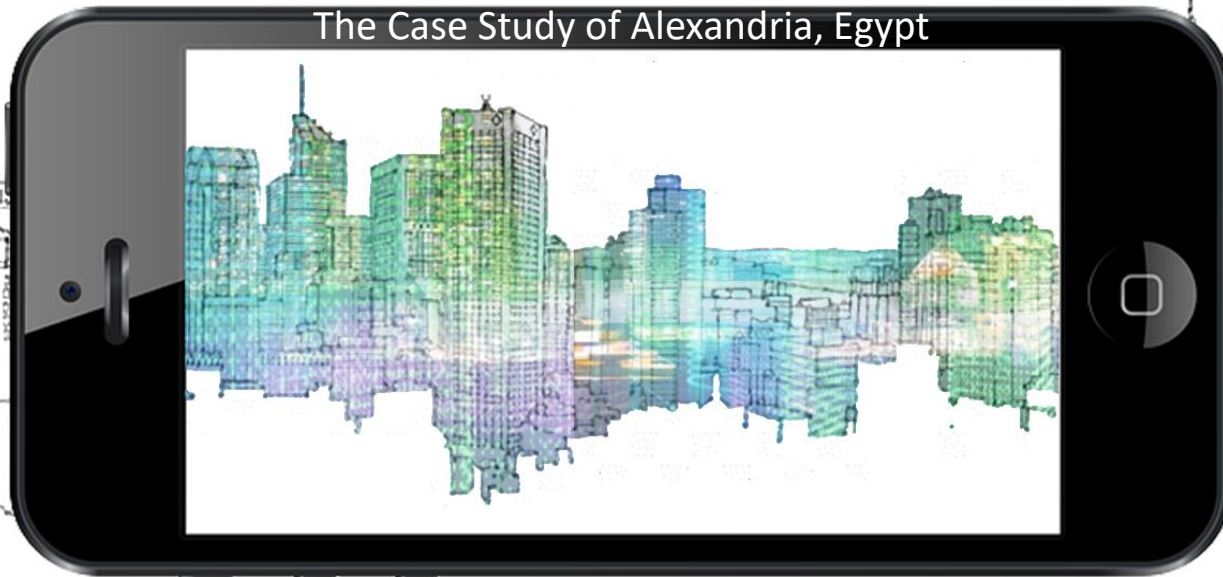


An Approach towards Better Quality of Urban Spaces: Digital Media and Promoting Public Involvement

The Case Study of Alexandria, Egypt





Introduction

Background

Public urban spaces have always been the beating heart of any society. They should be easily identified within their context, as they offer numerous functions and privileges, such as: : better human health, creation of a sense of community, economic growth, transformation of wasted space, enhancement of city character and architectural diversity. (Radwan, 2018).



In order to have a prosperous city, rises the need to have a lucrative public space, which has a very strong bond with public life. As Jan Gehl has specified, "the formula must be; first life, then spaces, then buildings." (Gehl, 2007, p. 4).

Problem Statement

Many changes have occurred, affecting the long established qualities of public spaces and life within.

The community is pushed to *escape its reality* and many *behavioral disorders* are caused including the anti-social behavior. People are *abandoning open spaces*.



Aims and Objectives

The broad aim is:

The restoration of public urban spaces' roles and importance through retrofitting them to a digital era.

Objectives



ACKNOWLEDGE

the public space importance and determine its assessment parameters.



IDENTIFY

digital media tools and technologies that could be utilized in urban public spaces as promoters of their livability.



UNDERSTAND

the benefits of digital appliances in the public involvement, and the impact they have on public open spaces' success.



ANALYZE

the prospect of using smart features to attract, engage and evaluate the whole experience. of the residents in urban spaces.

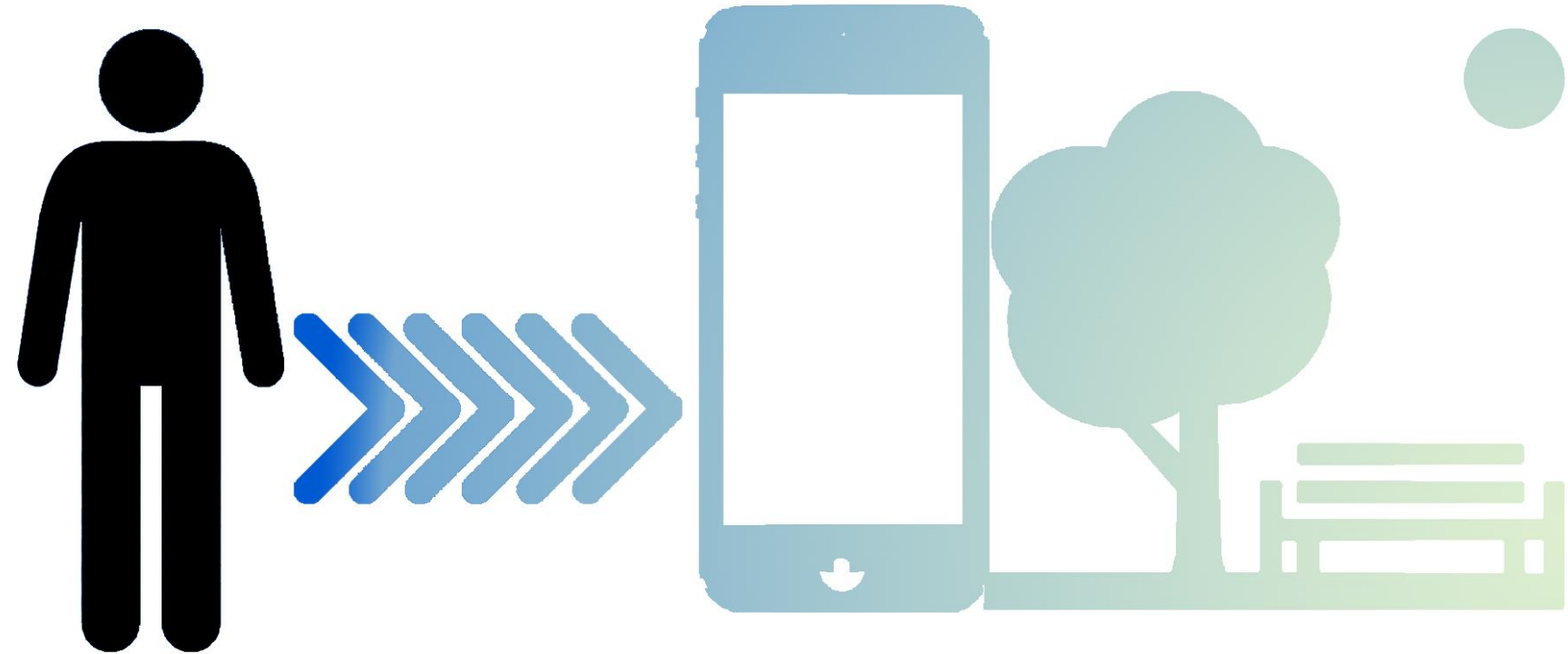


RECOMMEND

guidelines and implementations and measure their effect on public space revitalization and its retrofitting to the digital era.

Research Hypothesis

Digital media should be seen **not as a harmful tool**, but rather a **cooperative feature** in the revitalization of existing urban spaces and the public engagement stimulation.





Research Methodology

Research Methodology

Theoretical Background

**Public Space Importance
and Assessment**

Chapter (2)

**Digital Media Addiction
Promoters and Effects**

Chapter (3)

**Digital Media Tools
Application**

Chapter (4)

**Digital Media Defects
and Benefits**

Chapter (5)

**Digital Media Examples
in Urban Public Spaces**

Chapter (6)

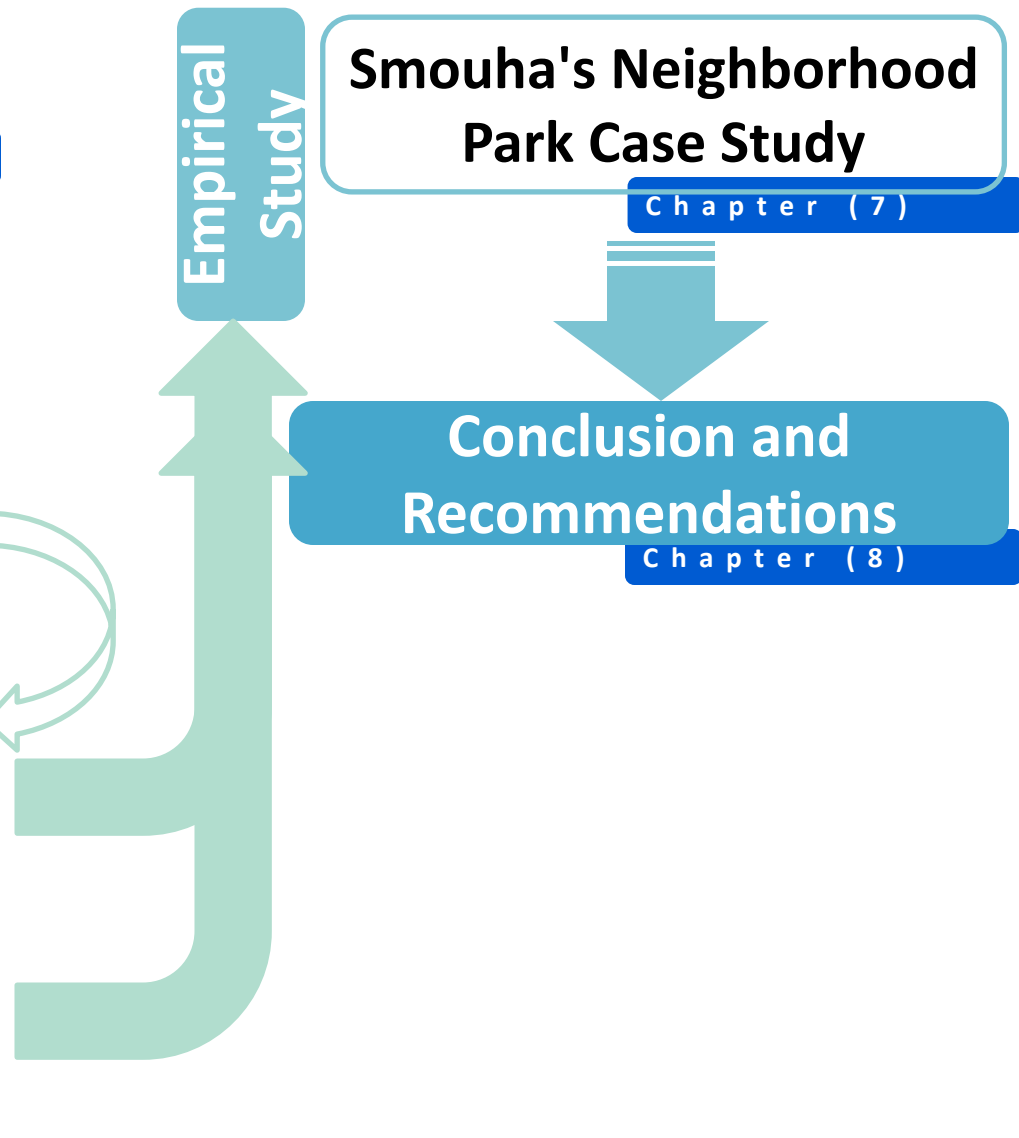
Empirical
Study

**Smouha's Neighborhood
Park Case Study**

Chapter (7)

**Conclusion and
Recommendations**

Chapter (8)

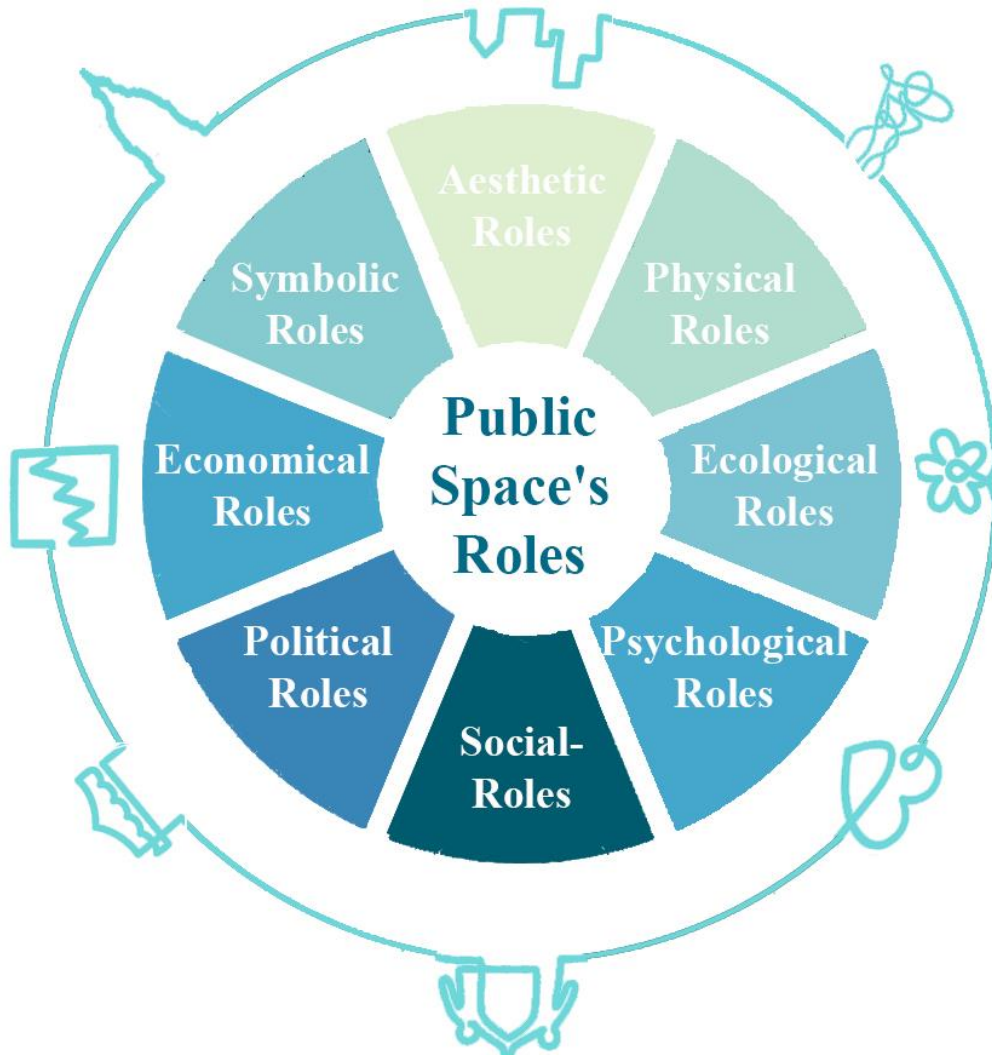




Theoretical Background

Public Spaces Importance

Roles of Public Spaces



Aesthetic Roles



Physical Roles



Ecological Roles



Psychological Roles



Social Roles



Political Roles



Economical Roles



Symbolic Roles

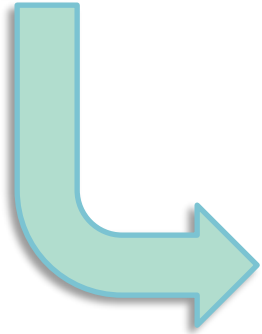
Qualities of Success of Public Spaces

Carmona, de Magalhães and Hammond (2008)	McCormack, Rock, Toohey and Hignell (2010)	Balabanides, A. and Philippou, P. (2015)	Mehan, A. (2016)	Zagropa, M. (2016)	Van Hecke, L. et al. (2018)	Peng, Feng, & Timmermans(2019)
attractiveness	aesthetics		visual qualities.	attractiveness	aesthetics (attractiveness and appeal).	
distinctiveness		identity				
accessibility	proximity			accessibility		
inclusiveness		pedestrians and car environment that protect the rights for each of them				
safety and security	safety	safety			safety (personal security and fear).	
functionality		sense of scale and human scale environment				
fulfillment	amenities maintenance	activities sitting quality	functional qualities.		features (facilities, amenities and general features of the POS). condition (maintenance, incivilities and upkeep).	
comfortability						micro-climate and the thermal comfort
greenery non-pollution		natural environment quality	spiritual qualities			
vitality and viability		livable		upgrading the living conditions of local communities		
cleanness and tidiness				cultural heritage.		
					policy (management, rules and restrictions).	

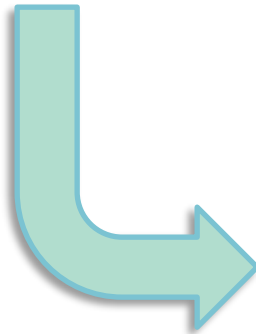


Qualities of Success of Public Spaces

Attract



Engage



Evaluate



Qualities of Success of Public Spaces

Attract



Visual Qualities

- Artistic
- Degree of Attractiveness
- Degree of Legibility
- Distinctiveness



Inclusiveness, Access and Linkage

- Proximity and Accessibility Degree
- Coexistence Ratio



Protection

- Against Traffic and Accidents
- Against Crime and Violence
- Against Unpleasant Sense Experiences
- From the Environmental Conditions

Qualities of Success of Public Spaces

Engage



User Centered Design

- For People
- Respect Human Scale



Activities and Functionality


- Functional Space
- Various Activities
- Efficiency and Quality Level



Comfort


- Possibilities for Walking
- For Standing and Staying
- For Sitting
- To See
- For Hearing and Talking
- For Playing and Unwinding

Qualities of Success of Public Spaces




Enjoyment

- Scale
- Possibilities for Enjoying Positive Aspects or Climate
- Aesthetic Qualities
- Positive Sense Experiences



Livability and Vitality

- Healthiness
- Sustainability
- Sociability
- Cleanliness



Communal Qualities

- Affecting Cultural and Social Heritage
- Affecting City Policy

Evaluate



Theoretical Background

Empirical Study

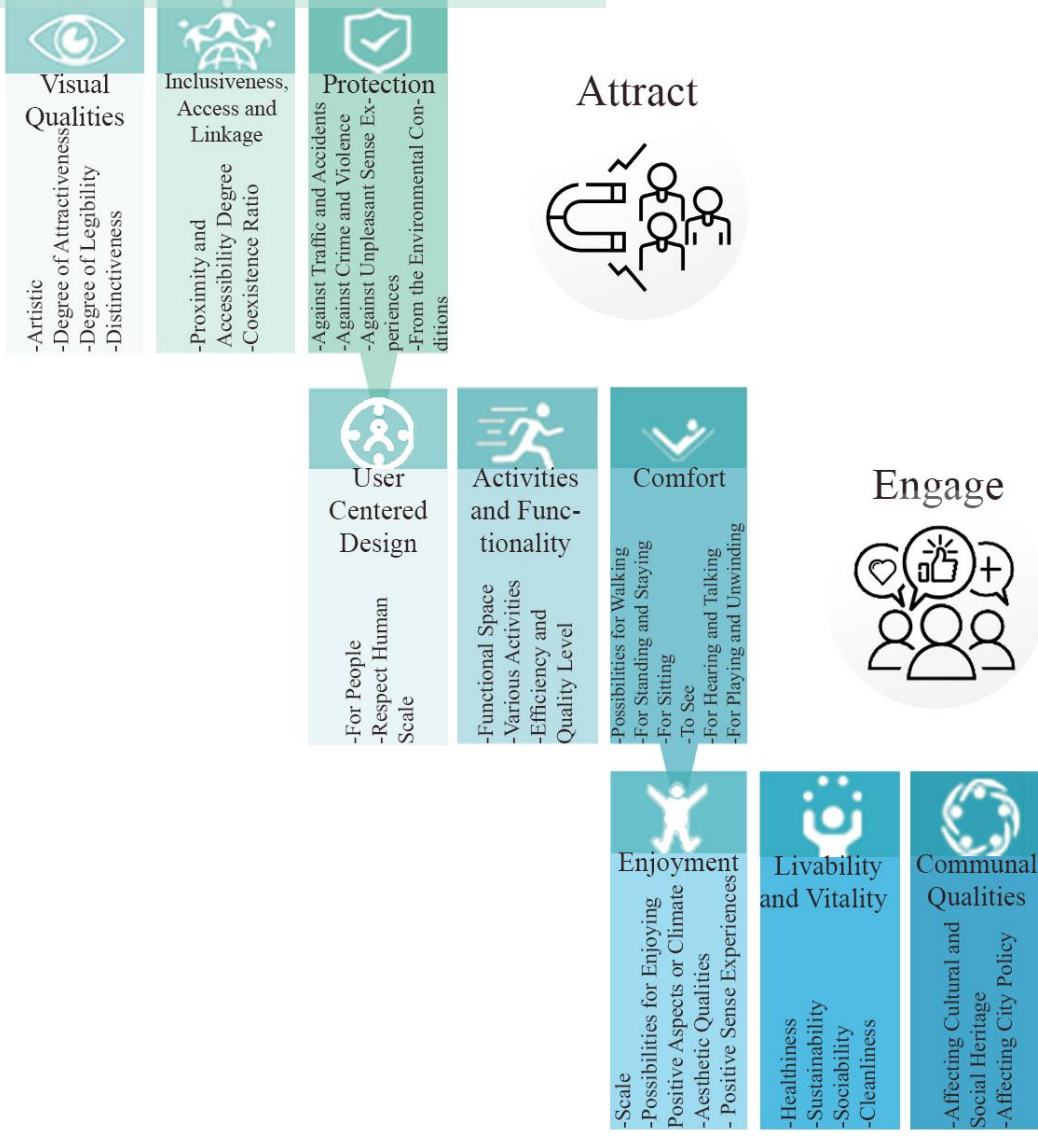
Conclusion and Recommendations

Further Research

Introduction

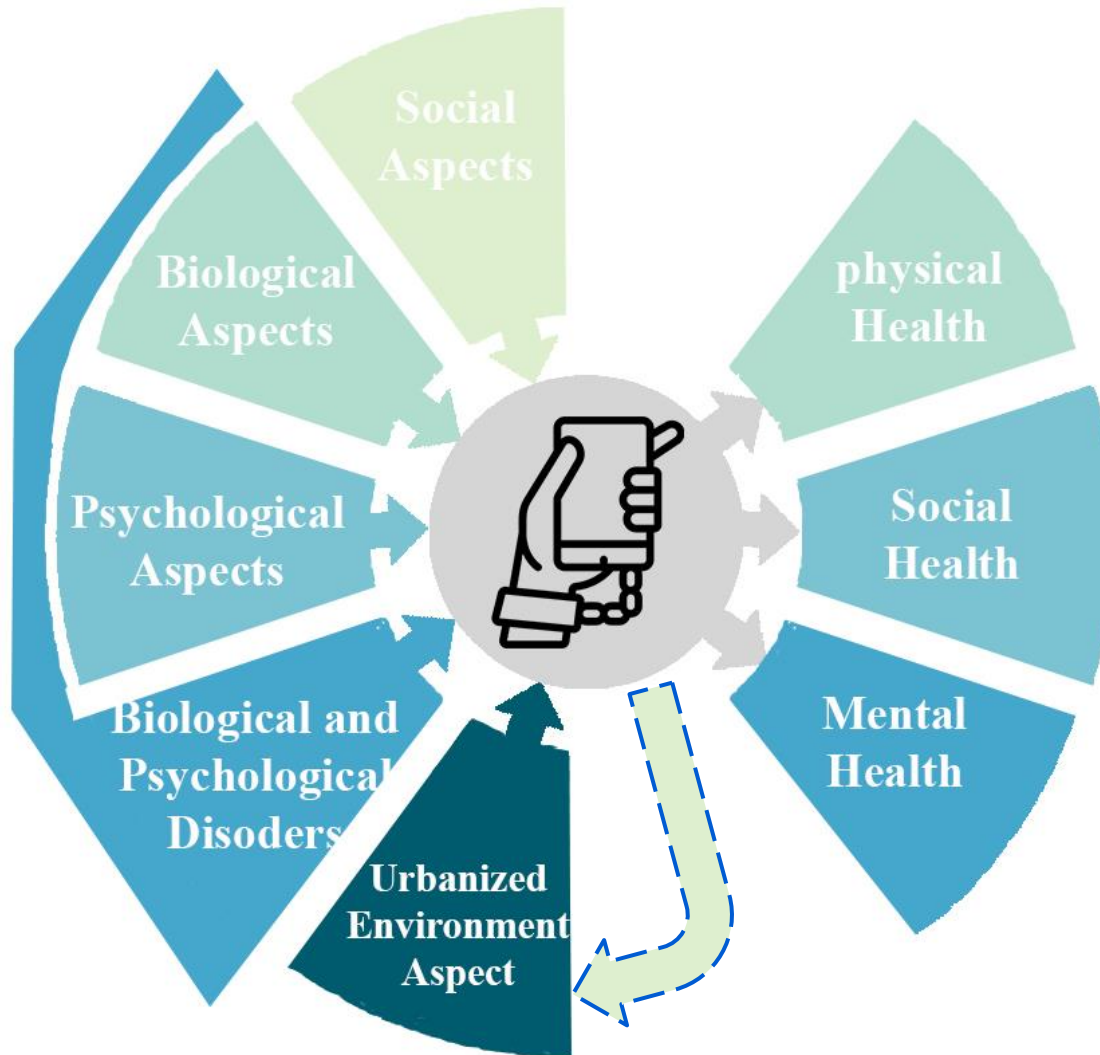
General Policy Findings

Qualities of Success of Public Spaces

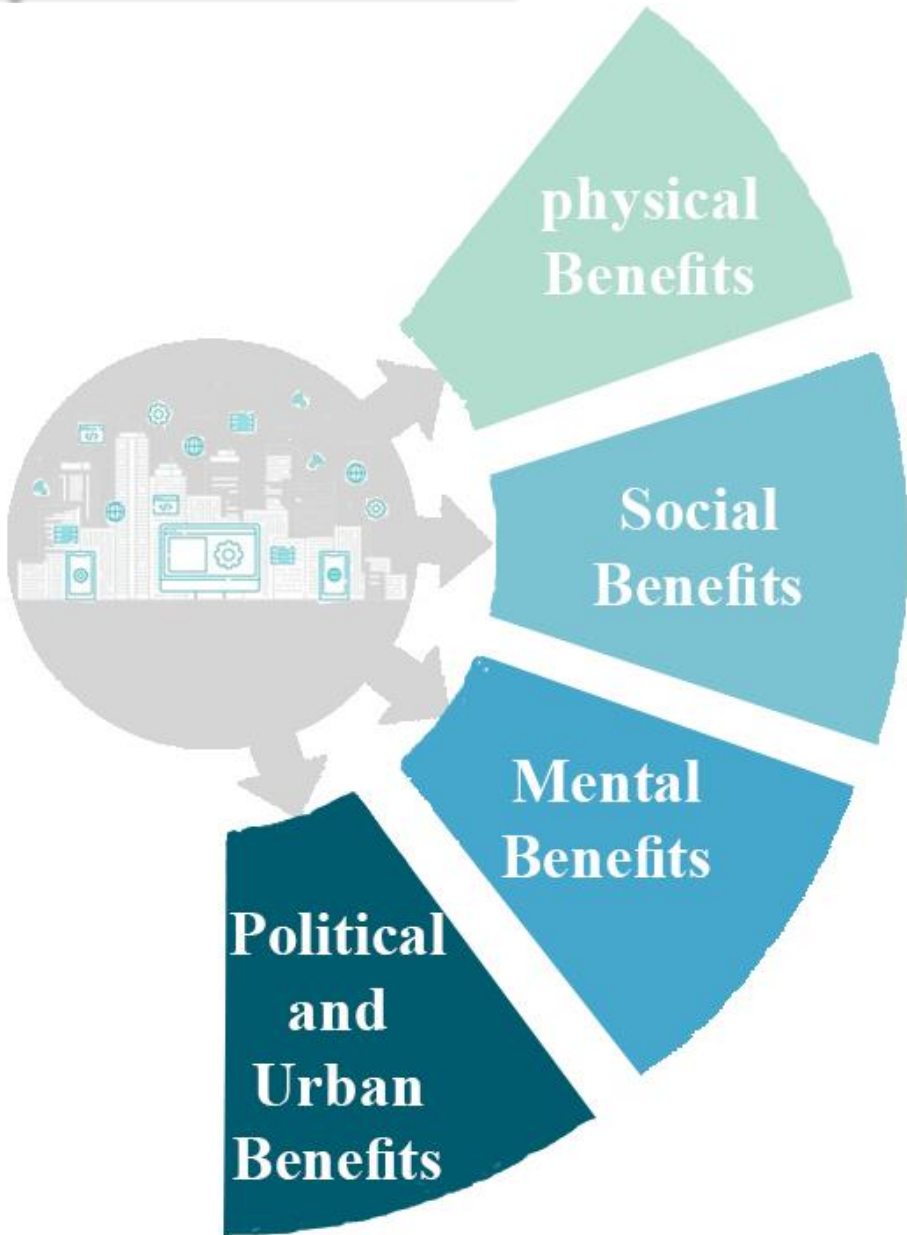


Digital Media Addiction Promoters and Defects

The long established qualities of public spaces are threatened
by the Digital Media Addiction



Digital Media in Public Spaces



Introduction

Theoretical
Background

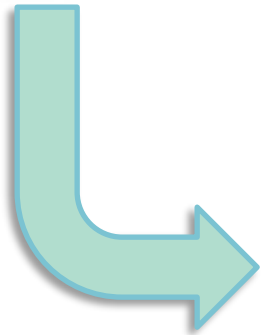
Empirical
Study

Conclusion and
Recommendations

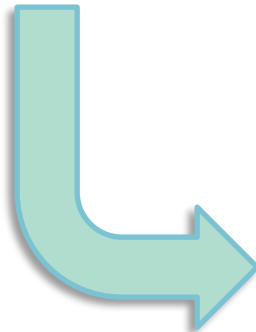
Further
Research

Digital Media Tools application

Attract



Engage



Evaluate



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Recommendations

Further
Research

Digital Media Tools application

Attract



Micro Service
Platform

Maps for Easy
Paths (MEP)

Media Façades
and Urban
Screens

Mapping Apps

Internet of
Mobility (IOM)

Multi-screen
Architecture
and Screen Art

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Further
Research

Digital Media Tools application

Interactive
Reality

Introduction

Adaptive
Lighting System

Engage



Augmented
Reality

Theoretical
Background

Adaptive Park
Bench

Information
Radiators

Public Screens

Empirical
Study

Location Based
Technology

location Based
Games

Conclusion and
Recommendations

Public
Interactive Art
Installations

Video Mapping
Technology

The Sonic
Technology

Further
Research

Digital Media Tools application

A Pyroelectric
Infrared Sensor
(PIR)

Public Open
Space Tool
(POST)

Simulating
Crowd Behavior

Online Commun
ity Participation
Forums

“Big Idea” Web
Platform

The Automatic
Reading of the
Locations of the
Citizen

Evaluate



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Media Defects and Benefits

Digital Media Defects

Digital Media Benefits

Addiction

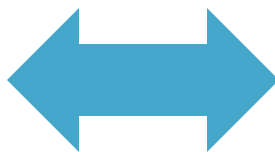


Qualities of Success

Tools











Qualities of Success



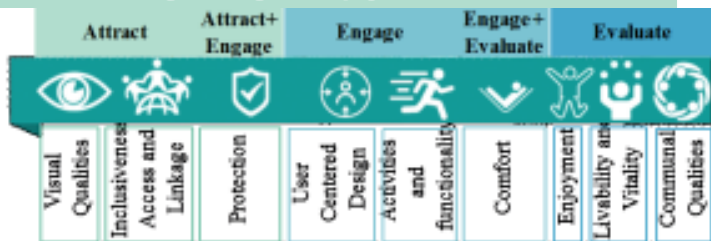
Media Defects and Benefits

Digital Media Defects

		       									
		Visual Qualities	Inclusiveness, Access and Linkage	Protection	User Centered Design	Activities and Functionality	Comfort	Enjoyment	Livability and Vitality	Communal qualities	
Digital Addiction	Hyper-coordination										
	Co-presence and Distant Focus	●									○
	Mobilephones for Perception of Security										
	Productive Use of Transition or Travel time	●									
	Constant Connection of Work and Contact										
	Public Dance or Choreography of the Mobile Phone	●									
	Overall weight of effect on each quality	Moderate	slight	slight	Large	Large	Moderate	Moderate	Large	slight	

Media Defects and Benefits

Digital Media Benefits



	Attract		Engage		Engage+ Evaluate		Evaluate	
	Visual Qualities	Inclusiveness Access and Linkage	Protection	User Centered Design	Activities and functionality	Comfort	Enjoyment Livability and Vitality	Communal Qualities
Attract								
Mapping Apps		●	○			○		
Maps for Easy Paths (MEP)		●	○	●		○		
Micro Service Platform		●	○	●	○	○		
Internet of Mobility (IOM)		●	●	●		●		
Media Façades and Urban Screens	●		○					
Multi-screen Architecture and Screen Art	●		○				●	●
Engage								
Adaptive Lighting System	○		●	●	●	●	○	
Adaptive Park Bench		○		●		●	○	
Information Radiators	○			○	●			
Augmented Reality	●				○		○	○
Interactive Reality	○			●	●		○	○
Location Based Technology		○		●	●			○
Location Based Games		○		○	●		●	○
Public Screens	●			○	○		●	○
Public Interactive Art Installations	○			●	●		●	○
Video Mapping Technology	○			●	○		●	○
The Sonic Technology				●			●	○
Evaluate								
Online Community Participation Forums				○			●	●
The Automatic Reading of the Locations of the Citizen		○		○				●
A Pyroelectric Infrared Sensor (PIR)								●
Public Open Space Tool (POST)			●		●	●	○	○
Simulating Crowd Behavior				●	○			●
"Big Idea" Web Platform				●				●

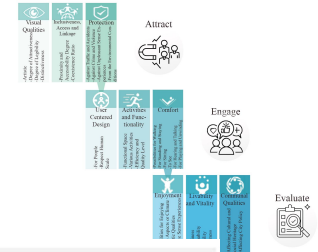
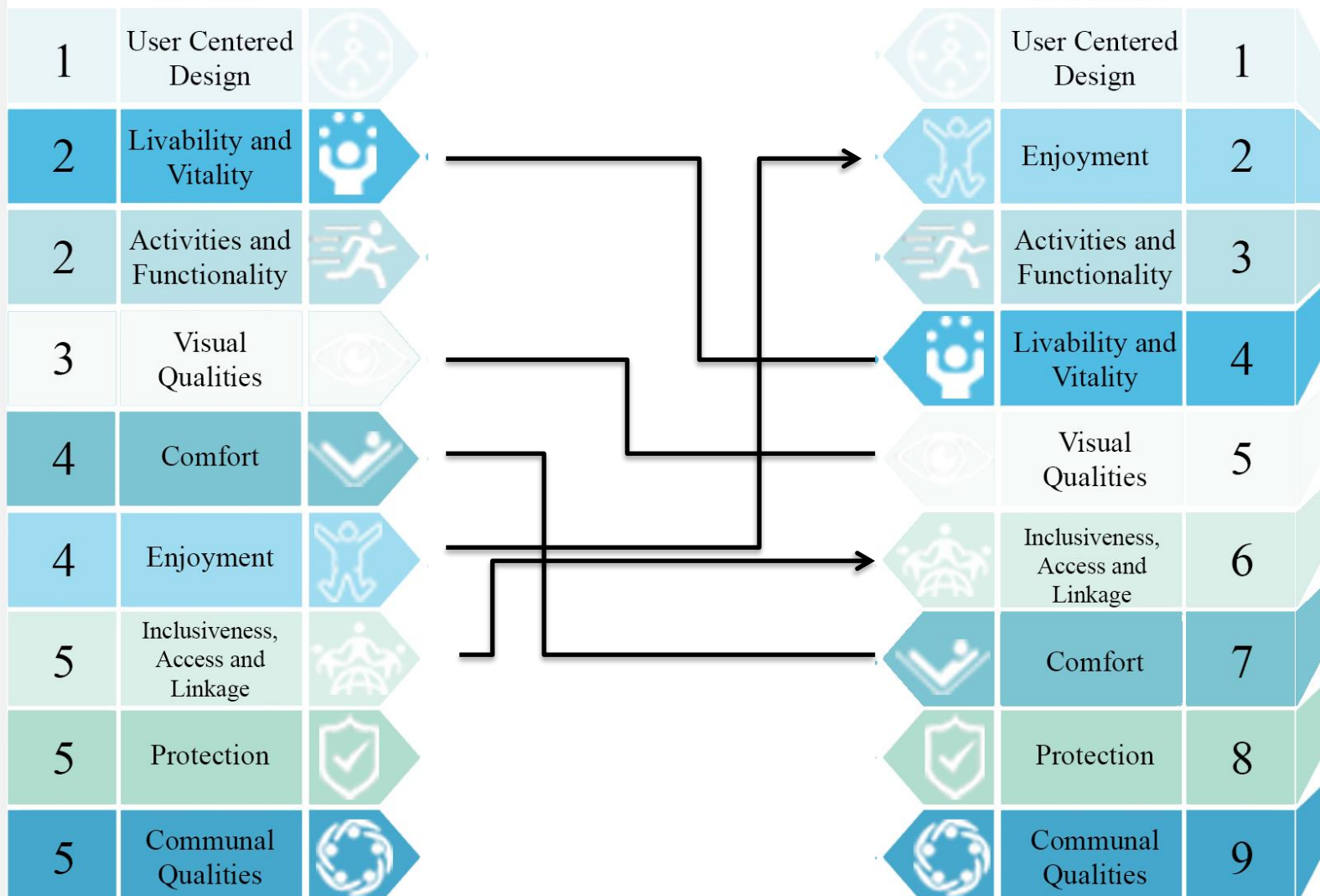
●: is a direct impact on the quality, ○: is an indirect impact.

General Policy Findings

Media Defects and Benefits

Order of the most impacted qualities of public space by the digital addiction

Order of the most improved qualities of public space due to digital media installments



Examples of Media Use in Public Spaces

Introduction

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IN SPACE SMART INTERACTIVE FIXTURES



DIGITAL SCREENS



MEDIA FACADES



MOBILE APPLICATIONS

Used Technology

Main Goal

People Interaction

Impact

Sub-qualities Evolvement

Degree of Impact on Each Quality

Examples of Media Use in Public Spaces

IN SPACE SMART INTERACTIVE
FIXTURES

Tangible Orchestra



Observed Qualities

Visual Qualities

Inclusiveness

User Centered Design

Activities

Enjoyment

Intangibly affected
Qualities

Comfort

Livability

Communal Qualities

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Examples of Media Use in Public Spaces

IN SPACE SMART INTERACTIVE FIXTURES

Tangible Orchestra

Tangible Orchestra

Quality	Visual Qualities			Inclusiveness, Access and Linkage		Protection			User Centered Design		Activities and Functionality			Comfort			Enjoyment			Livability and Vitality		Communal Qualities											
	Artistic	Degree of Attractiveness	Degree of Legibility	Distinctiveness	Proximity and Accessibility Degree	Coexistence Ratio	Protection Against Traffic and Accidents	Protection Against Crime and Violence	Protection Against Unpleasant Sense Experiences,	Protection from the Environmental Conditions	For People	Respect Human Scale	Functional Space	Various Activities	Efficiency and Quality Level	Possibilities for Walking	Possibilities for Standing and Staying	Possibilities for Sitting	Possibilities to See	Possibilities for Hearing and Talking	Possibilities for Playing and Unwinding	Scale	Possibilities for Enjoying Positive Aspects or Climate	Aesthetic Qualities	Positive Sense Experiences	Healthiness	Sustainability	Sociability	Cleanliness	Affecting Cultural and Social Heritage	Affecting City Policy		
Impact	✓	✓		✓		✓				✓	✓		✓	✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓		
Degree of Impact	High Impact			Moderate Impact		No related data			High Impact		Moderate Impact			High Impact			High Impact			High Impact		Moderate Impact											
	●			○					●		○			●			●			●		○											



Examples of Media Use in Public Spaces

DIGITAL SCREENS

Networked Screens



Observed Qualities

- Visual Qualities
- Inclusiveness
- User Centered Design
- Activities
- Enjoyment
- Livability
- Communal Qualities

Intangibly affected Qualities

Comfort

Examples of Media Use in Public Spaces

DIGITAL SCREENS

Networked Screens

Quality		Visual Qualities	Inclusiveness, Access and Linkage	Protection	User Centered Design	Activities and Functionality	Comfort	Enjoyment	Livability and Vitality	Communal Qualities
Scale of Application	Artistic	Degree of Attractiveness	Proximity and Accessibility Degree	Protection Against Traffic and Accidents	For People	Functional Space	Possibilities for Walking	Possibilities for Enjoying Positive Aspects or Climate	Healthiness	Affecting Cultural and Social Heritage
	Degree of Legibility	Distinctiveness	Coexistence Ratio	Protection Against Crime and Violence	Respect Human Scale	Various Activities	Possibilities for Standing and Staying	Aesthetic Qualities	Sustainability	
Impact				Protection Against Unpleasant Sense Experiences,		Efficiency and Quality Level	Possibilities for Hearing and Talking	Positive Sense Experiences	Sociality	
				Protection from the Environmental Conditions			Possibilities for Playing and Unwinding		Cleanliness	
Degree of Impact per quality	High Impact	Moderate Impact	No related data	High Impact	Moderate Impact	High Impact	High Impact	High Impact	High Impact	Moderate Impact
	●	○		●	○	●	●	●	●	○

Networked Screens in London and ShenZhen

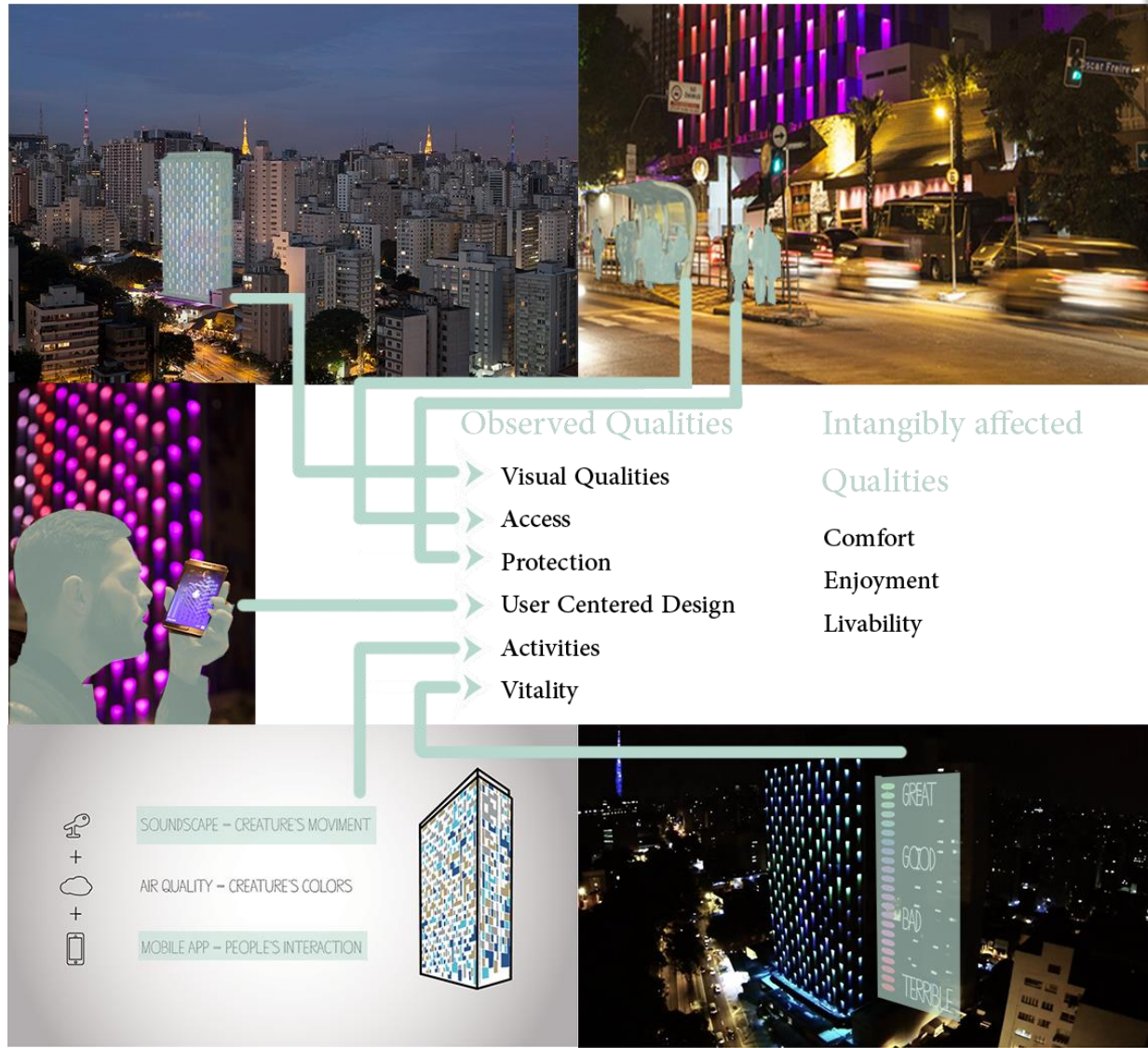
Digital Screens



Examples of Media Use in Public Spaces

MEDIA FACADES

São Paulo Hotel



Examples of Media Use in Public Spaces

MEDIA FACADES

São Paulo Hotel

Media Facades		São Paulo Hotel Interactive Light Façade										
Quality	Scale of Application	Visual Qualities	Inclusiveness, Access and Linkage	Protection	User Centered Design	Activities and Functionality	Comfort	Enjoyment	Livability and Vitality	Communal Qualities		
	Artistic	Degree of Attractiveness	Proximity and Accessibility Degree	Protection Against Traffic and Accidents	For People	Functional Space	Possibilities for Walking and Staying	Possibilities for Playing and Unwinding	Healthiness	Affecting Cultural and Social Heritage		
	Degree of Legibility	Distinctiveness	Coexistence Ratio	Protection Against Crime and Violence	Respect Human Scale	Various Activities	Possibilities for Sitting	Possibilities for Enjoying Positive Aspects or Climate	Sustainability	Cleanliness		
				Protection Against Unpleasant Sense Experiences, Protection from the Environmental Conditions		Efficiency and Quality Level	Possibilities for Hearing and Talking	Aesthetic Qualities	Sociability			
Impact	√	√	√	√	√	√	√	√	√	√		
Degree of Impact	High Impact	Low Impact	Moderate Impact	Moderate Impact	High Impact	High Impact	High Impact	High Impact	High Impact	No Impact		
	●	○	○	○	●	●	●	●	●			

Examples of Media Use in Public Spaces

MOBILE APPLICATIONS

Project BudBurst



Observed Qualities

Visual Qualities

Inclusiveness

User Centered Design

Activities

Livability and Vitality

Intangibly affected

Qualities

Comfort

Enjoyment

Communal Qualities



Examples of Media Use in Public Spaces

MOBILE APPLICATIONS

Project BudBurst

Project BudBurst

Quality	Visual Qualities	Inclusiveness, Access and Linkage	Protection	User Centered Design	Activities and Functionality	Comfort	Enjoyment	Livability and Vitality	Communal Qualities
Scale of Application	Artistic	Proximity and Accessibility Degree	Protection Against Traffic and Accidents	For People	Functional Space	Possibilities for Walking and Staying	Scale	Healthiness	Affecting Cultural and Social Heritage
	Degree of Attractiveness								
Impact	Degree of Legibility	Coexistence Rate	Protection Against Unpleasant Sense Experiences, Environmental Conditions	Moderate Impact	Various Activities	Possibilities for Hearing and Talking	Aesthetic Qualities	Sociability	Moderate Impact
	Distinctiveness								
Degree of Impact	Moderate Impact	Moderate Impact	No related data	Moderate Impact	High Impact	Moderate Impact	Moderate Impact	High Impact	Moderate Impact
	○								



Examples of Media Use in Public Spaces

FESTIVALS RELATED TO DIGITAL MEDIA USE IN PUBLIC SPACES

Light Festivals



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Light Festivals

Quality	Visual Qualities	Inclusiveness, Access and Linkage	Protection	User Centered Design	Activities and Functionality	Comfort	Enjoyment	Livability and Vitality	Communal Qualities
	Scale of Application	Artistic Degree of Attractiveness Degree of Legibility Distinctiveness	Proximity and Accessibility Degree Coexistence Ratio	Protection Against Traffic and Accidents Protection Against Crime and Violence Protection Against Unpleasant Sense Experiences, Protection from the Environmental Conditions	For People Respect Human Scale	Functional Space Various Activities Efficiency and Quality Level Possibilities for Walking Possibilities for Standing and Staying	Possibilities for Sitting Possibilities to See Possibilities for Hearing and Talking Possibilities for Playing and Unwinding	Scale Possibilities for Enjoying Positive Aspects or Climate Aesthetic Qualities Positive Sense Experiences	Healthiness Sustainability Sociability Cleanliness
Impact	✓ ✓ ✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓ ✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓	✓ ✓ ✓ ✓
Degree of Impact	High Impact	High Impact	Moderate Impact	High Impact	Low Impact	Moderate Impact	High Impact	Moderate Impact	High Impact
	●	●	○	●	○	○	●	○	●

Examples of Media Use in Public Spaces

Impacts of Selected Examples on Public Space Qualities

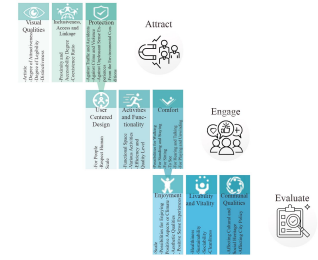
Examples of Media Tools Used in Attraction and Engagement within	Visual Qualities	Inclusiveness, Access and Linkage	Protection	User Centered Design	Activities and Functionality	Comfort	Enjoyment	Livability and Vitality	Communal qualities
	In Space Smart Interactive Fixtures	●	○		●	○	●	●	●
Tangible Orchestra									
Digital Screens									
Networked Screens in London and ShenZhen	●	○		●	○	●	●	●	○
Media Facades									
São Paulo Hotel Interactive Light Façade	●	○	○	○	●	●	●	●	
Mobile Applications									
Project Budburst	○	○		○	●	○	○	●	○
Media Façade Festivals	●		○	○	○	○	●	○	○
Light Festivals	●	●	○	●	○	○	●	○	●

●: High impact, ○: Moderate impact, ◌: Low impact.

Examples of Media Use in Public Spaces

Impacts of Selected Examples on Public Space Qualities

Order of the most improved qualities of public space according to the selected examples



General Policy Findings

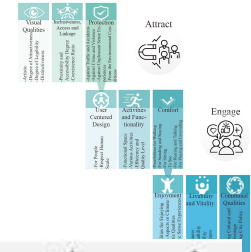
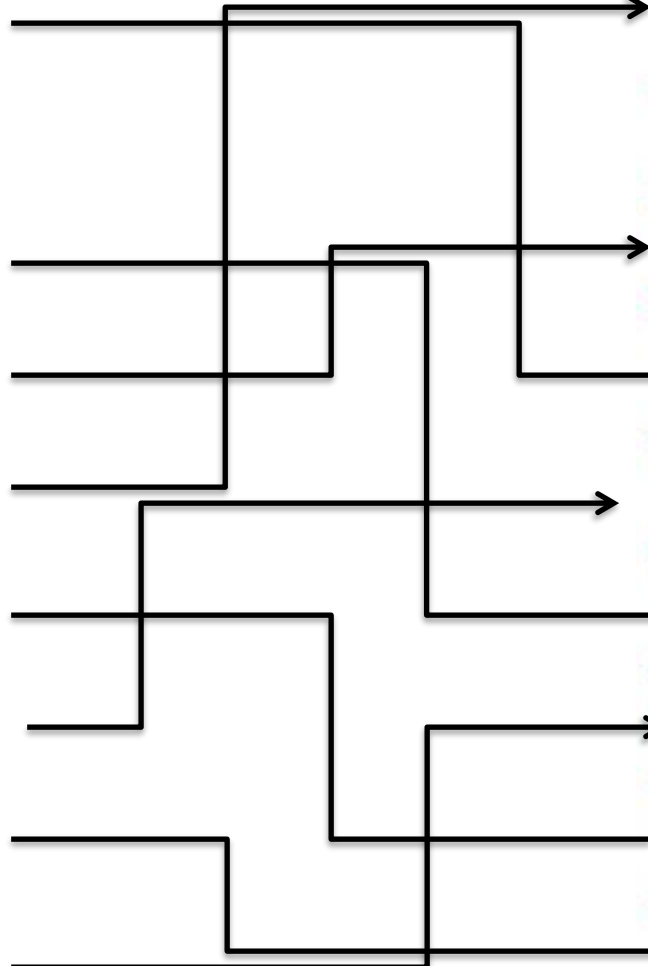
Comparison of Literature Order

Order of the most improved qualities of public space due to digital media installments

1	User Centered Design	
2	Enjoyment	
3	Activities and Functionality	
4	Livability and Vitality	
5	Visual Qualities	
6	Inclusiveness, Access and Linkage	
7	Comfort	
8	Protection	
9	Communal Qualities	

Order of the most improved qualities of public space according to the selected examples

1	Visual Qualities	
2	Enjoyment	
3	Livability and Vitality	
4	User Centered Design	
5	Comfort	
6	Activities and Functionality	
7	Communal Qualities	
8	Inclusiveness, Access and Linkage	
9	Protection	



General Policy Findings

Generation of the Qualities' Order from Literature

Order of the most improved qualities of public space due to digital media installments

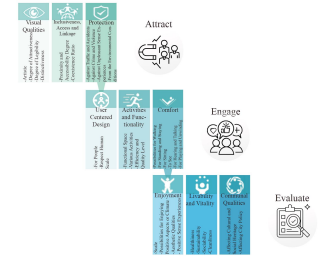
1	User Centered Design	
2	Enjoyment	
3	Activities and Functionality	
4	Livability and Vitality	
5	Visual Qualities	
6	Inclusiveness, Access and Linkage	
7	Comfort	
8	Protection	
9	Communal Qualities	

Order of the most improved qualities of public space according to the selected examples

	Visual Qualities	
	Enjoyment	
	Livability and Vitality	
	User Centered Design	
	Comfort	
	Activities and Functionality	
	Communal Qualities	
	Inclusiveness, Access and Linkage	
	Protection	

Generated order from literature

	Enjoyment	1
	User Centered Design	2
	Visual Qualities	3
	Livability and Vitality	4
	Activities and Functionality	5
	Comfort	6
	Inclusiveness, Access and Linkage	7
	Communal Qualities	8
	Protection	9





Empirical Study

Methodology

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Public Space Selection

User's Demography

Park Pre-assessment

Suggest a Set of Theoretical Interventions

Examine the Users' Reaction (Post Assessment)

Explore Users' Vision

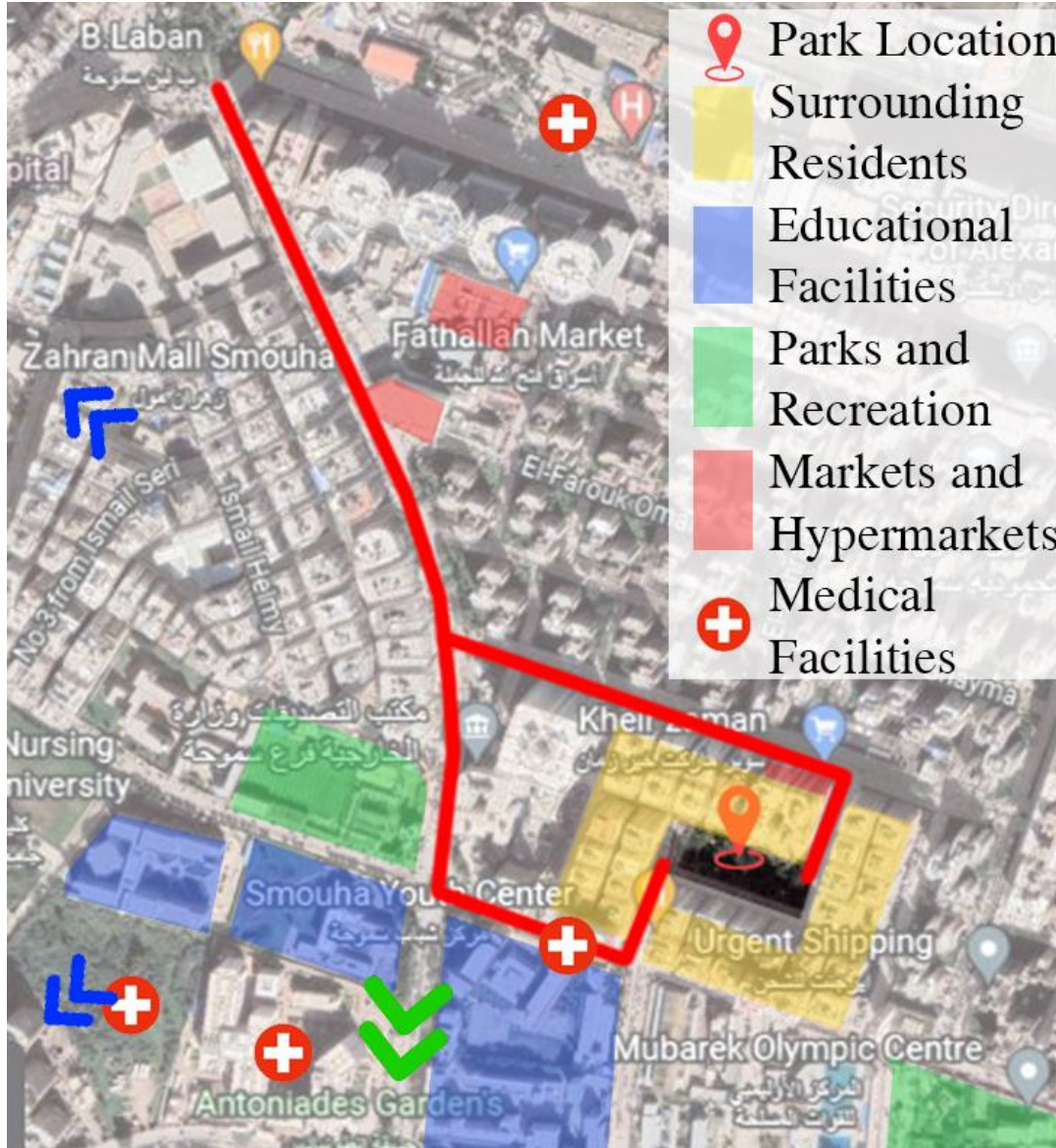


Recommendations for Public Space Improvement



Settings

Smouha's Neighborhood Park

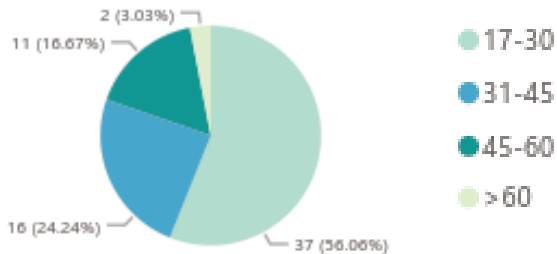


Demography

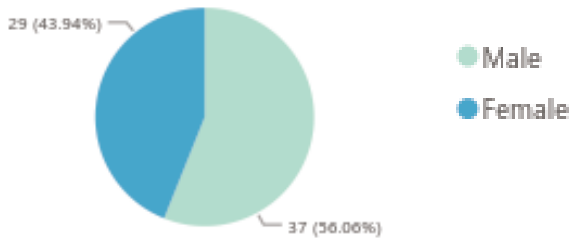
ONLINE QUESTIONNAIRE

66 Users

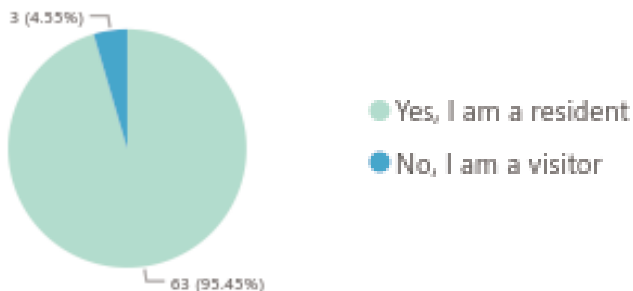
Age Range



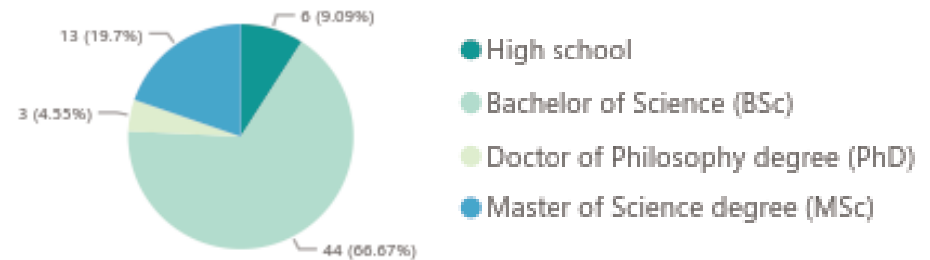
Gender



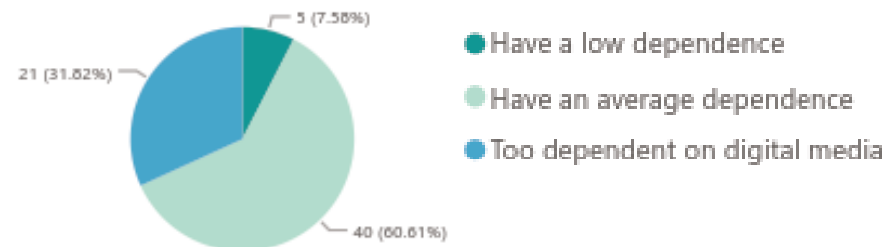
City Residency



Highest Degree Obtained



Dependence on Digital Media

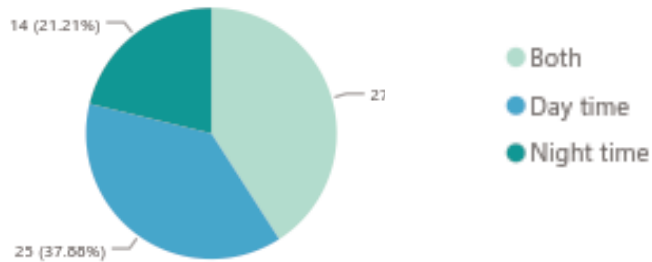


Demography

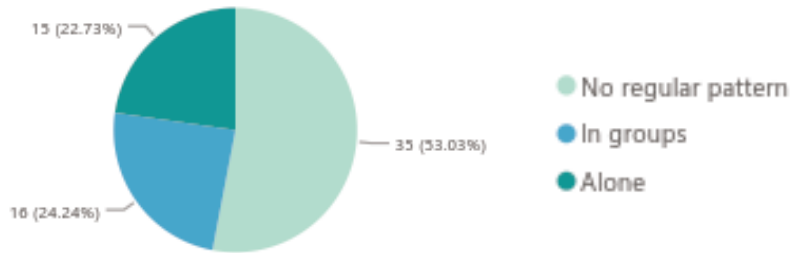
ONLINE QUESTIONNAIRE

66 Users

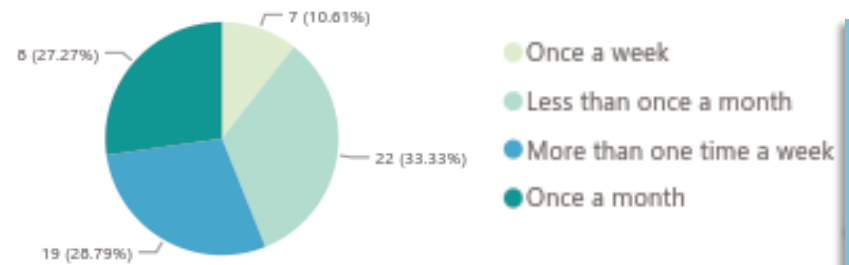
Preferred Timing for the Visit



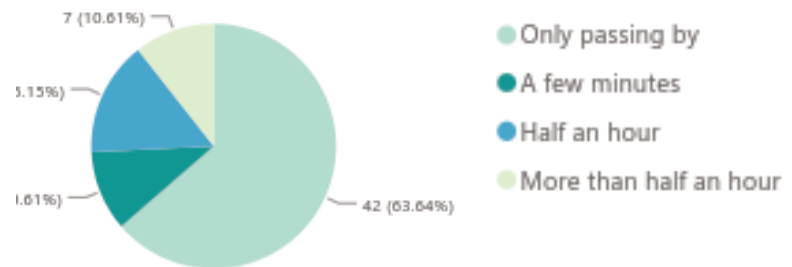
How do I visit the park?



Frequency of Park Visits



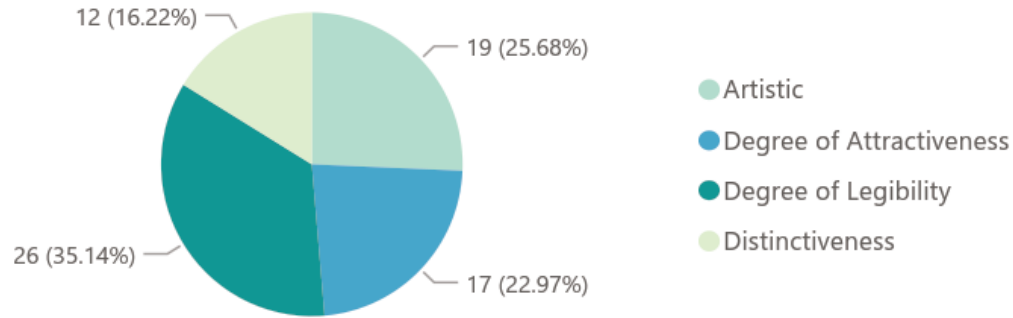
Duration of Stay in the Park



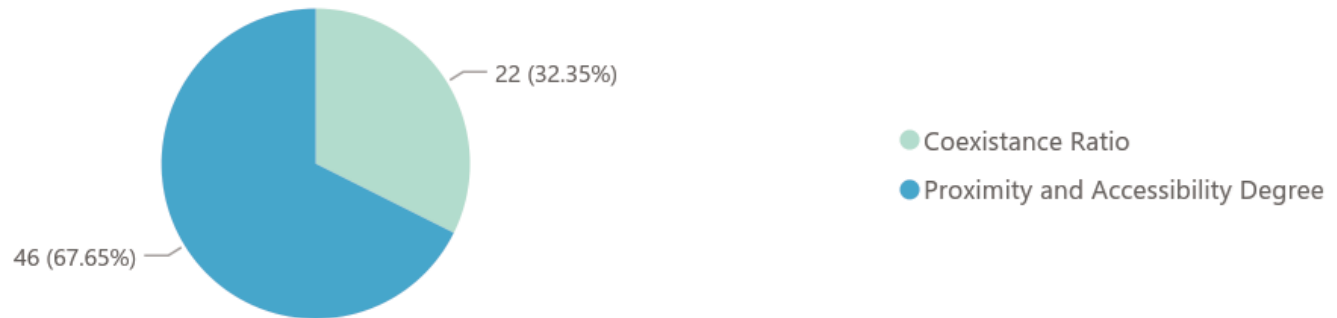
Park Pre-assessment

Existing Situation Assessment

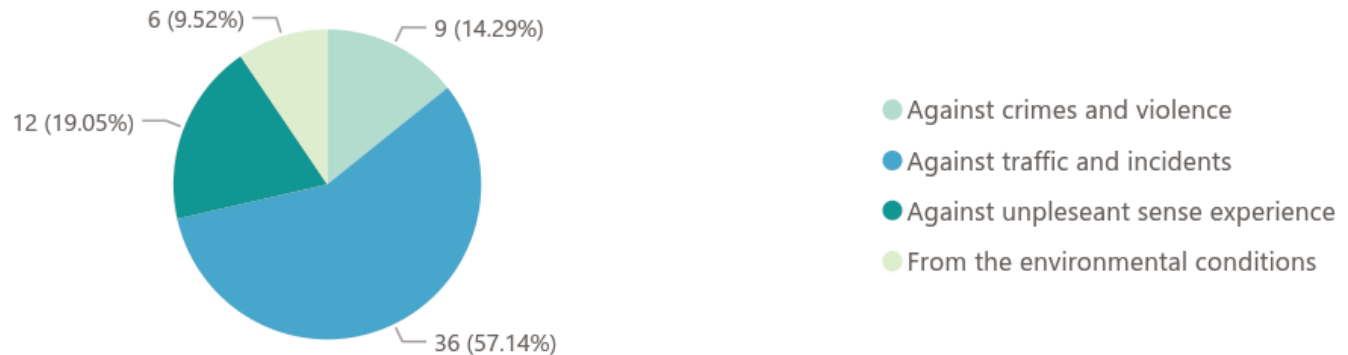
Visual Qualities



Inclusiveness, Access and Linkage



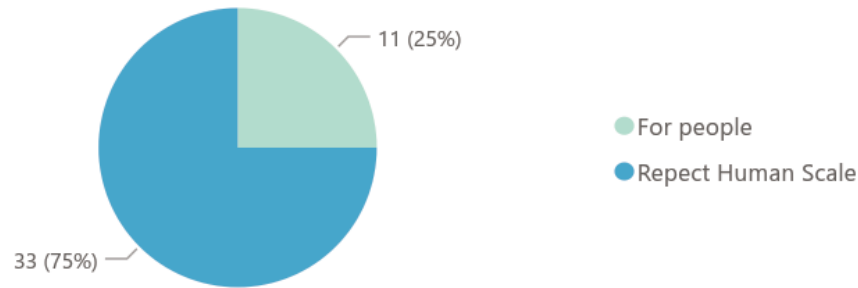
Protection



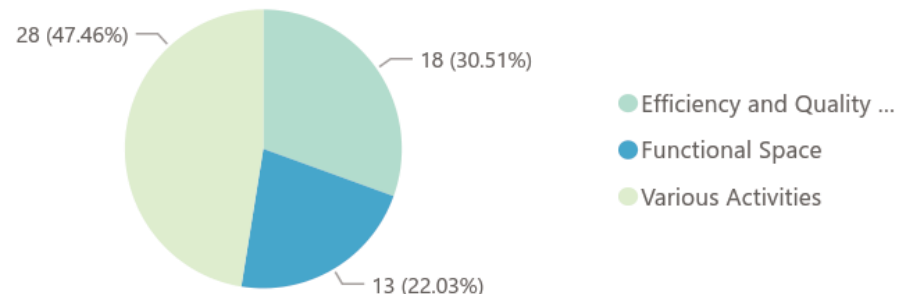
Park Pre-assessment

Existing Situation Assessment

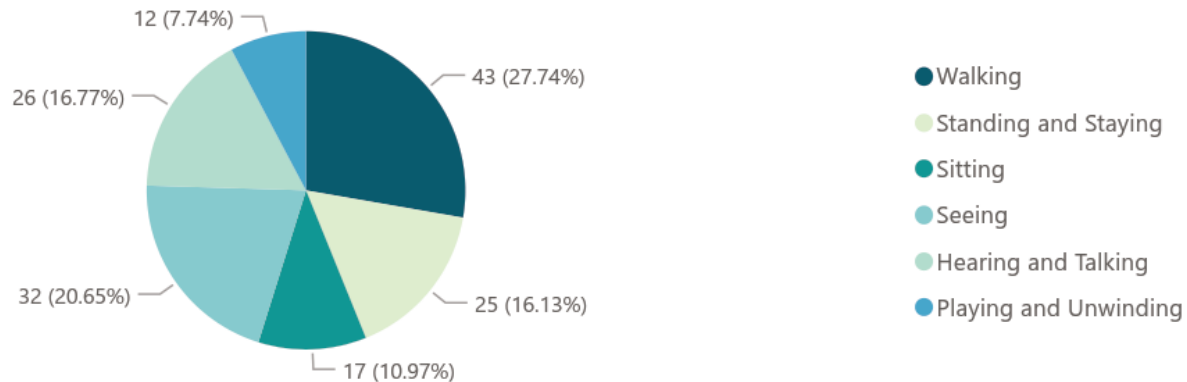
User Centered



Activities and Functionality



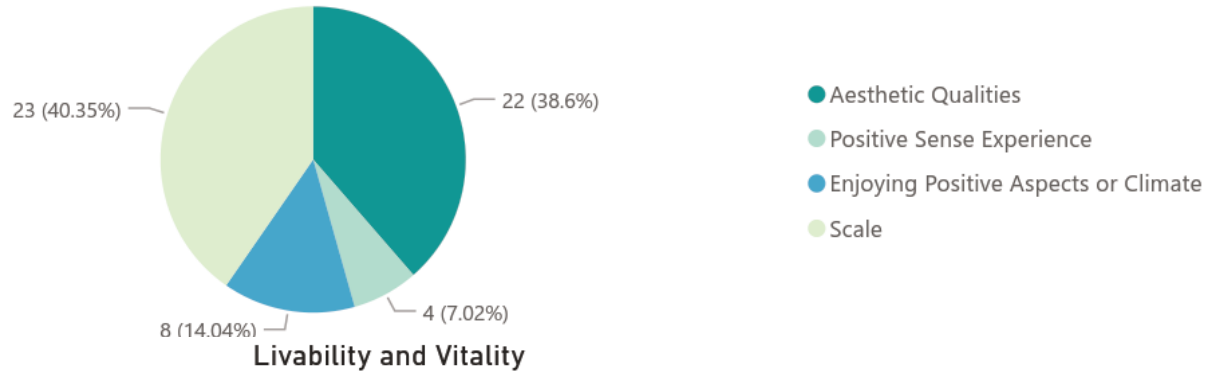
Comfort



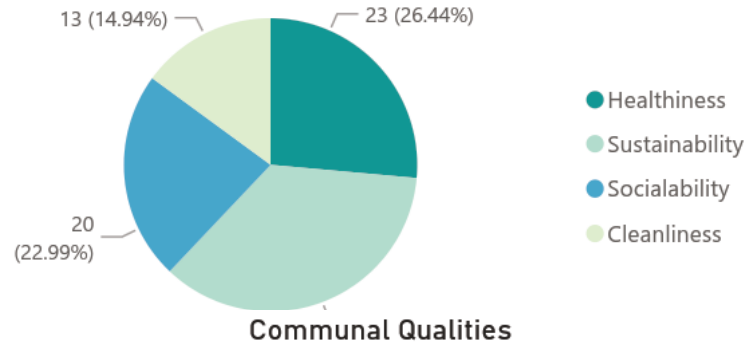
Park Pre-assessment

Existing Situation Assessment

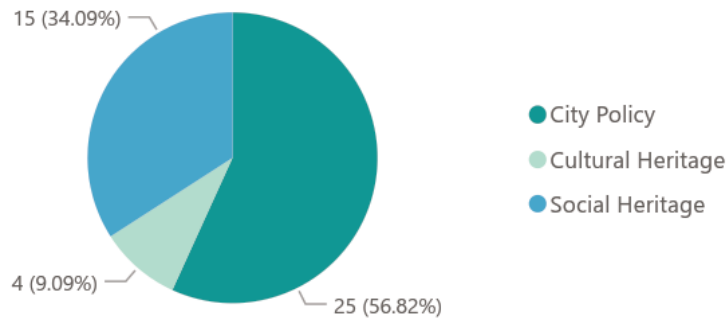
Enjoyment



Livability and Vitality



Communal Qualities

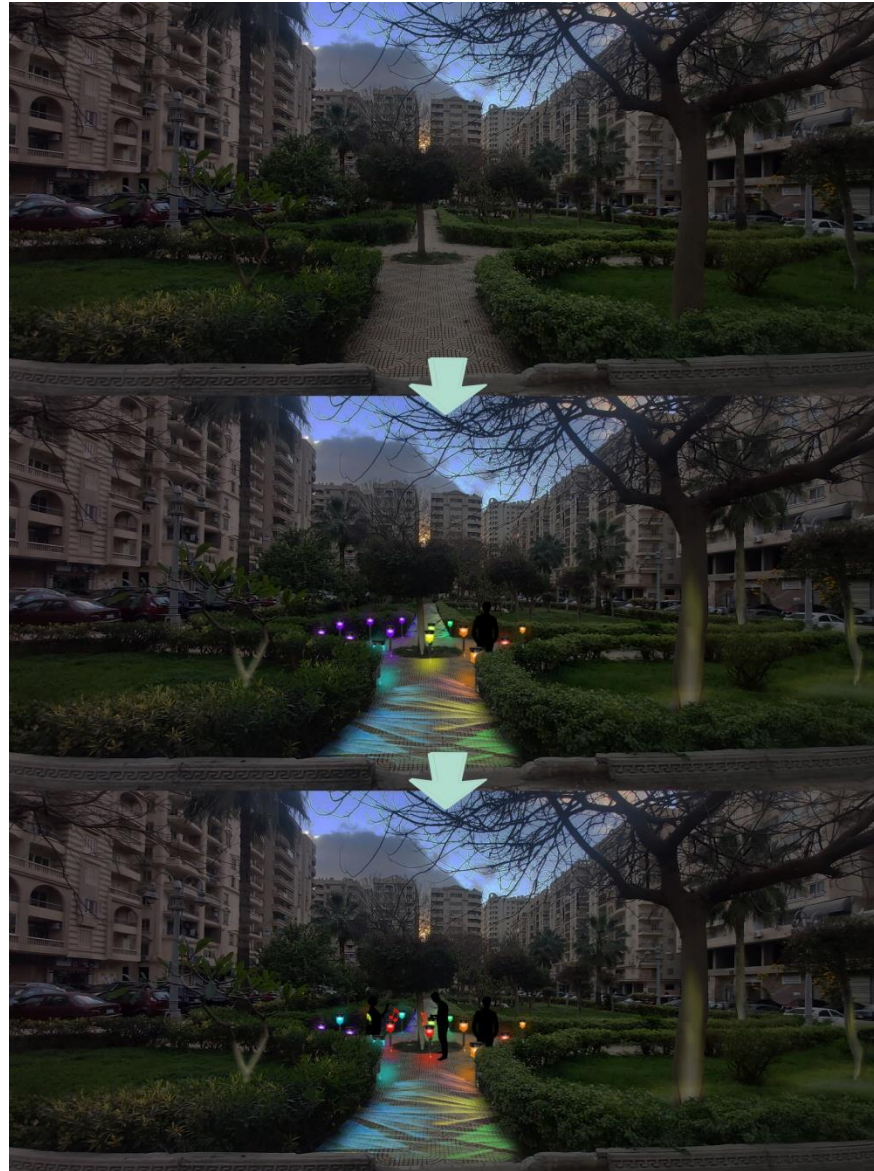


Interventions

Most Impactful Media tools

Adaptive lighting - Mobile application

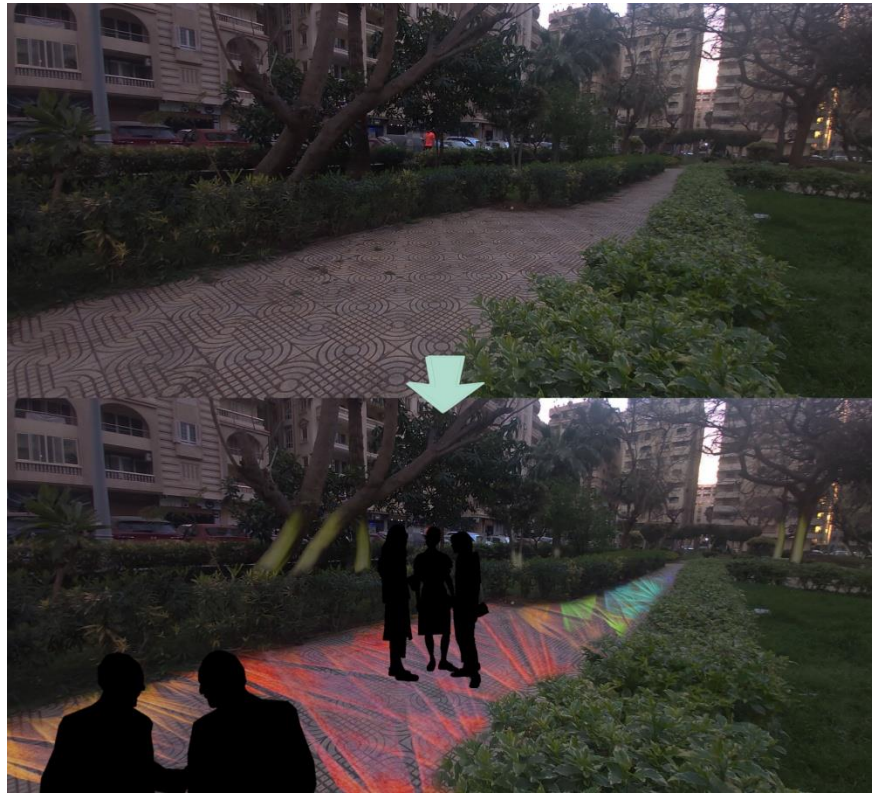
- Adaptive lighting system
- Mobile application (gathering IOM technology and mobile based games technology)
- Public art / Interactive screen
- Media facades (video mapping technology).



Interventions

Most Impactful Media tools

Adaptive lighting



Introduction

Theoretical
Background

Empirical
Study

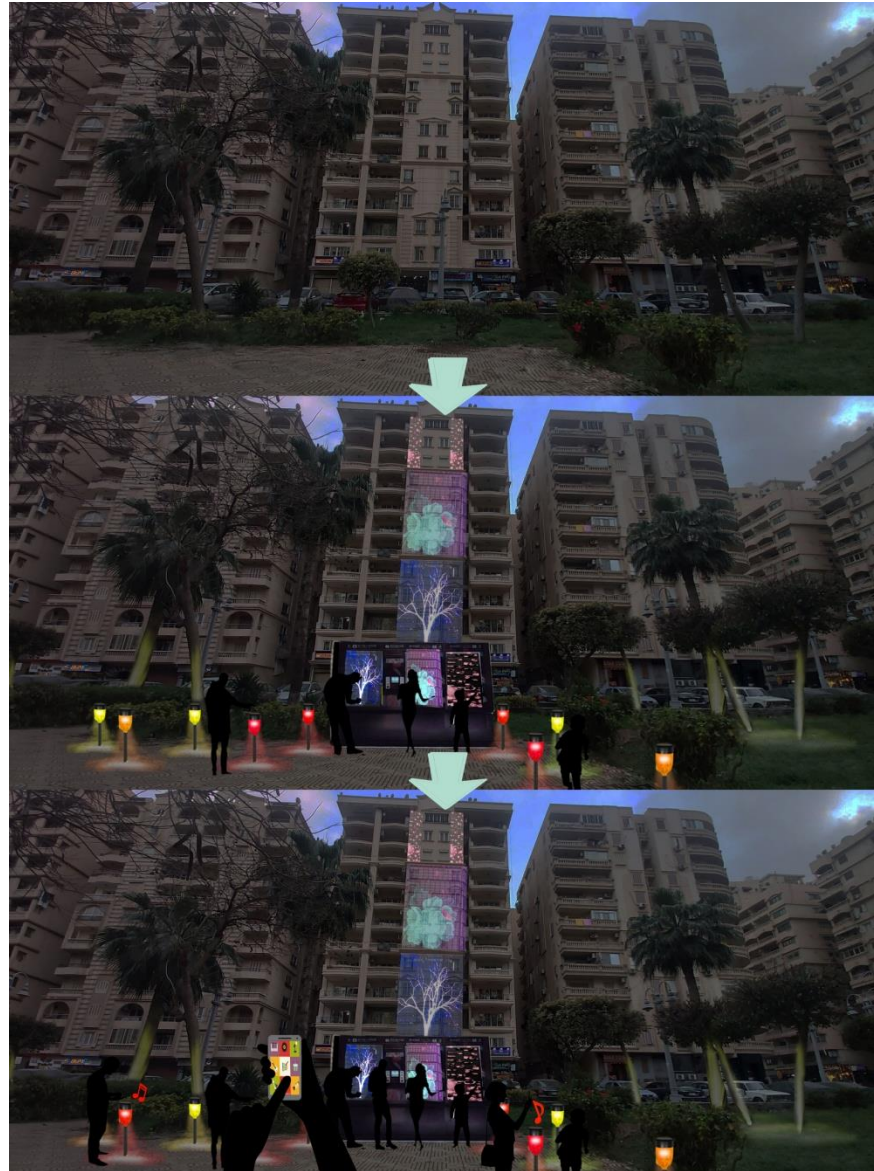
Conclusion and
Recommendations

Further
Research

Interventions

Most Impactful Media tools

Adaptive lighting - Mobile application
- Interactive screen- Media facades



Introduction

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Empirical
Study

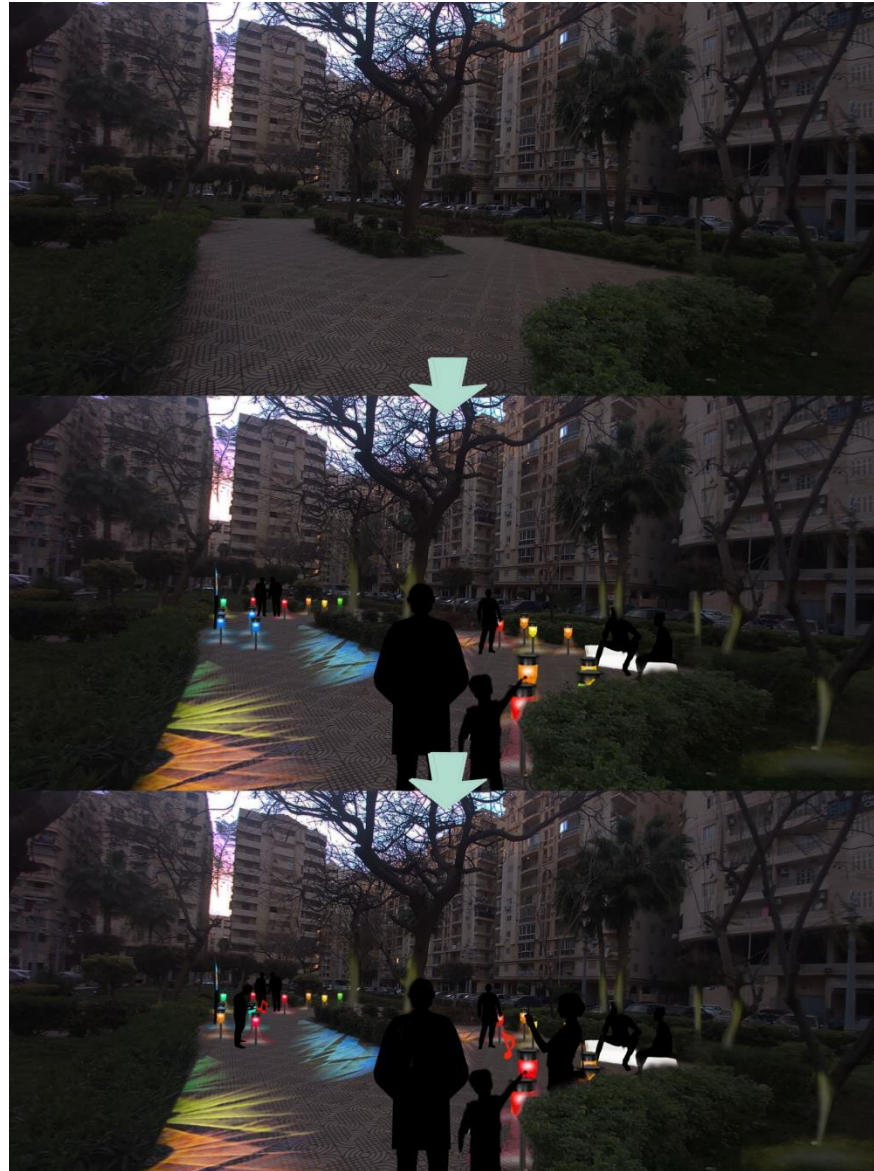
Conclusion and
Recommendations

Further
Research

Methodology and Interventions

Most Impactful Media tools

Adaptive lighting - Mobile application



Introduction

Theoretical
Background

Empirical
Study

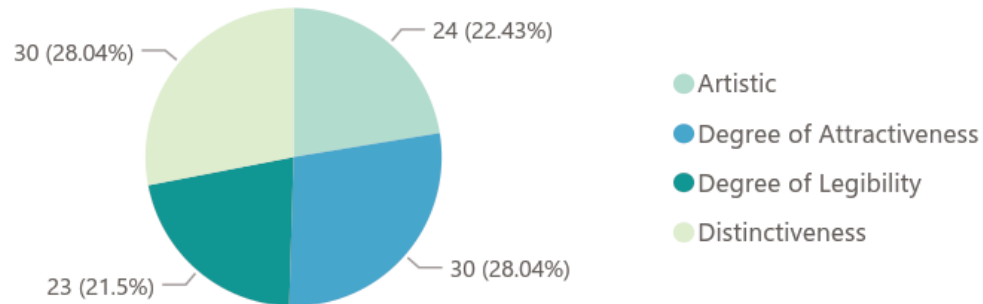
Conclusion and
Recommendations

Further
Research

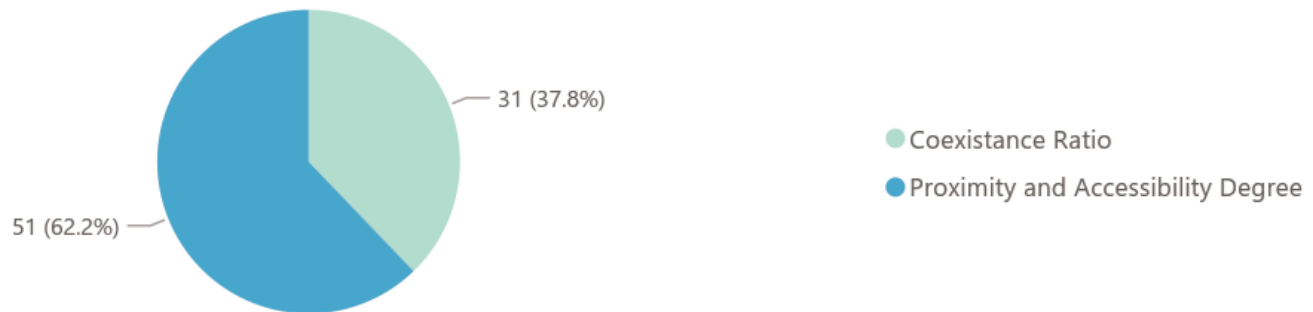
Park Post-assessment

Final Sub-qualities Assessment

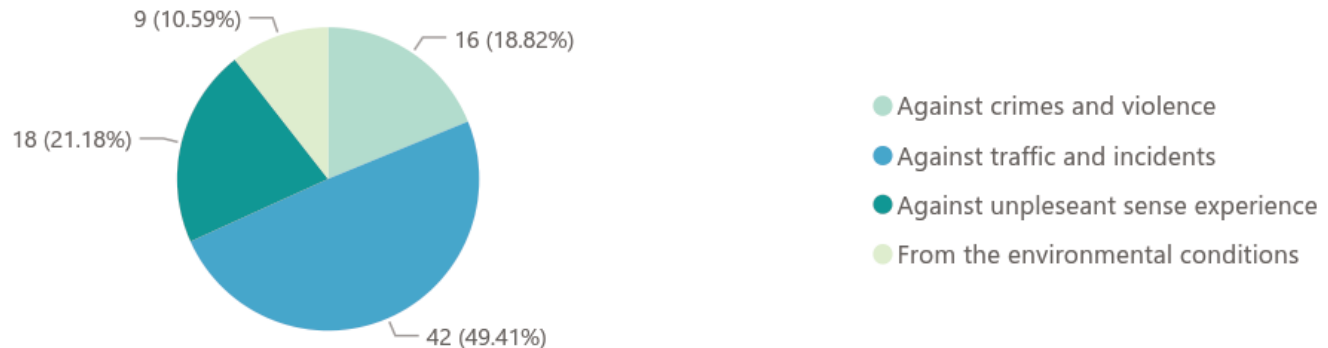
Visual Qualities



Inclusiveness, Access and Linkage



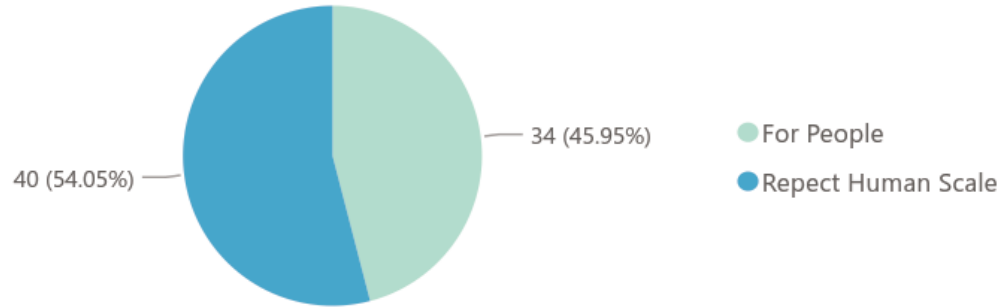
Protection



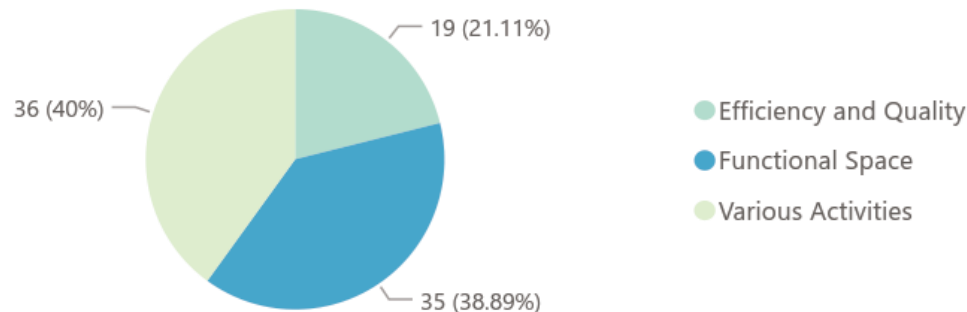
Park Post-assessment

Final Sub-qualities Assessment

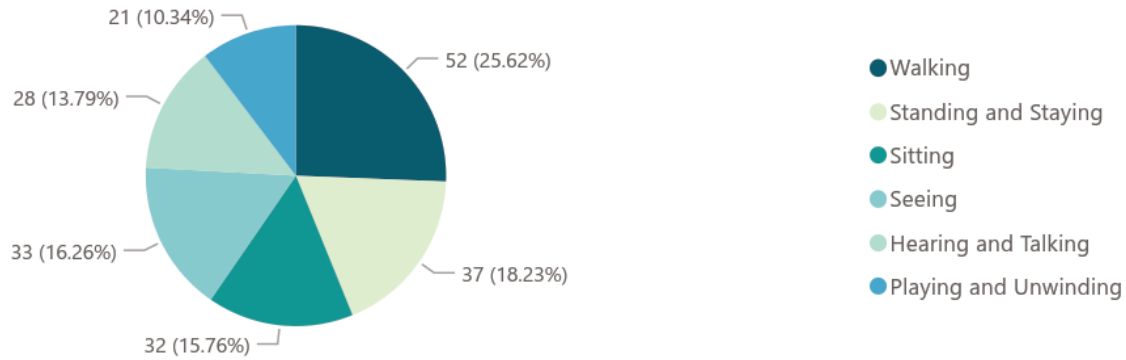
User Centered



Activities and Functionality



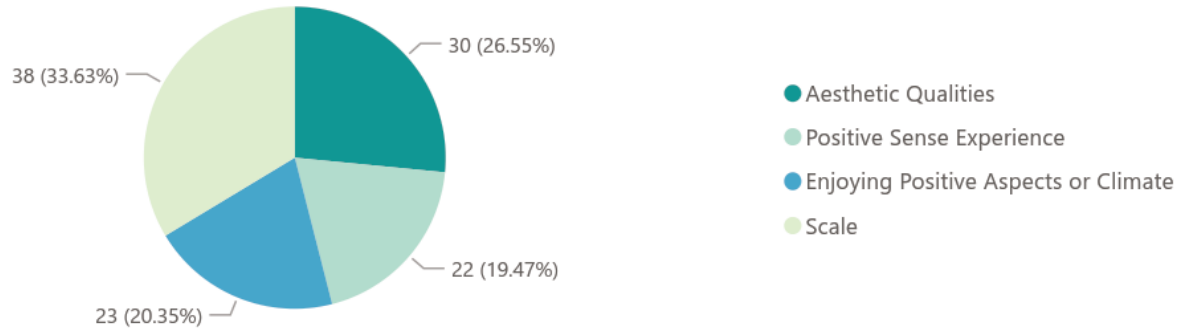
Comfort



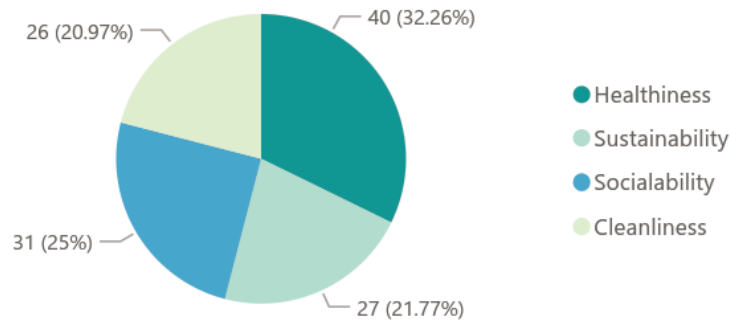
Park Post-assessment

Final Sub-qualities Assessment

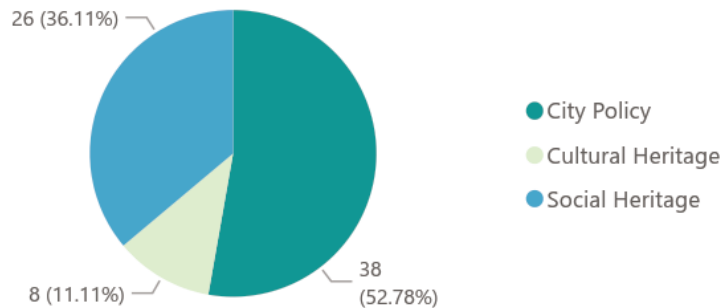
Enjoyment



Livability and Vitality



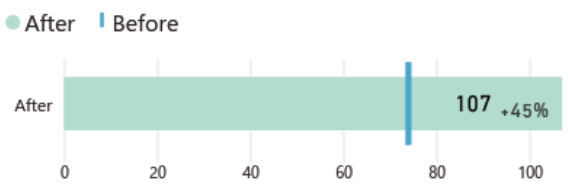
Communal Qualities



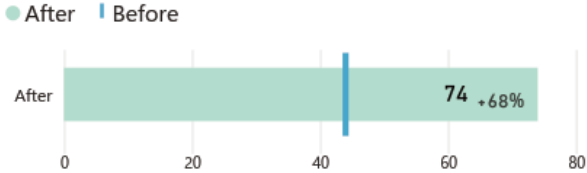
Results

Qualities' Improvement Percentage

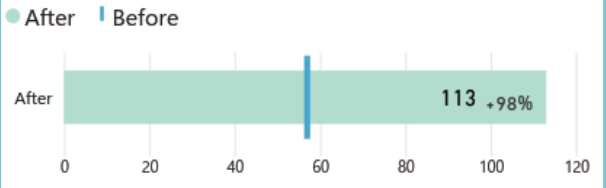
Visual Qualities



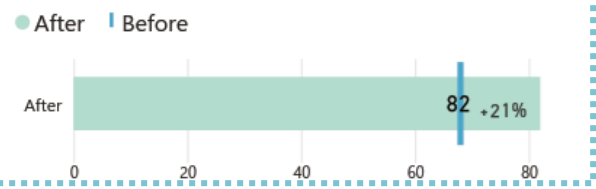
User Centered Approach



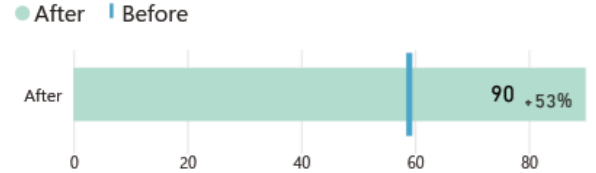
Enjoyment



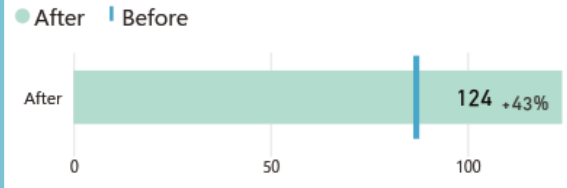
Inclusiveness, Access and Linkage



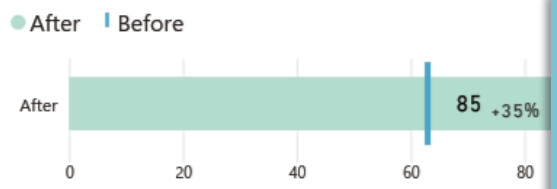
Activities and Functionality



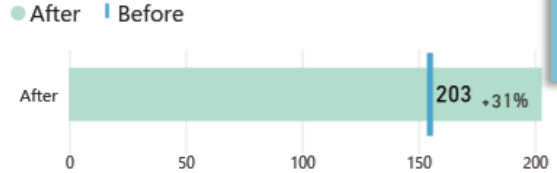
Livability and Vitality



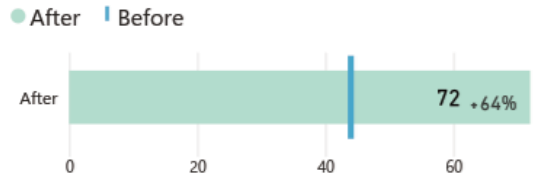
Protection



Comfort



Communal Qualities



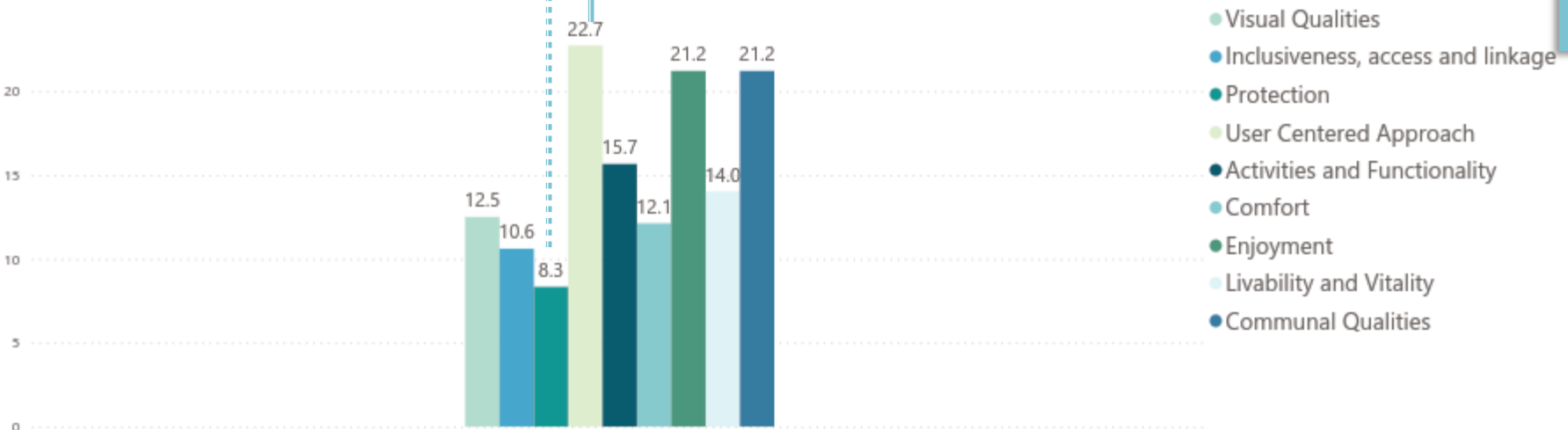
Results

Impacted Qualities Scale

User Centered Approach

Protection

Impact of digital media implementation on space qualities as a Percentage Increase



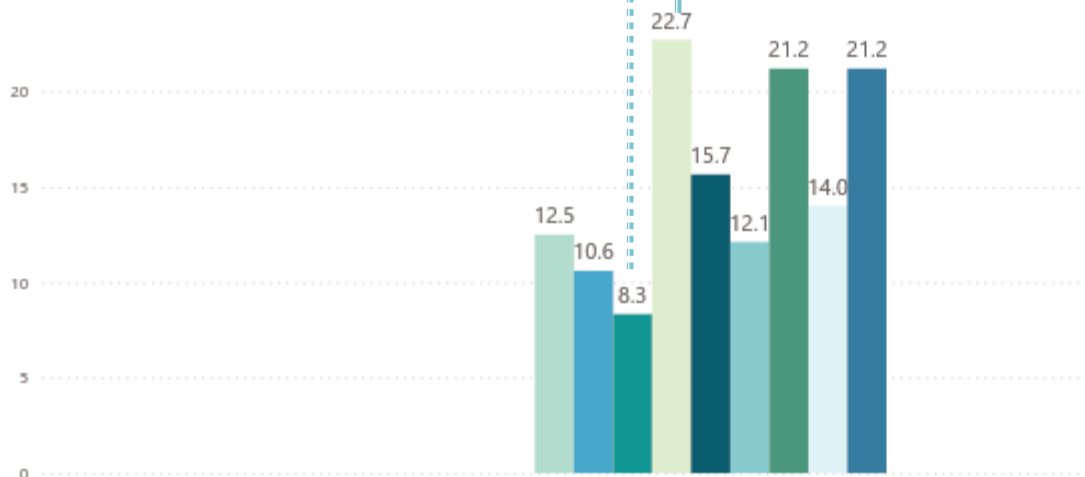
Results

Impacted Qualities Scale

User Centered Approach

Protection

Impact of digital media implementation on space qualities as a Percentage Increase

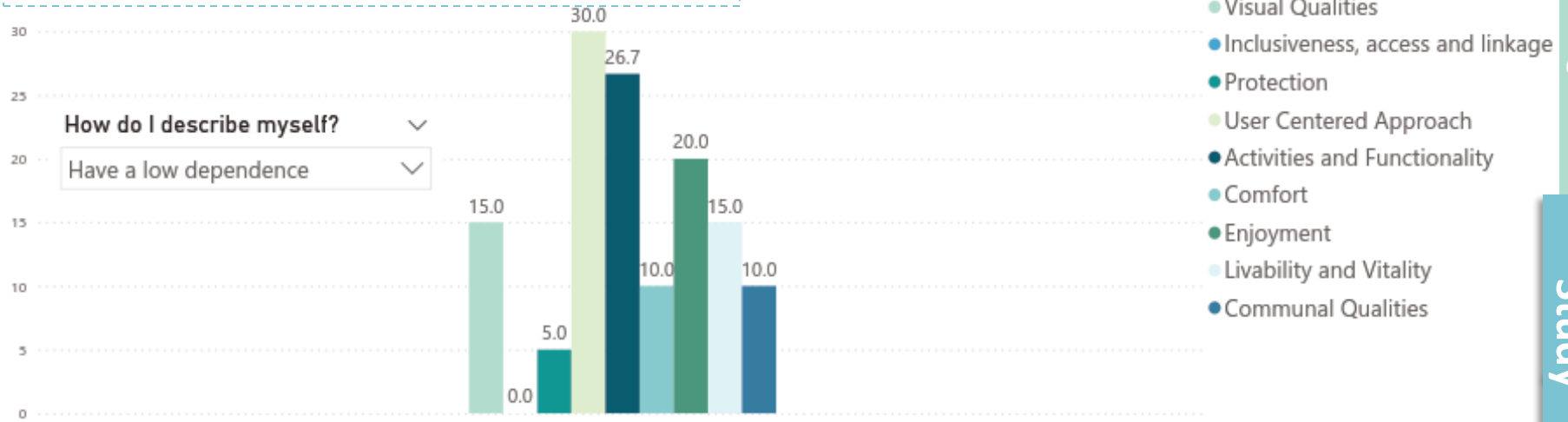


	User Centered Design	1	Introduction
	Enjoyment	2	
	Communal Qualities	3	Theoretical Background
	Activities and Functionality	4	
	Livability and Vitality	5	Empirical Study
	Visual Qualities	6	
	Comfort	7	Conclusion and Recommendations
	Inclusiveness, Access and Linkage	8	
	Protection	9	Further Research

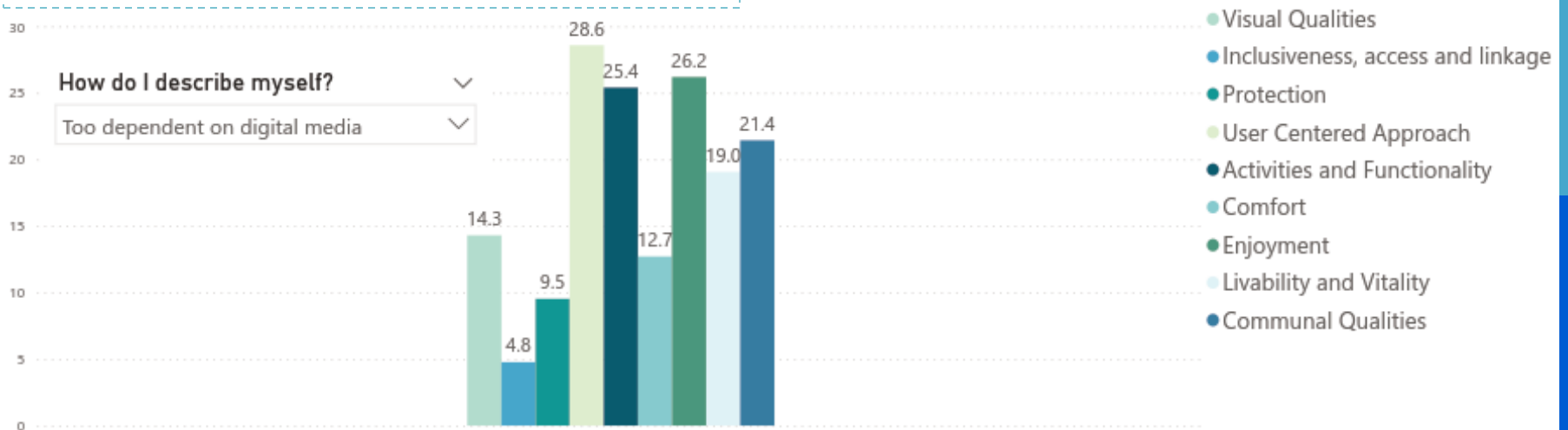
Results

Impacted Qualities Scale

Users with Low Dependence on Media tools



Users with High Dependence on Media tools



Results

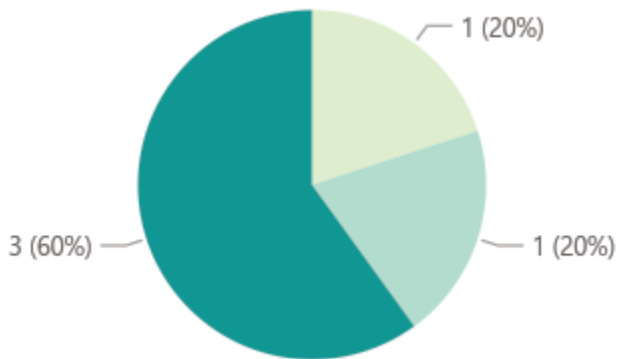
Impacted Qualities Scale

Media
Dependence

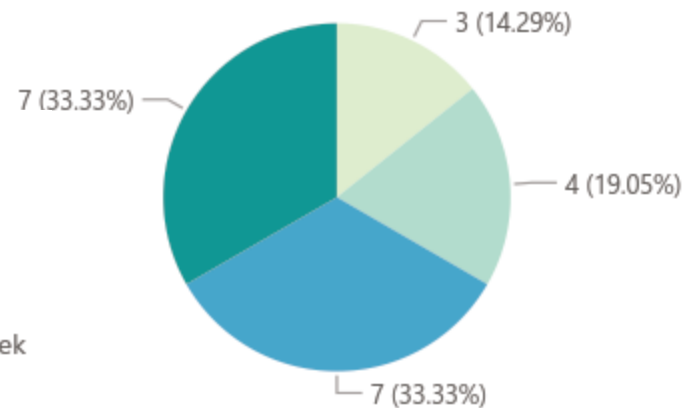
Users' Visit
Frequency

Users with Low Dependence on Media tools

Users with High Dependence on Media tools



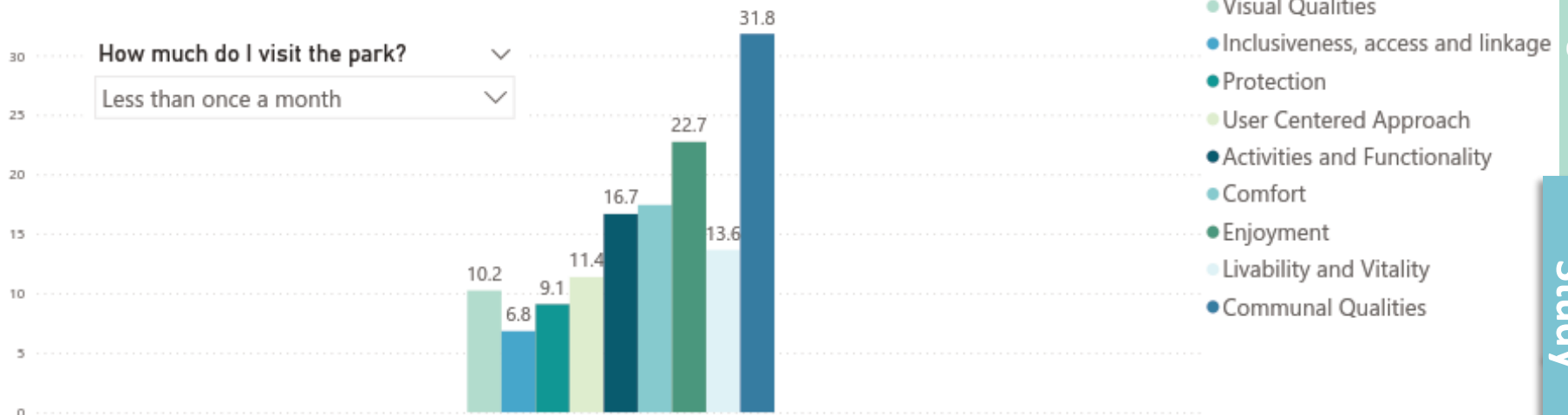
- Once a week
- Less than once a month
- More than one time a week
- Once a month



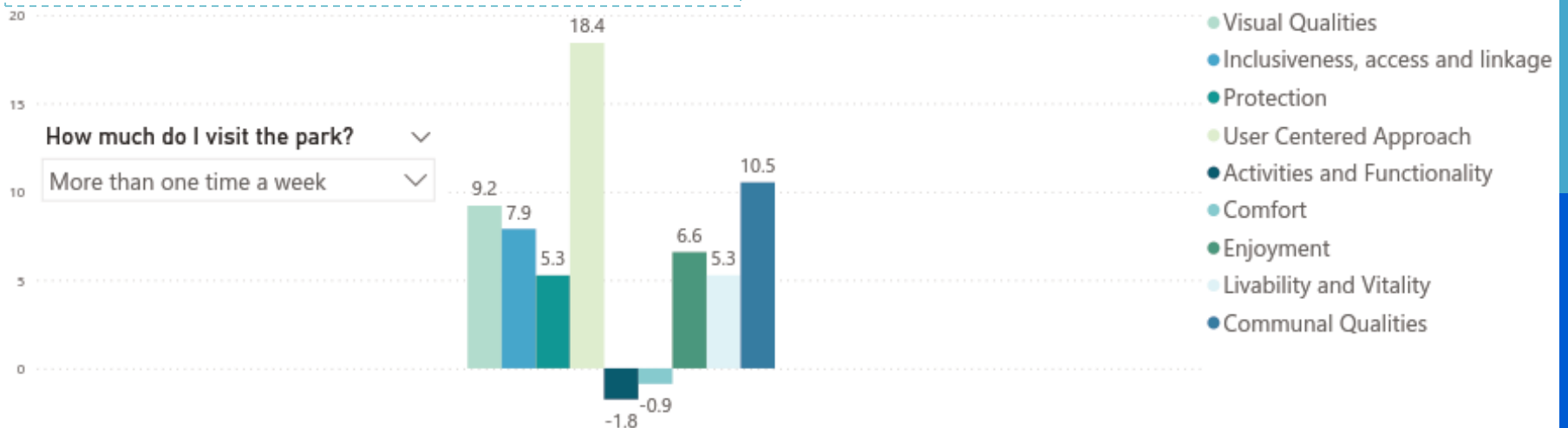
Results

Impacted Qualities Scale

Users with the Lowest Visit Frequency



Users with Highest Visit Frequency



Results

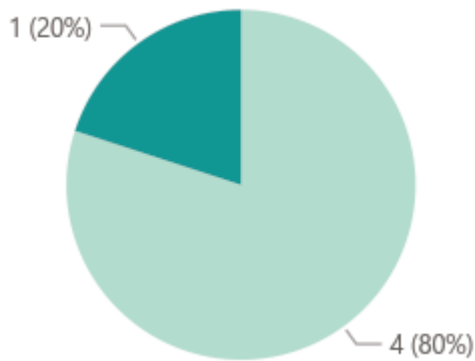
Impacted Qualities Scale

Media
Dependence

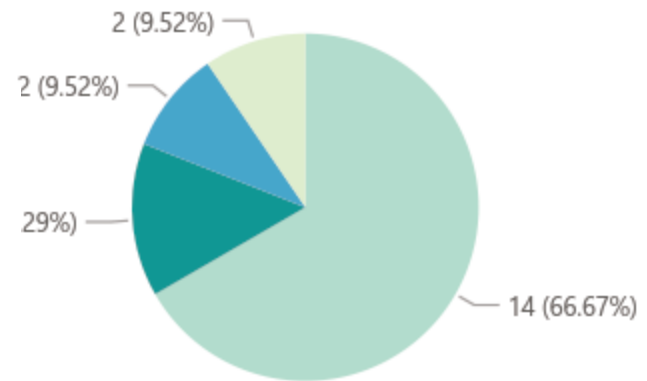
Users' Visit
Duration

Users with Low Dependence on Media tools

Users with High Dependence on Media tools



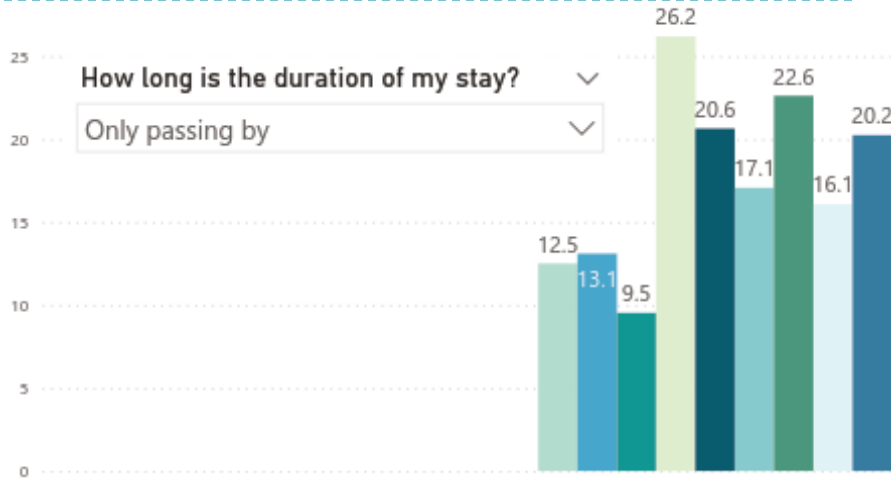
- Only passing by
- A few minutes
- Half an hour
- More than half an hour



Results

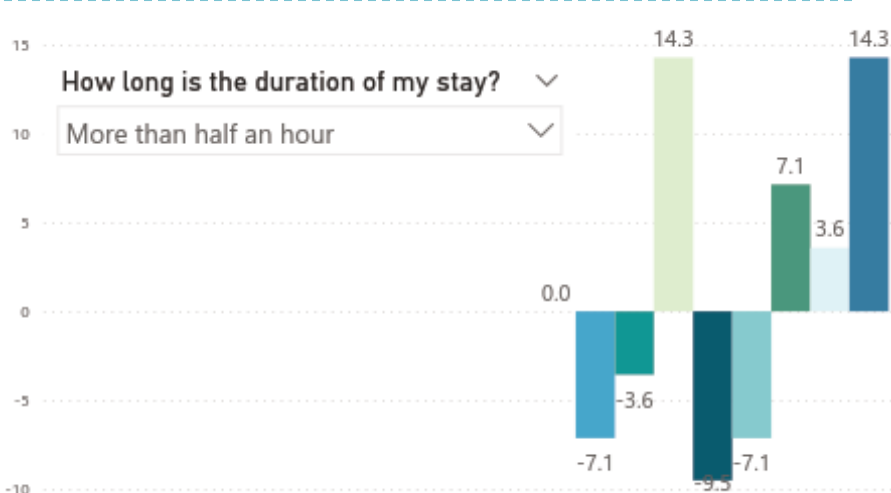
Impacted Qualities Scale

Users with the Lowest Visit Duration



- Visual Qualities
- Inclusiveness, access and linkage
- Protection
- User Centered Approach
- Activities and Functionality
- Comfort
- Enjoyment
- Livability and Vitality
- Communal Qualities

Users with Highest Visit Duration



- Visual Qualities
- Inclusiveness, access and linkage
- Protection
- User Centered Approach
- Activities and Functionality
- Comfort
- Enjoyment
- Livability and Vitality
- Communal Qualities

Results

Users' Vision for the Park

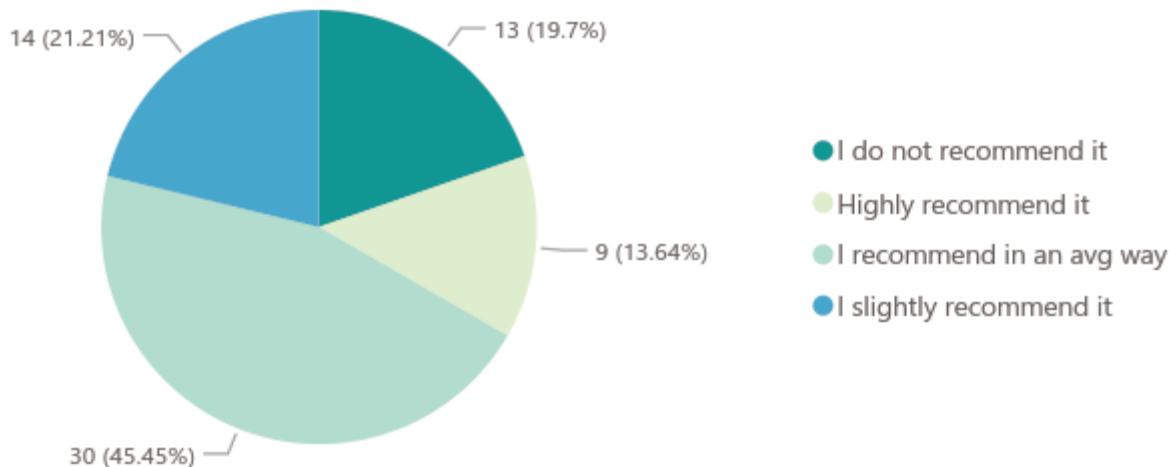
Park's Addition



Park's changes



Park Recommendation



Results

Qualities assessed for Smouha's neighborhood park before media interventions greatly improved when suggesting the four interventions

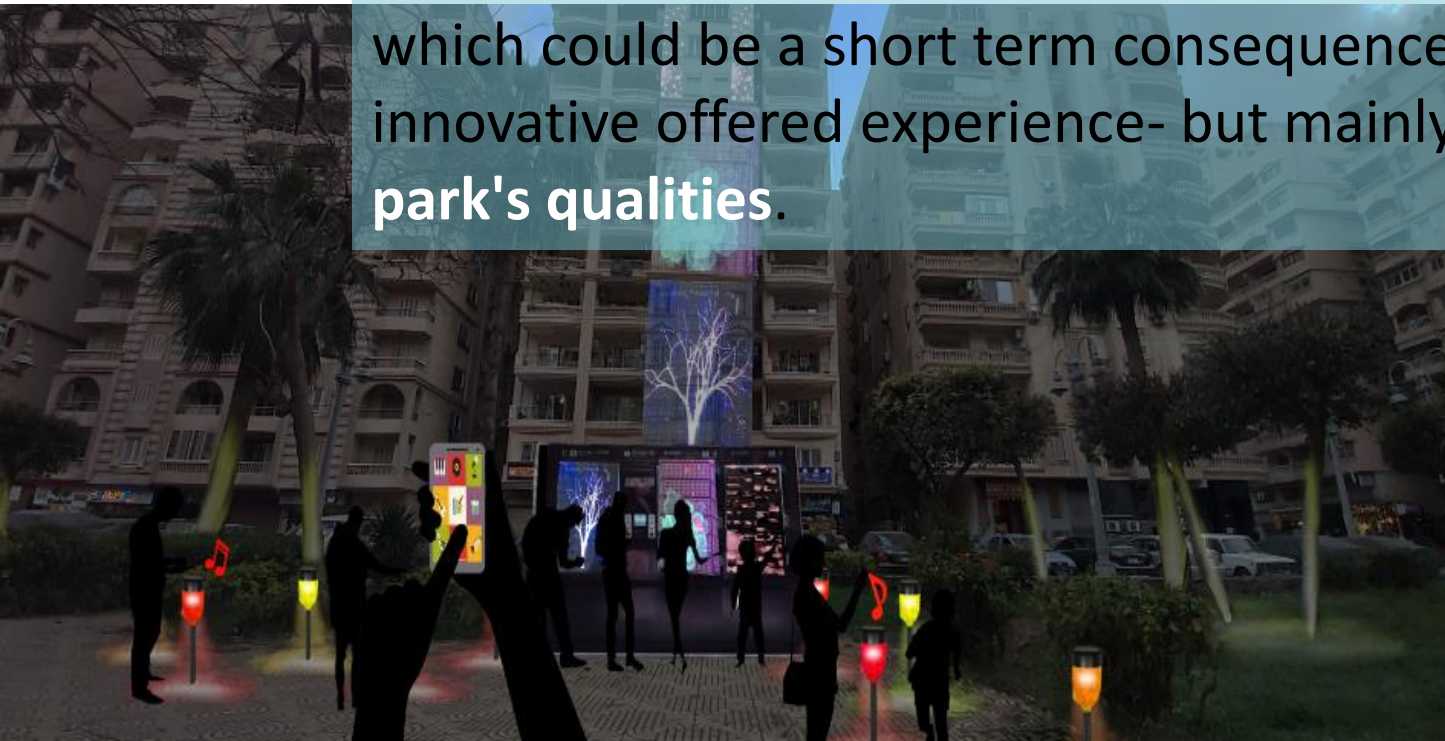
People with the highest media dependence seem to benefit more from the implementation suggested, since they record better rates of qualities' improvement.

Regular visitors and people with the highest duration of the stay in the park have some resistance to the change, which appears in some of the qualities' regression rather than improvement.

Results

Based on novelty, this might be a short term effect of the media installations, that definitely cannot compensate the actual users who seem to be resentful of the suggested interventions.

Though, the questionnaires' participants acknowledge the **effect of media tools** not only on their willingness to visit the park more often - which could be a short term consequence of the innovative offered experience- but mainly **on all park's qualities.**





Conclusion

Specific Context Findings

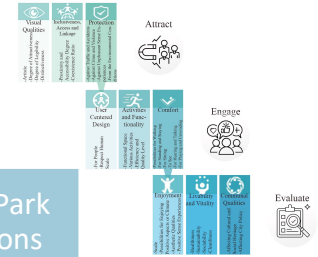
Conclusion

Specific Context Findings

Comparing the Empirical Qualities' Order with the Literature

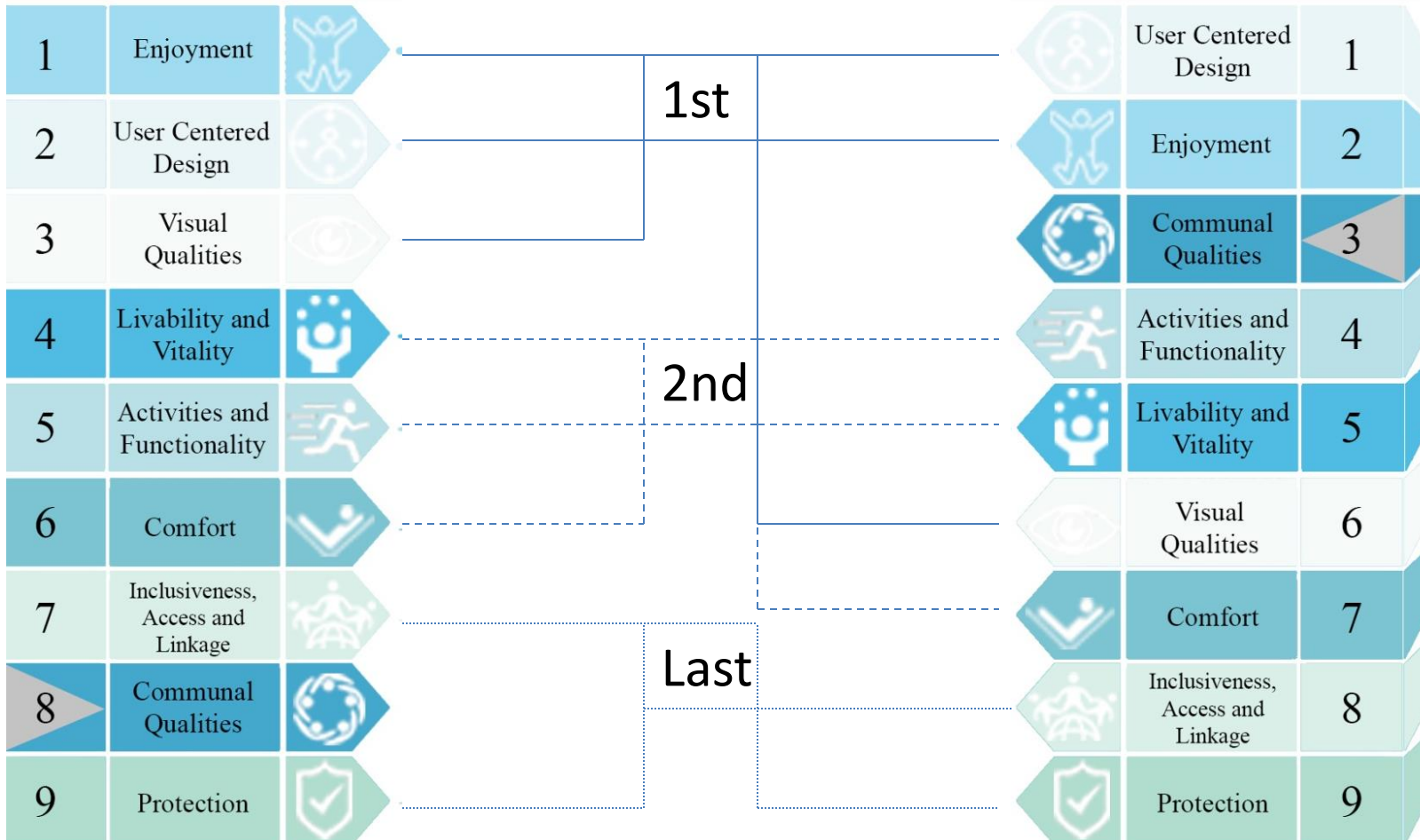
Generated Literature Order

Smouha's Park Interventions Order



Generated order from literature

Smouha's Park's impacted qualities order



Introduction

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Empirical Study

Conclusion and Recommendations

Further Research

Conclusion

Specific Context Findings

Comparing the Empirical Qualities' Order with the Literature

Order of the most improved quality of public space due to digital media installments

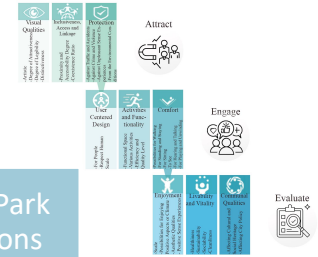
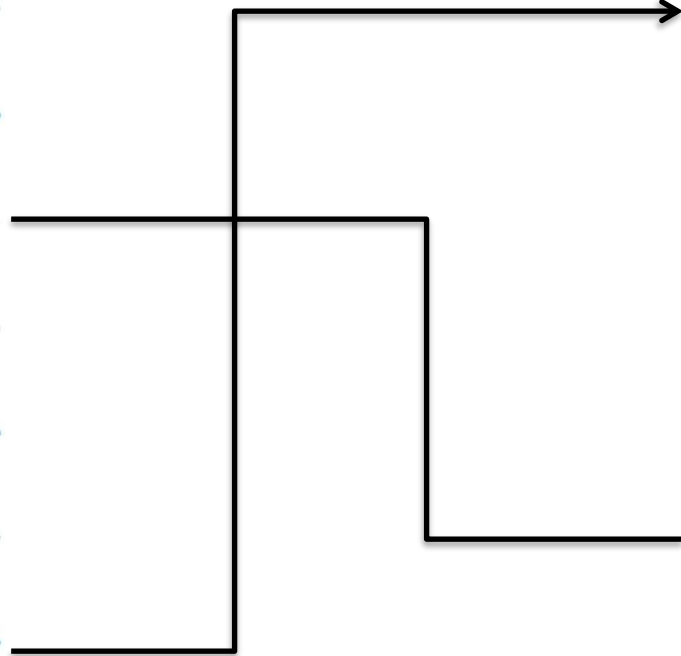
1	User Centered Design	
2	Enjoyment	
3	Activities and Functionality	
4	Livability and Vitality	
5	Visual Qualities	
6	Inclusiveness, Access and Linkage	
7	Comfort	
8	Protection	
9	Communal Qualities	

General Installments Order

Smouha's Park Interventions Order

Smouha's Park's impacted qualities order

	User Centered Design	1
	Enjoyment	2
	Communal Qualities	3
	Activities and Functionality	4
	Livability and Vitality	5
	Visual Qualities	6
	Comfort	7
	Inclusiveness, Access and Linkage	8
	Protection	9



Conclusion

Specific Context Findings

Hypothesis Accreditation

Addition
Defects Order

Smouha's Park
Interventions
Order

Order of the most impacted qualities of public space by the digital addiction

1	User Centered Design	
2	Livability and Vitality	
2	Activities and Functionality	
3	Visual Qualities	
4	Comfort	
4	Enjoyment	
5	Inclusiveness, Access and Linkage	
5	Protection	
5	Communal Qualities	

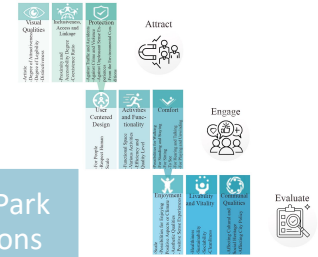
1st

2nd

Last

Smouha's Park's impacted qualities order

	User Centered Design	1
	Enjoyment	2
	Communal Qualities	3
	Activities and Functionality	4
	Livability and Vitality	5
	Visual Qualities	6
	Comfort	7
	Inclusiveness, Access and Linkage	8
	Protection	9



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Recommendations

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Research



Recommendations

Recommendations

Hypothesis Accreditation



All digital installations must be considered as **favorable** in terms of **attracting** people to the common realm, **engaging** them in all sorts of activities there and **evaluating** their experience.



The **positive effect** of the use of media tools ought to **overcompensate the negative impact** of media addiction on public spaces.



Since the **addicts tend to desert public spaces**, integrating digital media tools should guarantee **their reintegration in the public life once again**.

Recommendations

Qualities' Order and Priorities



The reached order represents **the degree of emergency and priority significance**, thus it must be used to establish the **urgent interventions needed**.



When confronted with **public space deficiency in those most improved qualities by media installments** the solution should be to make **digital media interventions** to improve those qualities in the space.



Decision makers should be able to set up **action plans**, **devise budgets**, and establish **effective phases of implementations**.



Further Research

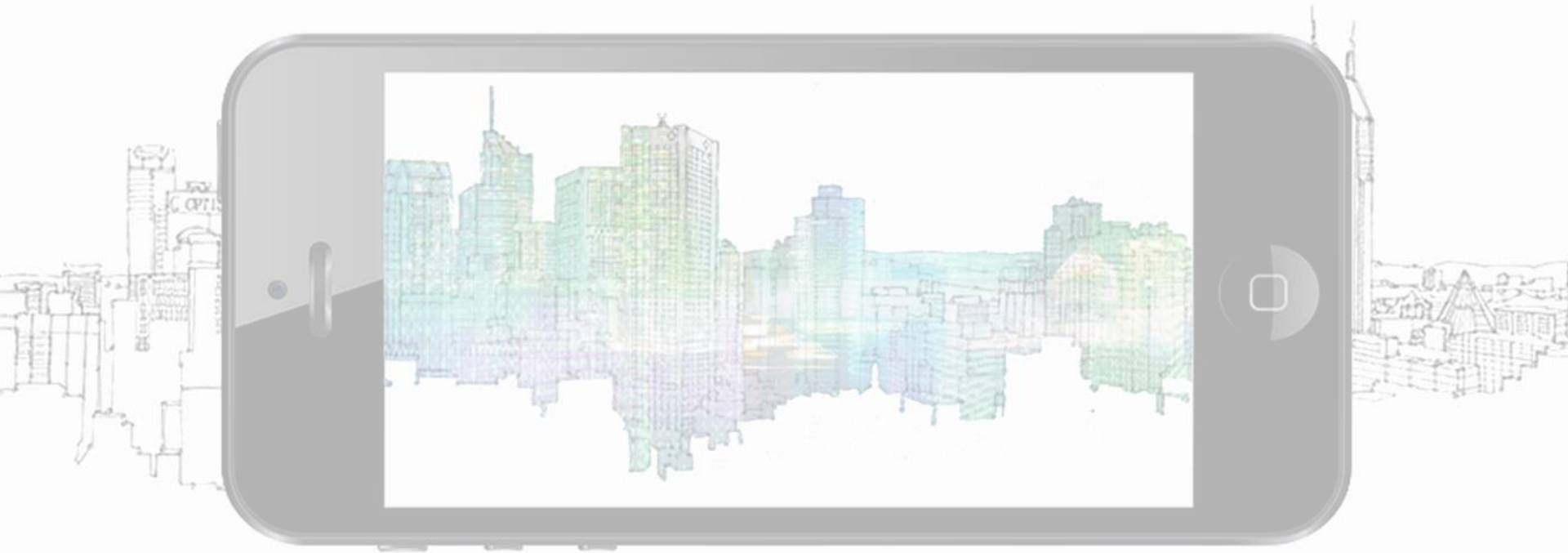
Further Research

Based on this research and the insight gained through the phases and analytical work carried out, several areas of further research could be suggested:

Field surveying involving adequate samples of real users and various stakeholders to reach a full understanding of any urban situation.

Studies on specific media tools effect on each quality of success. For a specific quality deficiency, designers should apply a specific media tool intervention.

The effect of digital media tools' implementation on the communal qualities related to the city public spaces.



Thank You