students of school and college as a 'public transport safety strike (July, 2018),' my attitude changed about youth interest in decision making and in any malpractice in urban decision making and city planning.

As a result, I have had to change my own previous thinking and assumptions in the course of this research. There is no doubt about the sincerity of young people's demands as the whole nation was shaken but these movements, these protests cannot be forgotten like previous movements after a few days by the political leaders and government high officials.

My interest in research on green space first came into my mind when I was writing the undergraduate thesis on 'Playgrounds in Dhaka city: Current issues, problems and need for retrieval' which was subsequently published as a paper (Hasan & Khan, 2010) that was almost ten years ago. Even at that time, I felt the necessity of young people's participation in policy making and planning in the local neighbourhood areas they were living but I was surprised how many young people are interested in their local community when you give people a chance to speak in a situation where they feel comfortable and safe (i.e. in small groups with peers).

As an urban planner, I have observed the absence of young people's participation in urban policy and planning. The tendency of Bangladeshi policy is, as some of the young respondents' and experts note, for decision making to be driven by government high officials, known as a top down planning approach, and their decisions and plans are rarely reviewed or updated at regular intervals. The policy making process in Bangladesh like many other Global

South countries is also often dominated by foreign donor agencies in the name of capacity development and knowledge development (Swapan, 2016). That approach means policies and plans too often come to these countries as a prescription not a pragmatic approach or demand driven one led by the local public let alone youth.

There is also often a gap between researchers and government officials in their visions of the future demands and prosperity of the country yet senior policymakers rarely see the necessity for engaging the public in setting priorities. The problems and issues of green space scarcity and management in Dhaka city for young residents are clear to all if we consider the current thesis findings and previous research but it is not yet obvious to policymakers at the top level of city decision making. Green space and public transport are vital for the sustenance of this vibrant and over populated city and having a voice in the provision of green space and effective transport can empower young people. At the end of this thesis, I would like point out the following recommendations for future reflection.

1. This study was conducted in a rapidly growing city in Bangladesh, some of the factors experienced in Dhaka are very different when compared to other cities in the Global North. The findings and analysis might also be different to other cities and other countries in the Global South depending on local culture and young people's perceptions.

2. The data for this thesis was collected before the impact of COVID-19, so the situation in my home city has radically changed as has working life and a return to so called 'normal life' after this pandemic will be challenging. As a consequence young people's expectations might have changed due to a need to focus on issues of survival by earning food for family rather than considering any choice for recreation (if they consider using green space in that way). Both way, young people and their priorities should be heard in the city recovery.

3. The impact of COVID-19 has also had another impact for the future generations that is relevant to this study, revealing the corruption of the various sectors including the urban public health sector in Dhaka city (Lata, 2020). This will have a serious influence on achieving the SDGs in the future and policy-making that advances sustainability will need greater future research.

4. A positive side of the pandemic (COVID-19) however that it underscores the vital need for physical activities and green space for recovery and to help boost community immunity by creating space to recreate. It has also highlighted the health risks across

the whole world of overcrowded transport systems. I hope that we learn lessons from COVID-19 and it opens the eyes of the politicians' worldwide, I hope Bangladeshi politicians as well as the politicians from the Global South more generally will consider the role of green space and public transport more carefully in future decision making.

Finally, and most importantly I hope the PLAY model of urban planning offered in my thesis can help inform decision makers about ways to support and engage with youth in sustainable urban planning. Many young people are keen to participate in finding solutions for urban problems which they can identify, but they need encouragement to implement these in a systematic way. I argue that youth participation can be supported by recognizing young people's capacity for leadership and activism through a PLAY model of small group discussion and activities, I hope youth engagement can achieve a more sustainable future.

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Appendix

1. Ethics approval for qualitative survey

UC UNIVERSITY OF CANTERBURY
Te Whare Wānanga o Waitaha
CHRISTCHURCH NEW ZEALAND

HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson
Telephone: +64 03 369 4588, Extn 94588
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2018/10

23 March 2018

Mohammad Mehedi Hasan
Political Science and International Relations
UNIVERSITY OF CANTERBURY

Dear Mehedi

The Human Ethics Committee advises that your research proposal "Young Lives and Use of Green Space in Dhaka City: Any Opportunity to Enhance Young People's Sustainable Quality of Life?" has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 21st March 2018.

Best wishes for your project.

Yours sincerely

pp. *R. Robinson*

Professor Jane Maidment
Chair
University of Canterbury Human Ethics Committee

2. Ethics approval for questionnaire survey

HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson
Telephone: +64 03 369 4588, Extn 94588
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2019/158

25 November 2019

Mohammad Mehedi Hasan
Political Science and International Relations
UNIVERSITY OF CANTERBURY

Dear Mohammad Mehedi

The Human Ethics Committee advises that your research proposal "The "3E's" of Urban Planning for Youth in the City of Global South: A Study on Young People's Experiences, Expectations and Empowerment in Green Space and Public Transport Planning of Dhaka City" has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 19th November 2019.

Best wishes for your project.

Yours sincerely

Dr Dean Sutherland
Chair
University of Canterbury Human Ethics Committee

3. Qualitative survey guideline and questions

3.1 Focus group topic guide and questions

Instruction for using focus group discussion

At least two people will be required to conduct the focus group, a facilitator and a note taker.

Participants

Six focus groups will be conducted including five members (at least) in each group students from schools and colleges of two study areas. The focus group should reflect if possible, gender, socio-economic status, religion.

Participant Consent

Participants will sign a consent form to participate in the focus group discussion. One copy of the informed consent form should be given to participants and a second copy should be kept by the focus group facilitator. Participants should be informed if any audio-taping will be used for data collection.

Data Collection

The focus group will need to be audio recorded and fully transcribed, and debriefing notes to accompany the transcription will need to be taken.

Time limit and place

The length of the focus group will be about 90 minutes in order to cover all the required areas. It is suggested that a refreshment break be held half way through or provided at some point during the activity. Participants need to receive clear details of where and when the focus group will take place and how long it will last.

Discussion guide
Facilitator's welcome, introduction and instructions to participants

Welcome and thank you for volunteering to take part in this focus group. You have been asked to participate as your point of view is important. I realize you are busy and I appreciate your time.

Introduction

This focus group discussion is designed to assess your current thoughts and feelings about the green space use by young people in leisure activities.

Ground rules

The most important rule is that only one person speaks at a time. There may be a temptation to jump in when someone is talking but please wait until they have finished.

- ☐ There are no right or wrong answers
- ☐ You do not have to speak in any particular order
- ☐ When you do have something to say, please do so. There are many of you in the group and it is important that I obtain the views of each of you
- ☐ You do not have to agree with the views of other people in the group

- Does anyone have any questions? (answers).
- OK, let's begin

Warm up
First, I'd like everyone to introduce themselves. Can you tell us your name?

Introductory question
I am just going to give you a couple of minutes to think about
   i.   What do you like to do in your neighbourhood?
   ii.   Is anyone happy to share his or her experience?

Guiding questions
1. Do you have any nearby green places that you use? What are they?
2. What do you like about these places?
3. Do you think any need for change or usability of the green space?
4. Do you have any opinion to the process of planning and designing their local area?
5. How do you want to be involved or participate in decision making processes?

Conclusion
Thank you for participating. This has been a very successful discussion.
Your opinions will be a valuable asset to the study.
We hope you have found the discussion interesting.
If there is anything you are unhappy with or wish to complain about, please contact or speak to me later.
I would like to remind you that any comments featuring in this report will be anonymous.

3.2 Interview questions for young adults (19-24 years)

a) What is your favourite kind of recreation and how often do you do this?
b) How do you get around usually? Do you ever use other transport? Why or why not?

Relevant topic

i. Green space use

ii. Planning process

iii. Awareness building

3.3 Key Informant Interview topic guide and questions

- First of all, the researcher should introduce himself in a friendly manner to make easy the time passing with the interviewee.
- The interviewer or the researcher should use simple word by avoiding technical words and sentence in describing his research project.
- The interviewer should have to avoid the sensitive issues like political decision or corruption in the organization.
- The interviewer should also follow the time limit and not making any embarrassing situation for the officials.

- Finally, giving thanks to the interviewee for the valuable time.

The topic of semi-structure interview with city planners and officials:

i. What are the most important recreation opportunities for children and young people in this community- do you think?
ii. What do you think about child friendly green space? Does it support Sustainable Development Goals?
iii. Are there problems in green space planning? (Does this effect child in wellbeing?)
iv. What is the policy for the children's participation in the city plan?
v. Do you think there is value in involving children in the designing process? Why or why not? (If yes: how would you go about it and why?)
vi. What is your organization's vision/strategy for the future of this community?
vii. What are the biggest barriers and opportunities you see to achieving this?

3.4 Information sheet, letter and consent form for the participants

3.4.1 Letter to School's Head/College's Principal

To

....

....

Dear.......... ,

I am Mohammad Mehedi Hasan, PhD research candidate in the Department of Political Science at the University of Canterbury, New Zealand. I am glad to inform you that I am conducting a research on young people's lifestyle and recreation in the green space of Dhaka city. I am requesting your consent by this letter to kindly hosting my study at your organization.

For this study, I would like to have a discussion of 6 students of class six to class ten (age 12-16) in any of the convenient room for them. The student participation is voluntary and nothing they say will identify them.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz). My project is being carried out under the supervision of Associate Professor Bronwyn Hayward (Department of Political Science and International Relations) bronwyn.hayward@canterbury.ac.nz . In Bangladesh, Professor Golam Moinuddin, PhD (Department of Urban and Regional Planning, Jahangirnagar University) moinuddin@juniv.edu will be my local contact person. You can also contact them if you have any questions or concerns.

Kind regards,

Mohammad Mehedi Hasan
PhD research candidate
Department of Political Science
University of Canterbury.

3.4.2 Letter to Expert/Officials

To

....

....

Dear.......... ,

I am Mohammad Mehedi Hasan, PhD research candidate in the Department of Political Science at the University of Canterbury, New Zealand. I am glad to inform you that I am conducting a research on young people's lifestyle and recreation in the green space of Dhaka city. I am requesting your consent by this letter to kindly participate in an interview at your organization.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz). My project is being carried out under the supervision of Associate Professor Bronwyn Hayward (Department of Political Science and International Relations) bronwyn.hayward@canterbury.ac.nz . In Bangladesh, Professor Golam Moinuddin, PhD (Department of Urban and Regional Planning, Jahangirnagar University) moinuddin@juniv.edu will be my local contact person. You can also contact them if you have any questions or concerns.

Kind regards,

Mohammad Mehedi Hasan
PhD research candidate
Department of Political Science
University of Canterbury.

3.4.3 Consent form

<u>PhD research project conducted by Mohammad Mehedi Hasan</u>

By signing this form, I consent to making an announcement, distributing forms to interested young people.

In giving this consent, I acknowledge that:

☐ I have received information about the study from the researcher, which I have understood.

☐ I have been given the opportunity to ask the researcher questions about the study and these have been answered to my satisfaction.

☐ I understand that young peoples' participation in the study is voluntary.

☐ I understand that if participants are under 18 years and/or still at high school, parents will be sent information about the study and will be required to sign consent forms before their son/daughter can participate in the study.

☐ I understand that the researcher will collect the signed student consent forms and arrange to contact the participants after they have provided the signed consent forms.

☐ I understand that all information/responses provided by participants' will be confidential, and the identity of the organisation will be kept confidential.

☐ I understand that the researcher will write about the results of the study in partial fulfilment of the requirements of their degree, and in summary form for parents and participants.

☐ I understand that all materials for this study will be stored securely by the researcher in the Department of Political Science at the University of Canterbury and destroyed ten years after the study is completed.

Name: (Please Print): _____

Signature: _____Date:_____

Name of school/college/university:

_____

3.4.5 Information sheet to participants

Doctor of Philosophy (PhD) conducted by Mohammad Mehedi Hasan

Please read this information sheet in full before making a decision.

Study background
This project has been reviewed and approved by the University of Canterbury Human Ethics Committee.
This study is being conducted by Mohammad Mehedi Hasan, a PhD student in the Department of Political Science at the University of Canterbury, New Zealand.
My project is being carried out under the supervision of Associate Professor Bronwyn Hayward, in the Department of Political Science. She can be contacted at bronwyn.hayward@canterbury.ac.nz and will be pleased to discuss any concerns you may have about participation.

Purpose
The aim of this research is to examine the opportunity for children and young people to live sustainably in Dhaka city with a particular focus on access to green space.

Participants
Young people aged 12-18 years old saw/heard an announcement about the study and decided they would like to participate. I am seeking 50-60 participants in total, 6 children and young people from each ward of selected site.
Youth who are under 18 and/or still at school will also require parental consent to participate. Young people 18 and over who are no longer at high school do not require parental consent.

Procedure
Interested young people will participate in a 50-60 minutes group discussion with the researcher. The discussion will occur at a time and place suitable to the participant and will be audio recorded.
The discussion will be open-ended and cover the student's views about Dhaka city and the visions that they have for the future recreation purposes, the issues that concern them using the facilities, and how they believe change can happen in using green space.

Risks, voluntary Participation and Right to Withdraw
There are no risks involved in taking part in this research.
Participation is completely voluntary. If both parents and participants consent to participate in this study, participants will have the right to withdraw at any time, including before or after the interview. There is no penalty for withdrawing. If they do withdraw, I will remove any information they have provided.

Confidentiality
I will be writing up the information from the discussion for my PhD thesis. A thesis is a public document and will be available through the UC Library. A summary of the results will be shared with you, if you wish.
While the results of this project will be publicly available, you may be assured of the complete confidentiality of the information gathered for this study. Names of participants and the name

of the organisation will not be made public. To ensure anonymity and confidentiality, pseudonyms will be used to disguise participant's identities in any published material.

Information gathered during the study will be kept on University premises, in a locked filing cabinet for ten years after the completion of the thesis. Data will only be accessed by the researcher. You may receive a copy of the project results as noted on the consent form.

Complaints Procedure

Participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (humanethics@canterbury.ac.nz).

Consent Forms

If both parents (if young person is under 18 and/or still at high school) and interested participants have read all of the above information and would like to participate in the study, please complete the attached consent forms and return these to the researcher.

Thank you for considering this, and please feel free to contact me at any time about the study (mehedi.hasan@pg.canterbury.ac.nz).

Thanks in advance,
Mohammad Mehedi Hasan

3.4.6 Parent's consent form

<u>Parent Consent Form</u>

- ☐ I have been given a full explanation of this project and have had the opportunity to ask questions.
- ☐ I understand what is required of my child if I consent to them taking part in the research.
- ☐ I understand that participation is voluntary and my child may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I have provided should this remain practically achievable.
- ☐ I understand that any information or opinions my child provides will be kept confidential to the researcher and that any published or reported results will not identify the participants. I understand that a thesis is a public document and will be available through the UC Library.
- ☐ I understand that all data collected for the study will be kept in locked and secure facilities and/or in password protected electronic form and will be destroyed after *five* years.
- ☐ I understand the risks associated with my child taking part and how they will be managed.
- ☐ I understand that I can contact the researcher [Mohammad Mehedi Hasan, mehedi.hasan@pg.canterbury.ac.nz] or local contact person [Professor Golam Moinuddin, PhD (Department of Urban and Regional Planning, Jahangirnagar University) moinuddin@juniv.edu] or supervisor [Bronwyn Hayward, Bronwyn.hayward@canterbury.ac.nz] for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz)
- ☐ I would like a summary of the results of the project.
- ☐ By signing below, I consent to my son/daughter participating in this research project.

Name:_____Signed:_____Date:

Email address *(for report of findings, if applicable)*:_____

3.4.7 Participants consent from

Department of Political Science and International Relations
Email: mehedi.hasan@pg.canterbury.ac.nz
Phone: +8801911924434 & +64 27 4924864

Participant Assent/Consent form for participation in interview

- ☐ I have been given a full explanation of this project and have had the opportunity to ask
  questions.
- ☐ I have discussed this with my parent, who has consented to my participation by signing the parent consent form.
- ☐ I understand what is required of me if I agree to take part in the research.
- ☐ I understand that participation is voluntary and I may withdraw at any time without penalty. Withdrawal of participation will also include the withdrawal of any information I
  have provided should this remain practically achievable.
- ☐ I understand that the interview will be audio-recorded.
- ☐ I understand that any published or reported results will not identify me.
- ☐ I understand that a thesis is a public document and will be available through the UC Library.
- ☐ I understand that all information collected for the study will be kept in locked and secure facilities and in password protected electronic form and will be destroyed after five years.
- ☐ I understand that I can contact the researcher, Mohammad Mehedi Hasan, mehedi.hasan@pg.canterbury.ac.nz or local contact person [Professor Golam Moinuddin, PhD (Department of Urban and Regional Planning, Jahangirnagar University) moinuddin@juniv.edu] or supervisor, Bronwyn Hayward, bronwyn.hayward@canterbury.ac.nz for further information.
- ☐ If I have any complaints, I can contact the Chair of the University of Canterbury Human Ethics Committee, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

Please complete the information below to help the researcher prepare for the discussion group. The researcher will contact you to figure out the best time to schedule the discussion.

Your Name*: _____
(1) Are you: ___ Female ___ Male ___ Other   (2) Age: _____
(3) What religious group (or groups) do you identify with?_____
(e.g. Muslim, Hindu, Buddhda, Christian, others)

(4) How long have you lived in Dhaka? _____ years

(b) What suburb do you live in? _____

What high school did/do you attend? _____

(5) How can you be contacted? Phone: _____ or Email: _____ or

Address _____

If you are at high school:

(6) What year are you in? _____

(7) Do you plan to stay in Dhaka after you finish school? Yes / No

(8) Do you plan to visit park/playground? Yes / No

If you are finished high school:

(6) What are you currently doing? (e.g. College, University, work) _____

(7) What is your highest educational qualification? _____

(8) Do you plan to visit park/playground? Yes/No

Signature

By signing below, I agree to participate in this research project.

_____ _____
_____
(Name)   (Signature)   (Date)

Nickname or False name (to be used in published data): _____

Option: I would like to receive a report of the findings of the study in early 2018.   Yes/No

Email (to send you the report) _____

3.4.8 Research Assistant Confidentiality Form

Telephone: +64 27 4924864
Email: mehedi.hasan@pg.canterbury.ac.nz

Date:

- [ ] I have been given a full explanation of this project and have been given an opportunity to ask questions.
- [ ] I have discussed the research protocols with the researchers and I understand what will be required of me as a research assistant working on this project.
- [ ] I agree to abide by the research protocols established by the researchers including, but not limited to: the naming of files; strict use of pseudonyms for participants and their schools; separation of real identities from pseudonyms; redacting identifying characteristics or data to minimise risk of identification; and the transfer of raw data, transcripts, and analysis records between the researchers and my place of work.
- [ ] I understand that all data, information or opinions provided to me must be kept confidential and that I must ensure that this information is not divulged in conversations, draft reports or publications of the findings.
- [ ] I understand my responsibility to securely store all data collected for this study and that final copies of this will be kept electronically in secure facilities at the University of Canterbury and will be destroyed after *10* years.
- [ ] I understand that if I require further information or advice related to this confidentiality agreement that I can contact the lead researcher, xx. If I have any complaints, I can contact the Chair, Educational Research Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).
- [ ] By signing below, I agree to abide by the confidentiality requirements specified in this agreement:

Name:

Date:

Signature:

Email address:

Please complete this form and return to ………………………. prior to employment contract beginning.

4. Questionnaire survey

4.1 Information sheet, letter and consent form

4.1.1 Information sheet for 12-18 years

অংশগ্রহণকারীর (বয়স ১২-১৮ বছর) তথ্য বিবরণী

Mohammad Mehedi Hasan
Department of Political Science and International Relations
University of Canterbury, Christchurch 8140, New Zealand.
Email:mehedi.hasan@pg.canterbury.ac.nz

তারিখঃ

CYCLES International Survey: Dhaka, Bangladesh
(Children & Youth in Cities, Lifestyles Evaluation and Sustainability)

এই ফর্মটি নেয়ার জন্য এবং আমার গবেষণায় আগ্রহী হওয়ার জন্য আপনাকে ধন্যবাদ।

আমি মোহাম্মদ মেহেদী হাসান, ক্যানটারবারি বিশ্ববিদ্যালয়ের পিএইচডি গবেষক। আমি "CYCLES" নামে একটি প্রকল্পে কাজ করছি, যা ঢাকা সহ বিশ্বের ৭টি শহরে বসবাসকারী তরুণদের অভিজ্ঞতা মূল্যায়ন করবে। সমীক্ষায় অংশ নেওয়ার জন্য আমন্ত্রণ

আমরা আপনাকে এই গবেষণায় অংশ নিতে আরও ৩০০-৫০০ জন যুবকদের পাশাপাশি আমন্ত্রণ জানাচ্ছি।

কারণ, আপনার বয়স ১২ থেকে ২৪ বছর এবং আপনি ঢাকায় থাকেন। আমরা আপনার ঢাকায় বসবাসের অভিজ্ঞতা সম্পর্কে জানতে আগ্রহী। আপনি যদি এই গবেষণায় অংশ নিতে চান, আপনাকে ১৫ মিনিটের একটি জরিপ শেষ করতে বলা হবে। জরিপটিতে আপনার ভালো থাকা, আপনার এলাকার চারপাশ এবং শহরের বিভিন্ন দিক নিয়ে আপনার মতামত জিজ্ঞাসা করা হবে।

আপনার যদি কোনও প্রশ্ন থাকে তবে দয়া করে গবেষককে জিজ্ঞাসা করুন যার যোগাযোগের তথ্য নীচে রয়েছে। আপনি এতে অংশ নেবেন কিনা তা সম্পূর্ণ আপনার পছন্দ।

গোপনীয়তার সীমাবদ্ধতা

আমরা আপনাকে নিশ্চয়তা দিচ্ছি যে, আপনার গোপনীয়তা সর্বদা রক্ষা করা হবে। অংশগ্রহণকারীদের বা অন্যদের যে কোনও সম্ভাব্য ক্ষতি বা বিপদ সম্পর্কিত বিষয়ে কর্তৃপক্ষকে জানানো আমাদের কর্তব্য।

আমি কীভাবে গবেষণায় অংশ নেব?

আপনি যদি এই গবেষণার অংশ হতে চান তবে পরবর্তী পদক্ষেপটি হলো, তথ্য ও সম্মতি ফর্মগুলি বাড়ীতে নিয়ে পিতামাতার সাথে আলোচনা করা। ফর্মগুলি স্বাক্ষর করা হলে আমার কাছে ১ সপ্তাহের মধ্যে ফেরত দিন। আপনি যদি অংশ নিতে রাজি হন তবে আমি আপনার নির্ধারিত সময়ে যোগাযোগ করব।

অনেক ধন্যবাদ ।

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4.1.2 Consent form for 12-18 years

অংশগ্রহণকারীর (বয়স ১২-১৮ বছর) সম্মতি পত্র

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CYCLES International Survey: Dhaka, Bangladesh

(Children & Youth in Cities, Lifestyles Evaluation and Sustainability)

- ☐ আমি তথ্য বিবরণীটি পড়েছি এবং এতে এই প্রকল্পের সম্পূর্ণ ব্যাখ্যা দেওয়া হয়েছে এবং আমি প্রশ্ন জিজ্ঞাসা করার সুযোগ পেয়েছি।
- ☐ আমি যদি গবেষণায় অংশ নিতে রাজি হই তবে আমার কী করা প্রয়োজন তা আমি বুঝতে পেরেছি।
- ☐ আমি বুঝতে পেরেছি যে, আমার অংশগ্রহণ স্বেচ্ছাসেবামূলক এবং আমি যে কোনও সময়ে এটা প্রত্যাহার করতে পারি। অংশগ্রহণ প্রত্যাহারের মাধ্যমে আমি যে তথ্য সরবরাহ করেছি তা প্রত্যাহার করার সুযোগ থাকবে।
- ☐ আমি বুঝতে পেরেছি যে, আমার পরিচয়টি গবেষকদের কাছে গোপন রাখা হবে এবং যে কোনও প্রতিবেদনে প্রকাশিত ফলাফল আমাকে বা অন্যান্য অংশগ্রহণকারীদের সনাক্ত করবে না। আমি বুঝতে পেরেছি যে, এই গবেষণার ফলাফলগুলি সর্বজনীন এবং অনলাইনে প্রকাশিত হবে।
- ☐ আমি বুঝতে পেরেছি যে, আমার পরিচয় গবেষণা দলের বাইরের লোকের কাছে প্রকাশিত হবে না এবং UK Data Protection Act 2018 and the New Zealand Privacy Act 1993 অনুসারে আমার সমস্ত ব্যক্তিগত তথ্য সংরক্ষণ করা হবে।
- ☐ আমি তথ্য বিবরণীতে বর্ণিত উদ্দেশ্যে আমার বিশেষ বিভাগের ডেটা (জাতিগত, ধর্ম) সংগ্রহ করার জন্য একমত হয়েছি।
- ☐ আমি যুক্তরাজ্যের সারে বিশ্ববিদ্যালয় দ্বারা ডেটা নিয়ন্ত্রণকারী যারা আমার তথ্য সংগ্রহের করবে তাদের সম্মতি জানাই।
- ☐ আমি ভবিষ্যতে অন্যান্য গবেষকদের ব্যবহারের জন্য যুক্তরাজ্যের এসেক্স বিশ্ববিদ্যালয়ের ইউকে ডেটা সংরক্ষণাগার দ্বারা পরিচালিত আমার নামে থাকা তথ্য সংরক্ষণ করার বিষয়ে সম্মতি জানাই।
- ☐ আমি বুঝতে পেরেছি যে, আমি গবেষকের সাথে আরও তথ্যের জন্য যোগাযোগ করতে পারি (মোহাম্মদ মেহেদী হাসান; ফোনঃ ০১৯১১৯২৪৪৩৪)।
- ☐ নীচে স্বাক্ষর করে, আমি এই গবেষণা প্রকল্পে অংশ নিতে সম্মতি জানাই।

_____   _____   _____
        নাম   স্বাক্ষর   তারিখ

আমার ইমেইল আইডিঃ

বাড়িতে আমি যে ভাষায় কথা বলিঃ

4.1.3 Information sheet for 19-24 years old
অংশগ্রহণকারীদের (বয়স ১৯-২৪ বছর) তথ্য বিবরণী

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CYCLES International Survey: Dhaka, Bangladesh

(Children & Youth in Cities, Lifestyles Evaluation and Sustainability)

শুভেচ্ছা,

আমি মোহাম্মদ মেহেদী হাসান, ক্যানটারবারি বিশ্ববিদ্যালয়ের একজন পিএইচডি গবেষক। আমি "CYCLES" নামে একটি প্রকল্পে কাজ করছি, যা ঢাকা সহ বিশ্বের ৭টি শহরে বসবাসকারী তরুণদের শহরে বসবাসের অভিজ্ঞতা মূল্যায়ন করবে।

সাইকেলস (CYCLES) সমীক্ষায় অংশ নেওয়ার জন্য আমন্ত্রণ

আমরা আপনাকে এই গবেষণায় অংশ নিতে আরও ৩০০–৫০০ জন তরুণদের পাশাপাশি আমন্ত্রণ জানাচ্ছি। কারণ, আপনার বয়স ১২ থেকে ২৪ বছর এবং আপনি ঢাকায় থাকেন। আমরা আপনার ঢাকায় বসবাসের অভিজ্ঞতা সম্পর্কে জানতে আগ্রহী। আপনি যদি এই গবেষণায় অংশ নিতে চান, আপনাকে ১৫ মিনিটের একটি জরিপ সম্পন্ন করতে বলা হবে। জরিপটিতে আপনার ভালো থাকা, আপনার এলাকার চারপাশের এবং শহরের বিভিন্ন দিক নিয়ে আপনার মতামত জিজ্ঞাসা করা হবে।

আমরা আপনাকে নিশ্চয়তা দিচ্ছি যে, আপনার গোপনীয়তা সর্বদা রক্ষা করা হবে। অংশগ্রহণকারীদের বা অন্যদের যে কোনও সম্ভাব্য ক্ষতি বা বিপদ সম্পর্কিত বিষয়ে কর্তৃপক্ষকে জানানো আমাদের কর্তব্য।

আমি কীভাবে গবেষণায় অংশ নেব?

আপনি যদি এই গবেষণার অংশ হতে চান তবে পরবর্তী পদক্ষেপটি হলো, সম্মতি ফর্মটিতে স্বাক্ষর করা এবং এটি আমার কাছে ফিরিয়ে দেওয়া।

অনেক ধন্যবাদ।

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4.1.4 Consent form for 19-24 years

অংশগ্রহণকারীদের (বয়স ১৯-২৪ বছর) সম্মতি পত্র

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CYCLES International Survey: Dhaka, Bangladesh

(Children & Youth in Cities, Lifestyles Evaluation and Sustainability)

- ☐ আমি অংশগ্রহণকারীর তথ্য বিবরণীটি পড়েছি যাতে এই প্রকল্পের সম্পূর্ণ ব্যাখ্যা দেওয়া হয়েছে এবং আমি প্রশ্ন জিজ্ঞাসা করার সুযোগ পেয়েছি।
- ☐ আমি যদি গবেষণায় অংশ নিতে রাজি হই তবে আমার কী করা প্রয়োজন তা আমি বুঝতে পেরেছি।
- ☐ আমি বুঝতে পেরেছি যে, আমার অংশগ্রহণ স্বেচ্ছাসেবামূলক এবং আমি যে কোনও সময়ে এটা প্রত্যাহার করতে পারি। অংশগ্রহণ প্রত্যাহারের মধ্যে আমি যে তথ্য সরবরাহ করেছি তা প্রত্যাহার করার সুযোগ থাকবে।
- ☐ আমি বুঝতে পেরেছি যে, আমার পরিচয়টি গবেষকদের কাছে গোপন রাখা হবে এবং যে কোনও প্রতিবেদনে প্রকাশিত ফলাফল আমাকে বা অন্যান্য অংশগ্রহণকারীদের সনাক্ত করবে না। আমি বুঝতে পেরেছি যে, এই গবেষণার ফলাফলগুলি সর্বজনীন এবং অনলাইনে প্রকাশিত হবে।
- ☐ আমি বুঝতে পেরেছি যে, আমার পরিচয় গবেষণা দলের বাইরের লোকের কাছে প্রকাশিত হবে না এবং কঠোর গোপনীয়তার সাথে UK Data Protection Act 2018 and the New Zealand Privacy Act 1993 অনুসারে আমার সমস্ত ব্যক্তিগত তথ্য সংরক্ষণ করা হবে ।
- ☐ আমি তথ্য বিবরণীতে বর্ণিত আমার বিশেষ তথ্য (জাতিগত, ধর্ম) প্রদানে একমত হয়েছি।
- ☐ আমি যুক্তরাজ্যের সারে বিশ্ববিদ্যালয় দ্বারা তথ্য নিয়ন্ত্রণকারীদের আমার তথ্য সংগ্রহের করার জন্য সম্মতি জানাই।
- ☐ আমি ভবিষ্যতে অন্যান্য গবেষকের ব্যবহারের জন্য যুক্তরাজ্যের এসেক্স বিশ্ববিদ্যালয়ের ইউকে ডেটা সংরক্ষণাগার দ্বারা পরিচালিত আমার নামে থাকা তথ্য সংরক্ষণ করার বিষয়ে সম্মতি জানাই।
- ☐ আমি বুঝতে পেরেছি যে, আমি গবেষকের সাথে আরও তথ্যের জন্য যোগাযোগ করতে পারি (মোহাম্মদ মেহেদী হাসান; ফোন: ০১৯১১৯২৪৪৩৪)।
- ☐ নীচে স্বাক্ষর করে, আমি এই গবেষণা প্রকল্পে অংশ নিতে সম্মতি জানাই।

নাম	স্বাক্ষর	তারিখ

আমার ইমেইল আইডিঃ

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বাড়িতে আমি যে ভাষায় কথা বলিঃ

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4.1.5 Information sheet for parents of 12-18 years

অংশগ্রহণকারীদের (বয়স ১২-১৮ বছর) তথ্য বিবরণী – অভিভাবক

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প্রিয় অভিভাবক,

আমি মোহাম্মদ মেহেদী হাসান, ক্যানটারবারি বিশ্ববিদ্যালয়ের একজন পিএইচডি গবেষক। আমি "CYCLES" নামে একটি প্রকল্পে কাজ করছি, যা ঢাকা সহ বিশ্বের ৭টি শহরে বসবাসকারী তরুণদের অভিজ্ঞতা মূল্যায়ন করবে।

আপনার সন্তানকে সমীক্ষায় অংশ নেওয়ার জন্য আমন্ত্রণ

আমাদের গবেষণায় অংশ নিতে ঢাকা শহরে বসবাসরত ১২ থেকে ২৪ বছর বয়সী প্রায় ৩০০–৫০০ জন তরুণ-তরুণীদের আমন্ত্রণ জানাচ্ছি। [...সংগঠন / বিদ্যালয়ের] এর সদস্য/ শিক্ষার্থীরা এই গবেষণার বিষয়ে সম্মতি জানিয়েছে এবং আপনার সন্তান গবেষণার বিষয়ে জেনে, শুনে এবং বুঝে এই ফর্ম এনেছে।

এই গবেষণায় অংশগ্রহণের জন্য আপনার সন্তানের ১৫ মিনিট সময় ব্যয় হবে। জরিপটিতে আপনার সন্তানকে তাদের সুস্বাস্থ্য এবং তাদের শহর এবং চারপাশের বিভিন্ন দিক সম্পর্কে তাদের ধারণা জিজ্ঞাসা করা হবে। গবেষণায় আপনার সন্তানের অংশগ্রহণ সম্পূর্ণ স্বেচ্ছাসেবামূলক।

গোপনীয়তার সীমাবদ্ধতা

আমরা আপনাকে নিশ্চয়তা দিচ্ছি যে, আপনার সন্তানের গোপনীয়তা সর্বদা রক্ষা করা হবে। অংশগ্রহণকারীদের বা অন্যদের যে কোনও সম্ভাব্য ক্ষতি বা বিপদ সম্পর্কিত বিষয়ে কর্তৃপক্ষকে জানানো আমাদের কর্তব্য।

আমার সন্তান কিভাবে গবেষণায় অংশ নিতে সম্মতি জানাবে?

আপনার সন্তানের সাথে গবেষণাটি আলোচনা করুন। যদি আপনারা উভয়ই গবেষণায় অংশগ্রহণে সম্মত হন তবে দয়া করে সংযুক্ত সম্মতি ফর্মগুলিতে স্বাক্ষর করুন। ফর্মগুলি এক সপ্তাহের মধ্যে গবেষণা দলকে ফেরত দিতে হবে। যদি আপনারা উভয়ই সম্মত হন তবে আমরা সম্মতি ফর্ম সংগ্রহের পরে জরিপ শুরু করতে আপনার সন্তানের সাথে যোগাযোগ করব। জরিপটি নিজ উদ্যোগে বা নির্ধারিত সময়ে গবেষণা সহকারীর সহায়তায় সম্পন্ন করা হবে।

অনেক ধন্যবাদ।

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4.1.6 Consent form for parents of 12-18 years

অংশগ্রহণকারীদের (বয়স ১২-১৮ বছর) অভিভাবকের সম্মতি পত্র

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- ☐ আমি তথ্য বিবরণীটি পড়েছি এবং এতে এই প্রকল্পের সম্পূর্ণ ব্যাখ্যা দেওয়া হয়েছে এবং আমি প্রশ্ন জিজ্ঞাসা করার সুযোগ পেয়েছি।

- ☐ আমার সন্তান যদি গবেষণায় অংশ নিতে রাজি হয় তবে আমার সন্তানের কী করা প্রয়োজন তা আমি বুঝতে পেরেছি।

- ☐ আমি বুঝতে পেরেছি যে, আমার সন্তানের অংশগ্রহণ স্বেচ্ছাসেবামূলক এবং যে কোনও সময়ে এটা প্রত্যাহার করতে পারে। অংশগ্রহণ প্রত্যাহারের মধ্যে আমার সন্তান যে তথ্য সরবরাহ করবে তা প্রত্যাহার করার সুযোগ থাকবে।

- ☐ আমি বুঝতে পেরেছি যে, আমার সন্তানের পরিচয়টি গবেষকদের কাছে গোপন রাখা হবে এবং যে কোনও প্রতিবেদনে প্রকাশিত ফলাফল তাকে বা অন্যান্য অংশগ্রহণকারীদের সনাক্ত করবে না। আমি বুঝতে পেরেছি যে, এই গবেষণার ফলাফলগুলি সর্বজনীন এবং অনলাইনে প্রকাশিত হবে।

- ☐ আমি বুঝতে পেরেছি যে, আমার সন্তানের পরিচয় গবেষণা দলের বাইরের লোকের কাছে প্রকাশিত হবে না এবং UK Data Protection Act 2018 and the New Zealand Privacy Act 1993 অনুসারে আমার সন্তানের সমস্ত ব্যাক্তিগত তথ্য সংরক্ষণ করা হবে।

- ☐ আমি তথ্য বিবরণীতে বর্ণিত উদ্দেশ্যে আমার সন্তানের বিশেষ বিভাগের ডেটা (জাতিগত, ধর্ম) সংগ্রহ করার জন্য একমত হয়েছি।

- ☐ আমি যুক্তরাজ্যের সারে বিশ্ববিদ্যালয় দ্বারা ডেটা নিয়ন্ত্রণকারীদের আমার সন্তানের তথ্য সংগ্রহের করার জন্য সম্মতি জানাই।

- ☐ আমি ভবিষ্যতে অন্যান্য গবেষকদের ব্যবহারের জন্য যুক্তরাজ্যের এসেক্স বিশ্ববিদ্যালয়ের ইউকে ডেটা সংরক্ষণাগার দ্বারা পরিচালিত আমার সন্তানের নামে থাকা তথ্য সংরক্ষণ করার বিষয়ে সম্মতি জানাই।

- ☐ আমি পরবর্তীতে গবেষণার ফলাফল জানতে আগ্রহী। ইমেইল আইডি ....

- ☐ আমি বুঝতে পেরেছি যে, আমি গবেষকের সাথে আরও তথ্যের জন্য যোগাযোগ করতে পারি, মোহাম্মদ মেহেদী হাসান; ফোনঃ ০১৯১১৯২৪৪৩৪।

- ☐ নীচে স্বাক্ষর করে, আমি এই গবেষণা প্রকল্পে আমার সন্তানের অংশ নেওয়াতে সম্মতি জানাই।

——————————   ——————————   ——————————
         নাম   স্বাক্ষর   তারিখ

আপনার সন্তানের নামঃ

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আপনার সন্তানের ইমেইল আইডি   (যেখানে জরীপ ফলাফল পাঠানো যাবে)

4.1.7 Information sheet for school and college

☐

<div align="center">অংশগ্রহণকারীদের তথ্য বিবরণী) স্কুল / সংস্থা (</div>

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</div>

আমি মোহাম্মদ মেহেদী হাসান, ক্যান্টারবারি বিশ্ববিদ্যালয়ের একজন পিএইচডি গবেষক। আমি "CYCLES" নামে একটি প্রকল্পে কাজ করছি, যা ঢাকা সহ বিশ্বের ৭টি শহরে বসবাসকারী যুবকদের অভিজ্ঞতা মূল্যায়ন করবে। আমরা অন্য ছয়টি দেশে (ব্রাজিল, ভারত, জাপান, নিউজিল্যান্ড, দক্ষিণ আফ্রিকা এবং যুক্তরাজ্য) গবেষণা দলের সাথে কাজ করছি যারা একই ধরনের প্রকল্পগুলি পরিচালনা করছে।

সমীক্ষায় অংশ নেওয়ার জন্য আমন্ত্রণ

আমাদের গবেষণায় অংশ নিতে ঢাকা শহরে বসবাসরত ১২ থেকে ২৪ বছর বয়সী প্রায় ৩০০-৫০০ জন তরুণ-তরুণীদের আমন্ত্রণ জানাচ্ছি। আপনার অনুমতি নিয়ে আপনার সংগঠন/বিদ্যালয়ের সদস্য/শিক্ষার্থীদের এই গবেষণায় আমন্ত্রণ জানাচ্ছি। এই গবেষণায় তাদের ১৫ মিনিটের সমীক্ষা সম্পন্ন করতে হবে। জরিপটি তাদের সুস্বাস্থ্য, তাদের শহর এবং চারপাশের বিভিন্ন দিক সম্পর্কে তাদের ধারণা জানতে চাওয়া হবে। আপনি বিষয়টা আপনার সদস্য/শিক্ষার্থীদের জানাতে পারেন এবং যারা আগ্রহী তাদের ফর্ম দিতে পারেন যেটা তারা মা-বাবার অনুমতি জানার জন্য বাড়িতে নিতে পারে।পরবর্তীতে তারা এগুলো ফেরত দেবে (এক সপ্তাহের মধ্যে)।

গবেষণায় আপনার সংগঠন/বিদ্যালয়ের অংশগ্রহণ সম্পূর্ণ স্বেচ্ছাসেবামূলক। পরবর্তীতে শিক্ষার্থী কিংবা তাদের পিতামাতা যদি অংশগ্রহণ প্রত্যাহার করতে চান তবে আমাদেরকে দেয়া তাদের সব তথ্য সরিয়ে নেয়া হবে।

গোপনীয়তার সীমাবদ্ধতা

আমরা আপনাকে নিশ্চয়তা দিচ্ছি যে, আপনার সংগঠন/বিদ্যালয়ের গোপনীয়তা সর্বদা রক্ষা করা হবে। অংশগ্রহণকারীদের বা অন্যদের যে কোনও সম্ভাব্য ক্ষতি বা বিপদ সম্পর্কিত বিষয়ে কর্তৃপক্ষকে জানানো আমাদের কর্তব্য।

আমি কিভাবে গবেষণায় অংশ নিতে সংগঠন/বিদ্যালয় থেকে সদস্য/শিক্ষার্থীদের সম্মতি নেবো ?

আপনার সংগঠন/বিদ্যালয়ের শিক্ষার্থীদের সাথে গবেষণাটি আলোচনা করুন। যদি উভয়ই গবেষণায় অংশগ্রহণে সম্মত হন তবে দয়া করে সংযুক্ত সম্মতি ফর্মগুলিতে স্বাক্ষর করুন এবং আমাকে ১ সপ্তাহের মধ্যে ফেরত দিন। কেউ যদি অংশ নিতে রাজি হন তবে আমি তার নির্ধারিত সময়ে যোগাযোগ করব।

আপনার বিবেচনার জন্য অনেক ধন্যবাদ।

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4.1.8 Consent form-school/college

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স্কুল / সংস্থার সম্মতি পত্র – ঘোষণা

</div>

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এই ফর্মটিতে স্বাক্ষর করে, আমি আগ্রহী তরুণদের মধ্যে একটি ঘোষণা এবং ফর্ম বিতরণ করতে সম্মতি দিচ্ছি।

এই সম্মতি দেওয়ার পরে, আমি স্বীকার করি:

- আমি অংশগ্রহণকারী তথ্য বিবরণীটি পড়েছি এবং এই প্রকল্পের সম্পূর্ণ ব্যাখ্যা দেওয়া হয়েছে এবং আমি প্রশ্ন জিজ্ঞাসা করার সুযোগ পেয়েছি।
- আমার সংগঠন/বিদ্যালয় যদি গবেষণায় অংশ নিতে রাজি হয় তবে আমার কী করা প্রয়োজন তা আমি বুঝতে পেরেছি।
- আমি বুঝতে পেরেছি যে, আমার সংগঠন/বিদ্যালয়ের অংশগ্রহণ স্বেচ্ছাসেবামূলক এবং অংশগ্রহণকারী যে কোনও সময়ে এটা প্রত্যাহার করতে পারবে। অংশগ্রহণ প্রত্যাহারের মাধ্যমে যে তথ্য সরবরাহ করা হবে তা প্রত্যাহার করার সুযোগ থাকবে।
- অংশগ্রহণকারী যদি ১৮ বছরের কম বয়সী হয় তবে অনুমতির জন্য তাদের পিতামাতার কাছে অনুমতিপত্র পাঠানো হবে। তারা তাতে স্বাক্ষর করে তাদের সন্তানের অংশগ্রহণের অনুমতি দেবে।
- আমি বুঝতে পেরেছি যে, আমার সংগঠন/বিদ্যালয়ের পরিচয় গবেষকদের কাছে গোপন রাখা হবে এবং যে কোনও প্রতিবেদনের প্রকাশিত ফলাফল আমার সংগঠন/বিদ্যালয়ের বা অন্যান্য অংশগ্রহণকারীদের সনাক্ত করবে না। আমি বুঝতে পেরেছি যে, এই গবেষণার ফলাফলগুলি সর্বজনীন এবং অনলাইনে প্রকাশিত হবে।
- আমি বুঝতে পেরেছি যে, আমার আমার সংগঠন/বিদ্যালয়ের পরিচয় গবেষণা দলের বাইরের লোকের কাছে প্রকাশিত হবে না এবং UK Data Protection Act 2018 and the New Zealand Privacy Act 1993 অনুসারে আমার সংগঠন/বিদ্যালয়ের সমস্ত ব্যক্তিগত তথ্য রাখা এবং সংরক্ষণ করা হবে।
- আমি তথ্য বিবরণীতে বর্ণিত উদ্দেশ্যে বিশেষ বিভাগের তথ্য (জাতিগত, ধর্ম) সংগ্রহ করার জন্য একমত হয়েছি।
- আমি যুক্তরাজ্যের সারে বিশ্ববিদ্যালয় দ্বারা তথ্য নিয়ন্ত্রণকারী যারা তথ্য সংগ্রহ করবে তাদের সম্মতি জানাই।
- আমি ভবিষ্যতে অন্যান্য গবেষকের ব্যবহারের জন্য যুক্তরাজ্যের এসেক্স বিশ্ববিদ্যালয়ের ইউকে ডেটা সংরক্ষণাগার দ্বারা পরিচালিত আমার সংগঠন/বিদ্যালয়ের নামে থাকা তথ্য সংরক্ষণ করার বিষয়ে সম্মতি জানাই।
- আমি বুঝতে পেরেছি যে, আমি গবেষকের সাথে আরও তথ্যের জন্য যোগাযোগ করতে পারি (মোহাম্মদ মেহেদী হাসান; ফোনঃ ০১৯১১৯২৪৪৩৪)।
- নীচে স্বাক্ষর করে, আমি এই গবেষণা প্রকল্পে অংশ নিতে সম্মতি জানাই।

নাম	স্বাক্ষর	তারিখ

সংগঠন/বিদ্যালয়ের নামঃ

4.1.9 Announcement-school/college

স্কুল / সংস্থার জন্য ঘোষণা

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তারিখঃ

স্কুল / সংস্থার জন্য নমুনা ঘোষণা

সম্মানিত) অধ্যক্ষ (. . . . . / ,

আপনার সংস্থা/স্কুলের জন্য উপযুক্ত বৈশিষ্ট্য-এর ক্ষেত্রে এই নমুনা ঘোষণাকে পুনরায় সাজানো যেতে পারে। এটি কোনও ফেসবুক পেইজে রাখা যেতে পারে, ইমেলের মাধ্যমে প্রেরণ করা যেতে পারে , ক্লাস বা মিটিং চলাকালীন সময়ে ঘোষণা করা যেতে পারে।

মোহাম্মদ মেহেদী হাসান, ক্যানটারবারি বিশ্ববিদ্যালয়ের একজন পিএইচডি গবেষক; "CYCLES" নামে একটি প্রকল্পে কাজ করছেন, যা ঢাকা সহ বিশ্বের অন্য ছয়টি দেশের বিভিন্ন শহরে বসবাসকারী যুবকদের অভিজ্ঞতা মূল্যায়ন করবে। গবেষণায় অংশ নিতে ঢাকা শহরে বসবাসরত ১২ থেকে ২৪ বছর বয়সী প্রায় ৩০০-৫০০ জন তরুণ-তরুণীদের আমন্ত্রণ জানানো হচ্ছে।

এই গবেষণায় তাদের ১৫ মিনিটের সমীক্ষা শেষ করতে হবে।

আপনি যদি আগ্রহী হন তবে আরও তথ্যের জন্য দয়া করে শিক্ষক/ সংশ্লিষ্ট ব্যাক্তির সাথে যোগাযোগ করুন।

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4.1.10 Information sheet for school/organization

স্কুল / সংস্থার জন্য তথ্য বিবরণী

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তারিখঃ

CYCLES International Survey: Dhaka, Bangladesh
(Children & Youth in Cities, Lifestyles Evaluation and Sustainability)

সম্মানিত) অধ্যক্ষ / নেতার নাম (,

আমি মোহাম্মদ মেহেদী হাসান, ক্যানটারবারি বিশ্ববিদ্যালয়ের একজন পিএইচডি গবেষক। আমি "CYCLES" নামে একটি প্রকল্পে কাজ করছি, যা ঢাকা সহ বিশ্বের বিভিন্ন শহরে বসবাসকারী যুবকদের অভিজ্ঞতা মূল্যায়ন করবে। আমি অন্য ছয়টি দেশের (ব্রাজিল, ভারত, জাপান, নিউজিল্যান্ড, দক্ষিণ আফ্রিকা এবং যুক্তরাজ্য) গবেষণা দলের সাথে কাজ করছি যারা একই ধরনের প্রকল্পগুলি পরিচালনা করছে।

সমীক্ষায় অংশ নেওয়ার জন্য আমন্ত্রণ

আমাদের গবেষণায় অংশ নিতে ঢাকা শহরে বসবাসরত ১২ থেকে ২৪ বছর বয়সী প্রায় ৩০০-৫০০ জন তরুণ-তরুণীদের আমন্ত্রণ জানাচ্ছি। আপনার অনুমতি নিয়ে (পিতামাতার অবর্তমানে) আপনার সংগঠন/বিদ্যালয়ের সদস্য/শিক্ষার্থীদের এই গবেষণার আমন্ত্রণ জানাচ্ছি। এই গবেষণায় তাদের ১৫ মিনিটের সমীক্ষা শেষ করতে হবে। জরিপটি তাদের সুস্বাস্থ্য এবং তাদের শহর এবং চারপাশের বিভিন্ন দিক সম্পর্কে তাদের ধারণা জিজ্ঞাসা করবে। আপনি বিষয়টা আপনার সদস্য/শিক্ষার্থীদের জানাতে পারেন এবং যারা আগ্রহী তাদের ফর্ম দিতে পারেন। পরবর্তীতে তারা স্বাক্ষর করে এগুলো ফেরত দেবে।

এই গবেষণায় আপনার সংগঠন/বিদ্যালয়ের অংশগ্রহণ সম্পূর্ণ স্বেচ্ছাসেবামূলক। পরবর্তীতে কোন সদস্য/শিক্ষার্থীরা যদি অংশগ্রহণ প্রত্যাহার করতে চান তবে আমাদেরকে দেয়া তাদের সব তথ্য সরিয়ে নেয়া হবে।

গোপনীয়তার সীমাবদ্ধতা

আমরা আপনাকে নিশ্চয়তা দিচ্ছি যে, আপনার সংগঠন/বিদ্যালয়ের গোপনীয়তা সর্বদা রক্ষা করা হবে। অংশগ্রহণকারীদের বা অন্যদের যে কোনও সম্ভাব্য ক্ষতি বা বিপদ সম্পর্কিত বিষয়ে কর্তৃপক্ষকে জানানো আমাদের কর্তব্য।

আমি কিভাবে গবেষণায় অংশ নিতে সংগঠন/বিদ্যালয় থেকে সদস্য/শিক্ষার্থীদের সম্মতি নেবো ?

আপনার সংগঠন/বিদ্যালয়ের শিক্ষার্থীদের সাথে গবেষণাটি আলোচনা করুন। যদি উভয়ই গবেষণায় অংশগ্রহণে সম্মত হন তবে দয়া করে সংযুক্ত সম্মতি ফর্মগুলিতে স্বাক্ষর করুন এবং আমাকে ১ সপ্তাহের মধ্যে ফেরত দিন। কেউ যদি অংশ নিতে রাজি হন তবে আমি তার নির্ধারিত সময়ে যোগাযোগ করব।

আপনার বিবেচনার জন্য অনেক ধন্যবাদ।

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4.1.11 Consent form for representative of school/organization in absent of parents

পিতামাতার অবর্তমানে স্কুল / সাংগঠনিক প্রতিনিধিদের সম্মতি পত্র

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তারিখঃ

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- ☐ আমি তথ্য বিবরণীটি পড়েছি এবং এতে এই প্রকল্পের সম্পূর্ণ ব্যাখ্যা দেওয়া হয়েছে এবং আমি প্রশ্ন জিজ্ঞাসা করার সুযোগ পেয়েছি।

- ☐ আমার সংগঠন/বিদ্যালয় যদি গবেষণায় অংশ নিতে রাজি হয় তবে আমার কী করা প্রয়োজন তা আমি বুঝতে পেরেছি।

- ☐ আমি বুঝতে পেরেছি যে, আমার সংগঠন/বিদ্যালয়ের অংশগ্রহণ স্বেচ্ছাসেবামূলক এবং অংশগ্রহণকারী যে কোনও সময়ে এটা প্রত্যাহার করতে পারবে। অংশগ্রহণ প্রত্যাহারের মাধ্যমে যে তথ্য সরবরাহ করা হবে তা প্রত্যাহার করার সুযোগ থাকবে।

- ☐ আমি বুঝতে পেরেছি যে, আমার সংগঠন/বিদ্যালয়ের পরিচয় গবেষকদের কাছে গোপন রাখা হবে এবং যে কোনও প্রতিবেদনে প্রকাশিত ফলাফল আমার সংগঠন/বিদ্যালয়ের বা অন্যান্য অংশগ্রহণকারীদের সনাক্ত করবে না। আমি বুঝতে পেরেছি যে, এই গবেষণার ফলাফল সর্বজনীন এবং অনলাইনে প্রকাশিত হবে।

- ☐ আমি বুঝতে পেরেছি যে, আমার আমার সংগঠন/বিদ্যালয়ের পরিচয় গবেষণা দলের বাইরের লোকের কাছে প্রকাশিত হবে না এবং UK Data Protection Act 2018 and the New Zealand Privacy Act 1993 অনুসারে আমার সংগঠন/বিদ্যালয়ের সমস্ত ব্যক্তিগত তথ্য সংরক্ষণ করা হবে ।

- ☐ আমি তথ্য বিবরণীতে বর্ণিত উদ্দেশ্যে বিশেষ বিভাগের তথ্য (জাতিগত, ধর্ম) সংগ্রহ করার জন্য একমত হয়েছি।

- ☐ আমি যুক্তরাজ্যের সারে বিশ্ববিদ্যালয় দ্বারা তথ্য নিয়ন্ত্রণকারী যারা তথ্য সংগ্রহের কাজ করবে তাদের সম্মতি জানাই।

- ☐ আমি ভবিষ্যতে অন্যান্য গবেষকের ব্যবহারের জন্য যুক্তরাজ্যের এসেক্স বিশ্ববিদ্যালয়ের ইউকে ডেটা সংরক্ষণাগার দ্বারা পরিচালিত আমার সংগঠন/বিদ্যালয়ের নামে থাকা তথ্য সংরক্ষণ করার বিষয়ে সম্মতি জানাই।

- ☐ আমি পরবর্তীতে গবেষণার ফলাফল জানতে আগ্রহী। ইমেইল আইডি . . . .

- ☐ আমি বুঝতে পেরেছি যে, আমি গবেষকের সাথে আরও তথ্যের জন্য যোগাযোগ করতে পারি, মোহাম্মদ মেহেদী হাসান; ফোনঃ০১৯১১৯২৪৪৩৪ ।

- ☐ নীচে স্বাক্ষর করে, আমি এই গবেষণা প্রকল্পে অংশ নিতে সম্মতি জানাই।

_____   _____   _____
নাম   স্বাক্ষর   তারিখ

4.1.12 Research assistant's confidentiality agreement

Mohammad Mehedi Hasan
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CYCLES International Survey: Dhaka
(Children & Youth in Cities, Lifestyles Evaluation and Sustainability)

Research assistant confidentiality agreement

Thank you for your assistance with the CYCLES research project. Protecting the confidentiality of the research participants is essential and you are therefore asked to sign the following confidentiality agreement.

I, _____ , agree to maintain full confidentiality in regards to any and all verbal information and hard copy information received from the research team for the above project.

Furthermore, I agree:

- To hold in strictest confidence the identification of any individual and the content of any documents containing data or privilege information relating to the project.
- To not make copies of any files or materials, unless specifically approved to do so by the Research Team Co-investigator Mohammad Mehedi Hasan.
- To store all files and materials in a password protected computer or safe, secure location as long as they are in my possession.
- To return all files and materials to Co-investigator Mohammad Mehedi Hasan in a complete and timely manner.
- To delete all electronic files containing study-related documents or files from my computer hard drive and any back-up devices on completion of my project-based tasks.

I am aware that I can be held legally responsible for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information

_____ _____ _____
Name   (Signature)   (Date)

contained in files to which I will have access.

4.2 CYCLES International survey questions

Section 3: 'About my city'

3.1 Thinking about your life in your city, please select one option to show how satisfied or dissatisfied you are with:

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
Having access to good education or opportunities to build skills	○	○	○	○	○
Having access to good job opportunities	○	○	○	○	○
Feeling safe on the streets	○	○	○	○	○
Having a clean environment, clean air, and enough safe water to drink and wash	○	○	○	○	○
Having access to enough food to eat	○	○	○	○	○
Having access to affordable, good quality housing	○	○	○	○	○
Having access to social spaces and events for people like me (e.g. community centres, village halls, town squares, libraries, festivals)	○	○	○	○	○
Having access to green space or the natural environment (e.g. parks, gardens, beaches, lakes)	○	○	○	○	○
Having access to shops and markets	○	○	○	○	○
Having access to public transport (e.g. buses, trains)	○	○	○	○	○

3.2 Thinking about play grounds or parks near where you live, please select one option to show how satisfied or dissatisfied you are with the:

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Don't know
Attractiveness of the space	◯	◯	◯	◯	◯	◯
Facilities in the space (eg. drinking water and seating)	◯	◯	◯	◯	◯	◯
Behavior of others in the space	◯	◯	◯	◯	◯	◯

3.3 Thinking about how you travel in your local area (please select one option).

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Don't know
Pedestrian's access to footpaths	◯	◯	◯	◯	◯	◯
The behavior of others using the footpath	◯	◯	◯	◯	◯	◯
Rickshaw passenger's safety and security	◯	◯	◯	◯	◯	◯

3.4 Thinking about bus travel in Dhaka City, select one option to show how much you agree or disagree with the statements below:

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	Don't know
Buses run to schedule	○	○	○	○	○	○
I can usually find a seat	○	○	○	○	○	○
Bus drivers/ conductors are courteous/respectful	○	○	○	○	○	○
Bus drivers drive safely	○	○	○	○	○	○
Other passengers are respectful to me	○	○	○	○	○	○

3.5a What is the **worst** thing about living in your neighbourhood or city? (Please comment in the space below)

3.5b What is the **best** thing about living in your neighbourhood or city? (Please comment in the space below)
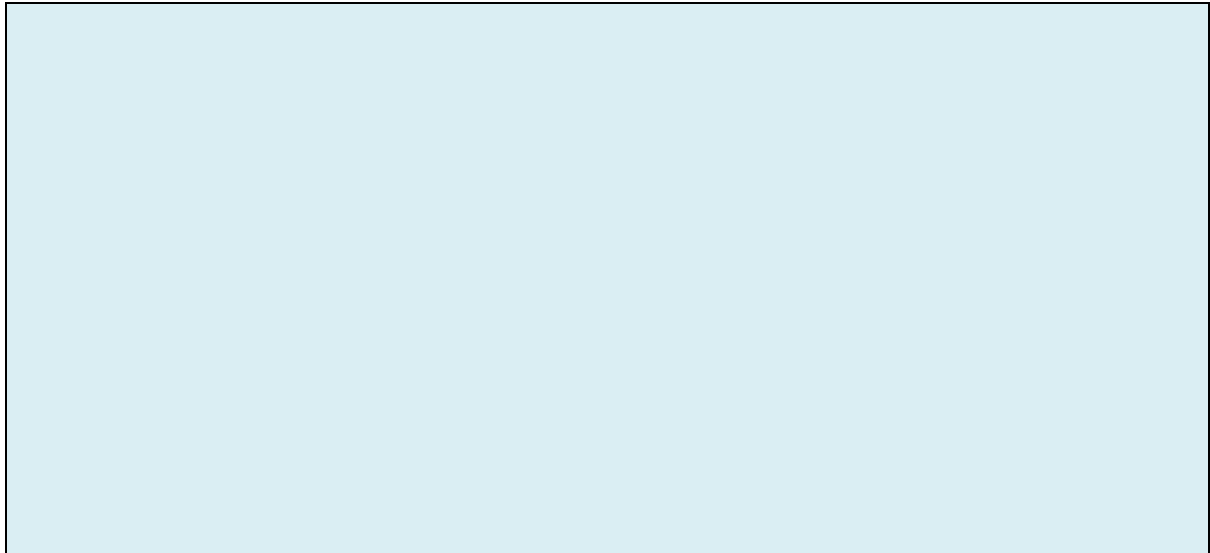
Section 4: 'About my community'

4.1 How much do you agree or disagree with the following statements? (Select one option)

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree	Don't know
Most people who live in my neighbourhood trust one another.	○	○	○	○	○	○
Together people in my neighbourhood can influence what happens in the city.	○	○	○	○	○	○
I am involved in planning or decisions for the community.	○	○	○	○	○	○
People who make decisions, listen to people like me.	○	○	○	○	○	○
I believe I can make a difference in my city.	○	○	○	○	○	○