MAKING TIRANA CHILD-FRIENDLY: CO-CREATING A NETWORK OF SUSTAINABLE CHILD-FRIENDLY ROUTES

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Approval sheet of the Thesis

This is to certify that we have read this thesis entitled **"Making Tirana child-friendly: Co-creating a network of sustainable child-friendly routes."** and that in our opinion it is fully adequate, in scope and quality, as a thesis forthe degree of Master of Science.

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I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

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ABSTRACT

MAKING TIRANA CHILD-FRIENDLY: CO-CREATING A NETWORK OF SUSTAINABLE CHILD-FRIENDLY ROUTES.

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Children have the right to grow up in an environment where they feel safe and included. It is important for a healthy city to allow various generations to meet and interact daily. As young citizens, they have the equal right to be part of the cityscape and to access basic services and public spaces, all these fundamental rights based on the Convention of the Child Rights. But this is not always the case on our cities. Especially in Tirana, children are deprived of most urban spaces, as they have not been taken into consideration during the urban design process. This thesis aims to bring out the playfulness in our urban city and make place for children into it. To make them feel integrated into the chosen urban context, it is important to understand the current conditions of their day-to-day spaces.

An analysis of relevant literature concepts will be conducted to gain knowledge on how we can create a network of urban spaces that are safe, socially and physically more inclusive and sustainable. The analysis focused on identifying the principles of a successful child-centric city, co-creation, and participatory methods to understand children's perspective as young citizens and sustainable design solutions for improving independent mobility.

Today, just from an urban-scale observation of Tirana the majority of open spaces have the same expression. Children recognize them because they have seen them before. Only a ten-minute walk from the city centre, the site was chosen due to its contrasting urban fabrics and lack of safe open spaces that cater children needs. Two meso-zones are selected according three main criteria including school zone,

mixed used street and historically underserved neighborhood. The purpose of this study is to provide an answer to the research question of how the selected urban context can support a network of spaces, beyond playgrounds, that are purposefully designed to create a system of "children's infrastructure" that is sensitive to the physical and mental development and changing needs and behaviours of children as they grow. Within the framework of this thesis, it is proposed a set of solutions that capture the results from literature, desktop and on-site analysis and participatory questionnaire where the urban playscape is reconsidered. By doing so, we will be able to reintegrate children into the urban space and transform it into a vibrant space that celebrates flexibility and livability.

This thesis suggests at the end a set of interventions that could be adapted to similar contexts, and with the help of Children's Participation, evaluates its generalizability of research-based data and designing methods, to provide continuous methods and referential design strategies for building child-friendly networks in urban Tirana.

Keywords: *Child-Friendly City, urban playground, co-creating, independent mobility, playing streets, sustainable solutions.*

ABSTRAKT

TIRANA MIQËSORE PËR FËMIJËT: BASHKËKRIJIMI I NJË RRJETI RRUGËSH TË QËNDRUESHME DHE MIQËSORE PËR FËMIJËT.

Bullari, Ketjona

Master Shkencor, Departamenti i Arkitekturës

Udhëheqësi: Dr. Paolo Camilletti

Fëmijët kanë të drejtë të rriten në një mjedis ku ndihen të sigurt dhe të përfshirë. Është e rëndësishme që një qytet i shëndetshëm të lejojë breza të ndryshëm të takohen dhe të ndërveprojnë çdo ditë. Si qytetarë të rinj, ata kanë të drejtën e barabartë për të qenë pjesë e peizazhit të qytetit dhe për të aksesuar shërbimet bazë dhe hapësirat publike, të gjitha këto të drejta themelore të bazuara në Konventën e të Drejtave të Fëmijëve. Por kjo nuk ndodh gjithmonë në qytetet tona. Sidomos në Tiranë, fëmijët janë të privuar nga shumica e hapësirave urbane, pasi nuk janë marrë në konsideratë gjatë procesit të projektimit urban. Kjo tezë synon të nxjerrë në pah argëtimin në qytetin tonë urban dhe të krijojë vend për fëmijët në të. Për t'i bërë ata të ndihen të integruar në kontekstin urban të zgjedhur, është e rëndësishme të kuptohen kushtet aktuale të hapësirave që ata aksesojnë në përditshmëri.

Një analizë e koncepteve të literaturës përkatëse miqësore për fëmijët do të kryhet për të fituar njohuri se si mund të krijojmë infrastuktura argëtuese urbane që janë më gjithëpërfshirëse dhe të qëndrueshme nga ana sociale dhe fizike. Analiza u përqendrua në identifikimin e parimeve të një qyteti të suksesshëm me në qendër fëmijën, bashkë-krijimin dhe metodat pjesëmarrëse për të kuptuar perspektivën e fëmijëve si qytetarë të rinj dhe zgjidhjet e qëndrueshme të projektimit për përmirësimin e lëvizshmërisë së pavarur.

Sot, vetëm nga një vëzhgim në shkallë urbane të Tiranës, shumica e hapësirave të hapura kanë të njëjtën shprehje. Fëmijët i njohin sepse i kanë parë më parë. Vetëm dhjetë minuta në këmbë nga qendra e qytetit, zona e studimit u përzgjodh për shkak të vendndodhjes së saj urbane dhe mungesës së hapësirave të sigurta publike që

plotësojnë nevojat e fëmijëve. Dy mezo zona janë përzgjedhur sipas tre kritereve kryesore, duke përfshirë zonën rreth shkollës, rrugën multifunksionale dhe lagjen historikisht të nënshërbyer. Qëllimi i këtij studimi është t'i përgjigjet pyetjes kërkimore se si konteksti urban i përzgjedhur mund të mbështesë një rrjet hapësirash, përtej këndeve të lojërave, që janë projektuar me qëllim për të krijuar një sistem të "infrastrukturës së fëmijëve" që është i ndjeshëm ndaj zhvillimit fizik e mendor dhe ndryshimin e nevojave dhe sjelljeve të fëmijëve ndërsa rriten. Në kuadër të kësaj teze, propozohet një grup zgjidhjesh që mbështeten në literaturë, analizat e zonës dhe pyetësori pjesëmarrës, ku rishikohet peizazhi urban. Duke vepruar kështu, ne do të jemi në gjendje të riintegrojmë fëmijët në hapësirën urbane dhe ta transformojmë atë në një hapësirë të gjallë që manifeston fleksibilitetin dhe jetueshmërinë.

Kjo tezë sugjeron në fund një grup ndërhyrjesh që mund të përshtaten në kontekste të ngjashme, dhe me ndihmën e pjesëmarrjes së fëmijëve, vlerëson përgjithësimin e saj, të dhënave të bazuara në kërkime dhe metodave të projektimit, për të ofruar strategji referenciale të projektimit për ndërtimin e rrjeteve miqësore për fëmijët në Tiranën urbane.

Fjalët kyçe: *Qytet miqësor për fëmijët, shesh lojërash urbane, bashkë-krijim, lëvizshmëri e pavarur, rrugë argëtuese, zgjidhje të qëndrueshme.*

To my family!

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CHAPTER 1

INTRODUCTION

1.1 Problem Statement

Numerous experts have warned us over the last few decades about the negative effects of declining children's spontaneous outdoor play and physical activity on their physical and mental well-being (Gray 2011, Chudacoff 2007). Rising rates of diabetes, obesity, depression, anxiety, loneliness, and natural world phobias have all been related to a drop-in outdoor activity and are cause for concern. Planners, architects, councils, and developers all play important roles in ensuring that neighbourhoods prioritize children's health and well-being. Urban planners, governments, and investors all play important roles in ensuring that neighbourhoods prioritize children's health and well-being. Placing children's well-being, development, and future at the centre of the city's concerns is not only fair, but it also allows for the alignment across multiple significant and universal problems, such as the general welfare, sustainable urban planning, and climate change adaptation (Gill, 2018). This involves designing towns that give children access to nature, playful places, social connection, autonomous mobility, and a sense of the belonging. The distribution of safe, engaging, and natural play settings is especially critical as our cities expand in size and land becomes more precious. Over the past 30 years, Tirana's population has increased by a factor of five, much of which was unplanned until recently. Rapid increases in the number of cars on the road have caused severe traffic jams, car-clogged streets, and significant levels of air pollution. According to a Tirana study that was given to parents and other caregivers, 62% of kids utilized the street in front of their houses to play, although only 5% of them desired to do so (Qendra Marrdhenie, 2018). These results clearly show that public parks and playgrounds are not easily accessible on a day-to-day basis. But how safe are our streets to accommodate play? Understanding the importance of childhood and acting toward child-friendly cities is key to define spatial solutions for all ages.

1.2 Thesis Objective

The thesis aims to provide an immersive and engaging scenario of networks between neighbourhoods, streets, and public settings. By including children in the design thought and planning process we can create a successful framework for an engaging, attractive, and sustainable living environment. Only a ten-minute walk from the city centre, the site was chosen due to its contrasting urban fabrics and lack of safe open spaces that cater children needs. The purpose of this study is to provide an answer to the research question of how the selected urban context can support a network of spaces, beyond playgrounds, that are purposefully created to create a system of "children's infrastructure" that is sensitive to the physical development and changing needs and behaviours of children as they grow.

- To capture the challenges and opportunities children face on their day-to-day activities in Tirana.
- To emphasize the role of children in shaping attractive and sustainable living environments.
- To create a system of 'children's infrastructure' that provides immersive and engaging scenarios of networks connecting schools, neighbourhoods, streets and public parks.
- To reintegrate children in the urban space transformed into a safer, more inclusive, nurturing, and sustainable space for them to live, learn, play and thrive in.
- To suggest with the help of Children's Participation, interventions that could be adapted to other contexts.

1.3 Research question

My approach to the thesis began with identifying the main research question:

How can Tirana be made child-friendly? What tactics and spatial interventions can kids help create to make the built world a safer, more welcoming, loving place for them to live, study, play, and thrive?

Sub-research questions:

What challenges and opportunities do children face in Tirana? How can children help to develop a set of interventions that could be adapted to other contexts?

1.4 Scope of work

With the aim to capture the challenges and opportunities children face on their day-to-day activities in Tirana, the process was divided in three phases: understanding, prioritizing, and designing. Overall, the literature collection highlights children's right to the city manifested in two parallel processes: designing for children by recognizing their needs and presence on the urban city; and designing with them to help the feeling of active ownership and sustainable built environments. To design for children, firstly it is important to gain understanding about the chosen site by a set of desktop and on-site analysis carried out to give a spatial and physical comprehension. "Myslym Shyri" area was selected due to its diverse urban fabric and lack of child-friendliness. Then, it is necessary to design with children, in order to be able to propose sustainable solutions that cater their day-to-day needs. A participatory questionnaire was developed and then distributed at two local primary schools "Dora D'Istria" and "Konferenca e Pezës"; to gather information in lines of children how they perceive the built environment and how would they transform it into a more friendly environment. At the end, the extracted results were translated to proposals that attempt to add a child-friendly layer into the streets, school yards, public spaces; all creating a network of spaces connected by safer and more enjoyable streets accessible. A model that can be applied in a variety of the urban contexts is constructed discussing the categories of influential factors on children's range of activities, places that children interact and play in their daily life.

1.5 Organization of the thesis

This thesis is divided in 5 chapters. The organization is done as follows:

Chapter 1 introduces the research question and the problem statement. It also includes the research scope of the study, research design, and overall thesis structure.

Chapter 2 is a collection of literature and concepts of value useful for laying the thesis are further explained. This section begins with a review of child, planning and cities. It defines play as a legitime right as well as an important part of children's physical and psychological development. Proceeds with the understanding of the term of the child-friendly city. The principles of a city child-friendly will then be discussed considering two main concepts: everyday freedom and children's infrastructure. Methods of co-designing important for shaping attractive and sustainable living environments are highlighted through case studies.

Chapter 3 consists of the methodology followed in this study. Methods used for data collection and data analysis are addressed; it is divided into three main parts, including: understanding, prioritizing and design solutions. For the first phase methods used to understand the challenges children face in Tirana are desktop research highlighted through relevant case studies and site analysis, on-site research including collection of both qualitative and quantitative data information in lines of children and caregivers and engagement with children through a co-creation questionnaire. Methods used for analysis are further explained and illustrated.

In Chapter 4, are presented the research findings and the discussion on influence children's movement in an urban environment are explained. Introduces the site, presents data collection process and key research findings which are going to be implemented on the selected site. Finally, the results from children's perception are translated into a proposal that attempts to add a child-friendly layer into the streets, school yards, public spaces, all creating a network of spaces connected by safer and more enjoyable streets accessible by children during their everyday activities.

In Chapter 5, concluding remarks and recommendations for further research are stated.

Appendix chapter presents the data collected from participatory questionnaire and note tables from on-site observation methods.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The literature collection below gives background information on relevant academic studies and key concepts that support this thesis. The literature covers concepts like children, city, play, child-friendly city and its principles, active mobility and children infrastructure, co-creation and participatory methods to understand children's perspective as young citizens, sustainable design solutions for improving active mobility; from various fields of early childhood, health and place; environmental psychology, children's geographies, and outdoor learning was part of the preliminary stage.

2.2 Children, planning, city

It's crucial to think about children, their developmental phases, and their right to live in the city. According to the United Nations Convention on the Rights of the Child (UNICEF, 1989), "children" refers to those ages 0 to 18. From birth until age 5, a child's early years are extremely important for their physical and mental development. Actually, 60% of adult mental structures form in the first three years of life, while around 80% of brain architecture is formed during the prenatal period. Therefore, it is crucial to offer kids access to healthy urban surroundings that encourage relationships between kids and their parents, between kids themselves, with the outside world, and with their final destinations (UNICEF's Child-Friendly Cities Initiative, 2019).

The foundation for social, emotional, cognitive, and physical development throughout a person's life is set throughout the early childhood years, from birth to age five. The brain needs to develop during these years. The brain is more susceptible to outside events and information during this time than it is at any other point in life. Over

80% of a baby's brain, including the synaptic connections that mold linguistic abilities, cognitive abilities, and sensory ability, is created by the age of three, according to UNICEF. A person's future physical and mental health are significantly and permanently impacted by their early years.

According to the UN Convention on the Rights of the Child (UNICEF, 1989), children have two linked rights in the city:

1. Creating for kids: This strategy acknowledges children's existence, needs, and experiences in the built environment. As emphasized by Bishop & Corkery (2017), Churchman (2003), Monaghan (2019), and Vincelot (2018), it underlines the significance of taking children into account during the design process.
2. Designing with kids: This method recognizes kids as capable life experts and engaged contributors to the built world. As stressed by Bishop & Corkery (2017), Chawla (2002), and Monaghan (2019), it entails including kids in the decision-making, design, and creating processes.

A good city is one where children may grow and develop to their greatest potential, gaining self-confidence and actively connecting with the outside world while being independent and capable of handling their own affairs, according to Kevin Lynch in his 1977 book "Growing Up in Cities." According to UNICEF (2007), this quotation emphasizes the significance of giving children's health, safety, education, socialization, and sense of belonging in families and society a high priority.

As our cities become denser and face challenges of affordability and limited space, urban environments have primarily catered to the needs of working adults. Living in cities offers numerous benefits, such as access to amenities, social networks, cultural expressions, and reduced commuting time between home and work. Families are motivated to choose urban locations based on a combination of activities, priorities, and cost considerations (Hjorthol & Bjornskau, 2005). However, city planning needs to be reinvented to address the needs of new families. Researchers have identified a lack of awareness and understanding among planners regarding the regional scale's importance in the daily lives of parents and children. They advocate for more inclusive practices that consider families (Karsten & Vliet, 2006).

Themes like the value of play areas, independent mobility, health, and access to urban green spaces have become increasingly important in creating child-friendly cities, particularly in response to rising childhood obesity rates. In order to create child-friendly settings and maximize their benefits, it is essential to have a knowledge of how different urban elements interact with one another. For neighborhoods, cities, and regions to be strong and thriving, child-friendly communities must be developed. Urban planning and design are crucial in highlighting the importance and agency of children's geography in planning processes within the changing urban landscape. Urban planning and design must distinguish between its duties of highlighting the value of children's territories, the various levels of intervention tactics (bottom-up and top-down), and accepting demographic changes in cities (Krishnamurthy, 2019).

The picture that frequently comes to mind when we think of children and urban public places is a playground with equipment that is dispersed throughout a flat area in primary colors. Children, on the other hand, are flexible and can play anywhere with nearly anything. Children frequently prefer to play in settings where adults may sit on benches for respite. This remark highlights the conflict that exists in behavioral psychology between the desire and actual performance of an action. Even though they may want their kids to play, parents only let it when it is easy for them to watch (Gill T, 2022). All urban residents benefit from well-designed public places, not simply those who are parents of small children. They are especially important for low-income families or those living in substandard housing, as they benefit the most from outdoor public spaces but often have limited access to them (World Health Organization, 2016).

2.2.1 Built Environment

The physical surroundings and infrastructure of metropolitan areas that have an impact on children's experiences, development, and well-being are referred to as the built environment for children. Cities can build inclusive, kid-friendly settings that promote children's well-being and help them to thrive by taking children's unique needs into account during the planning and design phases of the city.

The following elements are some of those considered when determining how the built environment affects children:

Safe and easily accessible play areas: for kids to engage in physical exercise, social contact, and cognitive development, there must be a supply of well-designed, easily accessible play areas. Active play, exploration, and sensory experiences may be encouraged at playgrounds, parks, and recreational places that are created with children's needs in mind (Cohen et al., 2014).

Walkability and mobility: creating walkable neighborhoods with pedestrian-friendly infrastructure, such as sidewalks and crosswalks, can enhance children's mobility and independent travel. Safe walking and cycling routes to schools, parks, and other destinations enable children to engage in physical activity, develop spatial awareness, and foster a sense of autonomy (Frost et al, 2001).

Proximity to essential services: the proximity of children's homes to essential services like schools, healthcare facilities, libraries, and community centers can significantly impact their accessibility and well-being. Designing neighborhoods that provide easy access to these services can enhance children's educational opportunities, social connections, and overall quality of life (Loukaitou, et al 2018).

Safety and security: ensuring the safety and security of children within the built environment is vital. Measures such as well-lit streets, secure playgrounds, and traffic calming measures help mitigate potential hazards and create a sense of security for children and their caregivers (Malone et al, 2015).

Environmental quality: children's physical and mental health can be greatly impacted by the quality of the built environment, including noise levels, the quality of the air and water, and exposure to green areas. In general, happiness is increased when people have access to clean air, water, and green places (Veitch, 2017).

Inclusive design: designing the built environment with inclusivity in mind is essential for creating spaces that cater to children with diverse abilities, including those with physical or cognitive disabilities. Incorporating universally accessible design principles ensures that all children can engage, play, and navigate the urban environment without barriers (Frost et al, 2001).

Bishop and Corkery (2017) emphasize the significance of planning communities with kids and teenagers in mind, going above and beyond the typical playgrounds and skate parks. They underline the need of considering the many contexts in which children live and play, including both formal and unstructured play environments. Cities may build surroundings that are more inclusive and kid-friendly by identifying and implementing these various play places into urban planning and design. This method takes into account the needs, preferences, and active participation of children in the design of their urban environment.

The Childhood world Inventory, a tool introduced by Chawla in 2002, gauges children's impressions of the physical world and how it relates to their early experiences. This research acknowledges how children's experiences and development are impacted by the built environment. Planners and academics may learn more about how kids relate to the built environment by researching how kids perceive and engage with their physical surroundings.

Researchers and planners can gain a thorough grasp of the interaction between children and the built environment through the findings from Bishop and Corkery (2017) and Chawla (2002). This knowledge may direct the creation of plans and actions meant to make cities kid-friendly. These techniques could include establishing surroundings that encourage both unstructured and supervised play, designing and including a variety of play areas, taking children's viewpoints into account during urban planning, etc. The ultimate objective is to build inclusive, accessible cities that foster young people's physical, social, and cognitive growth.

2.2.2 Play

The essential activity of play helps kids develop physically, socially, emotionally, and cognitively. It enables kids to discover their surroundings, socialize, express their creativity, and learn how to solve problems and think critically (Whitebread et al., 2012; Whitebread et al., 2017). Play, however, has become less appreciated and more controlled in contemporary society despite its importance.

The reduction in outdoor play and the loss of autonomous movement are two important issues for children's play. Children are now spending more time in scheduled activities or sedentary hobbies rather than playing outside due to factors such growing urbanization, safety concerns, and alterations in family dynamics (Louv, 2008; Gill, 2007). The health and wellbeing of children suffer because of this change. Children's sedentary behavior, obesity, and mental health problems are all attributed to a lack of outdoor play (Valentine et al., 2010; Tremblay et al., 2015). Additionally, it reduces their possibilities for imaginative and unstructured play, which is crucial for promoting creativity, resilience, and problem-solving abilities in children (Burghardt, 2005; Pellegrini & Bohn, 2005).

Children's play experiences are significantly shaped by the built environment. Children can engage in physical exercise, social contact, and discovery in safe and easily accessible play environments including parks, playgrounds, and green spaces (Malone et al., 2015; Veitch et al., 2017). The availability and design of these places, however, are frequently insufficient, especially in metropolitan settings with few open spaces and subpar play facilities (Veitch et al., 2017; Frost et al., 2001). Children's play options are further constrained by the absence of appropriate play spaces, which also limits their access to the advantages of outdoor play.

Risk aversion has also grown to be a substantial obstacle to children's play. Overprotective attitudes and restrictive regulations that restrict children's freedom to engage in dangerous and adventurous play are a result of worries about safety and liability problems (Sandseter, 2007; Lester & Russell, 2008). Risky play is essential for children's development because it teaches them to identify and manage risks, develop resilience, and gain confidence (Little & Wyver, 2008; Brussoni et al., 2015). Examples of risky play include climbing trees and exploring strange places. By placing an excessive emphasis on safety and lowering risk, we unintentionally deprive kids of worthwhile learning opportunities and impede their growth and development.

Adopting a comprehensive strategy including the various needs and skills of kids is crucial to design spaces that encourage children to play. Making sure that there are a range of play opportunities is important, as is including kids in the design and planning stages (Spencer et al., 2017; Bishop & Corkery, 2017). These actions also

include creating inclusive play spaces that accommodate kids with varying physical and cognitive capacities. Additionally, to overcome the obstacles to play and construct settings that emphasize children's development and well-being, coordination between urban planners, lawmakers, educators, and communities is crucial.

To sum up, play is an essential part of a child's life that fosters their general enjoyment, growth, and well-being. Children's play, however, is significantly hindered by issues including the reduction in outdoor play, the lack of sufficient play areas, and risk aversion. To overcome these obstacles, a multifaceted strategy that highlights the value of play, promotes the creation of child-friendly surroundings, and creates a cultural change in favor of giving children's play and the freedom to engage in it a higher priority is needed. We can foster circumstances that encourage children's overall development and foster vibrant, inclusive societies by appreciating the value of play.

2.3 Child-Friendly City

According to UNICEF, a child-friendly city is one that promotes the rights and well-being of children, encourages their active involvement, and supports their physical, social, and emotional well-being. It acknowledges that children have difficulties in urban settings and tries to design environments that enable them to engage, explore, and take in their surroundings in a secure and independent manner. A city that is kid-friendly can be in many ways. It entails include kids in decision-making processes, enabling kids to overcome dependency, and incorporating kids' rights into government policies and initiatives (Brown et al., 2019). The most important factor is safety, which makes sure that kids may explore the city without worrying about being hurt. Additionally, it places a focus on the creation of areas for play, a close engagement with nature, and the encouragement of motivating child-caregiver connections (Brown et al., 2019).

Since the launch of programs like UNICEF's Child-Friendly Cities Initiative in 1996, efforts to make cities more kid-friendly have been continuing. These projects have produced motivational case studies from around the globe that highlight various

interventions and tactics. For instance, improving park spaces with facilities like bathrooms, water features, and seats to encourage prolonged playtime is one example. Another is building safer roads and networks to schools (Danenberg et al., 2018). Despite these initiatives, more work must be done to incorporate kid-friendly ideas into municipal planning and architecture (Bishop & Corkery, 2017). Although awareness and engagement have grown, children's rights have not yet been fully incorporated into urban settings. The fact that children's rights and wellbeing are universal highlights the significance of giving child-friendly strategies top priority in urban planning (ARUP, 2017). Designing for the requirements of both an 8-year-old and an 80-year-old will benefit people of all ages, according to the 8-80 cities concept. The beneficial effects of urban interventions may be emphasized by tackling problems like traffic, air pollution, and a lack of public space via a child-friendly perspective (ARUP, 2017).

Figure 1. Places to go, things to do (schematic view) Sam Williams/Arup

The two key components of a child-friendly environment are depicted in the child-friendly framework diagram. It emphasizes the value of providing kids with a range of activities and facilitating their independent movement, especially through walking and bicycling. The idea of a child-friendly city can only grow when kids have access to a variety of activities and the flexibility to roam about (Gill, 2021).

Creating child-friendly cities requires a comprehensive approach that encompasses various elements such as safety, play spaces, nature connection, and meaningful participation of children. While progress has been made, there is still work to be done to fully integrate children's rights and needs into urban design and planning. By prioritizing the well-being of children, we can create cities that benefit all residents and foster inclusive, healthy, and vibrant communities. Some benefits of the child-friendly city are as follows:

Effect on health and well-being: studies have demonstrated a beneficial effect of kid-friendly surroundings on young children's physical and mental health. Children in communities with more family-friendly features had reduced rates of childhood obesity, according to a study done in Barcelona, Spain (Marquet et al., 2016). In addition, having access to greenery and wildlife in cities has been linked to children enhanced mental health and lower stress levels (Dadvand et al., 2019).

Active transportation is given priority in child-friendly communities, such as cycling and walking. According to studies (Larouche et al., 2014; Faulkner et al., 2015), children who actively commute to school engage in higher levels of physical activity, have increased cardiovascular fitness, and exhibit better classroom focus. Children can be encouraged to use active transportation by creating safe and convenient walking and cycling paths, improving their general health.

Social inclusion: child-friendly communities work to be inclusive and provide all kids the same chances. According to research, it is crucial to provide inclusive play areas that are varied and meet the needs of kids with special needs. Children with a variety of abilities benefit from social contact, collaboration, and a sense of belonging when there are accessible playgrounds and inclusive design elements (Rosenberg et al., 2019).

Educational benefits: kid-friendly cities acknowledge the importance of educational opportunities in urban settings. Children's cognitive development and academic achievements can be improved by integrating educational aspects into public areas and creating kid-friendly learning settings in classrooms. To encourage curiosity, creativity, and knowledge acquisition, for instance, cities might incorporate educational signs, interactive exhibits, and cultural monuments (Sagaris et al., 2019).

Economic gains: making communities kid-friendly may have a favourable impact on the economy. Neighbourhoods that are kid-friendly draw families, boost real estate values, and energize nearby businesses. Accessible parks, playgrounds, and recreational areas can improve social capital and community cohesiveness, improving the quality of life for locals (Malone et al., 2019).

These data further reinforce the importance of designing cities with a child-friendly approach, as it not only benefits children but also contributes to the overall well-being and sustainability of communities.

2.3.1 Everyday freedoms, independent mobility

Two fundamental ideas - everyday freedoms and child-friendly infrastructure - highlight the concept of designing child-friendly communities. Children's daily freedoms include their capacity to play, interact with others, and move around with a great deal of independence. The UN Convention on the Rights of the Child recognizes that play is both a fundamental human right and a natural and instinctive learning urge. Unstructured, self-directed play benefits children's general development and long-term physical and mental health in addition to bringing happiness and a sense of accomplishment. Play is an essential tool for developing good behavioral patterns since it affects our capacity to lead healthy lives into old age. On the other hand, independent mobility describes a child's ability to freely roam about their neighborhood or a specific area of the city without adult supervision.

The accessibility to adjacent activities, the provision of secure road crossings, the children's age and gender, and the perceptions of safety held by both children and adults are some of the elements that affect children's independent mobility. These characteristics influence children's independent movement, according to studies by Shaw et al. (2015) and ARUP (2017). For children to have independent mobility, they must be able to walk, cycle, and take public transit to get to school, stores, friends' houses, and other destinations (Hillman et al., 1990).

Creating a child-friendly city involves designing environments that promote these everyday freedoms and support children's independent mobility. By considering factors such as accessible play spaces, safe routes, and inclusive transportation options, cities can enhance children's experiences, encourage their active participation, and contribute to their overall well-being.

In addition to the concepts of everyday freedoms and children's infrastructure, there are other important aspects to consider when creating a child-friendly city. One crucial element is the availability of safe and accessible play spaces. These spaces should cater to a range of activities and provide opportunities for both structured and unstructured play. Parks, playgrounds, and recreational areas should be designed with age-appropriate equipment, ensuring that children of all ages can engage in play that supports their physical, cognitive, and social development (Shaw, et al 2015).

Furthermore, the design of streets and transportation networks plays a significant role in promoting children's independent mobility. Safe road crossings, well-maintained sidewalks, and dedicated cycling paths are essential for enabling children to navigate their neighborhoods safely and independently. Additionally, urban planning should consider the proximity of schools, community centers, and other amenities to residential areas, reducing the need for long commutes and promoting walkability. Creating a child-friendly city also involves actively involving children in the decision-making processes and design of urban spaces (ARUP, 2017). Recognizing children as valuable stakeholders and seeking their input empowers them to contribute their unique perspectives, needs, and aspirations. It promotes a sense of ownership and belonging, fostering a stronger connection between children and their city. Moreover, fostering strong relationships between children and nature is crucial in a child-friendly city. Children who have access to green spaces, such parks, gardens, and natural landscapes, may interact with the natural world and develop a feeling of wonder, curiosity, and environmental responsibility. Cities may construct environments that place a high priority on the rights, well-being, and development of children by tackling these numerous issues. A child-friendly city is more than just good infrastructure and rules; it is a comprehensive strategy that includes children's physical, social, and emotional needs and encourages their active involvement in forming their urban settings (Hillman et al, 1990).

2.3.2 Children infrastructure

The vast network of areas, roadways, natural features, and actions that are essential to developing a child-friendly city is referred to as children's infrastructure. This infrastructure is essential for promoting fairness, inclusion, health, and resilience in the public sphere. Children's infrastructure serves as the cornerstone of urban functioning and aids in the growth of flourishing, family-centered communities, much like infrastructure for transportation, electricity, water, and waste does. Children's infrastructure may benefit all urban dwellers by placing a high priority on the development of interconnected, multipurpose, intergenerational, and sustainable public places. The layout and use of streets and the spaces in front of homes are crucial components of children's infrastructure. These areas, which generally make up at least 25% of a city's total size, have enormous potential to promote daily freedoms and interpersonal connection. It is essential to look beyond the conventional idea of playgrounds and concentrate on creating an all-ages, multipurpose public space that meets the requirements of families and communities. By establishing green spaces and healthful surroundings, cities should work to strengthen children's connection to the natural world. Additionally, children's access to neighborhood resources like youth centers, parks, and recreation places should shape and impact their daily travels, including routes to and from school (ARUP, 2017).

In order to make cities that are child-friendly and to promote the wellbeing of young citizens, children's infrastructure is essential. According to research, children's levels of physical activity and general health are significantly impacted by their access to high-quality public facilities and services. According to research by Kyttä et al. (2019), kids who live in areas with well-planned, easily accessible outdoor spaces play more actively and exhibit less sedentary behavior.

Additionally, the inclusion of greenery and other natural components in urban settings has been connected to several advantages for kids. According to studies (Wells and Evans, 2003; Faber Taylor and Kuo, 2009), being in nature boosts psychological well-being overall, improves cognitive performance, and decreases stress levels. For instance, research by Kuo and Sullivan (2001) discovered that exposure to nature enhanced focus and decreased symptoms in children with attention-deficit/

hyperactivity disorder (ADHD). As to make urban settings child-friendly, it is essential to include children's viewpoints and involve them in the design and planning processes. According to Bishop and Corkery's (2017) research, it is crucial to consider children's opinions when making decisions and planning cities since doing so produces more inclusive and meaningful results. Children who are involved in participation activities feel empowered and develop a feeling of ownership and community (Chawla, 2002).

Furthermore, it is impossible to disregard the positive economic effects of child-friendly cities. According to UNICEF research from 2012, making investments in children's infrastructure and fostering surroundings that are accessible, safe, and stimulating may help the economy and society. By fostering thriving and livable communities, child-friendly towns draw families, increase real estate prices, and support regional companies. Cities may construct settings that promote children's rights, well-being, and development by giving children's infrastructure priority and caring of their needs and viewpoints. This strategy improves the sustainability and general livability of metropolitan places, which benefits children as well (UNICEF, 2019).

2.3.3 Principles of a successful CFC

The rights and well-being of children are valued via a variety of policies and practices in a child-friendly city. Children are protected from exploitation, abuse, and violence while still receiving care for their whole development. Access to high-quality social services and inclusive education that encourages their active involvement are available to them. Children's opinions are respected, and they are given the chance to speak to them and have a say in decisions that may affect their life. They are urged to take part in community, cultural, and family events to help them feel a part of something. Children have designated play areas and spaces for recreation, and friendships are fostered. Every kid is given a fair shot at life in a child-friendly city, regardless of their ethnicity, religion, socioeconomic status, gender, or physical or mental abilities.

The UNICEF Child-Friendly Cities Initiative (2019) suggests several tactics to accomplish these objectives. The development and implementation of child-friendly policies and practices, advocacy and education about child-friendly principles, the formulation of city-wide strategic plans, the appropriate allocation of budgetary resources, meaningful child participation in decision-making processes, the establishment of coordination mechanisms and partnerships among stakeholders are some of these strategies. Child-Friendly Cities strive to create an environment that promotes the holistic well-being and development of children. According to research, children who grow up in child-friendly urban settings experience numerous benefits. For instance, a study conducted by Fotel and Baker (2019) found that children living in child-friendly cities have higher levels of physical activity, improved mental health, and better social connections compared to those in less child-friendly environments. Another study by Ruijsbroek et al. (2017), revealed that children in child-friendly neighborhoods have better access to green spaces, which positively impacts their cognitive development and overall quality of life.

Additionally, the development of kid-friendly laws and programs in cities has shown encouraging results. Van den Berg et al.'s (2018) case study of the Rotterdam, Netherlands-based Child-Friendly Cities initiative showed the benefits of young people's input on urban planning and decision-making. Parks, playgrounds, and other public areas were upgraded, safety measures were strengthened, and community cohesiveness was promoted thanks to the involvement of kids in the design process. Investing in child-friendly infrastructure also yields economic benefits for cities. A report by UNICEF (2018) highlights that creating safe walking and cycling paths for children not only promotes their independent mobility but also contributes to reducing traffic congestion and air pollution. This, in turn, leads to improved health outcomes and cost savings for the healthcare system.

In conclusion, evidence from study and statistics supports the idea that child-friendly cities improve children's wellbeing, physical and mental health, social relationships, and overall quality of life. Cities may develop inclusive, egalitarian, and sustainable settings for their youngest people by giving children's needs and rights priority in urban planning and policymaking.

2.4 Child-friendly neighborhood

Child-friendly neighborhoods are designed and developed with the well-being and needs of children in mind. These neighborhoods aim to create a safe, inclusive, and supportive environment where children can thrive and actively engage with their surroundings. Analyzing the concept of child-friendly neighborhoods involves examining various aspects that contribute to their effectiveness. The availability of welcoming and easily accessible public areas for kids to play and have fun is a crucial component. Playgrounds, parks, sports facilities, and green spaces are a few examples of these locations. According to research (Valentine, 2004; Mackett et al., 2007), having access to these areas improves kids' levels of physical activity, social engagement, and overall development. Child-friendly communities place a high priority on having these places adjacent to residential areas so that kids may play freely and participate in physical activity in a secure environment. The physical environment's design for ensuring safety and encouraging autonomous movement is another important consideration. Children can walk around independently in child-friendly areas, which promote bicycle and pedestrian infrastructure, traffic-calming measures, and lessening automobile domination (Giles-Corti et al., 2014). This encourages local connections, active transportation, and gives kids a greater feeling of independence.

Furthermore, child-friendly neighborhoods emphasize social cohesion and community engagement. They encourage interaction among neighbors, create opportunities for intergenerational connections, and foster a sense of belonging (Carver et al., 2008). This social fabric enhances children's well-being by providing a supportive network and promoting positive social relationships.

Additionally, child-friendly neighborhoods should provide essential services and amenities that cater to children's needs. These can include quality schools, healthcare facilities, libraries, and recreational centers. Access to such amenities within proximity helps ensure that children have equitable opportunities for education, healthcare, and leisure activities. Child-friendly communities place a high priority on creating open areas that are both safe and welcoming, encourage independent movement, promote social cohesiveness, and offer basic services and utilities.

2.5 Child-friendly streets

Child-friendly streets are designed and developed to prioritize the safety, well-being, and active engagement of children. Analyzing the concept of child-friendly streets involves examining various elements and characteristics that contribute to their effectiveness. One key aspect of child-friendly streets is traffic safety. These streets are designed to minimize traffic-related risks and create a safe environment for children to navigate independently. Measures such as traffic calming techniques, reduced speed limits, designated pedestrian crossings, and clearly marked school zones are implemented to enhance the safety of children on the streets (Zegeer et al., 2005). Child-friendly streets prioritize the separation of vehicle traffic from pedestrian areas, ensuring that children can walk, cycle, and play without the fear of accidents.

Infrastructure that encourages play and active mobility is a crucial component as well. Wide sidewalks, defined bike lanes, and designated play spaces can be found on streets that are kid-friendly. While bicycle lanes promote active transportation and make it possible for kids to bike safely, sidewalks offer kid-friendly places where they may stroll, interact with others, and utilize neighborhood resources. Pocket parks and play streets are examples of play places that may be included into the city environment to encourage spontaneous play and social interaction (Sheller & Urry, 2006). These components promote physical exercise, strengthen kids' community identities, and improve their general wellbeing.

Greenery and wildlife are also prioritized in kid-friendly neighborhoods. Along with improving the visual appeal, adding trees, plants, and other greenery to streetscapes also benefits kids in many ways. Green areas offer possibilities for nature engagement, which has been linked to increased mental health, lower stress levels, and greater cognitive development in children (Wells & Evans, 2003). The availability of green spaces in urban environments fosters a sense of connection to nature and provides areas for rest, exploration, and imaginative play.

Additionally, kid-friendly neighborhoods prioritize a sense of community. In the planning and usage of roadways, they promote community engagement, participation, and teamwork. It builds a sense of ownership and encourages a sense of community pride to involve residents, especially kids, in decision-making processes.

Child-friendly streets can develop into social areas where neighbors mingle, promoting social solidarity and a welcoming neighborhood atmosphere. Child-friendly streets place a high priority on community involvement, play areas, access to green spaces, and active transportation. For kids, these streets provide a welcoming and comfortable atmosphere that encourages social interaction, physical exercise, and overall wellbeing.

2.6 Children and sustainability

According to Colin Ward, author of "The Child in the City" (1978), improving urban environments to benefit children would also enhance the quality of life for adults. Measures taken to make cities more livable for the elderly would also create a more pleasant environment for the young. As populations continue to grow, urban development and environmental sustainability become increasingly important for a sustainable future. Studies in human-environment interaction have shown that learning occurs through engagement with the surrounding environment. Environmental philosopher Stephen Kellert (2012) argues that our deep connection to nature has shaped our senses, movements, intellect, and culture over countless generations. In this situation, high-rise urban environments offer a practical and sustainable way to house lots of young people while coexisting with other species (UNICEF, 2012). Children will be substantially impacted by decisions made today addressing climate change, public transit, safety, economic mobility, and public health. However, children's needs have typically been disregarded in urban design. To evaluate the performance of sustainable urban efforts, several proposals have been made, including the creation of sustainability standards (Turcu, 2013).

Positive indicators for Sustainable Child-Friendly Cities include free and safe transportation, participation in the community, social cohesiveness, and access to green areas. On the other hand, unfavorable signs include a lack of public meeting spots, a lack of a wide variety of activities, and traffic issues (Patricio Mulero & Rius-Ulldemolins, 2017). Both top-down and bottom-up methodologies, engaging local communities and networks as well as professionals and governments, can be used to produce these indicators (Turcu, 2013).

Sustainable child-friendly solutions

Among the various ideas, some can effectively contribute to the making of a child-friendly city:

- Walking, biking as a sustainable mode of transport;
- Sustainable child-friendly solutions, such as walking and biking as modes of transport, offer numerous benefits for both children and the environment. By promoting active transportation options, cities can create safer and healthier environments for children to move around and engage with their surroundings (Giles-Corti et al., 2016).

Children can exercise, increase their physical fitness, and form good habits early on thanks to walking and riding. Regular physical exercise has been related to various advantages, including increased mental health, decreased risk of obesity, and improved cardiovascular health (Sallis et al., 2015). From an environmental perspective, promoting walking and biking as sustainable modes of transport contributes to reducing greenhouse gas emissions and air pollution. By reducing reliance on motorized vehicles, cities can improve air quality and create more livable and sustainable urban environments (Woodcock et al., 2009). Walking and bicycling help kids develop a feeling of independence, self-reliance, and personal responsibility in addition to the health and environmental advantages. They help kids gain spatial awareness, problem-solving abilities, and a stronger sense of belonging to their communities (Carver et al., 2017). Children that actively participate in their surroundings grow more conscious of their surroundings and feel more a part of their community.

Cities need to place a high priority on the creation of secure and well-planned infrastructure to create surroundings that are both child-friendly and sustainable for walking and bicycling. To safeguard the safety of children and promote their active engagement in active transportation, this includes designated walkways, crosswalks, bike lanes, and traffic-calming measures (Veitch et al., 2017). In addition, educational initiatives and awareness campaigns may be extremely effective in highlighting the advantages of bicycling and walking and in enticing families to adopt these eco-friendly means of transportation (Larouche et al., 2014).

By investing in sustainable child-friendly solutions like walking and biking, cities can create more inclusive, livable, and environmentally conscious communities that prioritize the well-being and mobility of children (Shaw et al., 2013). Such initiatives contribute to building a sustainable future where children can thrive while fostering a deeper connection to their urban environments.

Tactical urbanism: Play along the way.

The idea of "play along the way," which is a component of tactical urbanism, has drawn attention as a possible strategy for developing kid-friendly urban settings. Tactical urbanism entails the use of quick, low-cost fixes to improve the usability and appeal of public areas for young people. This strategy highlights the value of recreation and active transportation in cities. Tactical urbanism interventions, according to Carmona, Tiesdell, Heath, and Oc (2010), might involve transient play projects, including pop-up playgrounds or transient street closures for play activities. These interventions aim to reclaim underutilized spaces and promote spontaneous play opportunities for children. By incorporating play elements into the urban fabric, children are encouraged to engage with their surroundings and experience the city as a place of fun and discovery. The idea of "play along the way" aligns with the principles of child-friendly urban design advocated by Fjørtoft and Sageie (2000). They emphasize the importance of integrating play opportunities into the daily routines and travel patterns of children. Designing streets and public spaces that invite play can transform the urban environment into a stimulating and child-friendly realm. Initiatives in tactical urbanism have demonstrated good effects on children's wellbeing and social engagement. These interventions, in accordance with Macintyre, de Jong, and McKenna (2018), can increase active mobility, social relationships, and community participation. Tactical urbanism promotes children to walk and bike as sustainable ways of transportation by constructing fun and secure surroundings.

Tactical urbanism, particularly the concept of "play along the way," offers a creative and cost-effective approach to shaping child-friendly cities. By incorporating temporary play interventions and integrating play into the urban fabric, cities can create engaging and stimulating environments for children to thrive and enjoy their daily routines (Carmona et al., 2010; Fjørtoft & Sageie, 2000; Macintyre et al., 2018).

2.7 Co-creation as a tool for urban sustainable design

Co-creation is an essential tool for sustainable urban design since it promotes community involvement and guarantees the long-term viability of urban initiatives. To jointly construct the urban environment, it entails collaborative efforts from a range of stakeholders, including people, local government officials, designers, and policymakers (Evans et al., 2016). Co-creation encourages a more inclusive and comprehensive approach to urban design by including a variety of viewpoints and areas of expertise, addressing the requirements and goals of many user groups (Brandsen et al., 2015).

The idea of co-creation supports social, economic, and environmental sustainability, which is in line with the ideals of sustainable development. By encouraging communities to actively participate in the design, implementation, and administration of urban areas, it promotes participatory decision-making processes (Björgvinsson et al., 2010). Cities may create creative, context-specific solutions that represent the distinct qualities and ambitions of the community by utilizing local expertise, creativity, and resources through co-creation (Garca-Mira et al., 2019).

Co-creation also promotes a sense of attachment and ownership among community members, increasing social cohesiveness and enhancing a sense of place (Hassan et al., 2016). Residents are more likely to engage in sustainable behaviors and practices when they actively shape their neighborhoods, which strengthens their sense of connection to the urban environment (Alves et al., 2020).

However, careful preparation, facilitation, and the development of mutual trust and respect among participants are necessary for effective co-creation processes (Evans et al., 2016). To ensure that many views are heard and evaluated in decision-making, it is crucial to ensure the inclusiveness of disadvantaged groups and address power disparities (Bacqué et al., 2014). Cities may encourage cooperation, creativity, and group accountability by adopting co-creation as a tool for sustainable urban design, creating more resilient and people-centered urban landscapes. Building cities that put children’s needs and well-being first is essential for promoting inclusion and enhancing overall urban functionality. Beyond just providing playgrounds, adopting a child-friendly approach in urban planning urges us to proactively solve problems and

put policies in place that help create a future that is more child-friendly. Children's time spent playing outside, their independence in navigating the city, and their connection to nature serve as unmistakable markers of how well a city is performing, not only for children but for residents of all ages. Cities may suffer negative economic and cultural effects if children's needs are not met. Children flourish in a secure and healthy environment, participate in decision-making processes, have access to basic public services, and engage in participatory skill development in a successful child-friendly city. In order to ensure long-term sustainability, it need a flexible management plan (Malone, 2017; UNICEF's Child-Friendly Cities Initiative, 2019).

2.8 Children participation methods

Including kids in urban planning is essential for developing child-friendly cities. Children, parents/caregivers, and the larger community should all be included in the co-creation of urban areas, with consideration for their needs and views. A successful engagement should make use of already-existing community activities and prior engagement results, and it should be age-appropriate, imaginative, and engaging. Although the idea of involvement may seem clear, it is crucial to comprehend its ramifications and different approaches, especially when dealing with youngsters (Clark & Percy-Smith, 2006).

Creating a child-friendly city requires establishing a system that facilitates citizen participation and ensures accountability for children's rights. The notion of participation encompasses different perceptions, as explored in a special issue of the journal Children, Youth, and Environments. It includes children experiencing and learning through participatory processes, providing their viewpoints on public matters, participating in town planning processes, engaging in co-creative discussions for knowledge exchange and transformation, empowering social involvement, and stimulating political participation (Clark & Percy-Smith, 2006). Harry Shier proposed a five-level approach, a three-stage model, to move away from the metaphorical "ladder" and acknowledge the diverse ways children can participate. This framework incorporates self-evaluation by organizations to assess their commitment to the

planning process. Shier's model emphasizes collaboration between children and adults in decision-making, rather than placing a limit on children's independent influence (Shier, 2001). Shier's five levels of participation for children are as follows: kids are listened to carefully; children are encouraged to express their opinions; their opinions are considered; they are involved in co-creation by making proposals; and they share responsibility and power for their choices (Shier, 2001).

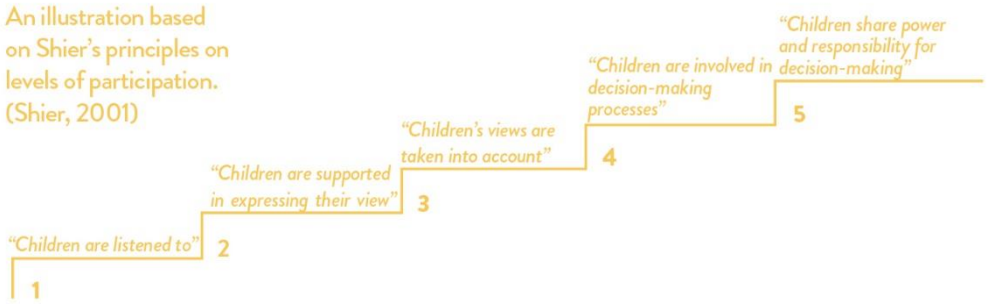

Figure 2. Shier participation ladder/ Author based on (Shier, 2001)

Methods for including children in decision-making processes that influence their lives and the urban areas they live in are crucial for empowering them. Shier (2001) and Clark and Percy-Smith (2006) both offer valuable perspectives, but there are also other crucial factors to take into account. For children to engage, Gallagher and Truong (2014) stress the need of fostering safe and welcoming environments. They contend that physical settings are vital for promoting children's participation and guaranteeing that their perspectives are heard.

Furthermore, the topic of children's engagement strategies frequently brings up Arnstein's ladder of citizen participation (Arnstein, 1969). This ladder represents various levels of involvement, from tokenism and non-participation to higher levels of power-sharing and public control. Recognizing the cultural and social elements that affect children's engagement is also crucial. In their 2010 article, Niemelä et al. highlight the significance of cultural sensitivity while developing participation strategies that respect regional conventions, beliefs, and practices. They emphasize the importance of adaptation and flexibility while working with kids from varied backgrounds since participation strategies might differ depending on the context and

culture. Along with the writers already mentioned, Gallagher and Truong (2014), Arnstein (1969), and Niemelä et al. (2010) offer insightful perspectives on children's engagement strategies. Urban planners and practitioners may establish meaningful and inclusive opportunities for children to engage in decision-making processes by taking into account the physical environment, participation levels, and cultural variables.

Overall, these writers underscore the value of including kids in urban planning and stress the necessity for age-appropriate, fun ways to get kids involved that value their viewpoints and contributions. Urban planners may design more inclusive and kid-friendly cities by adopting ways of child engagement.

2.9 Case studies: learning from good practices of child-friendliness in cities worldwide

Through case studies, useful insights are to be gathered. These case studies were put up using a variety of resources, including suggestions from groups working to make life better for kids. This compilation of best practices has also benefited from input from experts and academics in the domains of urban planning and design, as well as from pertinent readings and internet resources. As to promote inclusivity for young children in cities, organizations like UNICEF, Bernard van Leer Foundation: Urban95, Designing Streets for Kids, 8 80 Cities, and ARUP examine planning policies and design methodologies that actively involve children in decision-making processes. The findings shed light on how cities are working towards the sustainable goal of creating happier, healthier, and more inclusive urban environments for young children.

Rotterdam: Rotterdam has been recognized for its proactive approach to creating a child-friendly urban center. The city has integrated child-friendly elements into its economic regeneration plans, understanding that attracting families to the urban core contributes to its vitality. Rotterdam has implemented various initiatives such as designing accessible and safe public spaces, promoting active transportation, and incorporating child-friendly amenities and facilities. These efforts aim to enhance the quality of life for children and create an environment that supports their well-being and development.

Vancouver: Vancouver stands out for its ambitious efforts in transforming urban spaces to prioritize the needs and interests of children. The city has adopted comprehensive planning and design strategies that promote inclusivity and accessibility for young residents. Vancouver has focused on creating vibrant and interactive public spaces, such as playgrounds, parks, and community gardens, that encourage active engagement and social interaction among children. Additionally, the city has prioritized sustainable transportation options and safe pedestrian infrastructure to enable children to navigate the urban environment independently and safely.

London: as a global city, London has made significant progress in implementing child-friendly initiatives within its urban fabric. The city has recognized the importance of enhancing public spaces to accommodate the diverse needs of children. London has emphasized the creation of safe and inviting environments where children can play, socialize, and engage in recreational activities. The city has also implemented measures to promote active transportation, including the provision of cycling infrastructure and pedestrian-friendly streets, enabling children to move around the city safely and actively.

Copenhagen: Copenhagen is renowned for its commitment to sustainable and child-friendly urban design. The city has embraced a strong cycling culture and has created an extensive network of cycling infrastructure that prioritizes the safety and convenience of cyclists, including children. By providing dedicated cycling lanes, traffic-calmed streets, and secure bike parking facilities, Copenhagen has fostered a sense of independence and mobility among children. The city's emphasis on active transportation has not only contributed to children's well-being but has also positively impacted the overall livability and sustainability of the urban environment.

Gent and Antwerp: two Belgian towns, Gent and Antwerp, have achieved noteworthy advancements in incorporating kid-friendly methods into their urban development. The development of lively, welcoming public areas that serve children's needs and interests has been a priority for both communities. Accessible playgrounds, open spaces, and recreational facilities that encourage movement and interpersonal connection have been given top priority.

2.10 Tirana context

Over the last 30 years, Tirana's population has quadrupled, and this increase was largely unplanned, built to satisfy the active working adult. However, because most of this expansion was unplanned, it presented problems including severe traffic jams, streets and communities that were predominately car-filled, and high levels of air pollution. Given 11.3% of the population of Tirana are children aged 0-9 years (INSTAT, 2022), putting children's needs first in urban development initiatives makes sense. This is consistent with UNICEF's campaign to promote kid-friendly urban development as a component of the larger 2030 Agenda for Sustainable Development. The approach used by Tirana is in line with the worldwide movement that views children's needs as a springboard for tackling many societal problems. In response to the escalating number of cars and the resulting challenges faced by children in Tirana, the mayor took decisive action. Recognizing the need to address the city's pollution and congestion, the mayor prioritized the well-being, development, and future of children. This approach not only unifies efforts from a human perspective but also aligns with broader issues such as public health, sustainable urban planning, and climate change adaptation (Gill, 2018).

16% Obesity in Albania reached a staggering of children aged 0-5, surpassing the UK and US in 2021. The frequency of engaging in physical activities was also found to be relatively low among children in the Tirana region, according to the HBSC survey. However, obesity rates among school-age children were relatively low, 16% classified as overweight based on the BMI index. Certain factors, such as being male, 13-year-old, or residing in the central regions of Tirana, were associated with a higher likelihood of being overweight (INSTAT, 2022).

Some 44% of national road fatalities are pedestrians compared to 20% in the EU (INSTAT, 2022). These values raise significant concerns especially for the most vulnerable part of the pedestrians, children. Immediate actions should be taken to prioritize their safety on the roads, such as developing safe school routes, informing both children and drivers regarding road safety, and improving enforcement of traffic regulations.

The Albanian capital, Tirana is experiencing a metamorphosis into a thriving and family-friendly metropolitan setting. This transition may be seen on a variety of dimensions, from little neighborhood enclaves to huge public areas and educational institutions. Both short-term play pop-ups and long-term programs spanning numerous financial cycles demonstrate the city's dedication to fostering a fun and healthy environment for kids. The core section of the city has well-kept parks, large squares, and broad boulevards that give it a sense of order and space. The residential areas, on the other hand, are characterized by post-war apartment buildings of various heights, frequently accompanied by illegal and unofficial expansions. Narrow streets, sometimes unpaved, and limited outdoor spaces are characteristic of these neighborhoods. Tirana's bustling street culture, infused with a Mediterranean vibe, is further enhanced by the presence of bars and cafés with attached outdoor playgrounds. Families frequent these establishments, paying for play and contributing to the city's lively atmosphere (Gill T. , 2022).

Sam Williams, the main author and designer of "Cities Alive: Designing for Urban Childhoods," highlights the necessity of child-friendly development in better integrating kids into their wider communities. Tirana wants to establish a welcoming environment that is beneficial to everybody by putting a special emphasis on kids. The results of a 2019 survey, however, showed that children in Tirana were less satisfied with their living conditions. Only 54.7% of the kids said they were very satisfied with their neighbourhood. In addition, some kids voiced worries about safety, getting to play places, and how adults treat kids (Qendra Marrëdhënie, 2021).

2.10.1 Policy Research

The Sustainable Development Goals (SDGs) have been the focus of international efforts since 2015, and they have offered a framework that connects many stakeholders, including local and national governments. The SDGs are closely integrated with the New Urban Agenda and UNICEF's Strategic Plan 2018–2021, which emphasizes the significance of addressing children's and families' health and wellbeing locally. By addressing these challenges holistically, the Child-Friendly Cities Initiative (CFCI) strategy assists local governments in implementing the 2030 Agenda.

Particularly Tirana has embraced the idea of developing into a kid-friendly and playing city, viewing it as a crucial component of social advancement and inclusiveness. Comprehensive local strategy papers like the "Green City Action Plan" and the "Tirana General Local Plan 2030" provide support for this aim. These documents offer the framework required to direct Tirana's efforts to develop a safe, inclusive, and sustainable urban environment for children.

Below are some of the international, national, and municipal regulatory plans and standards that were reviewed to provide a baseline understanding of relevant policy and document context to this project.

Table 1. Collection of policies that address child-friendly sustainable developments

Documents	***Visions/ Goals/ Objectives***
Sustainable Development Goals (SDG)	SDG 11.7. By 2030, provide universal access to safe, inclusive, and accessible, green and public spaces, particularly for women and children, older persons and persons with disabilities. They support UNICEF's initiatives to include kid-friendly urban planning on the agenda. Several SDGs: pertaining to health and well-being, high-quality education, gender equality, sustainable cities and communities, climate action, and partnerships for the goals.
New Urban Agenda	Aligns with the SDGs and emphasizes the importance of creating child-friendly cities. It recognizes the right of children to relax, play, and participate freely in cultural and recreational life.
United Nations Convention on the Rights of the Child (1989)	Article 31 of the UN document recognized the right of children to relax and play, and to have equal opportunities to participate freely in cultural and recreational life. "On the Rights and Protections of the Child," Albania's own law on children's rights, was approved in 2017.

Tirana 2030 (TR030)—General Local Plan Tirana 030	A regulatory master plan authored by Stefano Boeri Architects and approved by the City Council in 2017 that envisions the capital city as an environmentally sustainable "kaleidoscopic" metropolis.
Green City Action Plan of Tirana the Green City Action Plan (GCAP)	Lays out a concrete roadmap for effectively transforming Tirana into a more environmentally friendly city. It has strategic goals include enhancing the infrastructure for environmentally friendly transportation. The strategy fits with the goal of establishing a greener, more sustainable urban environment.

2.10.2 Child-friendly initiatives in Tirana

Tirana, the capital city of Albania, has gained recognition for its child-centric approach to urban planning, with school streets playing a pivotal role in these initiatives. The executive director of Qendra Marrëdhnie, Simon Battisti, claims that Tirana views itself as an active member of the worldwide struggle against vehicle supremacy. The city has made establishing school streets as a starting point a priority because it recognizes the importance of upgrading roadways. Battisti highlights that the focus on children's well-being is not just a public health message but also a broader statement about livability. Creating environments that are suitable for children yields positive externalities that benefit society, including the environment, community socialization, and the development of trust (Qendra Marrëdhënie, 2021).

In 2015, Tirana started making significant attempts to better children's life and urban spatial interactions. The city has since put into effect several successful projects, both in principle and in reality. By creating a children's council, Mayor Erion Veliaj encouraged kids to participate in decision-making processes and incorporated their input in talks on new playgrounds and green spaces. To highlight the impact and significance of children in urban development, Mayor Veliaj underlines that a city for children is actually a city for everyone. Tirana is also part of a program called Urban 95, along with other child-friendly cities. The name Urban 95 symbolizes the cityscape as perceived by a healthy three-year-old child, considering their average height of 95 centimeters. Unlike the conventional design principles focused on fast-paced, mobile

adults, which exclude many, particularly the elderly and children, a child-centric approach ensures inclusivity for all. Most of these objectives directly impact children's well-being. Investments in sustainable transportation and renewable energy in buildings will help reduce air pollution, which significantly affects children. Accessible neighborhoods with walkable services and green spaces also contribute to children's welfare. Teaching children about proper waste management and recycling from an early age fosters environmental stewardship and can lead to advocacy in the future.

2.10.3 Where are the children in Tirana?

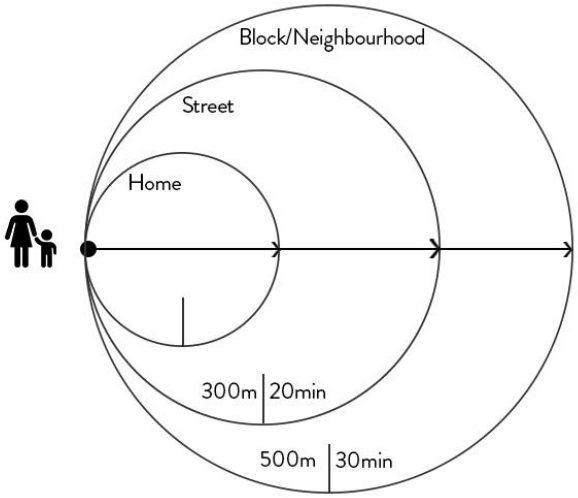

Figure 3. Distance children and caregivers can reach in 20 minutes/

Author refering to ITC walkability values for Tirana

To make room for children in public settings firstly it is important to understanding their trip chain of the caregiver and children. According to a study from ITC, the average distance a caregiver can walk with their children in 20 minutes in Tirana is a 300-meter distance. Examining the urban landscape of Tirana reveals a limited amount of space dedicated to children. Traditional playgrounds are the predominant feature, often located within parks. These green areas provide children with opportunities to extend their play beyond the confines of the playground and immerse themselves in nature while ensuring their safety from vehicular traffic.

However, the concentration of playgrounds in parks presents challenges such as age segregation, accessibility, and space limitations. Green areas require ample space, which can be difficult to accommodate in an era of urban densification (Gill T. , 2018). As Tirana strives to address these spatial challenges and create a more child-friendly environment, innovative solutions are needed to overcome the limitations of traditional playgrounds and integrate play opportunities throughout the city. By considering alternative approaches to design and utilizing available urban spaces creatively, Tirana can enhance children's access to play and nature while promoting inclusivity and sustainability.

CHAPTER 3

METHODOLOY

3.1 Research strategy

The research approach and the design proposal reflect Tirana's child-friendly strategy, while in line with UNICEF's efforts to position child-friendly urban development as a key component of the 2030 Agenda for Sustainable Development. Adopting this strategy assists in reimagining cities to enhance the lives of kids and all residents.

My approach to the thesis began with the literature review, which was chosen in accordance with the goals of the thesis and the primary research topic: "How can Tirana be made child-friendly? How can kids contribute to the development of sustainable, safe routes? Building a conceptual framework, through studies, books, research on children and urban planning, child-friendly cities, sustainable solutions for urban planning, participatory design.

Together with the theoretical background provided by the literature review, the design approach is based on a set of social and physical interventions that may be adapted in the urban context to encourage children's play and autonomous active movement. To design for children, it is firstly necessary to comprehend the context through a series of desktop and on-site analyses conducted to provide a social and physical knowledge. The "Myslym Shyri" area was chosen because of its location near city center and contrasting settings in terms of urban fabric, local values, neighborhood age, accessibility, and vehicular traffic exposure.

Two meso zones are selected according three main criteria: school zone, mixed used street and historically underserved neighborhood. The zones are examined in various conceptual dimensions, spatial and morphological aspects, function and program, activity and building features, traffic, and open spaces etc. The results from the data collection will be reflected in mappings for two selected zones to point out critical zones that need immediate interventions, weaknesses, threads; also, potentials

for possible interventions. As to enhance child friendliness in these particular zones, a new network of sustainable connections with focus on autonomous pedestrian mobility is being proposed. The long-term objective is to construct an ecological system that is more inclusive, just, and fair and supports child development locally. The research aims to demonstrate several potentially fruitful methods for subsequent work. The thesis concludes with an outline of social and physical interventions that, with the aid of children's participation, could be tailored to a variety of different contexts. It assesses the generalizability of research-based data and designing methods, and offers regular and continuous methods, workable modes, and referential design strategies to help create CFC networks in urban Tirana.

Mixed methods are used for data collection and data analysis; divided into three main phases including: understanding, prioritizing and design solutions. For the first phase methods used to understand the challenges children face in Tirana are desktop research highlighted through relevant case studies and site analysis, on-site research including collection of both qualitative and quantitative data in lines of children and caregivers; and engagement with children through a co-creation questionnaire. Using the above mixed methods for the same selected context helps to fulfill the picture of the problem by upbringing allows different perceptions.

Methods used for the study are further explained and illustrated:

Understand: the assessment phase aims to gather evidence to make an informed decision on prioritizing intervention areas for creating a more child-friendly environment.

Prioritize: the prioritizing phase seeks to provide a consistent assessment of a wide range of factors that affect children's development at the selected site.

Design: the earlier stages provided a framework for understanding the study location, its prospects, and its limitations. The next phase is to create solutions that address the demands and long-term goals of the site.

Figure 4. Orthophoto of the site / ASIG Geoportal

Figure 5. Orthophoto 2019 showing first meso-zone studied Dora D'Istria / ASIG Geoportal

Figure 6. Orthophoto 2019 showing second meso-zone studied near Konferenca e Pezes primary school / ASIG Geoportal

3.2 Data Collection Methods

Table 2. Mixed methodology approach.

	Desktop research	***On-site research***	***Engagement***
Qualitative	*Literature*	*Site observation analysis*	*Questionnaire (co-creation)*
Quantitative	*Site analysis*	*Stationary activity*	*Questionnaire (assessment)*

The first phase of the research is “Understand”. This phase aims to gather evidence to make an informed decision on prioritizing intervention areas for creating a more child-friendly environment.

3.2.1 Desktop research

This is the first stage in comprehending the area and community under consideration, identifying the critical problems influencing early childhood development, and creating a database of significant local stakeholders with whom to interact. It directs the gathering of pertinent secondary data and maps, creates a conceptual framework for the location, and identifies the primary concerns impacting early childhood development. This might include anything that gives information on the project site, such as policy papers, census and statistical data, surveys, maps, academic articles, news items, images, videos, or other materials.

Age disaggregated data is used where possible to identify areas in which you need to collect more information. Analyse secondary socioeconomic, demographic, and geographic information about the selected neighbourhood using a computer.

3.3 On-site research/ observation & data collection

This is a crucial step in confirming the desktop analysis and acquiring more data to comprehend the possibilities and problems facing infants and toddlers in the selected site. Observations made on the zones will be utilized to direct the gathering of pertinent primary data, carry out spatial analysis, and organize the data that will be collected during the participation phase. Assesses and marks out site accessibility and materiality, social context, play space affordance and circumstances, child-friendly infrastructure, child-specific risks represented by neighboring facilities, vehicle and pedestrian flows, and possible play access barriers while strolling along segments. To collect the data on the performance of the zones, several site visits were conducted, and notes were taken on printed maps. Both qualitative and quantitative data from on-site visit and observation will be illustrated in mappings generated using Photoshop.

Qualitative analysis of site observational data: The qualitative analysis of the two meso-zones was conducted based on accessibility to understand main axis bounding each zone, sidewalk obstruction to understand how accessible are the streets by caregivers and children; active & passive façade to understand the life and activity of the street dividing them on active, passive and vibrating categories; street edge to understand the façade in terms of transparency, vehicular movement to understand the vehicular flow throughout the zones; land use to understand the urban fabric; greenery to understand how accessible are green elements etc.

Quantitative information from stationary activity: Stationary Activity Mapping is a tool extracted from Ghel's so called 'toolkit' to track the different types of stationary activities taking place in a given location (Bernrard Van Leer, Ghel). It was used to determine is using the space and how a location invited various activities among youngsters and caregivers.

3.3.1 Engagement & Co-creation

As indicated by the subtitle of the study - but not only - the method of co-creation questionnaires was chosen to get input from children on how to make Tirana child-friendly. This phase in collaboration with the students used Mixed-Methods for collecting both quantitative and data to provide an overview of the observations of children in the "Myslym Shyri" area. Assessment of children's perspectives is of key importance to make sure that the proposals are coherent and sustainable. While city planners provide safety features, the atmosphere of the street is created by the ones who live and work there. Co-creation encourages collective creative thinking about a street's potentials and then brings them to life.

The evaluation system is based on surveys done among students in grades 9 through 15 (Annexe I). Since almost all children in this age range are enrolled in school, it is relatively simple to manage surveys in a systematic and structured manner. This is why school children were chosen as the target population. Participatory questionnaires were utilized to gather qualitative and quantitative information regarding care travels, travel habits, independent mobility, and play possibilities. The following phase is to interact with kids to learn their user experience, viewpoints, and ideas for the research topic.

Determinant attributes for participants selection are as follows (theoretical sampling):

1. Children at the age group (9-13) participated in the workshop useful to provide qualitative evidence that will inform priority areas and design solutions.

2. Input from 2 primary schools: “Dora D’Istria” and “Konferenca e Pezës”. Two different contexed schools with two different contexts were chosen to capture children’s view through asking them to consider everything they would expect to find in a good play space.

3. Resident near the study area.

By utilizing strategies that are informed by their knowledge, assessment and co-creation activities focus not just on what people “like” or “don’t like,” but also on how they feel about the areas they have agency and control over and how this connects to their feeling of pleasure and wellbeing.

Children’s assessment sessions are used to identify the major problems that affect them and their caregivers in the neighbourhood, as well as to map out where and how children play, the types of transportation they use to get around, and their levels of independence. The surveys are set up as a series of questions in the following areas with a three-scale rating of “yes” “no” and “I don’t know/I prefer not to answer”.

Session 1: Your lived experience: mobility, independence, and play.

Session 2: Show us your neighbourhood, use of time questionnaire.

Session 4: Rating “Myslym Shyri” avenue. Some questions examples are:

“How did you get to school this morning?”

“Who did you travel to school with this morning?”

“How would you like to be able to travel to and from school?”

"Is there any green element on your way to school?"

Co-creation sessions with members (9-13) aims to identify common themes in children's preferences on improving local environment and generate ideas for potential playful interventions. Session 3: Tell us what you want, creative thinking. Some questions examples are:

"What is your favourite outdoor game?"

"Least favourite place to play, why?"

"How do you imagine an improved version of the place you already use to play? Suggest 1-3 actions."

"How would you replace those things you don't like from those places? Mention things that you do not like to replace with something better."

3.4 Data Analysis Methods

The prioritizing phase seeks to provide a consistent assessment of a wide range of factors that affect children's development at the selected site. Both qualitative and quantitative data were collected.

Qualitative Data Analysis: the qualitative analysis of the data was based on the grounded theory approach, as the method most associated with the analysis of interview transcriptions (Denscombe, 2010). The aim of this approach is to derive what theories and concepts best capture the meaning behind the data. Qualitative data results from on-site research and engagement with children are illustrated through mapping, graphics, photos etc. Collected qualitative data from site observations is to be classified on social and physical understanding of the selected context.

Table 3. Qualitative data analysis

SOCIAL	PHYSICAL
Land use mapping	Site map
Ground floor mapping	Street network
Public/Private mapping	Cycling mapping
Active facades	Public transport
Proximity analysis	Greenery mapping
	Street edge mapping

Quantitative data analysis: young children and their caretakers are seen travelling through the region at specific times, according to quantitative data collected during on-site study. The recordings were made at periods when kids were leaving for and returning from school. Quantitative data results from on-site research and engagement with children are illustrated through maps.

Stationary activity mapping is used to notice what kind of stationary activities are taking place in an area and how children and youngsters use the space. It was used to determine who was there and how a location invited diverse usage, as well as to identify where kids liked to play. Maps and graphs were used to display the results.

Quantitative data results from engagement with children produced by questionnaires, such as nominal data, in the form of the participant's identity (sex), and interval data(age). The final generated data was transferred by in Excel. An initial analysis of the data was initially performed with formulas to generate frequencies and percentages of each variable. Next, we conducted some inferential analysis of the data by comparing several variables. The results were presented in inclusive charts, graphs and word of maps.

CHAPTER 4

RESULTS AND PROPOSALS

4.1 Introduction of the site

Figure 7. Location of study area in relation with urban city /Author

The site is in the east side of Tirana's city centre. It has a rich and profound history that has affected the evolution of the area and the city at large. "Myslym Shyri" is named after a respected Albanian patriot who was influential in the early twentieth-century war for Albania's independence. His devotion and bravery in defending the independence of the nation have elevated him to the status of national hero. Tirana was a small area with a predominantly agriculture-based economy in the early twentieth century. However, as Tirana rapidly urbanized and grew, "Myslym Shyri" arose as a residential area in the city's centre. The growth of the area aligned with Tirana's emergence as a political, social, and economic centre.

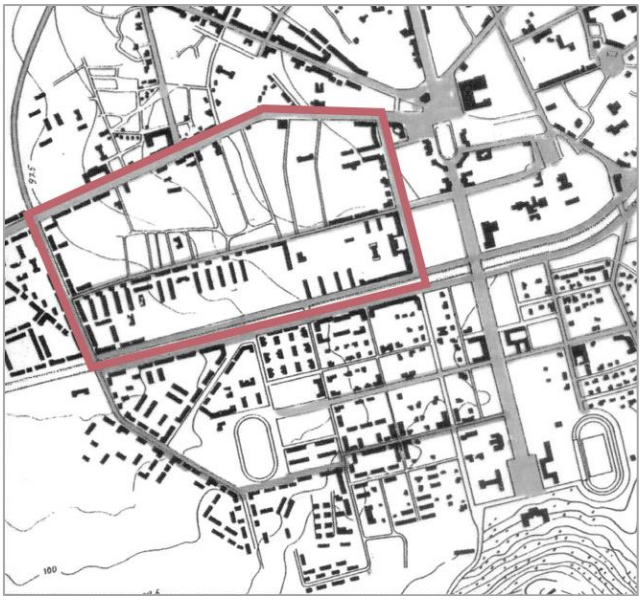

Figure 8. Map of Tirana's existing situation in 1965, study area highlighted in red; Source: (Aliaj, 2003)

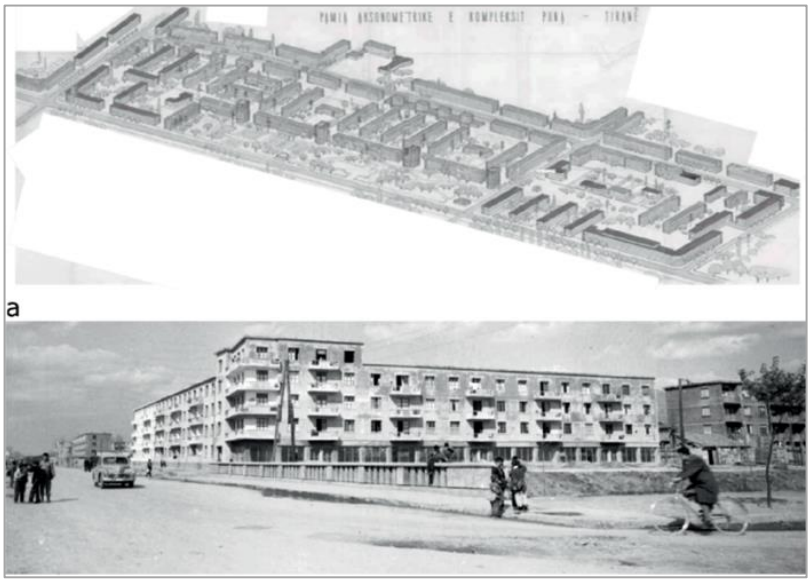

Figure 9. View from the residential complex "Puna" built in Myslym Shyri area during the communist regime / Source: Tirana Archive Centre

It was further urbanized and expanded throughout the communist period under Enver Hoxha's leadership. To meet the demands of the increasing population, the government built large-scale housing projects like as apartment blocks and housing (Aliaj, 2003).

During this time, classic socialist-era architecture was built, which remains characterizing the area nowadays. Albania witnessed a transition to a capitalist economy and a phase of significant urban expansion following the overthrow of communism in 1991. “Myslym Shyri” grew into a busy commerce hub, with its avenue lined with stores, cafes, and retailers catering to the city’s rising demand for goods and services. It has seen ongoing restoration initiatives in recent years to preserve its ancient identity while adopting modern trends. The revitalization of existing structures, the rise of contemporary high-rise buildings, and the influx of new enterprises have converted the neighbourhood to a vibrant urban core.

4.2 Desktop research:

4.2.1 General overview of the selected study area

Figure 10. Site introduction / Author.

Located only 500 m far from the western side of the city centre, “Myslym Shyri” is a bustling avenue with a lively public space and rhythms of daily life: inhabitants and visitors mixing, shopping, dining, and participating in numerous cultural activities. Its historical value and developing nature make it an appealing location for visitors looking to discover the interwoven strings of city’s past and present. “Myslym Shyri” is one of the main axes of the administrative unit no. 10. It is a high-density neighbourhood consisting typically of communist blocks housing with many off-street parking. Nearby public attractions include Youth Park, Scanderbeg square and Austria square, Lana River. During the first half of 2022, about 34,400 was the average number of inhabitants/km2 in the “Myslym Shyri” administrative unit, a small number of about 1,50-3,000 inhabitants/km2 in recent years alone (Scan Intel, 2022). Thus, the “Myslym Shyri”, is the most populated neighbourhood, but the least preferred area to live in Tirana for 2019 (Scan Intel, 2019).

Figure 11. Accessibility maps showing cycling routes, bike parking, bus stops and bus lines/ Author.

Block typology

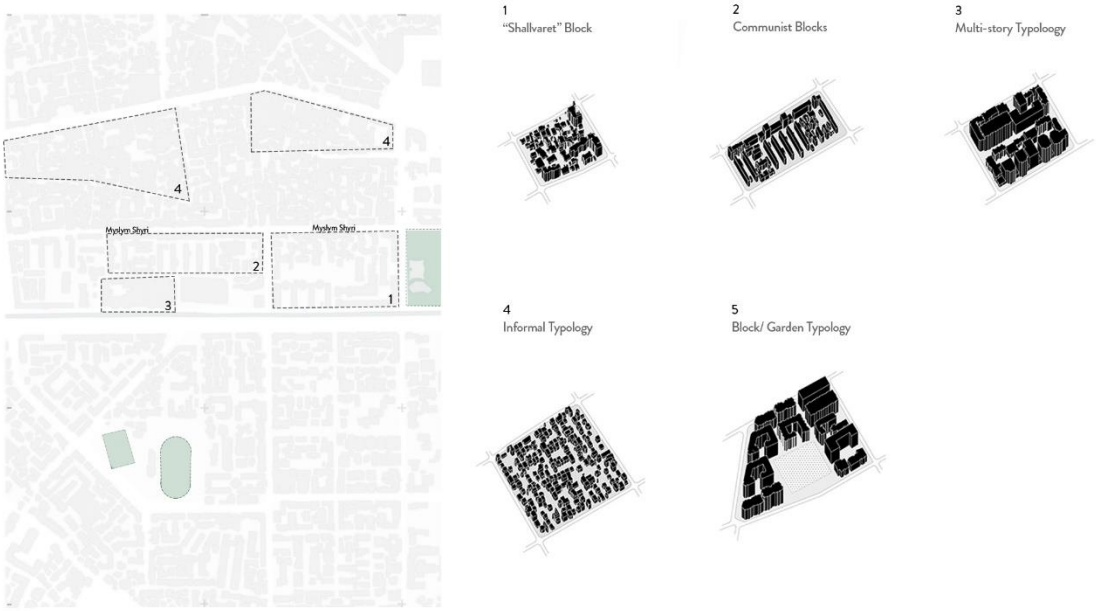

Figure 12. Block typology / Author.

The existing urban block typology of the area in study are:

- Multi-family flats of linear and hybrid type are objects mainly for residential use, which are on the ground and first floor are mainly used for services. They are mainly structures built before the 1990s, in which, after the 90s, it was inserted between the side additions or the floor additions. Multi-family flats of the linear and hybrid type (linear/tower) are also high-rise buildings located in the interior of the territory, built after the 90s. Those built before the 1990s are mostly up to 5 floors above ground (in total, without underground parking) and have a linear typology (shacks). They do not have their original shape and surface as they have been interfered with by making various horizontal and vertical additions and changes in the functions of the ground floors from residential to service.
- Tower-type multi-family apartments are built after the 1990s mostly belong to this construction typology. Towers as multi-family buildings are not numerous in number and mostly built after 1990. The buildings constructed after the 1990s are up to 13 storeys tall, fall under the tower dwelling typology, and are

towering structures with underground parking. While the other levels mostly serve as residences, their first floors are used for commercial services like: markets, stores, aesthetic centres, etc.

- Villa-type family apartments includes detached individual objects. In these spatial typologies, the structure can live in the centre or on the outskirts of the plot, one-family villa type or two-three-family detached house on floors, etc., mainly of low altitudes. Another typology of housing is the one-family house type villa, which reaches a maximum height of 3 floors. The typology of the villa is found built before the 1990s and after the 1990s.

Existing land use

Figure 13. Land use map/ Author.

The categories of land use consist of residential, commercial, mixed-used, public space, parks, education buildings, administrative, cultural, religious, healthcare etc. In the category of services are included: markets, shops, bars, restaurants, etc. in

which commercial activities are carried out, mainly on the first floors of existing buildings of medium categories and high. The main functions carried out by the buildings of structural unit are residential, service (trade, restaurants, bars, offices), education (Dora D'Istria primary school, Konferenca e Pezes primary school, kindergarten no. 56), police station grounds, healthcare facilities, sport (tennis courts) and public infrastructure. The facilities were built before and after 90'.

Land use of green spaces

Figure 14. Land use of green spaces/ Author.

Green spaces are strategically located on city centre where we can mention Scanderbeg square, Youth Park, Austria Park along "Myslym Shyri" street along the commercial strip and the southern border of the project area is described by Lana River at a length of 1021m. There is a lack of qualitative green elements at administrative unit no.10 on active main streets, but also deeper in the residential blocks. The daily users of these urban spaces including children, are deprived of well-designed greenery, gardens, neighbourhood parks, pocket parks green strips etc.

Figure ground

Figure 15. Figure ground map/ Author.

Figure ground mapping show that the area in study is a high-density constructed area. The built environment and open spaces are not proportionally distributed, causing the lack of qualitative open spaces.

Street analysis

Figure 16. Street pattern/ Author.

Myslym Shyri area is bordered by “Kavaja” street in the north, with “Muhamed Gjollesha” street in the west, “Ibrahim Rrugova” street in the east, and “Gjergj Fishta” boulevard and the Lana River in the south.

“Kavaja” street limits the area in its northern part. It is a two-way street, with 2 passing lanes each and a dedicated bicycle lane (2 lanes). It is a main artery of the city, which connects the area with all other main roads of Tirana. “Ibrahim Rugova” road limits the unit in its eastern part. It’s a one-way street, with 3 lanes and 2 parking lanes. This road is in good physical condition. It is a main artery of the city, which connects the unit with the small ring of Tirana and with other main roads in the city. “Muhamed Gjollesha” street limits the unit in its western part. It is a two-way road, with 2 lanes and 1 parking lane each. This road is in a good physical condition and is the second ring road of the city that connects the area with other main axes of Tirana. “Gjergj Fishta” boulevard, as part of the second ring of the city, limits the unit in its southern part. It is a one-way street with 3 lanes, 1 parking lane and 1 bicycle lane. This road is in good physical condition as an artery that connects the unit in question to other main roads Tirana.

Figure 17. Mobility map/ Author.

Noise map

Children's brain and body are constantly developing, resulting in them becoming more vulnerable to threats related to polluted air and excessive exposure to noise. High levels of noise have been associated to hearing loss and higher stress levels (Gupta, 2018). Tirana's average daily level of noise is 70 dB, whereas at night it is 55 dB (Pojani, 2012). The values for noise levels appear on norm near Konferenca e Pezës primary school compared to the EU and Albanian standard normal dB required on a CFC environment, and in contrast to Dora D'Istria primary school zone which reaches values above these norms. The ITC friendly path, of course, has sound buffers, which spread disturbances.

Figure 18. Noise map showing the differences in dB for the selected schools / Author based on CO-PLAN report (https://greenlungs.al/noise.php?lng=al)

Air pollution

The biggest threat to infants is air pollution; a toddler's mouth is on the same level with car emissions. According to Myhre et al. (2018), exposure to air pollution throughout childhood increases the likelihood of developing ADHD (attention deficit and hyperactivity disorder). Data from 2022-2023 measures illustrated on the map below was collected by Co-PLAN's "Green lungs for our cities" platform (Co-PLAN, 2019). The results show higher values above the standard norm on the selected neighbourhood.

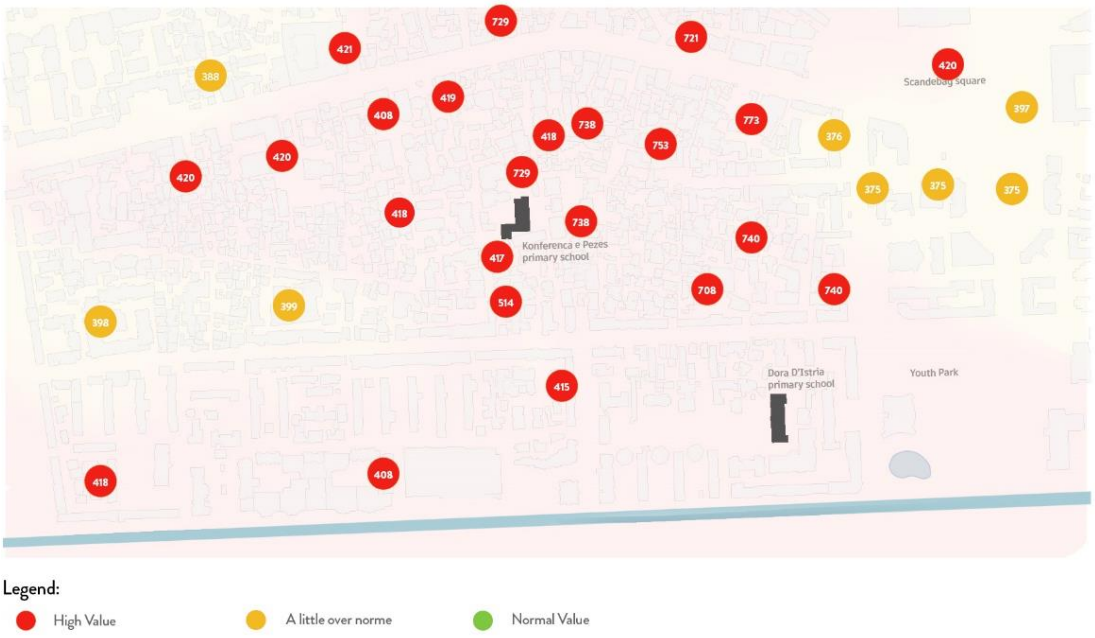

Figure 19. Air pollution rates appearing high on the selected site / Author based on Green Lungs report (https://greenlungs.al/air.php?lng=al)

4.2.2 Meso zones analysis

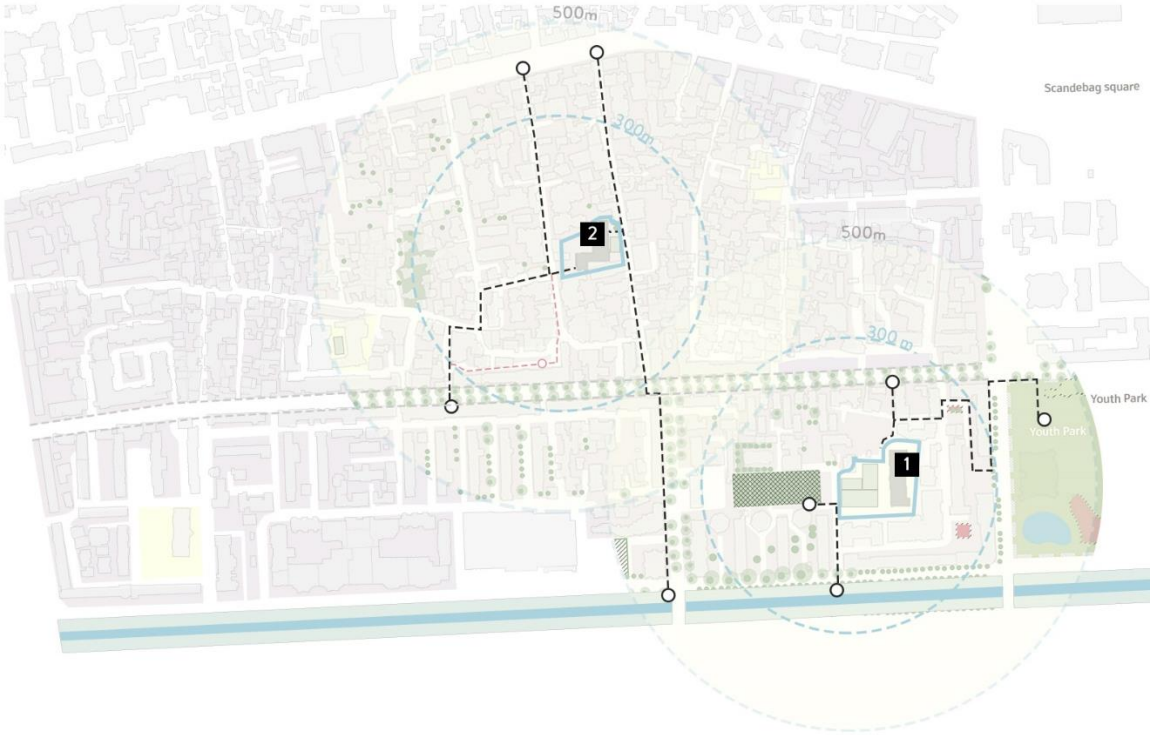

Figure 20. Map showing ITC radius measured in Tirana, the distance a child can walk in 20 minutes from the selected schools.

Two meso-zones are selected according three main criteria including school zone, mixed used, street and historically underserved neighborhood. Two zones were chosen for the analysis and proposals with a buffer radius of 300m from two selected primary schools, a distance caregivers and children can walk in 20 minutes in Tirana (Qendra Marrëdhënie, 2021). First criterion ensures improving conditions based on local needs and create play opportunities along the way for many children and carers as schools are part of the chain of their daily destinations. Both schools are connected by "Myslym Shyri", a mixed used street with commercial activities and other secondary connecting streets which have been historically underserved and do not facilitate children moving safely and confidently. The previous public open spaces are replaced with parking spaces to facilitate the needs of car-users where children are clearly excluded. However, the zones have their own distinctive elements, so they are examined in various spatial and morphological aspects, ground floor activity and building features, traffic and open spaces etc.

First meso-zone

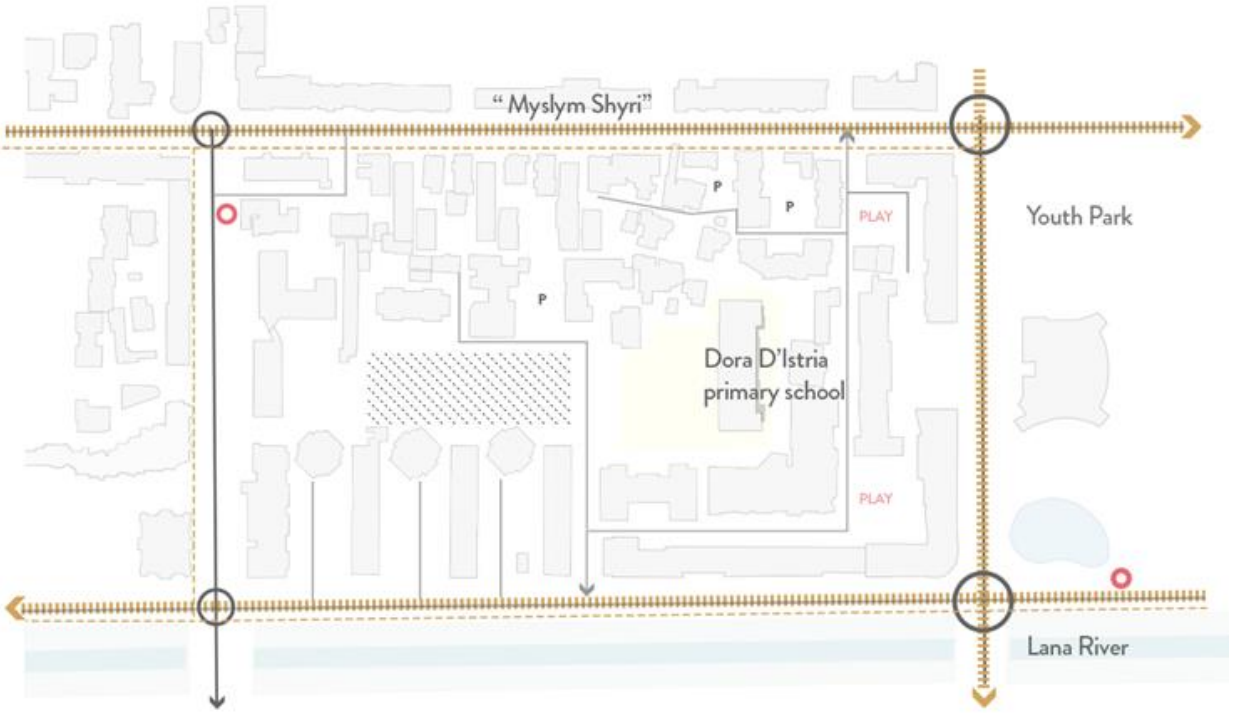

Figure 21. Map of the area near Dora D'Istria school, buffer zone 300m

The first meso-zone is located near central Tirana, covering a 300m radius from "Dora D'Istria" primary school, a distance a toddler and caregiver may easily cover on foot in about 20 minutes. Main access points include "Ibrahim Rrugova" street in the east (3 one-way lines plus 2 parking lines on each side), "Myslym Shyri" street in the north (2 one-way lanes and 1 dedicated bicycle lane), "Sami Frashëri" street in the west (two-way lines and a parking lane), and "Gjergj Fishta" boulevard (one-way street with 3 lanes, a parking lane and a bicycle lane) and the Lana River in the south. The site has high accessibility values from these main streets but lacks connectivity from secondary streets due to their narrow and cul-de-sac qualities. The current surface used for leisure activities is only 9%, while streets occupy 16.1% of the overall area. Current open spaces are overpopulated with parked cars, leaving no quality space for the community to get together and socialize. The entrances to the school lack character and wayfinding, safety and resting elements. They are hidden in between narrow and cul-de-sac streets, making them difficult to access and not confusing for children commuting independently.

Sidewalks

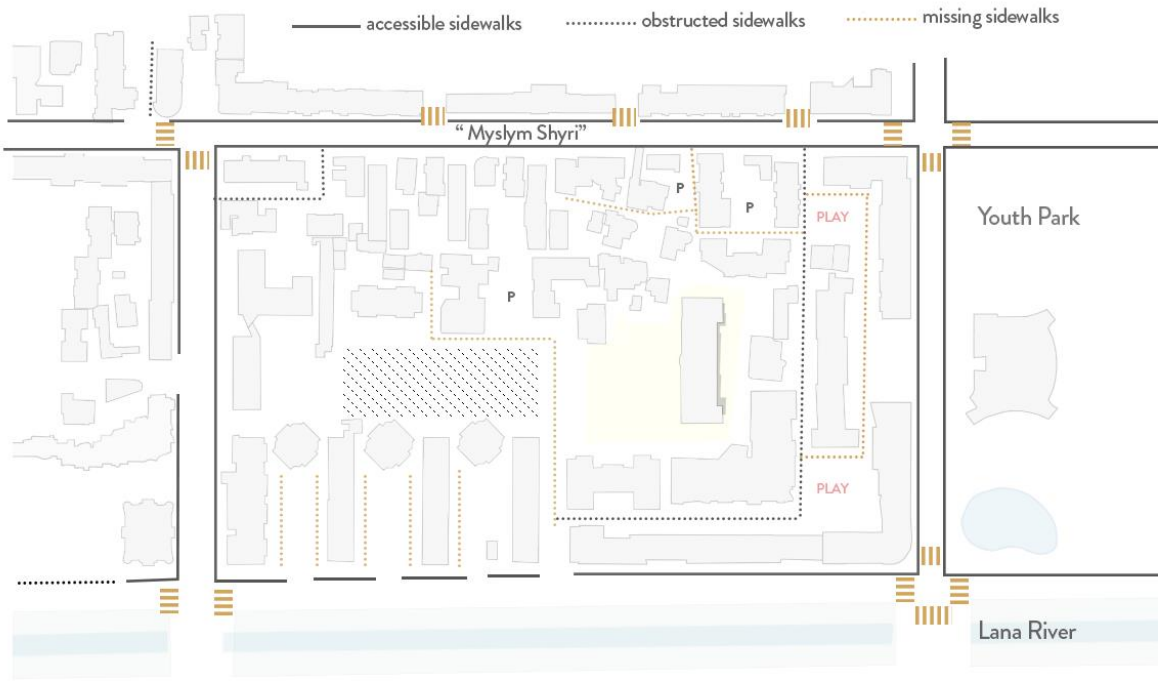

Figure 22. Sidewalk analysis showing accessible, obstructions and missing sidewalks

Children's and carers' journeys need the use of sidewalks. These areas should be designed with their functions as a mobility facilitator and an area for social interaction, where kids spend a lot of their time (GDCI, 2020). The map below illustrates existing conditions of sidewalks based on site visit observations. "Myslym Shyri" avenue provides a shaded path that meets the needs of accessibility and pedestrian volume, but fails to provide resting elements and did not encourage interaction between street users. Some negative qualities of sidewalks observed at "Myslym Shyri" avenue are broken tiles, lack pedestrian crossings near the school zone, lack of urban furniture and lack of activities for children. While at certain segments of Myslym Shyri the sidewalks were accessible, it is not the same on the inner part of the zone. The existing sidewalks do not have a clear path and are considered as obstructed. Sidewalks in "Reshit Collaku" street do not have enough space to accommodate walk so people were using the street to move around.

Figure 23. Existing conditions of sidewalks situated near "Dora D'Istria" primary school including obstructions, insufficient width, and disconnections.

Observations include missing safety elements like lighting and urban furniture, lack of inviting building edges near the school, shaded places to rest and walk, areas for play and socializing, and wayfinding systems. There were observed a large number of narrow and cul-de-sac streets. On the photos above are highlighted different typologies of sidewalks situated near Dora D'Istria primary school. The layout of the school's entrance does not provide a suitable area for movement or gatherings. There isn't enough space on the sidewalks near the school for people to walk, talk, or play.

Building use

The main functions are residential, service (trade, restaurants, bars, offices), education (Dora D'Istria primary school, kindergarten no. 56), state institutions (General Directorate of the State Police), sports grounds (tennis courts) and public infrastructure. The facilities were built before and after 1990/2000. Those built before the 1990s are mostly up to 5 floors above ground (without underground parking) and have a linear typology (shacks). They do not have their original shape and surface as they have been interfered with by making various horizontal and vertical additions and changes in the functions of the ground floors from residential to service. These interventions have also had an impact on the facade of the buildings. These are buildings where, as a result of depreciation, intervention mainly in the facade is

necessary. As for the buildings built after the 1990s, they are up to 13 floors high, belong to the typology of tower housing and are tall buildings that include underground parking. Their first floors are used for commercial services such as: markets, shops, aesthetic centres, etc., while the other floors have the main function of housing. Another typology of housing is the one-family house type villa, which reaches a maximum height of 3 floors. The typology of the villa is found built before the 1990s and after the 1990s. The unit has deficiencies in terms of completing services, infrastructure and redevelopment of the recreational area. Therefore, the premises that these facilities should have available are insufficient, their presence directly affects the commercial activity of the area, parking places, acoustic pollution, traffic congestion, etc. The categories of land use consist of residential, commercial, mixed-used, public space, parks, education buildings, administrative, cultural, religious, healthcare etc. In the category of services are included: markets, shops, bars, restaurants, etc. in which commercial activities are carried out, mainly on the first floors of existing buildings of medium categories and high.

Figure 24. Building use

Greenery analysis

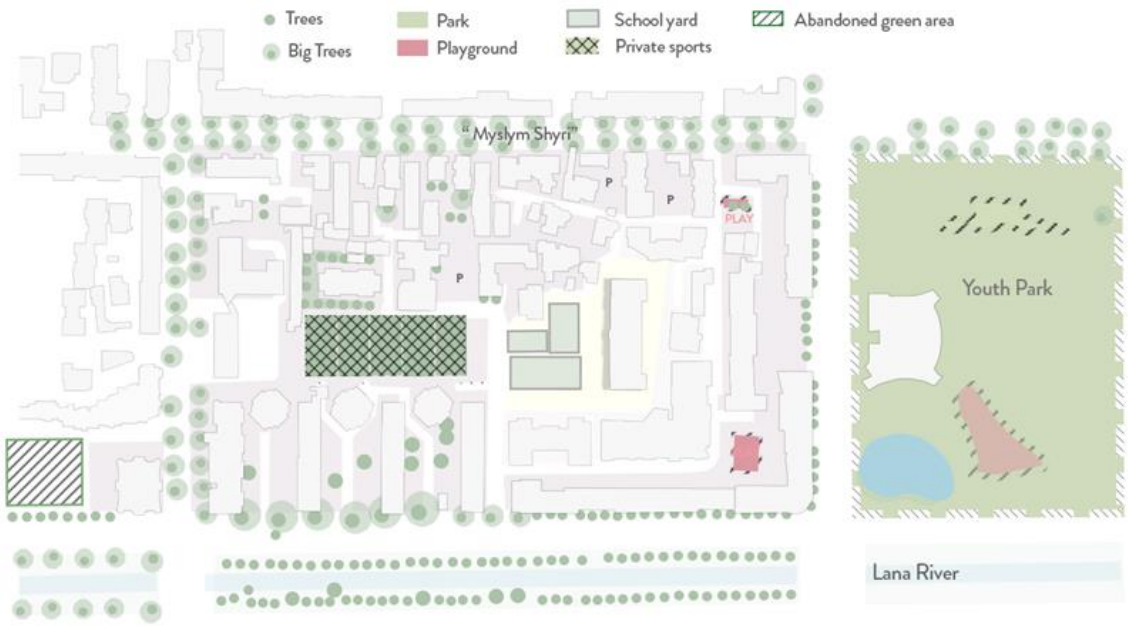

Figure 25. Green coverage map

Youth Park is the central public park of Tirana, situated only 220 metres east of "Dora D'Istria" primary school. Old plane trees (*Platanus orientalis*) are the main trees found on-site along Myslym Shyri avenue. There is a high tree coverage along the avenue in contrast with the other part of the neighbourhood. Inside the neighbourhood there are not identified any green open areas, only the private villas' yards. As designated play areas there are only one neighbourhood playgrounds, one paid playground near a café, Dora D'Istria school yard and private tennis fields. Green elements were present along the site appearing from private villas.

Figure 26. Existing elements like green wall, private villa garden, green pocket.

Active & passive façades

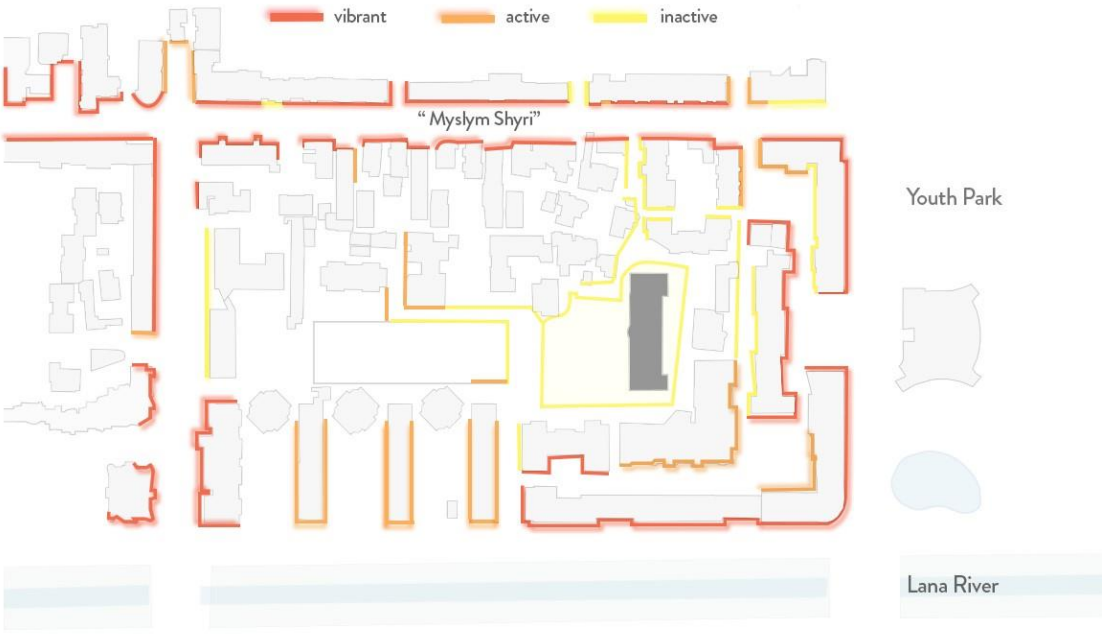

Figure 27. Active frontage analysis

The analysis of active and passive facades aids in understanding how lively and active a street is. The entire network of street facades, as well as the tertiary roadways that create different cul-de-sacs, are analysed in the map above. As a result, “Myslym Shyri” street is largely made up of active facades, as well as vibrant facades, which have more activity than active facades. Because of their residential function, passive ones are often seen on tertiary and cul-de-sac streets.

Figure 28. Street façade mapping showing vibrant active and passive street front.

Street edge analysis

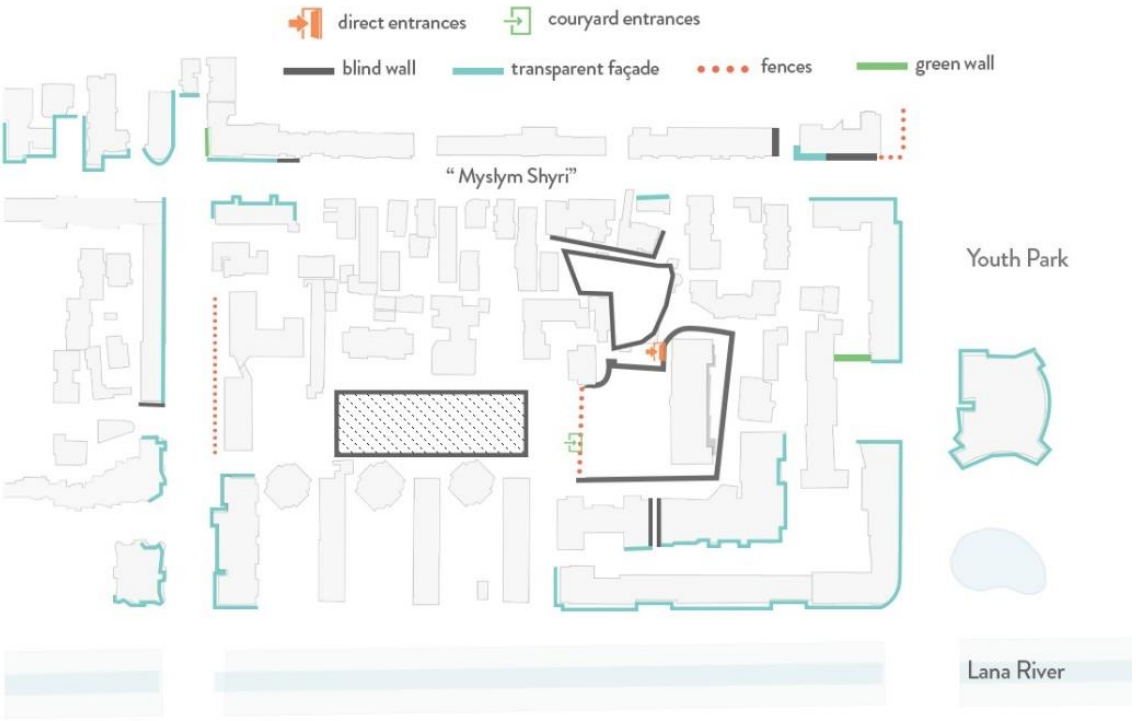

Figure 29. Façade physical feature

The physical elements of a building are an examination of the façade in terms of transparency. It depicts many façade characteristics such as blind walls, large openings, transparency, walls, fences, plant walls, courtyard entrances, and direct entrances to the buildings. According to the mapping, clear facades with direct entrances are the most prevalent features of the façade due to the building’s above-mentioned function of commercial purposes usage.

Figure 30. Physical features showing blind walls with fencing, transparent façade.

Vehicular movement and parking

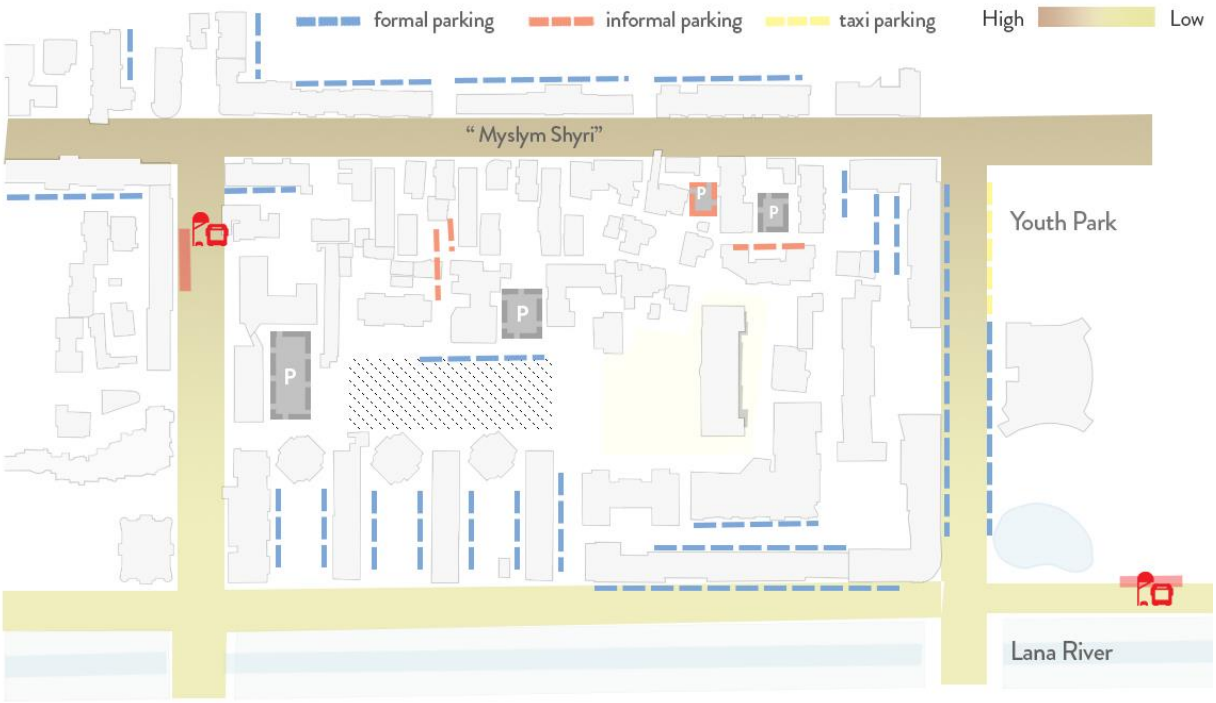

Figure 31. Vehicular movement and parking

During the observations was noted the vehicular movement is of a high density in "Myslym Shyri" street where cars average speed reached 60km/hour. Being a narrow street with a lot of activity at the street edge and with the lack of the sidewalks, makes it difficult and unsafe for the residents who pass their time there especially for the elderly people, disabled and children. Formal and informal parked cars are using the most space along the axes making the accessibility a real challenge. While the vehicular movement on "Reshit Collaku" is 20-30km/hour. Presence of double side parking on a segment of "Reshit Collaku" neighbourhood street without a sidewalk forces pedestrians to walk on the road. Informal parking sometimes in the sidewalk makes them inaccessible and unsafe for independent commute. Other routes with cul-de-sac qualities do not have any problem with the speed, but are overloaded with parking. Thus, the streets do not facilitate any needs of the community for open spaces near their homes or 'home zones' for interaction and other social activities.

Stationary activity map

Figure 32. Stationary activities mapping

Data collection according to stationary activities patterns, observations were done while on site visit. A radius of approximately 300m from "Dora D'Istria" primary school was observed on several walks. To capture more accurate results, it was needed to spend a lot of time on different segments of the zone. As a commercial street, the most predominant activities in lines of caregivers and children in "Myslym Shyri" are "Engaging with the commerce" and "Waiting to cross the street" mainly in pairs or group of three, while "Resting" and "Playing" activities where not registered. At "Reshit Collaku" street "Playing" was registered on neighbourhood playground, school yard during school hours only, private tennis centre and paid playground attached to a coffee shop; in pairs and groups of 3-6 or 7+. Both informal and formal parking made it difficult for facilitating social activities. "Using electronics" was observed in some cases near residential buildings stairs. "Eating/ Drinking" were observed on extended ground floor cafes in pairs.

Figure 33. Dora D'Istria primary school route

Figure 34. Dora D'Istria primary school entrance

Figure 35. Dora D'Istria primary school secondary entrance

Second meso-zone

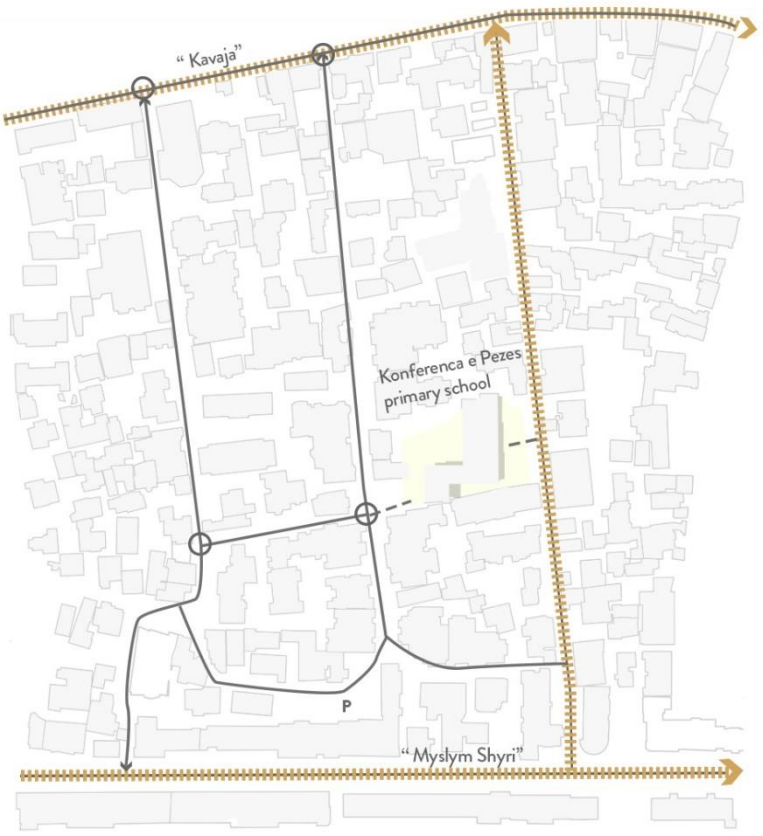

Figure 36. Map of the area near Konferenca e Pezes primary school, buffer zone 300m

The second meso-zone covers a 300m buffer zone from Konferenca e Pezes primary school with main access points from "Kavaja" street on north and "Myslym Shyri" on south and connecting axis "Islam Alla", "Him Kolli", "Mujo Ulqinaku" streets. As per greenery, the site does not offer green open spaces. Green elements were present only as a façade element on private villas. The site has high accessibility values from these main streets but it lacks connectivity from secondary streets due to their narrow and cul-de-sac qualities. The current surface used for leisure activities is only 0%, while streets occupy 16.1% of the overall area. Current open spaces are overpopulated with parked cars, leaving no quality space for the community to get together and socialize. The entrances to the school lack character and wayfinding, safety and resting elements. They are hidden in between narrow streets and parking spaces, making them difficult to access and not confusing for children commuting independently.

Sidewalks

Figure 37. Sidewalk map showing accessible, obstructed and missing sidewalks

As illustrated on the map above, all axis "Islam Alla", "Him Kolli", "Mujo Ulqinaku" do not offer sidewalks to access the area and its facilities making the streets an unsafe environment for children independent commute. The streets are shared between pedestrians, cars and cyclists and do not provide enough space to accommodate walk, rest and social interaction.

Figure 38. Existing sidewalk typologies showing obstructions and problematics

Active & Passive façades

Figure 39. Active passive façade, second zone

The analysis of active and passive facades near "Him Kolli" and "Islam Alla" streets shows that along these axes the facades are mainly vibrant and a lot of activities take place there during the day; including flea and farmers market, school zone indicating high children and caregivers' activity and other service stores. As a result, the street is largely made up of active facades, as well as vibrant facades. Passive facades are often seen on tertiary streets connecting the main ones.

Street edge analysis

Figure 40. Street edge analysis, second zone

From the mapping, blind walls with small opening along with courtyard entrances were noted at the edges of private villas, while transparent facades with direct entrances are the most repeated features on high rise residential buildings due to the ground floor function of commercial activities.

Figure 41. Photos showing street edge elements: blind walls with courtyard entrance, fencing and transparent façade.

Vehicular movement and parking

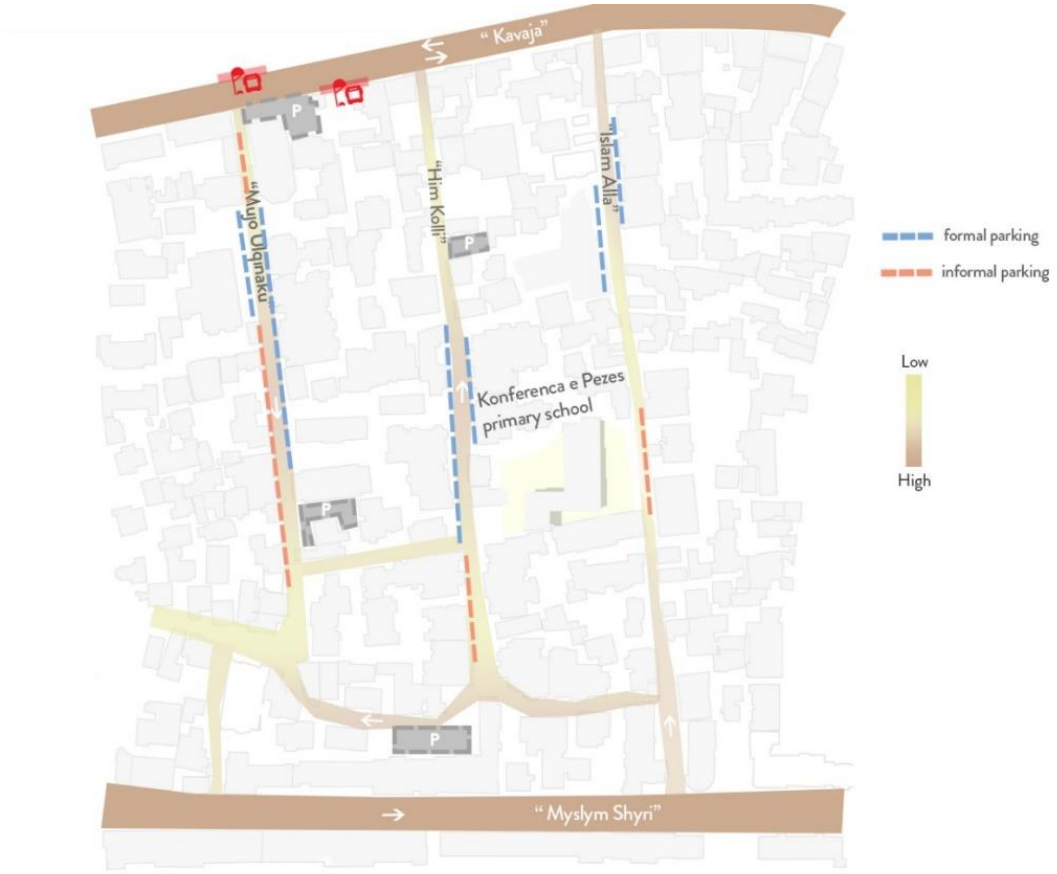

Figure 42. Vehicle movement and parking analysis

The vehicular flow is shown with a gradient where there is a high density at "Kavaja" street, that lowers up to the middle of "Him Kolli" and "Islam Alla" streets then starts increasing again at "Mslym Shyri" street. Formal and informal parked cars are using the most space along the axes making the accessibility a real challenge. The neighbourhood streets have an average speed of 10-20 km/h. Being narrow streets with a lot of activity at the street edge and with the lack of the sidewalks, makes it difficult and unsafe for the residents who pass their time there especially for the elderly people, disabled and children. Informal parking along the shared streets makes it more difficult to access the streets, especially during activities school commuting and farmers' market.

Stationary activity map

Figure 43. Stationary activity mapping for 2nd zone

For data collection according to stationary activities patterns, observations were done while on site visit. A radius of approximately 300m from "Dora D'Istria" primary school was observed on several walks. To capture more accurate results, it was needed to spend a lot of time on different segments of the zone. As a commercial street, the most predominant activities in lines of caregivers and children in "Myslym Shyri" are "Engaging with the commerce" and "Waiting to cross the street" mainly in pairs or group of three, while "Resting" and "Playing" activities where not registered. At "Reshit Collaku" street "Playing" was registered on neighbourhood playground, school yard during school hours only, private tennis centre and paid playground attached to a coffee shop; in pairs and groups of 3-6 or 7+. Both informal and formal parking made it difficult for facilitating social activities. "Using electronics" was observed in some cases near residential buildings stairs. "Eating/ Drinking" were observed on extended ground floor cafes in pairs.

Figure 44. Konferenca e Pezes primary school entrance

Figure 45. Konferenca e Pezes showing primary school yard

Figure 46. Konferenca e Pezes primary secondary entrance that has access to sport field

4.3 On-site

Site observation analysis: qualitative data

The first study zone is an area with medium construction intensity, so the public spaces are limited. In addition, the area suffers from a marked lack of accessibility in its interior, urban structures after the 90s integrated with each other have made it difficult to access the inner block. In these spaces, citizens should be offered the opportunity for a variety of activities and ways of expression within them; the quality of spaces as well as well-being for the community. A clear connection of green spaces and squares for recreation should be added.

According to the analysis, the main problems identified are:

1. Lack of a road network that meets the needs of the area in its interior;
2. Lack of public recreational spaces where activities can be developed for all age groups of this community;
3. Lack of a clear and established system of public parking places and open spaces.

The second meso-zone is characterized by a high construction intensity as a result of the presence of tall structures in it (6-10 floors). Public spaces in the area are few, almost non-existent. They mostly consist of in the streets and spaces in front of the buildings of the residential area, while the literal spaces (between buildings) are occupied, non-existent or neglected and in need of urban retraining. Consequently, the study area is currently deficient in terms of free spaces recreational. Yards or gardens, which constitute the most important recreational spaces of the area, are individual and intimate surfaces located within walls or fences surrounding. These spaces are in some cases equipped with different types of greenery, as decorative flowers and shrubs, but also fruit trees in the yard. These green spaces constitute the characteristic “squares” or “flower beds” of the Albanian individual dwelling (villa). However, these also have a lack of sunlight in most cases due to high urban density. The squares in front of the buildings lack the necessary greenery in almost all cases.

The main problems that are evident in the second zone are:

1. Public spaces used inefficiently;

2. Lack of recreational facilities in which to develop activities for all age groups starting from preschool, school, teenagers, adults, and the elderly of this community.

Qualitative on-site observation: (does not encourage play)

- lack of public spaces, difficulty journeys to facilities, anti-social behaviour, insecurity, the space at the doorstep of residential units was congested with parked cars);
- sidewalks and pavements were damaged along the segment (broken tiles, water collected on some parts), lack of urban furniture.

During the field trip was observed that the community did not spend much time together to socialise and interact together. On the other hand, children of different ages, ethnicities and gender were seen playing together in public spaces. There were not any play restrictions in and around local public spaces in your community. As free school recreational opportunities children were seen taking a trip to Youth Park or paid after-school recreational opportunities in the community (coffee shop paid play or tennis sports club). Houses do not have outdoor space designed for children play, so they were seen playing on the street in front of their house. Children independently and safely access play spaces near their apartment, while list schools' outdoor play facilities were not accessible on the afternoon. As main public and green spaces in the community we can mention Youth Park and city square (tree coverage on Myslym Shyri street, no individual gardening plots). Streets were lacking playful elements and wayfinding signs for children. The existing bike lanes were in good conditions. Overall, the area was not appropriate to facilitate play for children.

4.4 Participatory Questionnaires

Understanding children: the table below shows the demographic data collected from questionnaires on both schools. From the overall results 57,5 % of respondents were females. The results for Dora D'Istria school show that 62% of the participants were females, while at Konferenca e Pezës 53%.

Table 4. Demographic data

	Frequency		*Percentage*	
	Male	**Female**	**Male**	**Female**
Dora'Istria primary school	23	37	38%	62%
Konferenca e Pezës primary school	28	32	47%	53%
TOTAL	51	69	42,5%	57,5%

Session 1 gathered insight on mobility, independence, and play. The collected data is illustrated on charts below, dividing the answers of schools due to their difference in context. When asked about who did they travel to school with the most frequent choice among children on both schools was travelling with a parent or caregiver travel (KP 43% and DD 47%), followed by commute with a child of the same age or younger (KP 25% and DD 27%). Low rates were registered on traveling alone category. These results show that children on both schools lack independence on traveling to school.

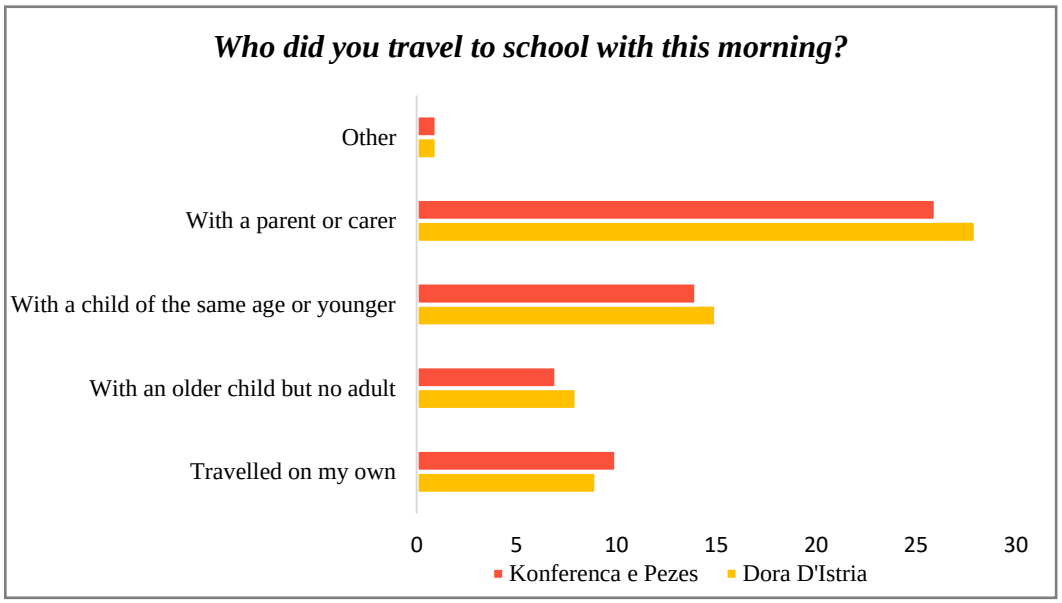

Figure 47. Who did you travel to school with this morning?

Two to three students walk every-day to go to Dora D'Istria school but only 40% of them prefer to walk to school. The most preferred mode of transport however is cycling to school. Three to four students walk to Konferenca e Pezes primary school and 48% of them prefer to walk to school. Most preferred way of travel on both schools was cycling.

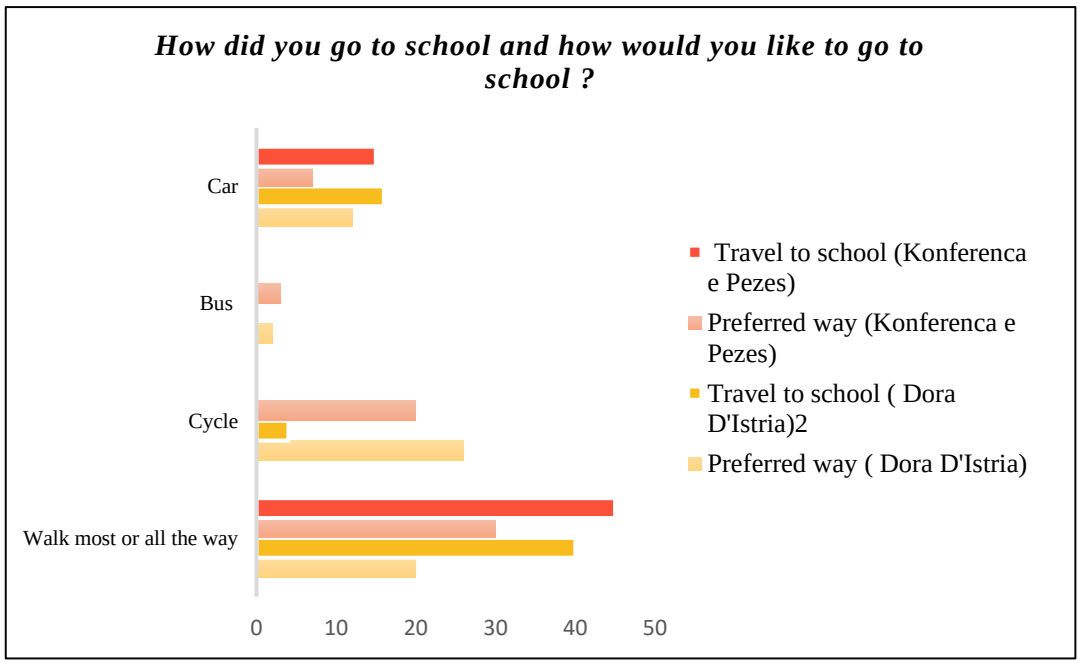

Figure 48. How did you go to school and how would you like to go to school?

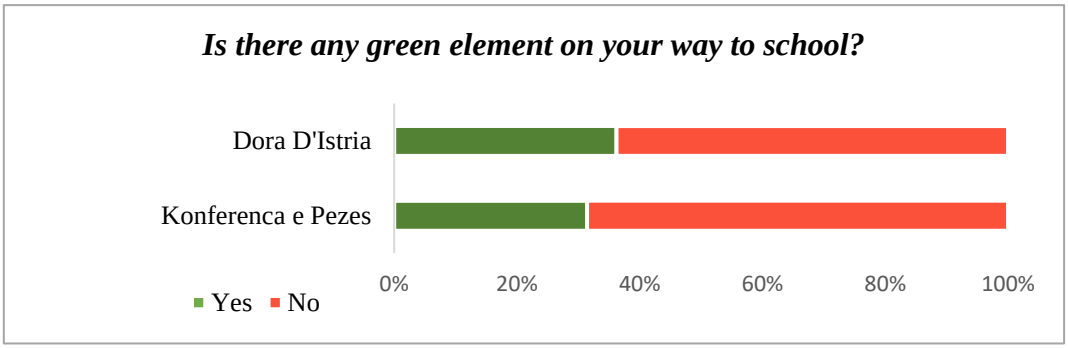

Figure 49. Is there any green element on your way to school?

Generally, on both schools were registered low rates of green elements on school commute. As explained on literature collection above, cycling is a sustainable mode of travel that needs to be incorporated into urban settings. However, even though children on both schools owned a bike, a small percentage of them were allowed to bike without adult supervision.

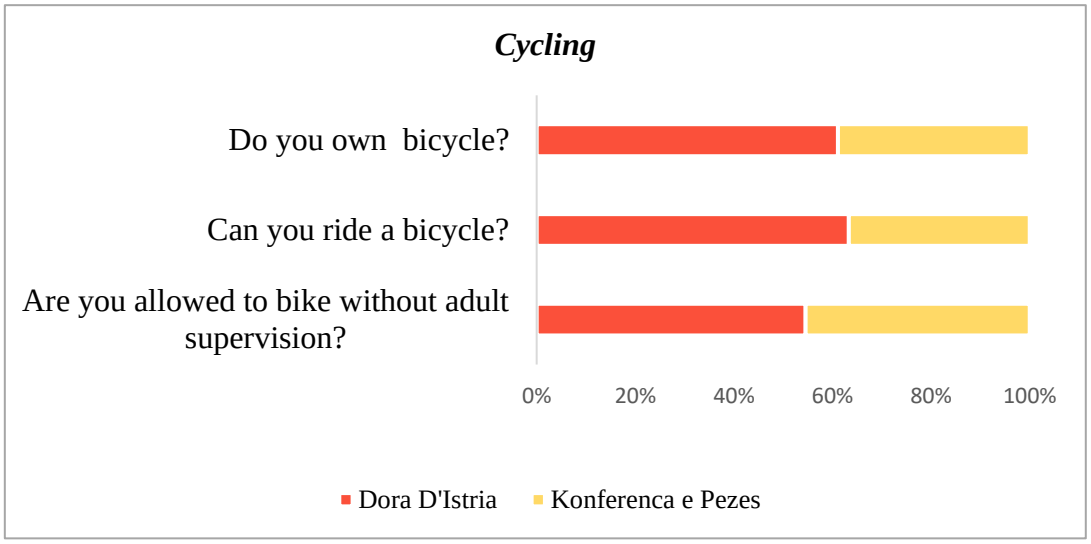

Figure 50. Responses when asked about cycling

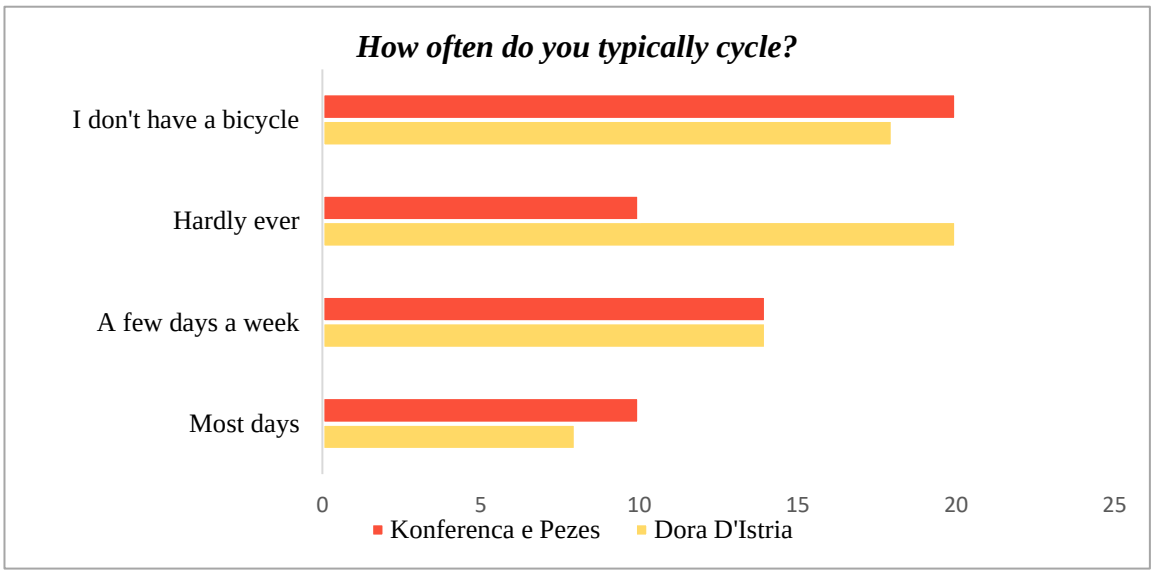

Figure 51. How often do you typically cycle?

More than half of respondents were registered under the category of hardly ever or do not have a bicycle, this also due to the absence of safe cycling infrastructure. Results from play category clearly show that the levels of independence of children at KP are lower in comparison to children in DD due to the lack of safe streets and accessibility to open spaces.

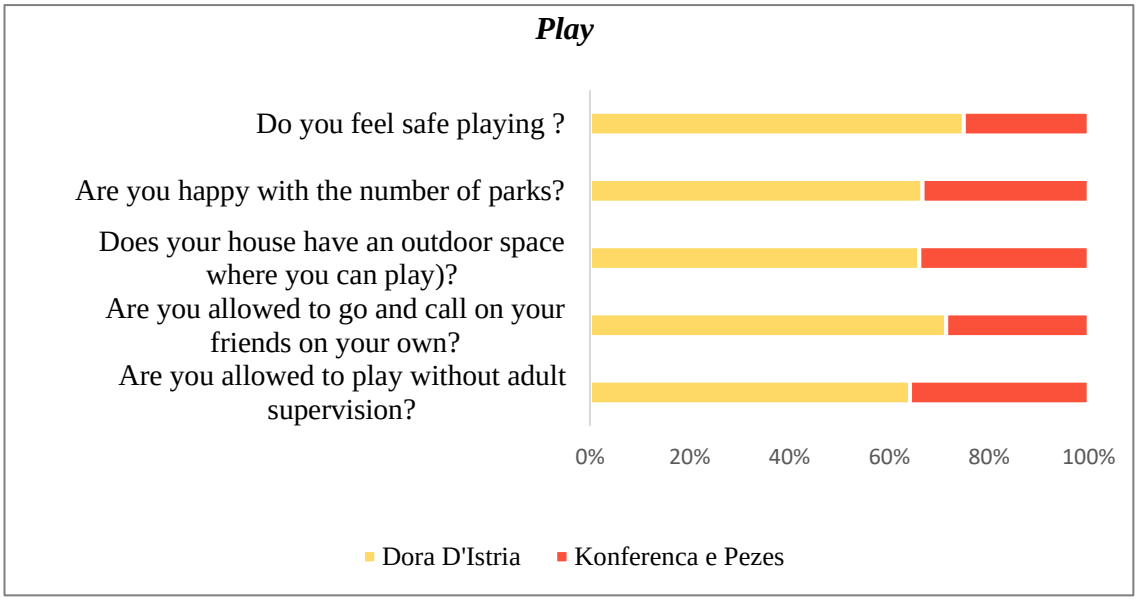

Figure 52. Responses for play category

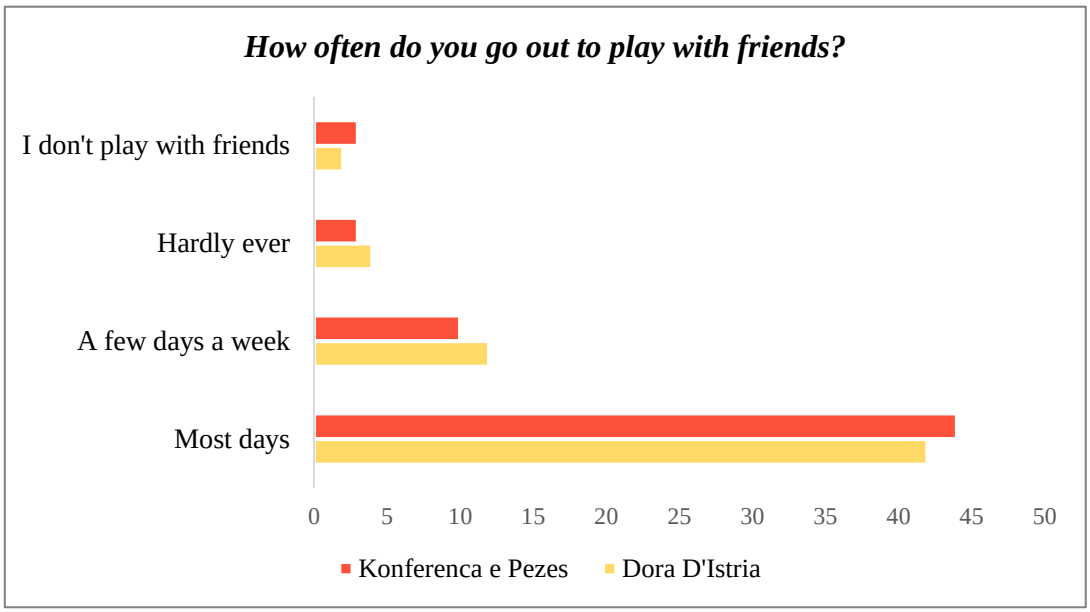

Figure 53. How often do you go out to play with friends?

Moreover, 70% of responders from Dora D'Istria school play outside with friends most days and the most preferred place to play were neighbourhood playground 45%. At Konferenca e Pezës 73% played most days with their friends and the most preferred place to play was a public park.

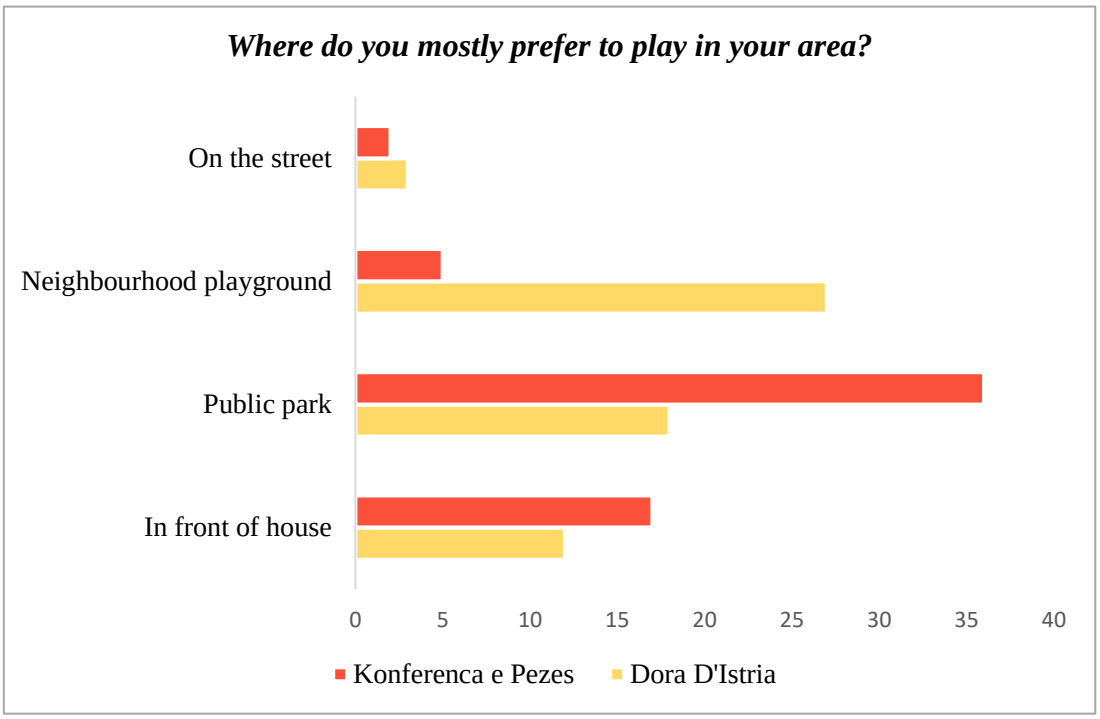

Figure 54. Where do you mostly prefer to play in your area?

Session 2 provided data from the use of time category. According to Qëndra Marrëdhënie, the distance caregiver with their children can reach in Tirana in 30 minutes is 500m. When asked about distance from park higher values were registered at KP school. While about involvement in community activities both schools registered low values. Children do not attend any community engagement or afterschool activities. Children at KP would like to spend more time outside their homes.

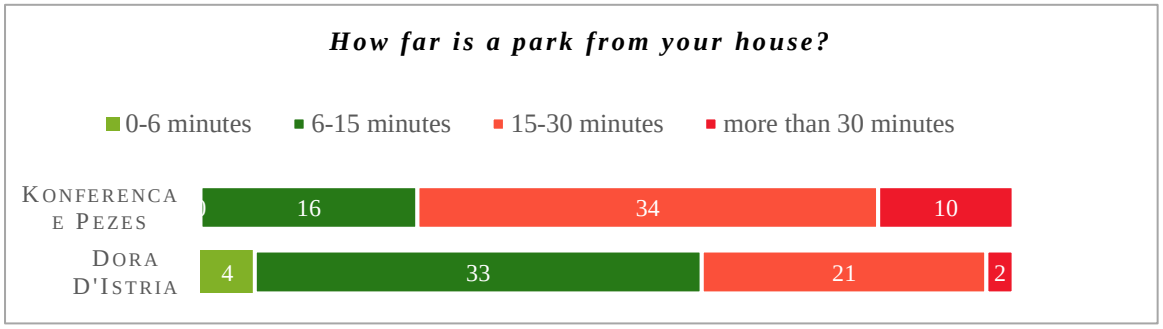

Figure 55. How far is a park from your house?

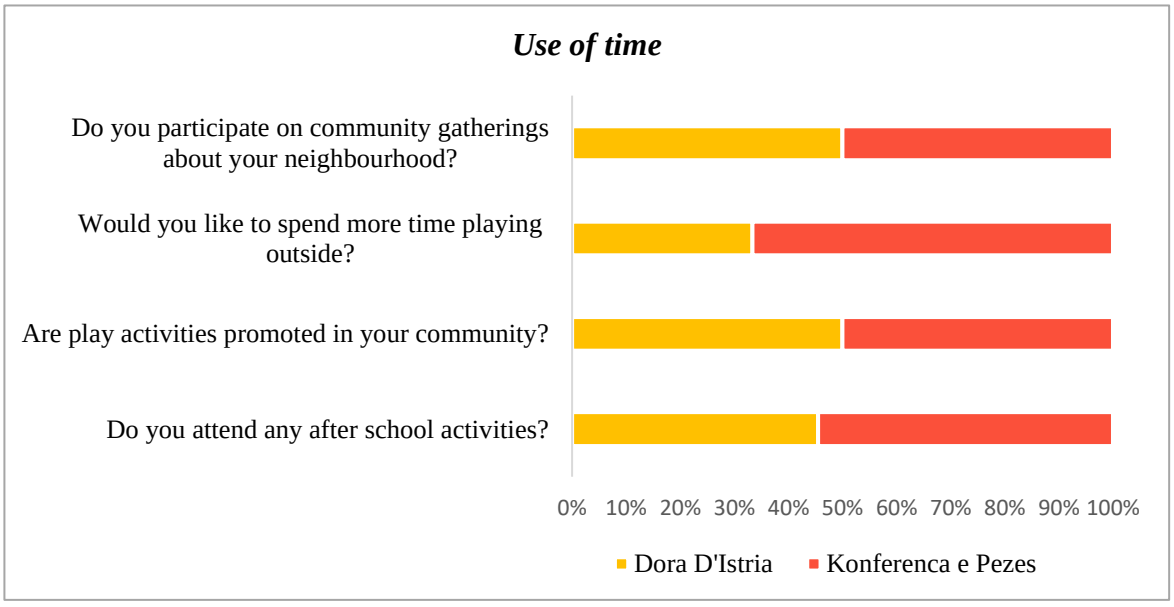

Figure 56. Use of time

Exercise 3 is designed to gather data and common themes in children's preferences on improving local environment and generate ideas for potential playful interventions. When asked about what stops them to explore your surroundings most influential categories were narrow sidewalks, informal parking, lack of safety, obstructions, lack of street furniture etc.

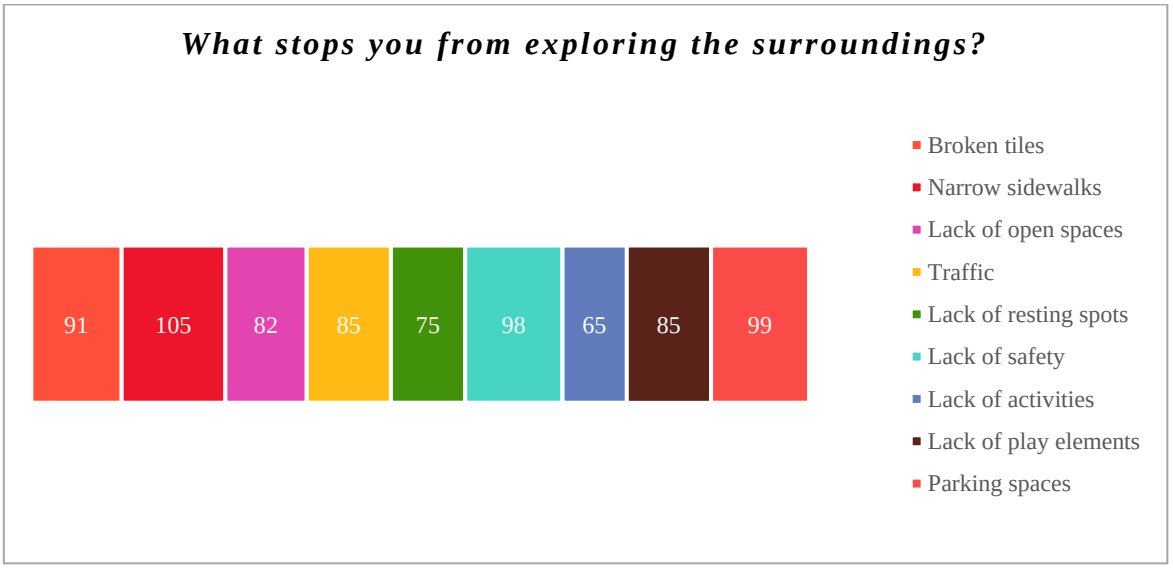

Figure 57. What stops you from exploring the surroundings?

Identified common themes in children's preferences:

"I want trees and nature"
"I want young play"
"I want a welcoming and attractive place"
"I want information"
"I want more interesting and diverse places"
"I want transport & safety"

Session 4 is overall rating of Myslym Shyri area. The pages that follow illustrate how frequently students visit the Mount, where they go, and what they think of it. All 120 respondents know Myslym Shyri, live in the area or nearby. A big percentage of them passed by Myslym Shyri daily to go to school. Almost 60% of those questioned choose to walk to Myslym Shyri, while 1 in 3 prefer cycling. Respondents prefer other modes of transportation instead of cars when visiting Myslym Shyri. Every day, 80% of students went to Myslym Shyri, 3% less than once a month. When 60% of surveyed students visit the area, they go to the stores the most. From the responses collected children mainly visited the area with their parent (s) or caregiver (s).

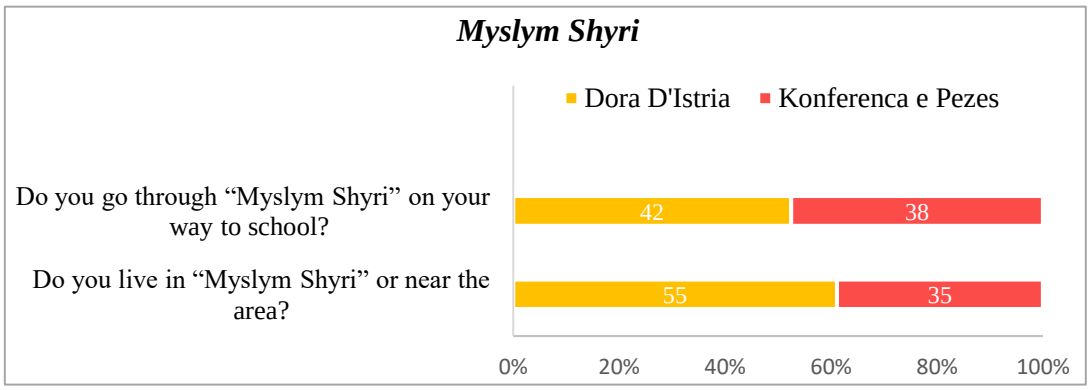

Figure 59. Do you live in Myslym Shyri or near the area? Do you go pass by Myslym Shyri on your way to school?

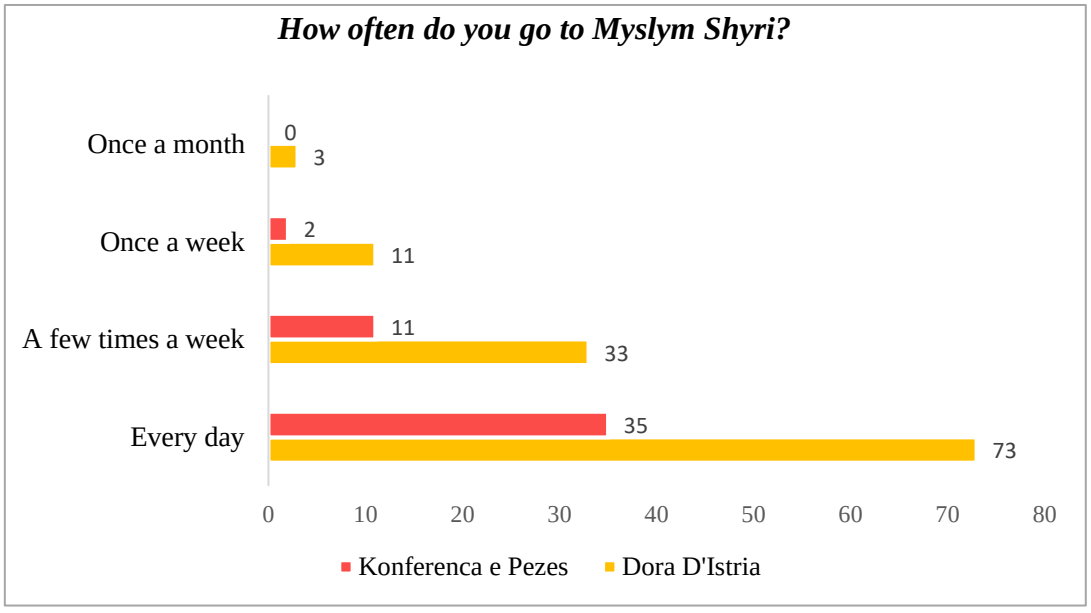

Figure 58. How often do you go to Myslym Shyri?

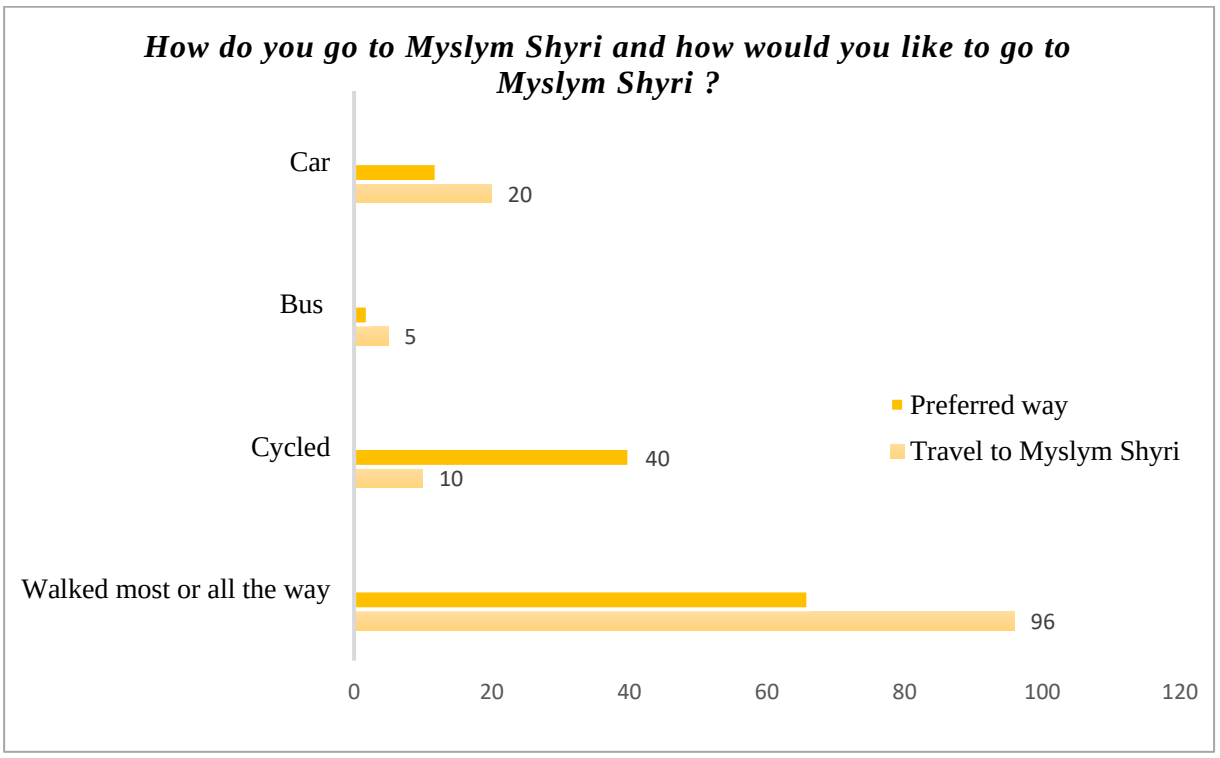

Figure 60. Results from 'how do you get to Myslym Shyri usually' and 'how would you like to get to Myslym Shyri'

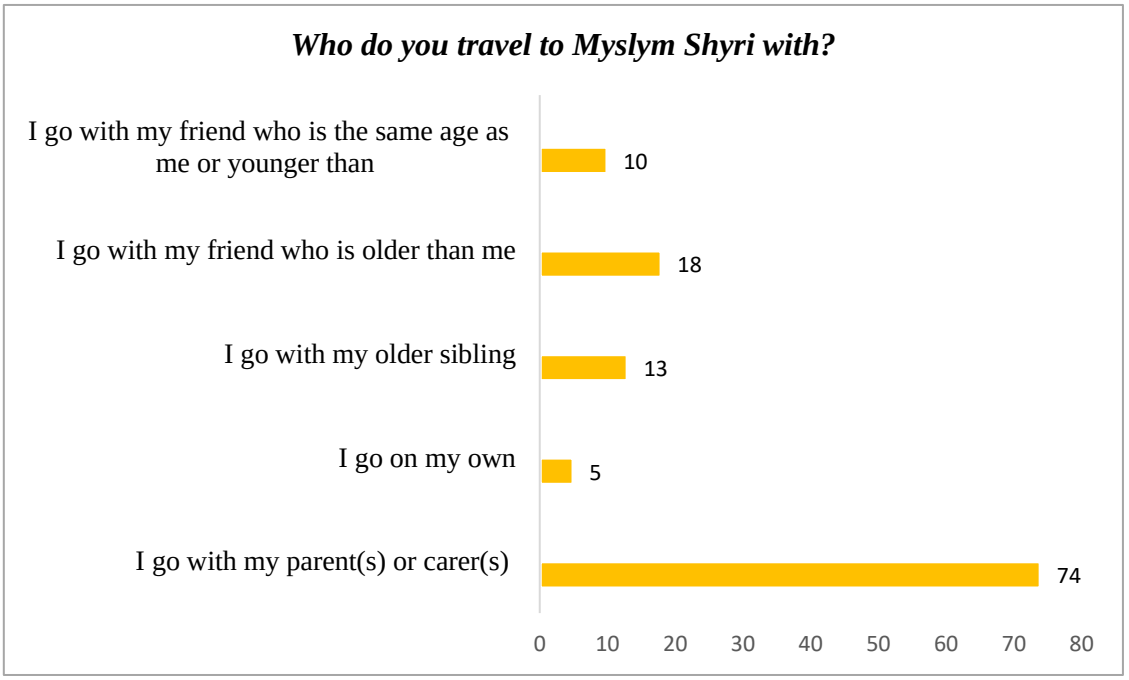

Figure 61. Who do you travel to Myslym Shyri with?

Figure 62. When you go to "Myslym Shyri", what shops or places do you visit?

Figure 63. What is the best and worst thing about "Myslym Shyri"?

The most frequent places among children in "Myslym Shyri" are "food and beverage", "kids store", "services' shops", "farmers' market", "visit a park", "visit friends' house" or "afterschool activities". When asked about favourite and least favourite activities, children appeared to enjoy "visiting shops", "food places", "memories", "things to do", "the location" and "trees". When asked about worst things about the area are "feeling unsafe", "lack of activities", "lack of greenery", "traffic", "crowds", "noise pollution" etc.

Table 5. "Rating Myslym Shyri" questionnaire response

Do you think "Myslym Shyri" is a						
	Frequency			**Percentage**		
	Yes	**No**	**I don't know**	**Yes**	**No**	**I don't know**
nice place	65	52	3	54%	44%	2%
place to play	26	94	-	22%	78%	-
clean and tidy place	52	66	2	44%	55%	1%
place for children	62	42	16	52%	35%	13%
has enough things to do	50	65	5	41%	58%	1%
safe place during the day	22	89	9	18%	74%	8%
has enough greenery	44	66	10	37%	55%	8%
has enough seating	25	95	5	20%	79%	4%
has too many cars	80	27	13	67%	22%	11%

The Table 5 displays children's perception to last set of questions of "Rating Myslym Shyri" on various elements of a place. The responses are divided into three categories: "Yes" "No" and "I don't know" For each statement, the percentages show the proportion of each response type. When asked if the place is nice, around 54% of respondents said "Yes" while 44% said "No" Out of 120 responses, 22% said the location is ideal for playing, while 78% said it is not. Approximately 44% of the respondents described the environment as clean and neat. A significant portion of 52% participants felt that the location was appropriate for kids, while 35% disapproved and 13% were undecided. Approximately 58% of the respondents said there were plenty of things to do, while 41% thought there were not enough. The majority (74% of respondents) thought the area was unsafe during the time of day, whilst 18% disagree and 8% were unclear. Around 37% of responders thought the area had enough vegetation, while 55% disagreed and 8% were undecided. Only 20% of respondents thought there was enough seating, while the vast majority (79%) disagreed. Approximately 67% of the youngsters polled from both schools said there were excessive amounts of cars in the neighbourhood.

4.5 Proposals

The previous steps established a grasp of the place under consideration of its opportunities and constraints. The next phase is to collect a set of recommendations that address the children's needs within the selected context. To revitalize a place using tactical strategies, the study started locating problems, points of interest, opportunities for improvement. Based on all observations, research and input from children, a set of proposals was developed focused on making the neighbourhood child-friendly tailored by the chosen context. The problems identified on the analysis process are addressed on meso-scale, an intermediate category of at neighbourhood level. The proposals provide safe and playful interventions on physical and social domain with the aim to treat the urban spaces with a child-friendly approach.

- Physical environment: design interventions focused on strategies that enhance children's safety and active movement, play, socialization, and agency within the physical environment.
- Social environment: programmed interventions focusing on revitalising the social infrastructure to creating a sense of belonging and strengthening community interactions.

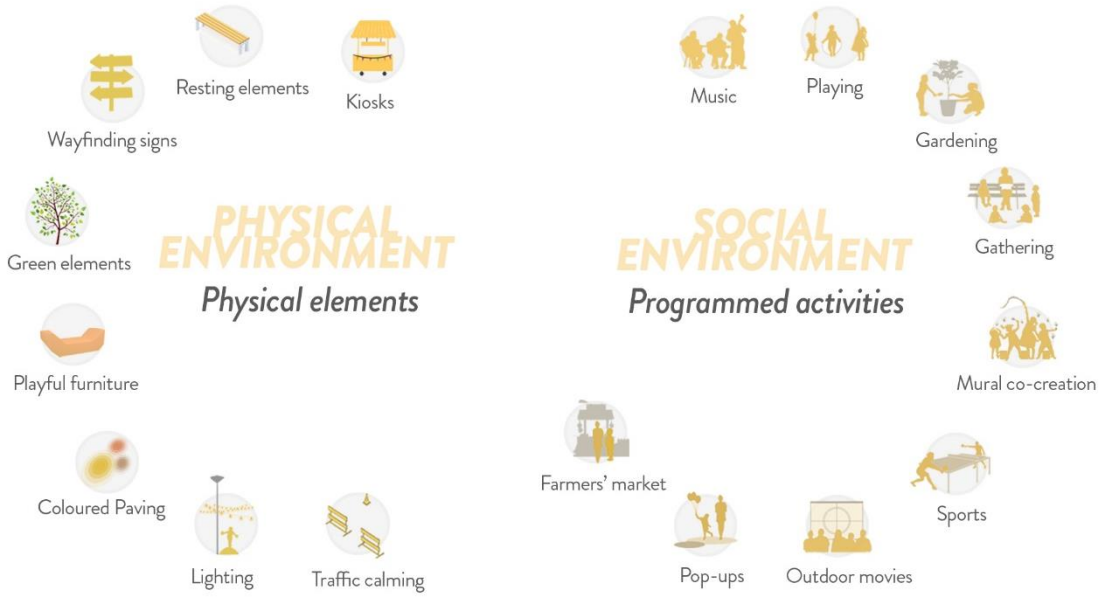

Figure 64. Design elements for physical environment and programmed activities for social environment

Project Brief

Sustainable travel routes that incorporate safety and play to encourage freedom and active mobility.

The recommendations suggest using lenses like safety and fun to reimagine our streets as children infrastructure. Working with children through a participatory questionnaire to establish common paths to explore and offer safe play opportunities along the way. A friendly layer for kids introduced in streets, home zones, school yards, and open spaces, all of which help facilitate the creation of a network of spaces linked by safer and more pleasurable streets for children, but not only. The set of recommendations takes place near key destinations such as schools, playgrounds, and community centres in order to establish a range of accessibility and sustainability of child-oriented destinations which promote walking, cycling, and play along the way. The project will enhance the lives of children in Tirana by offering safe and stimulating local journeys as well as different play possibilities. This will benefit not only the physical well-being of kids by encouraging activity, but also their psychological health by developing social relationships and a sense of attachment to their community. Neighbourhoods will be reactivated with pedestrian movement, play, and joy as more children walk and cycle in their local neighbourhoods, producing lively, healthy, and sustainable communities and improved quality of life for all inhabitants.

Quality criteria for child-friendly living spaces adapted aim to provide freedom from danger, accessibility, interaction opportunities. The hierarchy of spaces considered: spaces in front of home, near key destinations, streets. Design principles adapted include input from children engagement, front door play, ‘‘play along the way’’, streets as destinations, interaction with nature for health and wellbeing.

4.5.1 Development Strategy

The followings are suggested development strategies that different hierarchies of spaces need to facilitate children on their daily activities. Taking advantage of the zone's assets and possibilities through measures such as school streets, side-walk improvement, and pedestrianization of streets, quality pedestrian crossing, activating play by putting clear boundaries between open space and informal parking spots and emphasising connections of recreational facilities with other every-day facilities.

Figure 65. Scheme showing development strategies

- *Value the existing:*
  - Activating open spaces- 2 school streets through tactical solutions.
  - Making use of existing spaces, spot the spaces that hold great potentials.
- *Nurture the possible:*
  - Utilising underused plots by creating places for children's activities.
  - Defining open spaces from parking spots.
  - Lowering the fences for interaction and safety.
  - Pedestrianizing the streets.
- *Define what is missing:*
  - Open public spaces- 300m radius child-related activities buffer zone from selected schools.
  - Physical and social infrastructure.

4.5.2 Network Proposals for sustainable child-friendly routes

Two meso-zones selected within a 300m buffer from both primary schools are considered to be transformed on their physical and social aspect including proposals that facilitate the needs of children using these spaces on their daily basis. Proposed network focuses on providing a more sustainable and safe approach for children and caregiver's movement including slow mobility, pedestrian only street, temporary closure during flea market "Him Kolli", "Islam Alla" and "Reshit Collaku" as shared one-way shared. Strategies proposed include spaces for multiple use, designated child routes, flexible use, accommodating cycling, pedestrianization. Types of programming proposed include car-free streets near 'home zones'; temporary programmed street closure: pop ups, farmers' market, carnivals; shared streets, slow mobility.

Figure 66. Child-friendly network proposal in neighbourhood scale

Street space, which can range from parking lots to entire blocks, can be used for a variety of purposes. Aside from movement, streets can be designed as spaces to play and socialise. When asked about what stops them from exploring their surroundings, 87% of respondents from both schools underlined the lack of paved, safe and wide enough sidewalks. Other main concerns in the range of children participating in the questionnaires underlined informal parking, lack of safety, obstructions, lack of street furniture etc. on both zones under study, all these results confirmed also by the analyses conducted on-site. To solve these problems in Tirana and simultaneously answering their needs of a safer street network we were based on the solutions captured by the literature in study in the case of Rotterdam and London that suggests promoting active transportation, including the provision of cycling and pedestrian-friendly streets, traffic calming measurements enabling children to move around the city safely and actively.

Another critical issue of the current situation ascertained from the analysis process is the informal parking along one-way streets makes it more difficult to access the streets, especially during school commuting and farmers' market. Pedestrians are forced to walk on the road. Informal parking sometimes in the sidewalk makes them inaccessible and unsafe for independent commute. To improve the quality of movement and speed control, traffic calming measures are proposed.

Also, it was possible to observe that 73% of respondents attending "Konferenca e Pezës" primary school were not able to attend a designated play space or green space e.g., a park or playground near their home in less than 15-30 minutes, leaving the streets as their only option they can use for play and social activities. To solve this problem and also used as traffic calming elements, it is proposed to adopt tactical solutions that offer resting furniture along the street and trees as green elements for shade along "Islam Alla" street; but also programming activities as temporary closure to promote multiple use of the streets during the day at "Him Kolli" street and pedestrianizing streets in front of residential buildings to make room for safe community interactions and play streets using elements like lighting, coloured paving, resting and playful furniture, green elements etc.

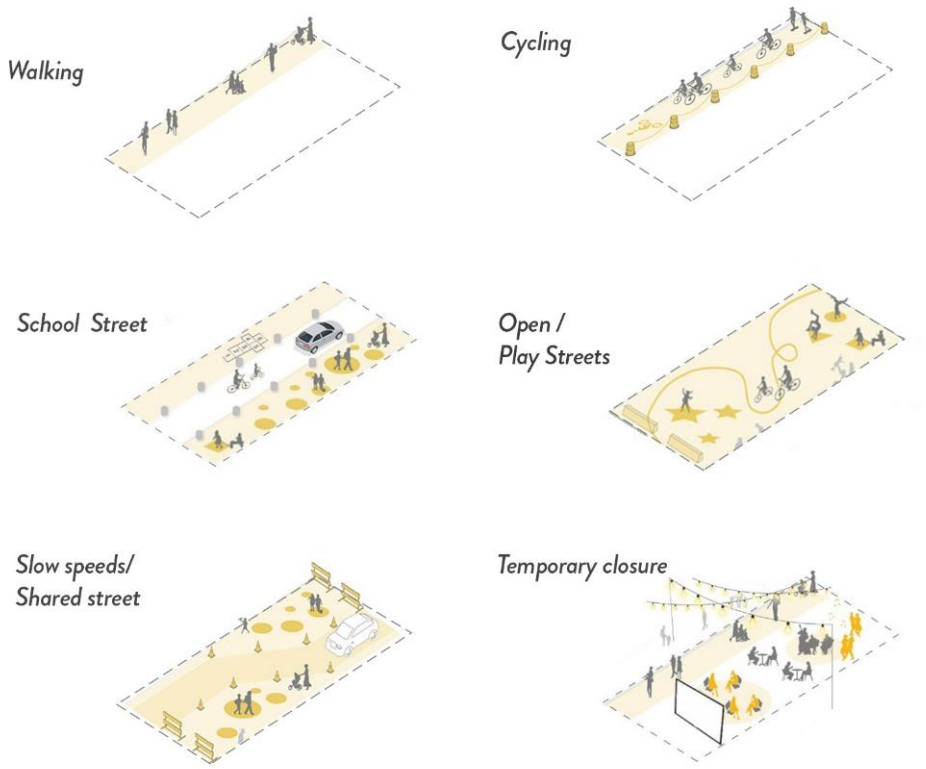

Figure 67. Street as public space activity programming

Main suggested street use include: school streets, streets that prioritize walking and cycling as sustainable modes, shared streets, and temporary interventions like play streets, pop-ups and temporary closure of streets. The proposed use of streets suggests temporarily altered interventions for innovative uses and different users by placing lightweight components. These temporary tactical applications may eventually lead to more permanent alterations. Adapted programming utilises a variety of approaches to produce safe and diverse functions with the aim of low-cost interventions. When a street is utilised the right way for each specific time of the day depending on the uses it can be easily adjusted to be more sensitive to children. When empty and not in use, parking spots can be instantly converted by adding a picnic table. When underused, parking spots, for example, can be instantly switched into a lively space by inserting a small furniture. A street can be temporarily altered for new activities and various users by placing lightweight and moveable components such as chairs or games. These temporary utilisations may eventually evolve to become sustainable and permanent modifications depending on their performance.

4.5.3 First meso-zone proposals

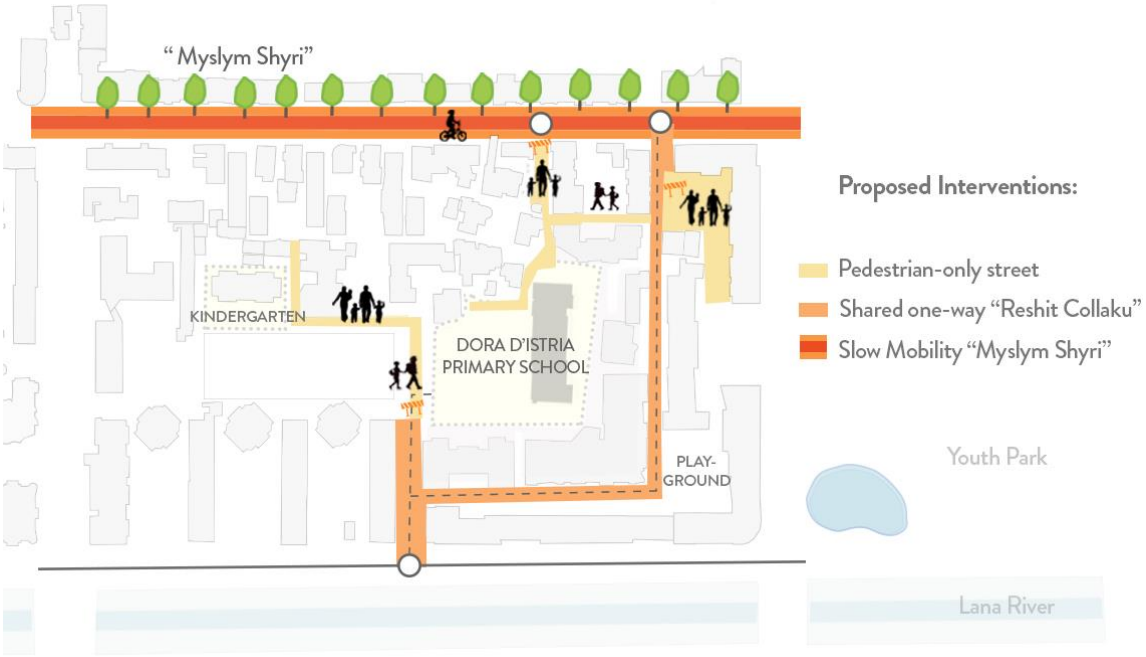

Figure 68. Network proposal on traffic calming measurements to improve safety and enhance independent mobility

From the site observations and children's feedback from questionnaires distributed to "Dora D'Istria" school it was ascertained lack of safe streets that facilitate children and caregivers' movement, especially on "Reshit Collaku" street. Currently it is serving as a one-way street used by one line car movement and sidewalk on both sides that do not offer quality space for pedestrian movement due to obstructions and even parked cars, so children and caregivers were forced to walk on the street. To improve safety and promote independent mobility, it is proposed shared use for "Reshit Collaku" street with traffic calming elements and car-free for streets connecting with the school and inner streets with cul-de-sac qualities. The routes network will be transformed using sustainable solutions adapted from literature research such walking and biking as a sustainable solution that helps with safety and "play along the way" tactical urbanism, low-cost interventions that make their journeys more enjoyable, as to improve the current situation but also to achieve the overall goal of the thesis. Existing streets with cul-de-sac qualities are proposed as pedestrian only streets, where social programming for safer and more enjoyable uses by the community like gatherings, gardening and mural co-creation can take place.

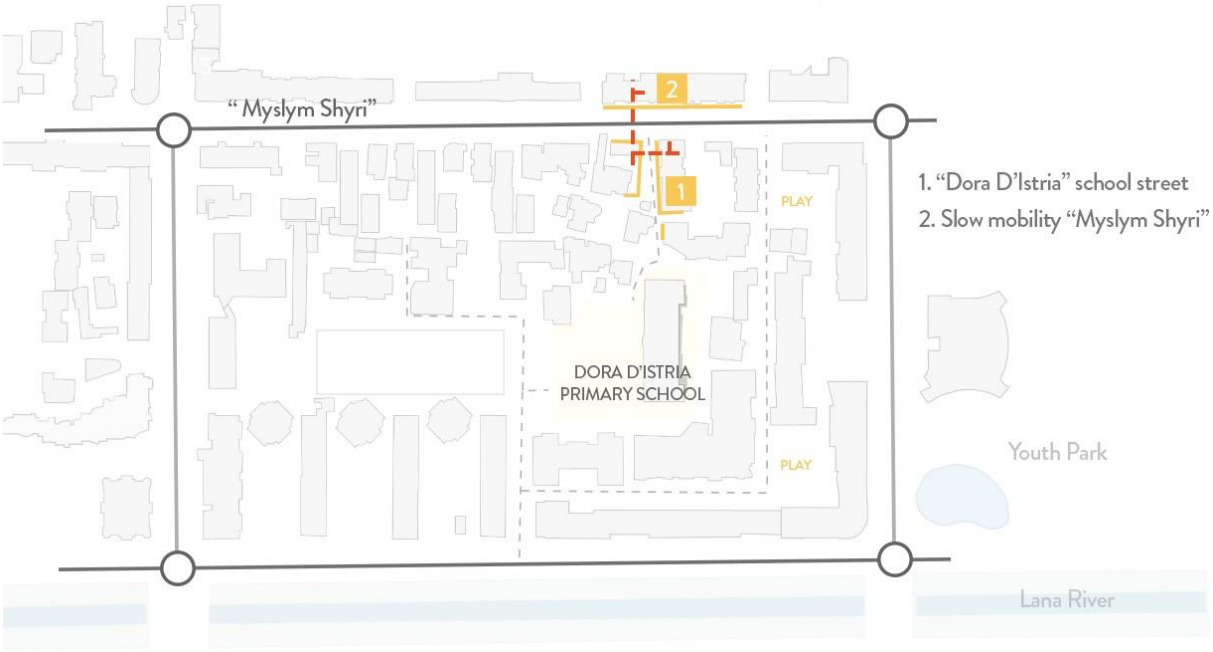

Figure 69. Map of interventions, first zone near Dora D'Istria primary school

Interventions selected to be illustrated are "Dora D'Istria" school street transformed from the existing residential parking square and slow mobility elements in "Myslym Shyri". 80% of students that walk to "Dora D'Istria" primary school pass by "Myslym Shyri" avenue. Some expressed concerns in lines of children were lack of resting elements and lack of extended activities in food and beverage categories along this avenue making it difficult for them or their companions to walk such long distances without resting and engaging with the commerce. The other concern was that the street connecting the school with the avenue was overloaded with parked cars leaving little to no room for accommodating group movement near school zones. Critical issues of the current situation observed from the collected data are illustrated with proposals in spot 1 and 2, with the aim of creating a more accessible route to school that encourages active mobility of children. The proposals will impact both the physical and social environment of the selected area by adding physical elements like playful furniture, coloured paving, green trees for shading, bike parking for promoting cycling to school, resting elements and wayfinding signs; and programming like gathering, co-creation of murals on blank walls, pop-ups, sports etc. These proposals will not only benefit the children and caregivers that use these urban spaces on a daily basis, but creates a ripple effect by positively impacting the broader community.

School street using tactical interventions

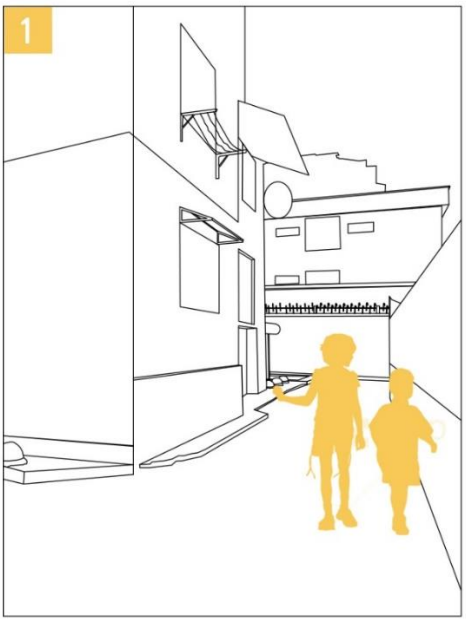

Figure 70. Sketch from children's perspective showing school route

Similar to schoolyards as community centre, the square in front of the school will be used and built to accommodate various functions. The parking lot will be removed, and the area will serve as open area to facilitate school network during the day. As we saw from building feature analysis illustrated also in Figure 70, the route children, carers, teachers use is bounded from high walls that do not create a comforting experience and do not encourage socializing. The removal of school fences by lowering the wall to tear down view obstacles, revitalize communities, and promote community building ensure access points and signs that are welcoming, apparent and well-placed. Existing street edges such as blind walls will serve as canvas for children mural co-creation activities, where they can gather and personalize the empty space by transforming them into enjoyable features children can observe during their commute to school. Proposals suggests lowering the school wall, and through tactical solutions adding wayfinding painted paths and programmed yard opening for community services. Clear division between designated pedestrian and car routes opens space for indicial play. Now existing open area for parking, this small square is restricted from parked car and just by addition of urban furniture is turned into a lively open area that promotes engaging, dialoguing, wandering and play.

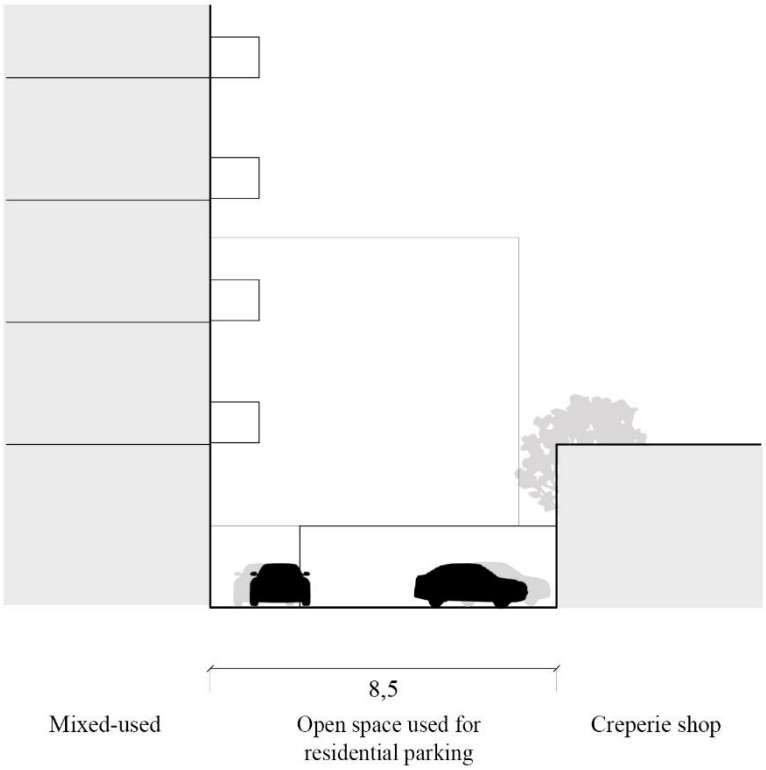

Figure 71. Section showing the route to Dora D' Istria school from "Myslym Shyri" street, the area is used for residential parking

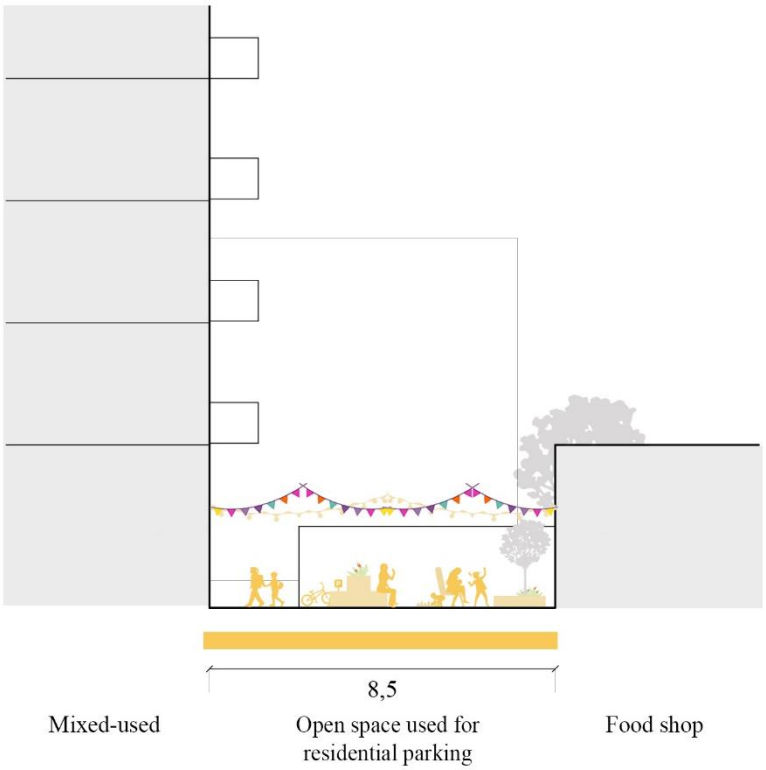

Figure 72. Proposals for school zone, parking lot flexible use, lowering the fences

Figure 73. Existing condition of “Dora D’Istria” school zone serving as residential parking leaving insufficient space for group commute and interaction.

Figure 74. Proposal through tactical interventions that promote safety, play elements and social interaction.

Addition of resting elements to promote a slow mobility “Myslym Shyri”

Figure 75. Current condition of “Myslym Shyri” street, main street used by children walking and biking to “Dora D’Istria” primary school

“Myslym Shyri” is a bustling commercial street that offers different services during daytime and nighttime. From the questionnaires responses was noted that children enjoyed spending time there, visiting shops with their parents and visiting friends, but they were not happy with the noises and car traffic. Also, the majority of the respondents noted the lack of resting elements. To solve these problems and to help achieve the overall goal of making streets more friendly for children and their caregivers, it is proposed addition of urban furniture for facilitating resting and play and a proper division of cycling route with green stripes to invite children to bike to school as a sustainable way of transport. From the stationary activity mapping it was understood that children and caregivers use the street to engage and commerce and for food and beverage it is proposed for these categories to extend their activities in frontage zones as the existing width can facilitate these kinds of programmes. The proposal aims to make the sidewalks a safer and more enjoyable alternative.

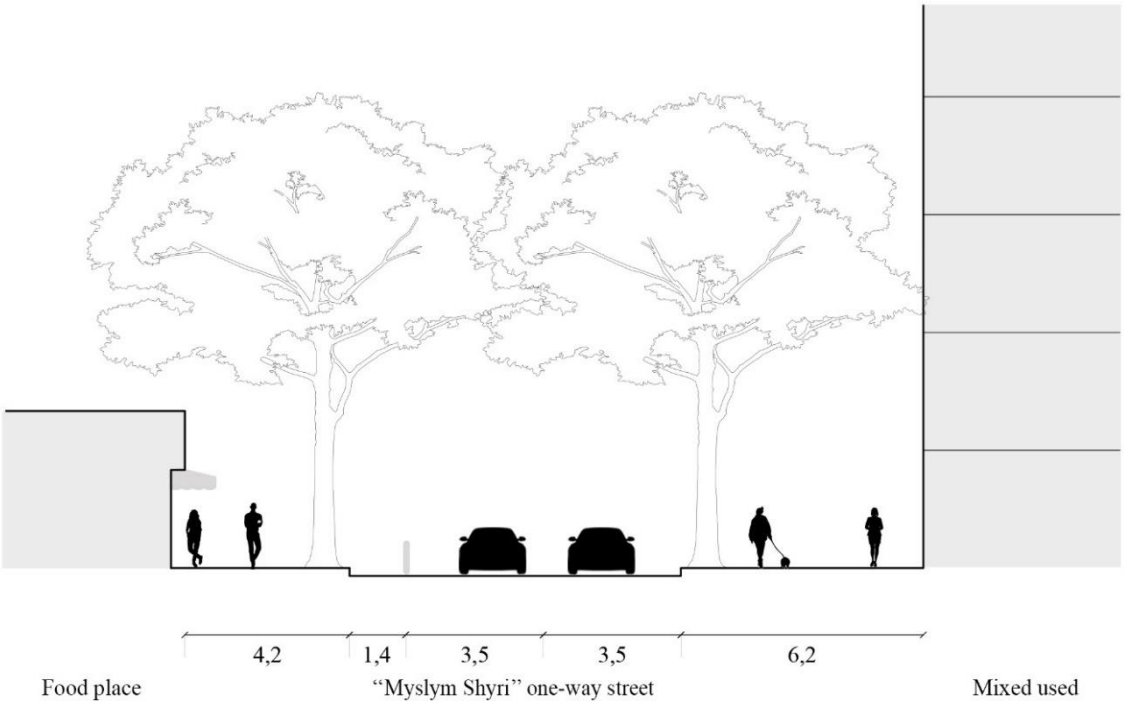

Figure 76. Existing condition of “Myslym Shyri” street showing lack of resting elements

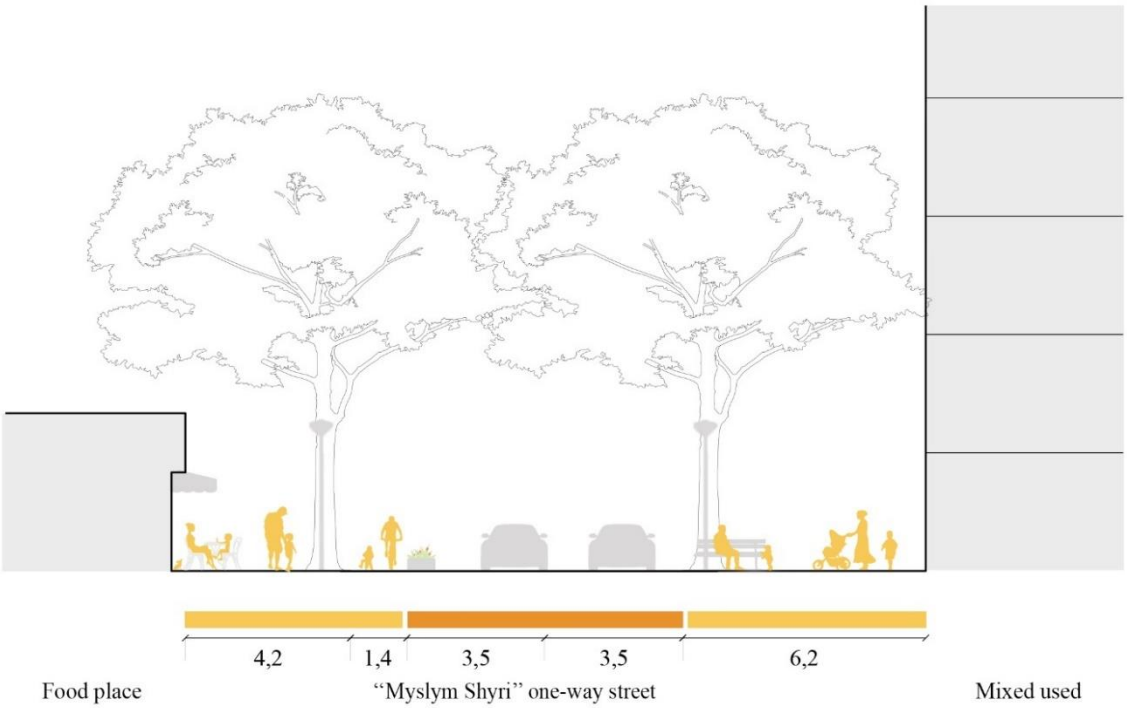

Figure 77. Proposed extension of businesses providing frontage zone, addition of urban furniture for facilitating resting and play

4.5.4 Second meso-zone proposals

Figure 78. Network proposal for child-friendly routes for "Him Kolli", "Islam Alla" and "Mujo Ulqinaku"

From the site observations and children's feedback from questionnaires distributed to "Konferenca e Pezës" primary school it was ascertained lack of open public spaces, difficulty journeys to facilities, anti-social behaviour, insecurity, the space at the doorstep of residential units was congested with parked cars). Most influential category on children's preferences was "I want trees and nature" and 70% of the respondents expressed their concern on car chocked streets. So, to answer their needs and to add to the overall goal of the thesis it was proposed a network of routes that support children's and caregivers' everyday commute and help create a safe and enjoyable children infrastructure. The interventions include pedestrian-only streets near home-zones, school streets near school, temporary street closures during peak hours of children and caregivers' movement, shared streets between pedestrians, bikers and cars; combined with activities along the way.

Figure 79. Map of proposals, second zone near Konferenca e Pezës

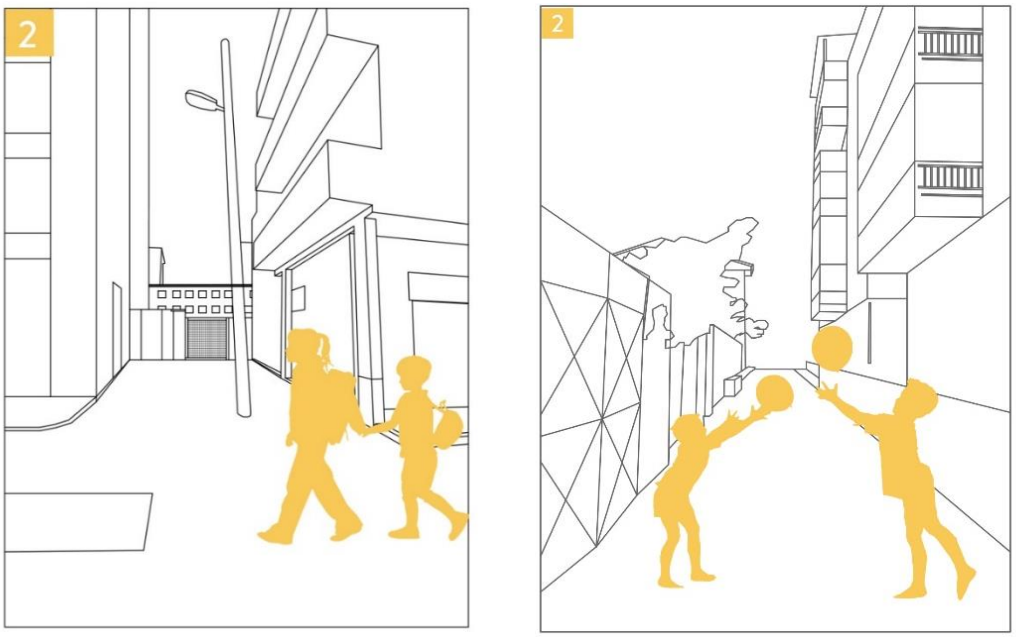

Figure 80. Sketch showing children's perspective from school entrance and nearby street

School street

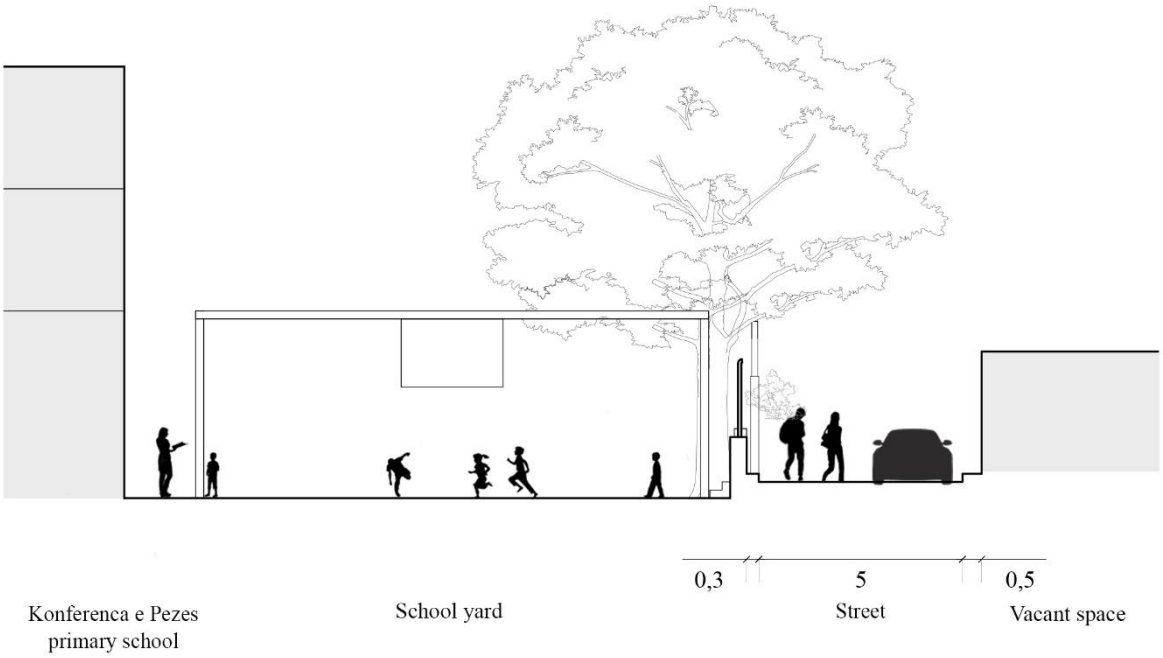

Figure 81. Section showing existing condition of “Islam Alla” street

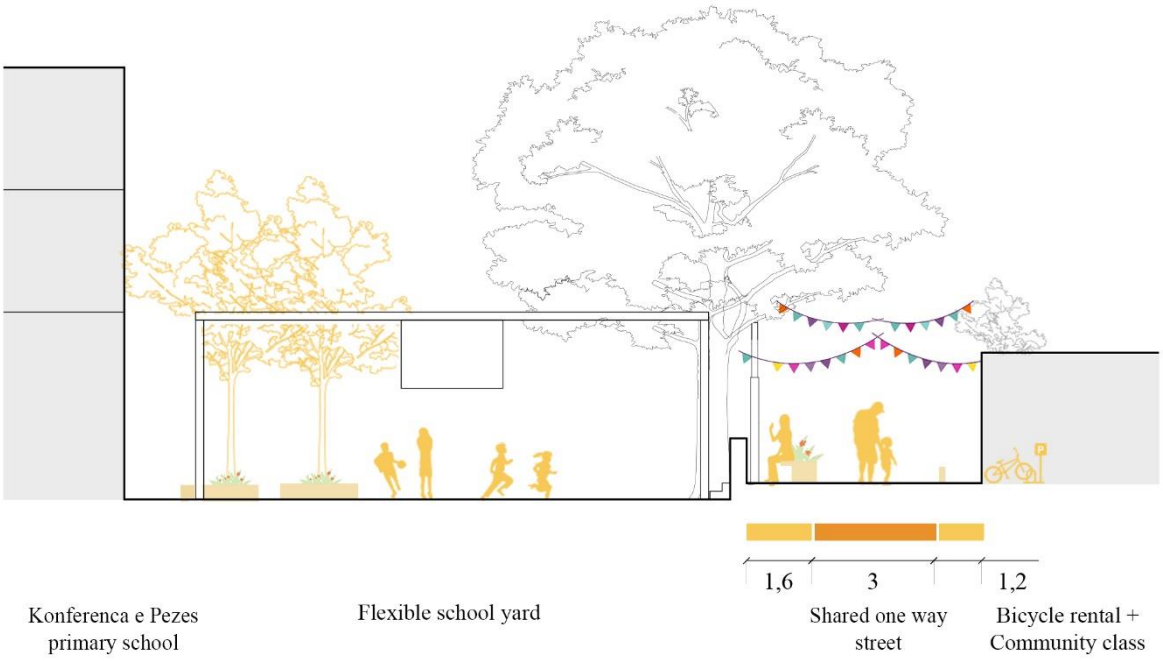

Figure 82. Proposed interventions including addition of seating elements, bike parking, playful elements to highlight the school zone

“Konferenca e Pezes” primary school is accessed by “Him Kolli” (main entrance) and “Islam Alla” streets, where the secondary entrance is positioned. From the analysis phase was noted the lack of resting elements and lack of community interaction due to the nature of the street. During the field trip was observed that the community did not spend much time together to socialise and interact together. On the other hand, children of different ages, ethnicities and gender were seen playing together in public spaces. Due to the high density of construction, residential buildings do not offer outdoor space designed for children play, so they were seen playing on the street in front of their house. Children independently and safely access play spaces near their apartment, while list schools’ outdoor play facilities were not accessible on the afternoon. Also, it was possible to observe that 73% of respondents attending “Konferenca e Pezës” primary school were not able to attend a designated play space or green space e.g., a park or playground near their home in less than 15-30 minutes, so it is proposed for the school yard to be open to the community.

The interventions suggest adding bollards along the school route as a traffic calming element used for seating where community members can sit and enjoy children play. By adding these elements, we can prevent informal parking especially near school perimeter to facilitate commuting and human activity around the school. Hanging elements and playful coloured paving are used to point out the school zone and define the space for new uses. The school yard will function as a flexible community yard after the lesion hours; where they can plant, use the sport fields and interact with each other. Also, vacant store in front of the school yard is proposed to be used as a community classroom and as a plus function it will serve as bicycle rental spot. These proposals aim to improve the safety and wellbeing of children and promoting ‘play along the way’. Providing appropriate resting and interaction area for kids and their caregivers, as well as creating a unique, friendly atmosphere that invites everyone to linger.

Figure 83. Existing conditions of “Islam Alla” street

Figure 84. School street child-friendly proposal

Pedestrianizing the street

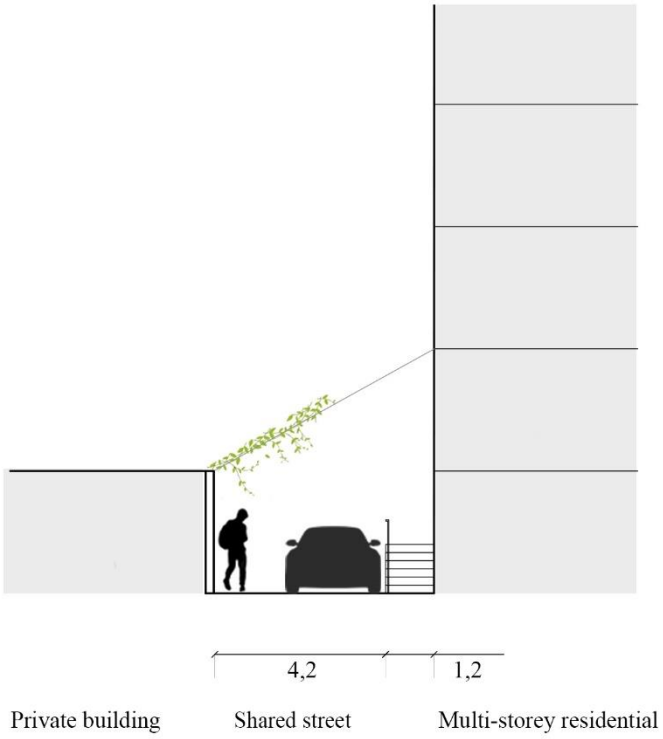

Figure 85. Section showing shared street near residential units near school

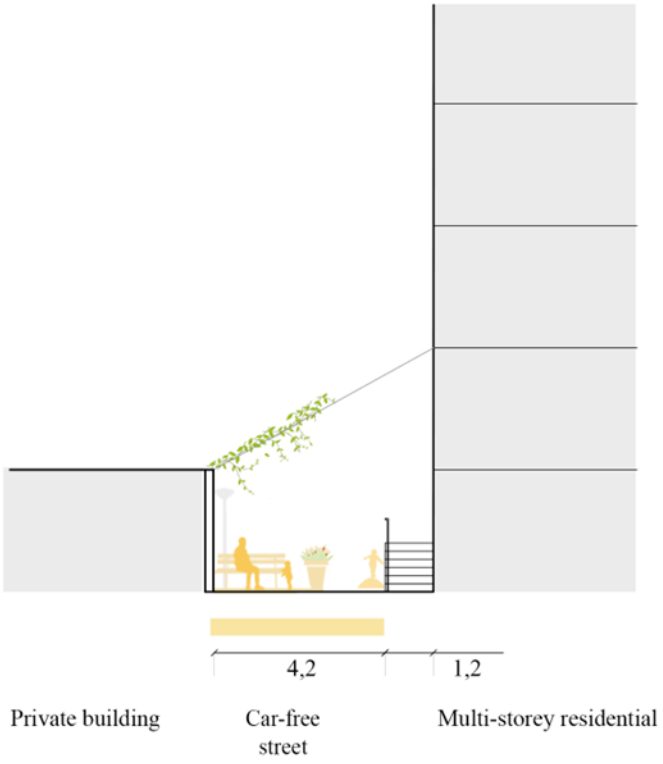

Figure 86. Proposal for car-free street that facilitates play in front of home, addition of playful elements that promote gathering and safety

Figure 87. Existing conditions of the street

Figure 88. Proposals for car-free street

Figure 89. Collage showing lighting elements and nighttime usage of the car-free street.

This narrow one-way street near the school is thought to be turned into car-free open space where children can walk to school, 'play along the way', but also interact with other community members of different age groups. It will serve as a flexible open space where pop-up programs can take place and a variety of activities happen during certain times, but also as a 'home zone' for shared usage that offers outdoor play elements like climbable wall, climbing plants for shading and green elements. Children can use the street during their daily commute as a safe transitional space, to learn the bike, play sports and socialise with their friends. From Figure 87 and the analysis phase was noted the lack of resting elements, lighting and safety. The street was overloaded with parked cars making it unsafe for children to navigate around freely and independently. Proposals of tactical coloured paving was used on the ground to make the space for vibrant and playful are illustrated on collage (Figure 88). Shown on Figure 89 is a collage of nighttime use as a multi-generational open space with hanging lighting elements added to create a safe atmosphere.

Temporary street closure for “Him Kolli” street

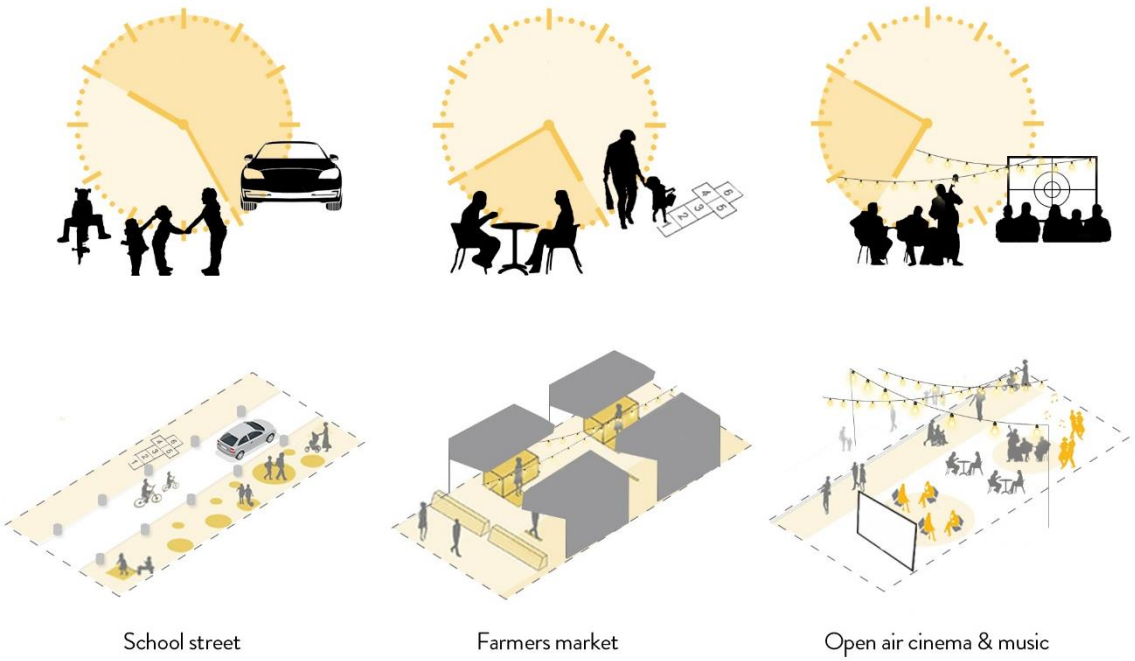

Figure 90. Shared one-way street with child and community friendly activity programming

Temporary closure of “Him Kolli” street is one of the child-friendly network proposals. It suggests the street to be programmed for various uses throughout the day. When a street is utilised the right way for each specific time of the day depending on the uses it can be easily adjusted to be more sensitive to children. When underused, parking spots, for example, can be instantly switched into a lively space by inserting a picnic table. A street can be temporarily altered for new activities and various users by placing lightweight and moveable components such as chairs or games. These temporary utilisations may eventually evolve to become sustainable and permanent modifications depending on their performance. “Him Kolli” street proposed uses are school street during school hours to facilitate children and caregiver commute, temporary closure during farmers’ market hours to help children, caregivers, community members have safe travel journeys and during the night the street is to be transformed into a lively community gathering open space programmed with open air cinema and music performances.

Street market

Figure 91. Existing conditions of street market, “Him Kolli” street

Alternating pavement was proposed to differentiate the area from other parts of the street. From site visit was noted that due to its vibrant façade profile during the farmer’s market hours the vehicular movement on “Him Kolli” street and extensions of the market on the street made it difficult for caregivers and children to move around (Figure 91). As a result of stationary activity analysis, it was observed that parents and children engage with the commerce especially along the street market segment. Temporary street closure was proposed as programmed intervention to ensure safety and ease for caregivers that shop with their children, but also other daily users of the space. Proposals on physical environment include addition of unified shading elements like tends, shelves that serve as sitting elements after the market is closed and hanging lights to create a safe and welcoming space during the night (Figure 93).

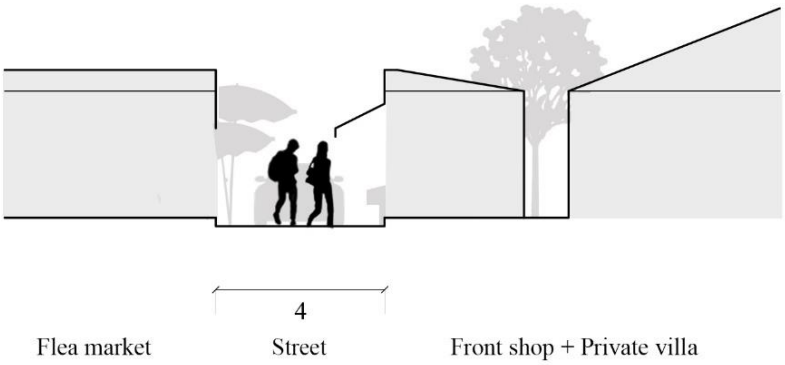

Figure 92. Street section showing flea market at “Him Kolli” street

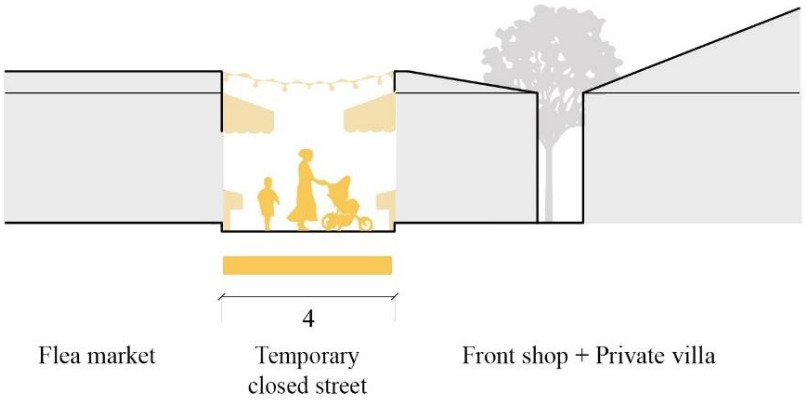

Figure 93. Proposals including temporary street closure, lighting, uniformity, and shading elements

Underutilized open space used for parking

Figure 94. Existing condition of poorly used open space near residential buildings

The area shown in the Figure 88 is an underutilized open space used for parking next to an abandoned plot. As second meso-zone in study does not offer any open public space for its community, this spot currently used as a residential parking space will be transformed into an open space that celebrates flexibility, community gatherings, gardening. This spot offers opportunities to develop guerrilla community gardening, natural play areas and giving it room for evolution and change. For nighttime use lighting features were provided. As our urban city today is designed to be serving car owners and streets to facilitate vehicular movement, this spot makes no exception. The proposals suggest that the area presented on section (Figure 88), to serve as a public open space that offers rest, stop and socialise by restricting car parking. Children that were registered using electronics at the stairs of the multi-story residential building are now offered a space to explore and interact. Through tactical solutions, some proposals added to help children wellbeing are green elements, urban furniture will be installed and cycling lane to add to sustainable modes of transport. The lighting elements add to the child and community friendly approach by ensuring that the space is used during night-time and it feels safe.

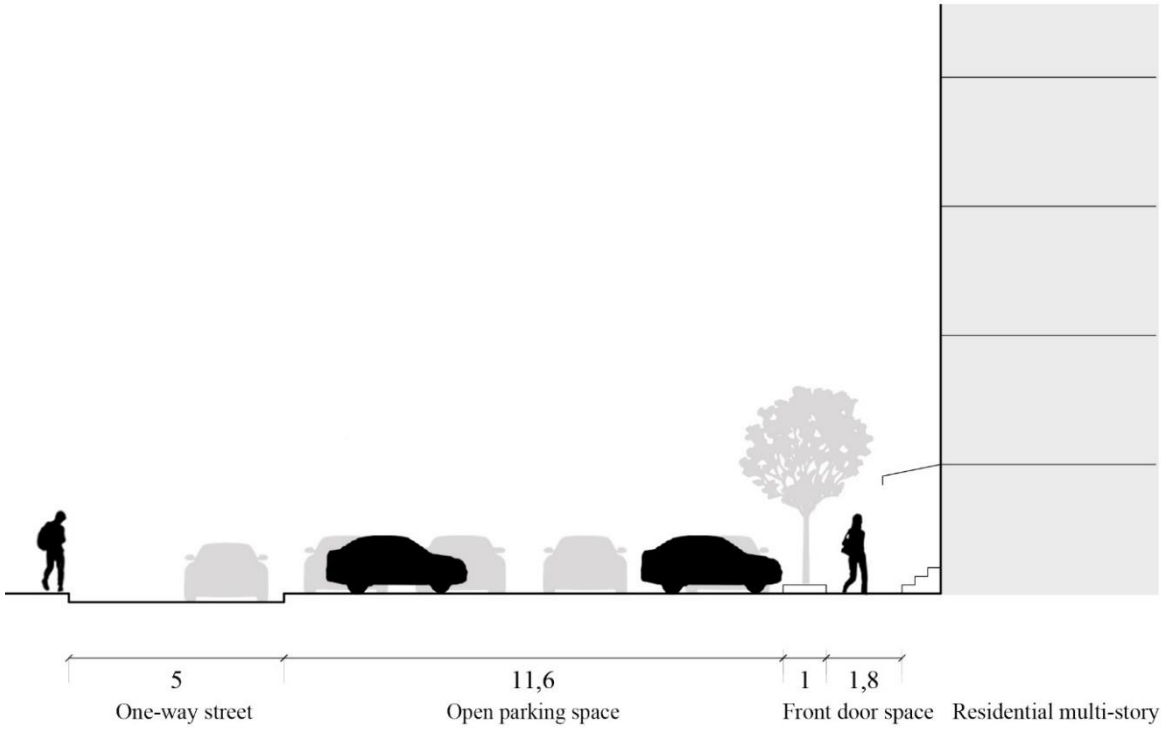

Figure 95. Existing condition of public space used for parking only

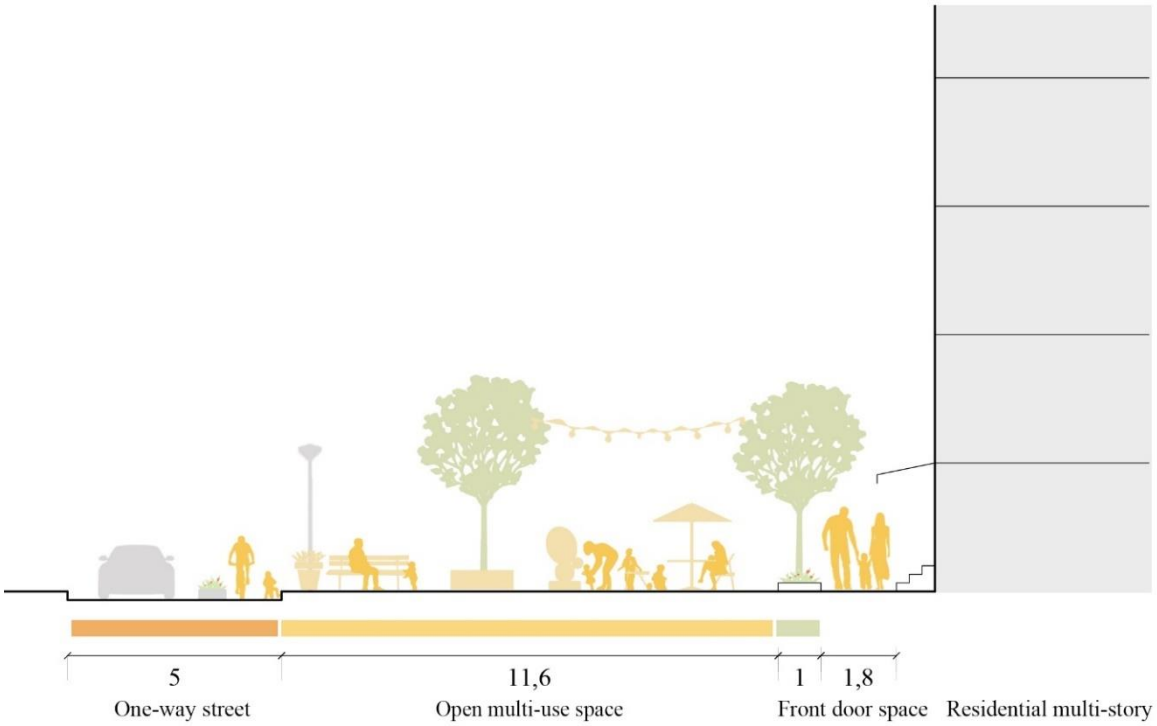

Figure 96. Open space for the community with additions like guerrilla gardening and parking converted into multi use open space.

CHAPTER 5

CONCLUSIONS

5.1 Conclusions

The thesis aims to study children's perception on the built environment of urban Tirana, and with their help suggest a set of social and physical recommendations that address safety, health, citizenship, prosperity, and environmental sustainability on the current site choice, that can be also adapted on other contexts. This contributes to the overall goal of the thesis, that of making Tirana a safer, more welcoming, loving place for them to live, study, play, and thrive.

The results of the research from two different contexts in "Myslym Shyri" area, both confirm patterns of use as reported in literature, but also add new insights for urban planning and design. It is useful here to distinguish between the following, role of urban planning and design can play in highlighting the importance of children's geographies, the levels of possible interventions, bottom up and low-cost. Some of the problems highlighted on multiple occasions relate safety, awareness, ability to maintain, and more family-friendly settings, which can be solved at various degrees and levels of intervention.

A child-friendly neighbourhood should have the following micro-scale qualities: places that encourage play and an active lifestyle, places that are close to and accessible to green spaces, places which encourage interacts within communities, safe and well-maintained streets, along with the ability to move around, all this dictated by both the quantity and quality of routes (Bishop & Corkery, 2017) (ARUP, 2017). As stated by the Gehl Institute (2017), while designing for toddlers, safety and security are the top priorities, the environment should foster diversity, inclusion, and social behaviours, and nature and green space should be interwoven.

Overall, the literature collection highlights children's right to the city manifested in two parallel processes: designing for children by recognizing their needs and presence on the urban city; and designing with them to help the feeling of active ownership and sustainable built environments.

To design for children, firstly it is important to gain understanding about the chosen site by a set of desktop and on-site analysis carried out to give a spatial and physical comprehension. "Myslym Shyri" area was selected due to its diverse urban fabric and lack of child-friendliness.

Then, it is necessary to design with children, in order to be able to propose sustainable solutions that cater their day-to-day needs. A participatory questionnaire was developed and then distributed at two local primary schools "Dora D'Istria" and "Konferenca e Pezës"; to gather information in lines of children how they perceive the built environment and how would they transform it into an ideal and friendly environment for them.

Two meso zones were selected according three main criteria: school zone, mixed used street and historically underserved neighborhood. A mixed methods approach was followed to capture the challenges and opportunities children face on their day-to-day activities in Tirana with the process was divided in three phases: understanding, prioritizing, and designing. The zones were examined in various conceptual dimensions, spatial and morphological aspects, function and program, ground floor activity and building features, traffic, and open spaces etc. The results show that the main problems such as lack of a road network that meets the needs of all age groups, lack of a clear and established system of public parking places and open spaces. space used inefficiently, lack of recreational facilities in which to develop activities for all age groups starting from preschool, school, teenagers, adults, and the elderly of this community.

In order to enhance child friendliness in these particular zones, a new network of sustainable connections with focus on autonomous pedestrian mobility is being proposed. The long-term objective is to construct an ecological system that is more inclusive, just, and fair and supports child development locally.

Quality criteria for child-friendly living spaces include freedom from danger, accessibility, interaction opportunities. Design principles include input from children engagement, front door play, “play along the way”, streets as destinations, interaction with nature for health and wellbeing.

On this study two levels of interventions were addressed including neighbourhood and street scale, modified in accordance with the inputs from participatory questionnaires. The hierarchy of spaces considered are spaces in front of home, near key destinations, streets.

Design strategies include:

- *Value the existing:* making use of existing spaces, spot the spaces that hold great potentials:
    - Activating open spaces - 2 school streets through temporary and permanent design solutions.
- *Nurture the possible:*
    - Utilising useless plots by creating places for children’s activities.
    - Defining open spaces from parking spots.
    - Lowering the fences for interaction and safety.
    - Tactical interventions on streets.
    - Pedestrianizing the streets.
- *Define what is missing:*
    - Open public spaces- 300m radius child-related activities buffer zone from selected schools.
    - Physical and social infrastructure

At the end, the extracted results were translated to a proposal that attempts to add a child-friendly layer into the streets, school yards, public spaces; all creating a network of spaces connected by safer and more enjoyable streets accessible. A model that can be applied in a variety of the urban contexts is constructed discussing the most effective categories of influential factors on children’s range of activities, places that children interact and play in their daily life.

The thesis concludes with an outline of social and physical interventions that, with the aid of children's participation, could be tailored to a variety of different contexts. The programming that is provided from this thesis can be scaled up from here to become a city scale strategy or be implemented to potential school zones with the same selection criteria used in this study.

5.2 Limitations of study and recommendations for future research

A participatory approach was one of the strategies adapted since the beginning of the thesis, but it was limited to only taking into consideration children's perception through questionnaires. For higher community involvement that guarantees various views are heard, future researchers can consider using novel participatory tactics such are interactive workshops or on-site analysis with children.

Looking forward this study outlines a set of recommendations on how a neighbourhood in Tirana can be transformed into a welcoming and friendly place for children through small tactical interventions. The recommendations developed from this study and the questionnaire results may be useful for other researchers on the field of sustainable mobility, independent mobility, related to children.

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APPENDIX

Your age: _____

Are you a: Girl □ Boy □ Prefer not to say □

Other (please state_____)

Please answer the questions as best you can – there are no right or wrong answers.

Please ask if you have any questions.

Exercise 1: SURVEY ON MOBILITY, INDEPENDENCE AND PLAY

TRAVELLING TO AND FROM SCHOOL

2.1 How did you get to school this morning?
(Only tick one box, to show the main method you used)

☐ Walked most or all the way
☐ Cycled
☐ Bus
☐ Car
☐ Other (please state_____)

2.2 Who did you travel to school with this morning?
(Only tick one box)

☐ Travelled on my own
☐ With an older child but no adult
☐ With a child of the same age or younger but no adult
☐ With a parent or carer (can be with other children too)
☐ Other (please state_____)

2.3 How would you like to be able to travel to and from school?
(Only tick one box)

☐ Walk most or all the way
☐ Cycle
☐ Bus
☐ Car
☐ Other (please state_____)

2.4 Is there any green element on your way to school?

☐ YES
☐ NO

CYCLING

2.5 Do you have a bicycle now?

☐ YES

☐ NO

2.6 Can you ride a bicycle?

☐ YES

☐ NO (if answer is no, move to second part)

2.7 Are you allowed to go outside on your bike without an adult?

☐ YES

☐ NO

2.8 How often do you typically cycle? (Only tick one box)

☐ Most days

☐ A few days each week

☐ Hardly ever

☐ I don't have a bicycle

PLAY

2.9 Are you allowed to play outside without an adult?

☐ YES

☐ NO

2.10 Are you allowed to go and call on your friends on your own?

☐ YES

☐ NO

2.11 How often do you go out to play with friends?
(Only tick one box)

☐ Most Days

☐ A Few Days Each Week

☐ Hardly Ever

☐ I Don't Play Outside with Friends

2.12 Does your house have an outdoor space where you can play (e.g., a garden)?

☐ YES

☐ NO

2.13 Are you happy with the number of parks, public spaces and/or playgrounds in your community?

☐ YES

☐ NO

2.14Where do you mostly prefer to play in your area?

- ☐ In front of house
- ☐ Public Park
- ☐ Neighbourhood playground
- ☐ Along the street
- ☐ Other (please state_____)

2.15Do you feel safe playing in these parks/public spaces and/or playgrounds in your community?

- ☐ YES
- ☐ NO

Exercise 2: USE OF TIME QUESTIONNAIRE

2.1 How far is a park, garden from your home or school?

- ☐ 0-5 minutes
- ☐ 6-15 minutes
- ☐ 15-30 minutes
- ☐ More than 30 minutes

2.2 Do you attend any play-focused pre- or after-school activities at school?

- ☐ YES
- ☐ NO

2.3 Are play activities or events promoted in your community?

- ☐ YES
- ☐ NO
- ☐ I don't know

2.4 Would you like to spend more time playing outside?

- ☐ YES
- ☐ NO

2.5 Do you participate on community gatherings about your neighbourhood?

- ☐ YES
- ☐ NO

Exercise 3: CREATIVE THINKING

3.1 What is your favourite outdoor game? (Including play activities on your way to school, with your caregiver, teachers, peers, and alone)

_____

_____

3.2 What stops you to explore your surroundings?

_____

_____

3.3 Least favourite place to play, why?

_____

_____

3.4 How do you imagine an improved version of the place you already use to play? Suggest 1-3 actions.

_____

_____

_____

3.5 How would you replace those things you don't like from those places? Mention things that you do not like to replace with something better.

_____

_____

_____

Exercise 4: RATING "MYSLYM SHYRI" AVENUE

4.1 Do you live in "Myslym Shyri" or near the area?

- ☐ YES
- ☐ NO (if your answer is no, you can finish your questionnaire now)

4.2 Do you go through "Myslym Shyri" on your way to school?

- ☐ YES
- ☐ NO

4.3 How often do you go to "Myslym Shyri"? (Only tick one box)

- ☐ Every day
- ☐ A few times a week
- ☐ Once a week
- ☐ About once a month
- ☐ Other (please state_____)

4.4 How do you usually go to "Myslym Shyri"? (Only tick one box)

- ☐ I walk most or all the way
- ☐ I cycle
- ☐ I take a bus
- ☐ I go in a car
- ☐ Other (please state_____)

4.6 How would you like to be able to travel to "Myslym Shyri"? (Only tick one box)

- ☐ Walk most or all the way
- ☐ Cycle
- ☐ Bus
- ☐ Car
- ☐ Other (please state_____)

4.7 When you go to "Myslym Shyri", who do you usually go with? (Only tick one box)

- ☐ I go with my parent(s) or carer(s) (can be with other children too)
- ☐ I go on my own
- ☐ I go with my older sibling
- ☐ I go with my friend who is older than me
- ☐ I go with my friend who is the same age as me or younger than me

4.8 When you go to "Myslym Shyri", what do you usually do there?
Write your answer below:

_____

4.9 When you go to "Myslym Shyri", what shops or places do you visit? Write your answer below:

_____

4.10 What is the best thing about "Myslym Shyri"? Write your answer below:

_____

4.11 What is the worst thing about "Myslym Shyri"? Write your answer below:

_____

4.12 On the following table, please TICK only one answer per row.

Do you think "Myslym Shyri" is a	*YES*	*NO*	*I DON'T KNOW*
nice place	□	□	□
place to play	□	□	□
clean and tidy place	□	□	□
place for children	□	□	□
has enough things to do	□	□	□
safe place during the day	□	□	□
safe place after dark	□	□	□
has enough trees and greenery	□	□	□
has enough seating	□	□	□
has too many cars	□	□	□

THANK YOU VERY MUCH FOR YOUR HELP! ☺