

Doğa Üzümcüoğlu*, Mukaddes Polay

User Perceptions on the Urban Waterfront Development in the Kyrenia Ancient Harbour, including the Creative Individuals

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Abstract: Various entities offer to evaluate the adequacy of applications for urban waterfront development. This study focused on the underlying assumptions that gave a comprehensive review of urban waterfront development projects and applications and analysed user impressions in Kyrenia Ancient Harbour. Visitors to Kyrenia, including employees, employers, students, and creative people, were asked to complete a questionnaire. This study discovered that the twelve underlying factors of creative waterfronts included awareness of people, promotion of entrepreneurs, creative spaces and activities, innovation, tolerance, physical comfort, political support, social cohesion, diversity of function, economic contribution, and cultural preservation. An evaluation of the creative environment at Kyrenia Waterfront found various degrees of user participation based on several statistical tests. Most community members saw the example area favourably due to its distinctive urban characteristics and socialisation possibilities. Locals, however, believe that creative folks require new technologies and ideas to be more productive.

Keywords: Urban waterfront; Waterfront development; Creative individuals; Kyrenia Ancient Harbour; Tourism

1 Introduction

Urban waterfront development is the design and construction of structures and infrastructure along a river or lake in an urbanised region (Üzümcüoğlu & Polay, 2022c, 2022a; Khairabadi, 2023). It may consist of residential, business,

and recreational areas. The perception of waterfront development by users, such as residents and tourists, can vary based on aspects such as the quality and accessibility of the spaces (Wu et al., 2023), the extent of community input in the planning process (Paula et al., 2023), and the development's overall design (Üzümcüoğlu, 2022b). Enhancing recreational opportunities, connectivity, and walkability could result in positive outcomes from redeveloping underutilised areas. On the other hand, unfavourable effects could result in the displacement of existing communities, the destruction of natural habitats, and gentrification. Although there are some negative opinions of urban waterfront developments, the positive perceptions are more valuable and necessary (Pereira et al., 2023). Creative waterfronts integrate artistic elements into development, fostering a sense of place (Kostopoulou, 2013; Girard et al., 2014; Miloš & Dragana, 2021). The study includes participants from the creative class, employees, employers, students, and tourists. The creative class comprises individuals in knowledge-intensive professions, while employees and employers represent a diverse workforce. Students provide insights into educational and recreational impacts, and tourists contribute to understanding the destination's appeal.

A literature survey and discussions follow to situate the findings within their theoretical perspective. This research examines key definitions, challenges, tendencies, and fundamentals of urban waterfront development. In particular, the function of users' perception in the development and transformation of the waterfront allows us to discover research accomplishments and knowledge gaps.

The research gap in the study lies in two main areas. The first one is the limited research on waterfronts and creative individuals: There needs to be more studies that specifically explore the relationship between creative individuals and urban waterfront development. While there may be research on urban waterfronts and studies on creative individuals in urban design separately, there is a lack of integration and examination of how creative individuals

*Corresponding author: Doğa Üzümcüoğlu, Assist.Prof.Dr., Department of Architecture, Rauf Denktaş University, Nicosia, North Cyprus via Mersin 10, Turkey, Email: doga.uzumcuoglu@rdu.edu.tr

Mukaddes Polay, Prof.Dr., Department of Architecture, Eastern Mediterranean University, Famagusta, North Cyprus via Mersin 10, Turkey

contribute to or influence the development of urban waterfronts. The second one is the neglect of creative individuals in the Kyrenia Ancient Harbour: The specific context of the Kyrenia Ancient Harbour needs to be adequately addressed in the existing literature. It could include a lack of attention to the unique characteristics, challenges, or opportunities that creative individuals bring to the urban waterfront development in the Kyrenia Ancient Harbour. Kyrenia is a city on the northern coast of Cyprus in the Eastern Mediterranean, known for its historic harbour and medieval castle. Considering these gaps, the research focuses on bridging the divide between creative individuals and urban waterfront development, with a specific emphasis on the Kyrenia Ancient Harbour. It may involve exploring the role of creative individuals in shaping the design, aesthetics, cultural aspects, and economic aspects of the waterfront and understanding how their contributions are perceived by the users in that specific location.

When contemplating the area's future, it is essential to consider how users perceive urban waterfront development. Including creative individuals in the decision-making process will ensure that diverse perspectives lead to the most favourable possible outcome for the community. The evaluation criteria for urban waterfront development applications should consider community needs and feedback from all stakeholders.

According to the paper, comprehensive waterfront development must involve all influential people and develop from an inclusive, diverse range of perspectives, including the twelve variables outlined in the study.

2 Overview of literature

Multiple factors influence the sufficiency and contentment of urban waterfront development. In addition, user perceptions are crucial throughout the entire development process, from the design stage to the post-application phase. The article's primary strengths consist of two supplementary objectives: the investigation of a method combining qualitative and quantitative research and the concentration on a particular case study (Kyrenia Ancient Harbour) to analyse and criticize this method.

2.1 Defining urban waterfront development and user perceptions

The development of urban waterfronts has been a continuous endeavour for many years. Several parties are involved in this complex issue, including government

agencies, private developers, community organizations, and individual residents (Paula et al., 2023).

User perceptions are significant because they provide valuable information about how urban places are utilised and experienced by individuals. These insights can assist in determining what form of development is suitable for a specific site (Bele & Chakradeo, 2022). The participation of creative people in planning and design processes ensures that the perspectives of productive users come into play from the beginning (Taufen et al., 2022).

It is possible to apply several principles to evaluate urban waterfront development proposals and post-applications (Üzümcüoğlu & Polay, 2022c). Some of these principles include being aware of people (Rahmat et al., 2016); supporting entrepreneurs (Jones, 2017); providing creative spaces and activities (Kostopoulou, 2013); generating new ideas (Sepe, 2013); being tolerant (Hoyle, 1999a); being physically comfortable (Almohannadi et al., 2015); having political support (Zeković & Maričić, 2022); fostering social cohesion (Sammakieh & Mohammed, 2021); providing a variety of functions (Ragheb & EL-Ashmawy, 2020); making an economic contribution (Syahrir, 2021); and preserving culture (Xie, 2023). Each of these concepts holds individual significance, but they can collaboratively contribute to achieving a positive outcome when interconnected.

The development of urban waterfronts is a complicated topic involving numerous parties. User perceptions have a significant impact on the outcome of these undertakings. Incorporating creative folks in the planning and design processes ensures that all factors matter.

2.2 Importance of user perceptions

"User perceptions" in urban waterfront development refers to how users view and experience the waterfront, including their feelings and attitudes regarding the area's design, programming, and administration. In urban waterfront development, user perceptions are significant because they influence how people use and interact with the waterfront and how they view the overall quality of the area (Paula et al., 2023; Üzümcüoğlu & Polay, 2022c).

Understanding the perspectives of waterfront users can assist in identifying areas of satisfaction and dissatisfaction and influencing future design and programming decisions (Jung et al., 2021; Erçin & Abdallah, 2023). Moreover, user perceptions can influence how individuals view the waterfront and contribute to creating a sense of place and community ownership (Rajakaruna, 2022). Additionally, user perceptions of safety and security can affect the frequency and conditions under which individuals choose to use the waterfront (Isa et al., 2022). Moreover, user percep-

tions of accessibility can impact how inclusive the waterfront appears and how accessible it is to different groups of people (Othman et al., 2021). In addition, user impressions of the shoreline as a desirable site to live, work, or visit can attract businesses, entrepreneurs, and tourists, contributing to economic development (Shi et al., 2023).

2.3 Why should creative individuals be included?

It is essential to include creative individuals in the urban waterfront development process, as they can contribute unique perspectives, abilities, and ideas to the design and programming of waterfront facilities. They can contribute to creating inventive and engaging public places that reflect the needs and goals of the community and foster innovation, culture, and the arts (Miloš & Dragana, 2021; Üzümcüoğlu & Polay, 2022a).

Creative individuals can contribute new and inventive ideas to the development process, thus enhancing the distinctiveness and appeal of waterfront places (Sepe, 2013; Kostopoulou, 2013; Miloš & Dragana, 2021). In addition, creative individuals can engage the community in the development process through public art, creative placemaking, and other tactics that build a sense of community ownership and involvement with the waterfront (Üzümcüoğlu & Polay, 2023). Moreover, creative individuals can contribute to fostering cultural expression and creating venues that reflect the community's cultural heritage and identity (Xie, 2023). Also, creative individuals can contribute to creating a sense of place by infusing history, culture, and ecology into the design and programming of waterfront places (Girard et al., 2014). Moreover, by building a vibrant and attractive waterfront, creative people can help attract tourists and entrepreneurs, contributing to economic development (Nieuwland & Lavanga, 2021).

3 Principles to evaluate urban waterfront development applications

Several principles are essential to evaluating design and post-applications for urban waterfront development. The one criterion is to address the community's requirements. What desires and needs does the community have for the project? The premise is to examine the development's environmental impact. What effect would the project have on the local environment? What impact will the development have on the regional economy? It is imperative that the project also be evaluated in terms of its economic

impact. The following principle is to consider the societal consequences of the development process. How will the project affect the community's social fabric?

Based on the following key questions, founded criteria fell into the twelve principles listed below:

1. Protection of culture: Protection of culture in urban waterfront development involves respecting and preserving the community's cultural heritage (Osman & Farahat, 2018; Üzümcüoğlu & Polay, 2022c; Yu & Zhong, 2022). Measures to safeguard culture include community-based participatory planning, incorporating community voices, acknowledging cultural heritage, and addressing needs (Erçin & Abdallah, 2023). Conservation methods, such as heritage preservation, help protect cultural landmarks (Fouad & Sharaf Eldin, 2023). Cultural education, using public art and plaques, informs the community about waterfront history and culture (Toomey et al., 2021). Integrating traditional ecological knowledge reflects cultural heritage in waterfront design (Cao & Wantzen, 2023). Lastly, using art, culture, and creativity revitalizes locations, fostering community identity while preserving cultural heritage (Isa et al., 2022).

2. Tolerance: Tolerance levels in urban waterfront development, crucial for adapting to changing conditions, involves flexibility and adaptability in the design (Florida, 2003; Landry, 2000). Achieving high tolerance involves measures like flexible land use (Üzümcüoğlu, 2023), modularity for adjusting infrastructure (Üzümcüoğlu, 2023), resilience against natural calamities (Sözer Şenol, 2022), and community engagement for reflecting community needs (Toomey et al., 2021).

3. Promoting entrepreneurship: To boost waterfront development and foster economic opportunities, entrepreneurship in urban waterfront development involves backing small enterprises and startups in the area (Bruns-Berentelg et al., 2020; Üzümcüoğlu & Polay, 2022a; Siewwuttanagul et al., 2022; Chen, 2022). Encouraging entrepreneurship includes co-working spaces for collaboration (Fiorentino, 2023), incubation programs offering financial aid and resources (Fiorentino, 2023), entrepreneurial events like pitch competitions (House of Lords, 2019), zoning for mixed-use developments (Toomey et al., 2021), and tax incentives for small businesses (Chen, 2022).

4. Creative environment opportunities: creative environment opportunities in urban waterfront development involve designing and programming venues to foster innovation, creativity, and community participation (Üzümcüoğlu & Polay, 2022a; 2022b; Kostopoulou, 2013; Sepe, 2013). To develop creative environments, consider

incorporating public art and murals (Ochoa, 2022), using creative placemaking for location revival and community identity (Toomey et al., 2021; Wise et al., 2021), organizing cultural events and festivals (Wise et al., 2021), establishing community gardens and green spaces (Eid et al., 2021), promoting pop-up shops and street markets (Panthi, 2023), and creating maker spaces for collaborative work (Sammakieh & Mohammed, 2021).

5. Creative activity opportunities: Creative activity options in urban waterfront development involve designing spaces to encourage creative and cultural activities like arts, music, and performances (Üzümcüoğlu & Polay, 2022a, 2022b; Kostopoulou, 2013; Sepe, 2013). Strategies for creative engagement in waterfront development include establishing performance spaces for various acts (Halawa & Poerbo, 2023); integrating art galleries and museums (Lorente & Juan García, 2023); creating artist studios and workshops (Lorente & Juan García, 2023); coordinating film screenings and festivals (Kayhan Müldür, 2020); providing creative education programs (Chan et al., 2022); and encouraging street performances (Halawa & Poerbo, 2023).

6. Innovation and technology: Innovation and technology play a crucial role in urban waterfront development by offering prospects for sustainability, energy efficiency, and smart city solutions (Kayanan, 2021; Lindtner & Avle, 2017; Cialdea & Pompei, 2022; Üzümcüoğlu & Polay, 2022c). To integrate innovation and technology, consider incorporating technology-enabled solutions like intelligent lighting and transportation systems for energy efficiency (Xie, 2023), embracing sustainable design principles such as green roofs and solar power (Xie, 2023), implementing resilient design solutions like green infrastructure to combat sea-level rise and natural disasters (Toomey et al., 2021), and utilising augmented and virtual reality for design, communication, and public involvement (Pacífico et al., 2023).

7. Awareness: Educating the public about waterfront development is essential for community engagement and ensuring that projects align with community needs (Santhosh, 2022; Wang et al., 2020; Üzümcüoğlu & Polay, 2022a). Methods to raise awareness include community outreach through public meetings and workshops (Xie, 2023), leveraging social media and online platforms for information dissemination (Cheng et al., 2022), utilising public art and creative placemaking for cultural education (Matthews & Gadaloff, 2022), offering interactive displays and tours (Bagnérès, 2020), and employing community-based participatory planning to involve residents in decision-making (Syahrir, 2021).

8. Quality of life and physical comfort: In urban waterfront development, the quality of life and physical comfort focuses on improving well-being and comfort for residents and visitors (Petrtýlová & Matej, 2022; Hoyle, 1999b; Erdoğan, 2022; Üzümcüoğlu & Polay, 2022b). Measures to enhance these aspects include developing accessible waterfront environments with universal design elements (Othman et al., 2021; Wu et al., 2023), creating walkable and cycling-friendly areas (Al-Thani & Furlan, 2020), providing comfortable seating and shading, ensuring adequate lighting for safety and aesthetics, and incorporating green areas like parks and gardens for natural beauty and improved well-being (Salama, 2022).

9. Political support: Political support is crucial for urban waterfront development, ensuring that necessary resources, funding, and legal frameworks are in place (Taufen et al., 2022; Bunce & Desfor, 2007; Gordon, 1997; Üzümcüoğlu & Polay, 2022c). Key aspects of political support include obtaining funding from government sources like grants (Zeković & Maričić, 2022), the influence of government regulations and policies, such as planning and zoning laws (Toomey et al., 2021), adherence to environmental regulations for sustainability (Wang et al., 2020), facilitating community engagement for representation of community needs (Perić, 2020), and government coordination of stakeholders for an efficient development process (Zeković & Maričić, 2022).

10. Social cohesion: Social cohesion in urban waterfront development involves fostering social interaction, community participation, and a sense of belonging among residents and visitors through venue design (Theodora & Spanogianni, 2022; Olsen, 2023; Attia & El Bortokaly, 2022; Campbell et al., 2022; Üzümcüoğlu & Polay, 2022a). Measures for enhancing social cohesion include encouraging community involvement in planning (Zeković & Maričić, 2022), creating multifunctional areas like parks and promenades for diverse activities (Theodora & Spanogianni, 2022), integrating public art for cultural expression (Remesar, 2020), organizing cultural events and festivals for social interaction (Remesar, 2020), and ensuring accessibility and inclusion for all individuals (Ali & Hussien, 2023).

11. Diversity of function: Diverse uses and activities are integral to urban waterfront environments, incorporating residential, business, recreational, cultural, and environmental purposes (Petrtýlová & Matej, 2022; Erdoğan, 2022; Üzümcüoğlu & Polay, 2022c; Shangi et al., 2020; Dong, 2004). Advantages of functional diversity in waterfront development include creating a vibrant ambiance attracting a diverse audience (Shangi et al., 2020; Amireh, 2020);

promoting economic development by attracting businesses and entrepreneurs (Xie, 2023), improving liveability through more leisure options (Amireh, 2020); enhancing accessibility for a broader demographic (Shangi et al., 2020); encouraging sustainable development by promoting active mobility (Xie, 2023; Amireh, 2020); and creating a sense of place fostering community ownership (Xie, 2023).

12. Economic contribution: Economic contribution in urban waterfront development focuses on creating economic benefits for the community, including job creation, increased property values, and higher tax revenues (Bunce & Desfor, 2007; Schreurs et al., 2023; Üzümcüoğlu & Polay, 2022c). Measures to promote economic contribution include promoting mixed-use development for diverse economic opportunities (Amireh, 2020), establishing waterfront attractions for tourism and economic growth (Amireh, 2020), providing incubation programs for small enterprises (Fiorentino, 2023), encouraging real estate development to raise property values (Chen, 2022), and incorporating community-based participatory planning for sustainable economic growth (Syahrir, 2021).

4 Methods

This study employed a questionnaire to gauge user perception, including that of creative individuals. Data collection took place at the Kyrenia Ancient Harbour between

September and November 2020. The formula employed for sample size determination in the investigation conducted by (Üzümcüoğlu, 2022a) was adopted for application in the present study. According to the prescribed formula, the recommended minimum sample size for an unknown population is 95. Nonetheless, opting for a larger sample size may yield more reliable results. Consequently, a random selection of 250 individuals was made for participation in this study. However, out of the 250 participants, 247 completed the survey, and only this subset of 247 respondents was utilised for the subsequent analysis. This analysis offered insight into the responder profiles. These profiles include demographic information, frequency of visits, desire to spend time, and recommendations to others. In addition, the frequency and proportion of each questionnaire question got measured using descriptive analysis. Before analysis, all data were checked thoroughly to ensure completeness and normality. Exploratory factor analysis (EFA) occurred as part of the investigations for convergent validity, discriminant validity, and reliability ($n=247$). In addition, a confirmatory factor analysis (CFA) took place utilising several measurement models ($n=247$). The ANOVA and Tukey HSD post-hoc tests aimed to assess differences between subgroups of linked variables and other demographic characteristics. With a confidence level of 95%, SPSS Version 25 and AMOS Version 24 have taken part in all analyses.

This study aims to serve the diverse needs of the users and also the creative class. In essence, the creative com-

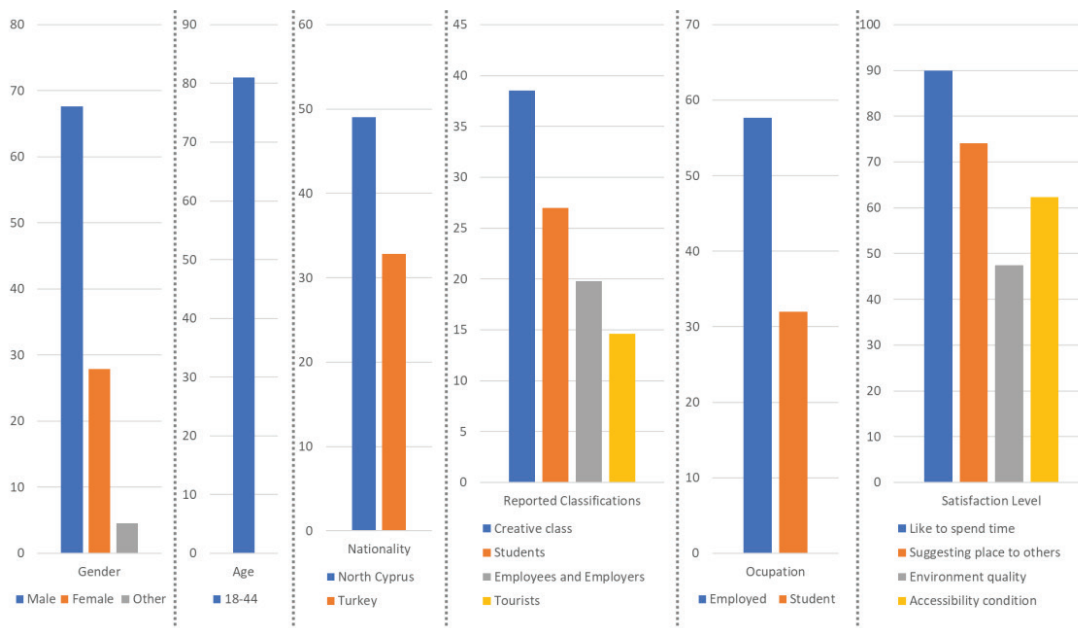


Figure 1: Participant Information (Authors)

munity includes professionals from various fields, such as artists, engineers, advertisers, architects, and photographers. Employers, employees, tourists, and students might not necessarily qualify as creatives, but they may enjoy similar physical, functional, social, and cultural amenities.

The results of the descriptive analysis shown in Figure 1 are for the gender, age, nationality, classification, occupation, and satisfaction level variables.

According to the literature review, twelve waterfront principles aid in the analysis of development projects or post-applications: awareness of people (Rahmat et al., 2016); supporting entrepreneurs (Jones, 2017); providing creative spaces and activities (Kostopoulou, 2013); generating new ideas (Sepe, 2013); being tolerant (Hoyle, 1999a); being physically comfortable (Almohannadi et al., 2015); having political support (Zeković & Maričić, 2022); fostering social cohesion (Sammakieh & Mohammed, 2021); providing a variety of functions (Ragheb & EL-Ashmawy, 2020); making an economic contribution (Syahrir, 2021); and preserving culture (Xie, 2023).

The study aimed to outline the societal context of the Kyrenia waterfront and assess satisfaction with it as a creative space. The questionnaire, comprising four components, started with demographics, followed by gauging satisfaction with the waterfront's development and principles. It concluded by describing consumer satisfaction with innovative waterfront features (Appendix A).

5 Results

The study aimed to see if the questionnaire survey's way of grouping the evaluation tools for urban waterfronts matched the exploratory and confirmatory analyses done for this study. The survey provided a list of waterfront evaluation instruments and asked respondents to rate their importance on a scale of 1–5. During the exploratory and confirmatory analyses, the survey data showed how the different evaluation tools relate to each other and if the survey was correctly categorized.

Stage 1: Reliability of the variables

The reliability of the measurement scales has undergone a test based on Cronbach's alpha (Cronbach, 1951). Generally, the Cronbach alpha measure should be above 0.7 (Hair et al., 2006), as it is for all the variables in this study. The results in Table 1 show that all the waterfront development variables had good reliability, as evidenced by Cronbach alphas of 0.843 for "tolerances" and 0.955 for "social cohesion."

Stage 2: Exploratory factor analysis (EFA)

Only waterfront development principles supporting creative individuals underwent EFA, revealing 12 factors with eigenvalues exceeding 1. Cross-loading occurred for "adequacy of strategic alliances and economic partnerships with other cities," identified as a non-occurrence in the future. Two criteria, "adequacy of accommodations" and "eligibility for sports activities," were identified for various functional elements and were jointly included in the final EFA results. The merged items, combined with previous results, yielded a total of nine factors for the creative waterfront measurement, leading to the creation of two components: "creative environments and activities" and "social cohesion." The final elements are highlighted in Table 6. Kaiser-Mayer Olkin's measure of sampling adequacy (MSA) and Bartlett's test of sphericity (BTS) confirmed the data's eligibility for factor analysis, with MSA exceeding 0.90 and significant BTS (Hair et al., 2006).

Stage 3: Confirmatory factor analysis (CFA)

The validation included CFA, which took place with AMOS 24.0. Tables 3 and 4 display the findings of the CFA, correlation, and Heterotrait-Monotrait ratio of correlations (HTMT). According to Voorhees et al. (2016), the HTMT takes the place of the average variance.

Previous results indicate that all indicators aligning with latent factors of waterfront development principles support creative individuals, showing t-values greater than 3.30 at the 0.001 level ($df > 100$), providing evidence for convergent validity (Anderson & Gerbing, 1984). The standardised loadings for constructs range from 0.678 to 0.955, indicating the significance of observed variables as indicators for each construct. Additionally, measurements for creative waterfronts exhibit high reliability, with composite reliability scores surpassing 0.60 (Bagozzi & Yi, 1988).

Table 4 results reveal strong positive correlations ($p < 0.001$) among variables associated with waterfront development principles supporting creative individuals. Correlation coefficients range from 0.234 (innovation and technology and social cohesion) to 0.843 (innovation and technology and creative environments and activities). The HTMT ratio assessment indicates no significant concerns regarding discriminant validity, as all ratios are below 0.90, with most falling below the ideal cut-off of 0.85 (Henseler et al., 2015; Voorhees et al., 2016).

Step 4. Comparison of means

The mean comparison of the variables through one-way ANOVA analysis arose since all the data had a relatively normal distribution. One-way ANOVA analysis tests the

Table 1: Reliability of the waterfront development variables

Items	Item-Total Correlation	Cronbach's alpha
PROTECTION OF CULTURE		0.932
Adequacy of cultural promotion.	0.798	
Competence of cultural spaces.	0.826	
The capability of contextual protection (historic and/or cultural heritage).	0.849	
Protection level of an existing unique culture.	0.841	
Festival opportunities in the place.	0.788	
Access to local foods.	0.575	
Access to local arts.	0.764	
Adequacy of art activities.	0.704	
TOLERANCES		0.843
Welcoming level of the place.	0.793	
Sufficiency level of open-minded people.	0.617	
Freedom level.	0.741	
PROMOTING ENTREPRENEURSHIP		0.884
Competence in consultancy and/or funds opportunities.	0.766	
Competence of collaborative discussion spaces for stakeholders.	0.798	
Adequacy of investment activities.	0.760	
CREATIVE ENVIRONMENT		0.870
The capability of exhibition spaces.	0.725	
Suitability of performance areas.	0.772	
Adequacy of open and/or closed spaces which are motivating.	0.757	
CREATIVE ACTIVITY		0.894
Sufficiency of creative ideas, which come true.	0.780	
Competence in creative work activities.	0.809	
The capability of creative actions.	0.789	
INNOVATION AND TECHNOLOGY		0.934
Sufficiency of innovative ideas, which come true.	0.780	
Sufficiency of technological ideas, which come true.	0.744	
Adequacy of information tools for visitors.	0.705	
Existence of digital lighting systems.	0.719	
Existence of development areas.	0.827	
Existence of R&D areas.	0.790	
Existence of research areas.	0.759	
Existence of simulation areas.	0.736	
Existence of energy consumption via water.	0.764	
Access to the internet.	0.558	
AWARENESS		0.888
Adequacy of motivated people to keep the place clean.	0.784	
Adequacy of motivated people to promote their art, music, and literature in the place.	0.741	
Adequacy of responsive people for their environment and society.	0.823	
QUALITY OF LIFE AND PHYSICAL COMFORT		0.944
The efficiency of protection of natural spaces.	0.670	
Suitability of accessibility.	0.684	
Appropriateness of functional variety.	0.795	
Adequacy of architecture quality.	0.701	
Adequacy of urban design quality.	0.749	
Sufficiency of traffic, and access to the car park.	0.720	
Sufficiency of transportation.	0.680	
Possibility of relaxation.	0.623	
Adequacy of access for the disabled.	0.734	
Access to cycling.	0.757	
Access for pedestrians.	0.690	
Adequacy of safety.	0.697	
Suitability of urban furniture (sitting, lighting, shading, planting, etc.) and harmony between each other.	0.704	
Adequacy of cleanliness.	0.738	
Access to urban balconies (viewpoints).	0.703	
POLITICAL SUPPORT		0.877
Sufficiency of rules and regulations, which adapted into the place.	0.723	
Competence of funds opportunities for the development of the place.	0.824	
Adequacy of political support for the arrangement of a platform for stakeholders and/or investors.	0.743	
SOCIAL COHESION		0.955
Sufficiency of attractiveness.	0.768	
Existence of different age groups.	0.893	
Existence of different ethnicities.	0.930	
Existence of different education levels.	0.910	
Existence of different genders.	0.881	
DIVERSITY OF FUNCTION		0.869
Adequacy of accommodation opportunities.	0.627	
Existence of water-based activities.	0.640	
Variety of activities.	0.726	
Access to the other functions.	0.697	
Access to recreational facilities.	0.733	
Sufficiency of shopping opportunities.	0.608	
Eligibility for sports activities.	0.527	
ECONOMIC CONTRIBUTION		0.868
Sufficiency of publicity of the environment.	0.675	
The efficiency level of increased visitor numbers.	0.719	
Adequacy of strategic and/or economic agreements with other cities.	0.524	

Table 2: Final EFA for waterfront development principles encouraging creative individuals

Factors	Items	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Creative Environments and Activities	Sufficiency of creative ideas, which comes true.	0.823								
	Competence in creative work activities.	0.866								
	The capability of creative actions.	0.880								
	The capability of exhibition spaces.	0.707								
	Suitability of performance areas.	0.945								
	Adequacy of open and/or closed spaces, which are motivating.	0.934								
	Sufficiency of innovative ideas, which comes true.	0.666								
	Sufficiency of technological ideas, which comes true.	0.599								
Social Cohesion	Adequacy of information tools for visitors.	0.614								
	Existence of digital lighting systems.	0.508								
	Sufficiency of attractiveness.	0.761								
	Existence of different age groups.	0.948								
	Existence of different ethnicities.	0.974								
	Existence of different education levels.	0.944								
	Existence of different genders.	0.946								
	Welcoming level of the place.	0.634								
Quality of Life and Physical Comfort	Sufficiency level of open-minded people.	0.428								
	Freedom level.	0.723								
	The efficiency of protection of natural spaces.			0.484						
	Suitability of accessibility.			0.722						
	Appropriateness of functional variety.			0.608						
	Adequacy of architecture quality.			0.670						
	Adequacy of urban design quality.			0.458						
	Sufficiency of traffic, and access to the car park.			0.762						
	Sufficiency of transportation.			0.865						
	Possibility of relaxation.			0.587						
	Adequacy of access for disabled.			0.625						
	Access to cycling.			0.692						
	Access for pedestrians.			0.731						
	Adequacy of safety.			0.657						
	Suitability of urban furniture (sitting, lighting, shading, planting, etc.) and harmony between each other.			0.406						
Protection of Culture	Adequacy of cleanliness.			0.510						
	Access to urban balconies (viewpoints).			0.479						
	Adequacy of motivated people to keep the place clean.				0.765					
	Adequacy of motivated people to promote their art, music, and literature in the place.				0.499					
	Adequacy of responsive people for their environment and society.				0.798					
	Adequacy of cultural promotion.				0.856					
	Competence of cultural spaces.				0.816					
	The capability of contextual protection (historic and/or cultural heritage).				0.889					
Economic Contribution	Protection level of an existing unique culture.				0.720					
	Festival opportunities in the place.				0.491					
	Sufficiency of publicity of the environment.					0.414				
	The efficiency level of increased visitor numbers.					0.788				
	Adequacy of strategic and/or economic agreements with other cities.					0.755				
Diversity of Function	The efficiency level of increased tourism and investment activities.					0.751				
	Competence of employment opportunities.					0.447				
	Adequacy of accommodation opportunities.						0.880			
	Existence of water-based activities.						0.692			
	Variety of activities.						0.551			
	Access to the other functions.						0.781			
Innovation and Technology	Access to recreational facilities.						0.928			
	Eligibility for sports activities.						0.649			
	Existence of development areas.							0.424		
	Existence of R&D areas.							0.832		
	Existence of Research areas.							0.718		
Motivation of Entrepreneurs	Existence of Simulation areas.							0.814		
	Existence of energy consumption via water.							0.580		
	Competence of consultancy and/or funds opportunities.								0.752	
Political Support/s	Competence of collaborative discussion spaces for stakeholders.								0.697	
	Adequacy of investment activities.								0.554	
	Sufficiency of rules and regulations, which adapted into the place.									0.545
	Competence of funds opportunities for the development of the place.									0.814
	Adequacy of political support for the arrangement of a platform for stakeholders and/or investors.									0.798

Notes: Extraction Method: Principal Component Analysis. Kaiser-Meyer-Olkin (KMO): 0.937; Bartlett's Test of Sphericity (df): 15319.18 (1953), $P < 0.001$.

Table 3: CFA for waterfront development principles encouraging creative individuals

Construct	Measurement Items	B	Beta	t-Value	CR
Creative Environments and Activities	Sufficiency of creative ideas, which comes true.	1.000	0.816	n/a	0.940
	Competence in creative work activities.	0.962	0.856	16.3***	
	The capability of creative actions.	0.976	0.853	16.246***	
	The capability of exhibition spaces.	0.926	0.804	14.876***	
	Suitability of performance areas.	-	-	-	
	Adequacy of open and/or closed spaces which are motivating.	0.974	0.810	17.227***	
	Sufficiency of innovative ideas, which comes true.	0.952	0.857	16.367***	
	Sufficiency of technological ideas, which comes true.	0.924	0.779	14.146***	
	Adequacy of information tools for visitors.	0.791	0.725	12.89***	
Social Cohesion	Existence of digital lighting systems.	-	-	-	0.949
	Sufficiency of attractiveness.	0.792	0.782	17.557***	
	Existence of different age groups.	0.935	0.926	27.922***	
	Existence of different ethnicities.	0.991	0.955	31.767***	
	Existence of different education levels.	1.000	0.940	n/a	
	Existence of different genders.	0.987	0.904	25.638***	
	Welcoming level of the place.	-	-	-	
	Sufficiency level of open-minded people.	-	-	-	
	Freedom level.	0.791	0.688	13.804***	
Quality of Life and Physical Comfort	The efficiency of protection of natural spaces.	-	-	-	0.921
	Suitability of accessibility.	-	-	-	
	Appropriateness of functional variety.	1.024	0.789	13.396***	
	Adequacy of architecture quality.	-	-	-	
	Adequacy of urban design quality.	1.000	0.776	n/a	
	Sufficiency of traffic, and access to the car park.	0.938	0.743	12.429***	
	Sufficiency of transportation.	0.883	0.678	11.148***	
	Possibility of relaxation.	-	-	-	
	Adequacy of access for the disabled.	1.029	0.777	13.119***	
	Access to cycling.	1.090	0.758	12.733***	
	Access for pedestrians.	-	-	-	
	Adequacy of safety.	-	-	-	
	Suitability of urban furniture (sitting, lighting, shading, planting, etc.) and harmony between each other.	1.053	0.750	11.237***	
	Adequacy of cleanliness.	0.966	0.745	12.451***	
Protection of Culture	Access to urban balconies (viewpoints).	1.024	0.746	12.495***	0.940
	Adequacy of motivated people to keep the place clean.	0.779	0.717	14.116***	
	Adequacy of motivated people to promote their art, music, and literature in the place.	-	-	-	
	Adequacy of responsive people for their environment and society.	0.798	0.741	14.926***	
	Adequacy of cultural promotion.	0.941	0.880	20.894***	
	Competence of cultural spaces.	0.953	0.898	21.994***	
	The capability of contextual protection (historic and/or cultural heritage).	1.000	0.915	n/a	
	Protection level of an existing unique culture.	0.889	0.888	25.805***	
	Festival opportunities in the place.	0.734	0.763	15.751***	
Economic Contribution	Sufficiency of publicity of the environment.	-	-	-	0.853
	The efficiency level of increased visitor numbers.	1.004	0.800	11.745***	
	Adequacy of strategic and/or economic agreements with other cities.	1.000	0.745	n/a	
	The efficiency level of increased tourism and investment activities.	0.916	0.778	12.373***	
	Competence of employment opportunities.	1.308	0.752	10.965***	
Diversity of Function	Adequacy of accommodation opportunities.	-	-	-	0.876
	Existence of water-based activities.	1.000	0.812	n/a	
	Variety of activities.	1.064	0.950	15.315***	
	Access to the other functions.	-	-	-	
	Access to recreational facilities.	-	-	-	
	Eligibility for sports activities.	-	-	-	
Innovation and Technology	Existence of development areas.	1.000	0.812	n/a	0.924
	Existence of R&D areas.	1.011	0.882	16.577***	
	Existence of research areas.	1.019	0.827	15.265***	
	Existence of simulation areas.	0.948	0.860	14.135***	
	Existence of energy consumption via water.	0.937	0.824	14.948***	
Motivation of Entrepreneurs	Competence of consultancy and/or funds opportunities.	1.000	0.842	n/a	0.885
	Competence of collaborative discussion spaces for stakeholders.	0.952	0.857	16.026***	
	Adequacy of investment activities.	0.915	0.845	15.74***	
Political Support/s	Sufficiency of rules and regulations, which were adapted into the place.	1.000	0.901	n/a	0.875
	Competence of funds opportunities for the development of the place.	0.847	0.811	15.337***	
	Adequacy of political support for the arrangement of a platform for stakeholders and/or investors.	0.899	0.795	12.961***	

Note: - dropped during CFA; * Fixed parameter; *** $p < 0.001$; Model fit statistics; $\chi^2 [984] = 2051.849$, $\chi^2/df = 2.085$; IFI = 0.902; CFI = 0.901; SRMR = 0.053; B = Unstandardized loading; Beta = Standardized loading; CR = composite reliability; IFI = incremental fit index; CFI = comparative fit index; SRMR = standardized root mean square residual; and CI = confidence interval.

Table 4: Correlation and HTMT ratios for waterfront development principles encourage creative individuals

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Creative Environments and Activities	1	0.291	0.774	0.784	0.577	0.543	0.872	0.745	0.728
Social Cohesion	0.272***	1	0.381	0.442	0.522	0.443	0.258	0.407	0.425
Quality of Life and Physical Comfort	0.779***	0.395***	1	0.741	0.641	0.773	0.747	0.648	0.818
Protection of Culture	0.759***	0.415***	0.744***	1	0.591	0.574	0.769	0.740	0.693
Economic Contribution	0.554***	0.473***	0.634***	0.563***	1	0.561	0.507	0.588	0.705
Diversity of Function	0.528***	0.433***	0.761***	0.526***	0.535***	1	0.469	0.435	0.663
Innovation and Technology	0.843***	0.234***	0.740***	0.726***	0.483***	0.419***	1	0.674	0.660
Motivation of Entrepreneurs	0.741***	0.386***	0.667***	0.725***	0.557***	0.413***	0.664***	1	0.635
Political Support/s	0.720***	0.455***	0.838***	0.685***	0.650***	0.661***	0.650***	0.633***	1

Notes: upper diagonal elements in bold are HTMT ratios; lower diagonal elements are correlations; *** $p < 0.001$; HTMT = Heterotrait - Monotrait Ratio of Correlations.

Table 5: Comparing Means of Creative Waterfront Variables with User Group, Gender, and Age

Items	Mean	Std. Dev.	User Group			Gender			Age		
			F	Sig.	Effect size (η^2)	F	Sig.	Effect size (η^2)	F	Sig.	Effect size (η^2)
Creative Environments and Activities	2.02	0.842	1.131	0.337	0.014	3.361	0.036**	0.027	1.621	0.155	0.033
Social Cohesion	3.18	1.249	4.131	0.007*	0.049	4.010	0.019**	0.032	1.281	0.273	0.026
Quality of Life and Physical Comfort	2.07	0.826	0.122	0.947	0.001	2.002	0.137	0.016	2.791	0.018**	0.055
Protection of Culture	2.11	0.967	1.790	0.150	0.022	2.182	0.115	0.018	1.634	0.152	0.033
Economic Contribution	2.13	0.880	1.449	0.229	0.018	3.848	0.023**	0.031	0.835	0.526	0.017
Diversity of Function	2.23	1.022	0.270	0.847	0.003	2.371	0.096*	0.019	2.349	0.042**	0.046
Innovation and Technology	1.87	0.855	0.831	0.478	0.010	1.181	0.309	0.010	3.651	0.003**	0.070
Motivation of Entrepreneurs	2.26	0.922	0.498	0.684	0.006	4.323	0.014**	0.034	2.198	0.055*	0.044
Political Support/s	2.22	0.967	0.343	0.794	0.004	2.604	0.076*	0.021	2.254	0.050*	0.045

Notes: * $p < 0.050$, ** $p < 0.010$; Std. Dev. = Standard Deviation.

Table 6: Tukey HSD post-hoc test for user groups and significant variables

LB — UP MD (Sig.)	1	2	3	4
Social Cohesion				
1. Creative Class	-	-0.645 — 0.348	-0.637 — 0.265	-1.392 — -0.286
2. Employees & Employers	-0.149(0.901)	-	-0.568 — 0.493	-1.310 — -0.070
3. Students	-0.186(0.777)	-0.037(0.998)	-	-1.236 — -0.069
4. Others	-0.839(0.003**)	-0.690(0.053*)	-0.653(0.051*)	-

Notes: * $p < 0.100$, ** $p < 0.050$; upper diagonal elements are LB — UB; lower diagonal elements are MD (Sig.); LB = Lower Bound; UB = Upper Bound; MD = Mean Differences; Sig. = p-value significant.

assumption that the means of two or more populations are equal. It's well suited for comparing the means of two or more groups when the data follow a normal distribution (Kenton, 2023), as was the case with this analysis.

According to the one-way ANOVA test of the social cohesion variable (Table 5), there was a significant difference between the groups of respondents. There is a notable difference in the perceptions of “social cohesion” across groups of users ($F(3, 243) = 4.131$, $p = 0.05$).

Furthermore, the results demonstrate significant differences between genders in creative environments and activities, social cohesion, economic contribution, diversity of function, motivation of entrepreneurs, and political support. The results show significant differences in perceptions of creative environments and activities ($F(2, 244) = 3.361$, $p < 0.05$), social cohesion ($F(2, 244) = 4.010$, $p < 0.05$), economic contribution ($F(2, 244) = 3.848$, $p < 0.05$), diver-

sity of function ($F(2, 244) = 2.371$, $p < 0.10$), motivation of entrepreneurs ($F(2, 244) = 4.323$, $p < 0.05$), and political support ($F(2, 244) = 2.604$, $p < 0.10$) for different genders.

Table 5 indicates a significant difference between the different groups of respondents for factors such as life quality and physical comfort, diversity of functions, technology, motivation of entrepreneurs, and political support. According to this result, perceived levels of quality of life and physical comfort differ significantly ($F(5, 241) = 2.791$, $p < 0.05$), diversity of function ($F(5, 241) = 2.349$, $p < 0.05$), innovation and technology ($F(5, 241) = 3.651$, $p < 0.05$), motivation of entrepreneurs ($F(5, 241) = 2.198$, $p < 0.10$), and political support ($F(5, 241) = 2.254$, $p < 0.10$) for different age groups.

A post-hoc Tukey HSD test showed which groups of users differ significantly in the social cohesion variable. These results demonstrated that between creative individu-

als ($p < 0.05$), employees, and employers ($p < 0.10$), as well as between students ($p < 0.10$) and other groups of users, there are significant differences in the social cohesion variable.

Tables 5 and 6 results, illustrated in Figure 2, highlight significant differences in the social cohesion variable between students and other user groups. Creative individuals exhibit the highest agreement levels (mean = 2.981),

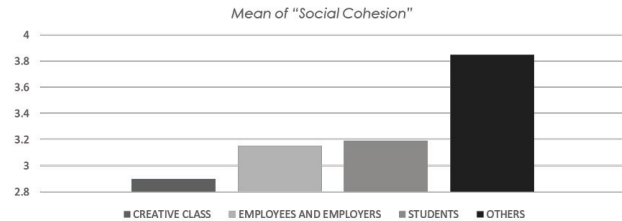


Figure 2: Means plot of social cohesion and user groups

while others are the least agreeable users (mean = 3.819). The largest and most significant differences between these groups are observed (mean difference = 0.839). Notably, employee and employer (mean = 3.129) and student (mean = 3.167) groups also show significant differences compared to the other user group (mean differences = 0.690 and 0.653, respectively).

The data from the Tukey HSD post-hoc test are presented in Table 7 along with the results of Table 5 to demonstrate which groups of users show substantive differences in creative environments, social cohesion, economic contribution, diversity of function, entrepreneurial motivation, and political support. There were differences in the functional diversity between the groups but not within them. According to the study, male and female participants differ significantly regarding creative environments and activities ($p < 0.05$), social cohesion ($p < 0.05$), economic

Table 7: Tukey HSD post-hoc test for Gender and Significant Variables

LB — UP MD (Sig.)		Male	Female	Others
Creative Environments	Male	-	-0.556 — -0.063	-0.621 — 0.450
	Female	-0.310(0.027**)	-	-0.334 — 0.783
	Others	-0.085(0.942)	0.224(0.686)	-
Social Cohesion	Male	-	-0.852 — -0.124	-0.696 — 0.889
	Female	-0.488(0.017**)	-	-0.242 — 1.410
	Others	0.0960(0.966)	0.584(0.313)	-
Economic Contribution	Male	-	-0.600 — -0.086	-0.574 — 0.543
	Female	-0.343(0.017**)	-	-0.255 — 0.910
	Others	-0.016(0.998)	0.328(0.478)	-
Motivation of Entrepreneurs	Male	-	-0.595 — -0.058	-1.109 — 0.059
	Female	-0.327(0.034**)	-	-0.807 — 0.411
	Others	-0.525(0.155)	-0.198(0.781)	-
Political Support/s	Male	-	-0.591 — -0.024	-0.576 — 0.658
	Female	-0.308(0.067*)	-	-0.294 — 0.992
	Others	0.0410(0.990)	0.349(0.504)	-

Notes: * $p < 0.100$, ** $p < 0.050$; upper diagonal elements are LB — UB; lower diagonal elements are MD (Sig.); LB = Lower Bound; UB = Upper Bound; MD = Mean Differences; Sig. = p -value significant.

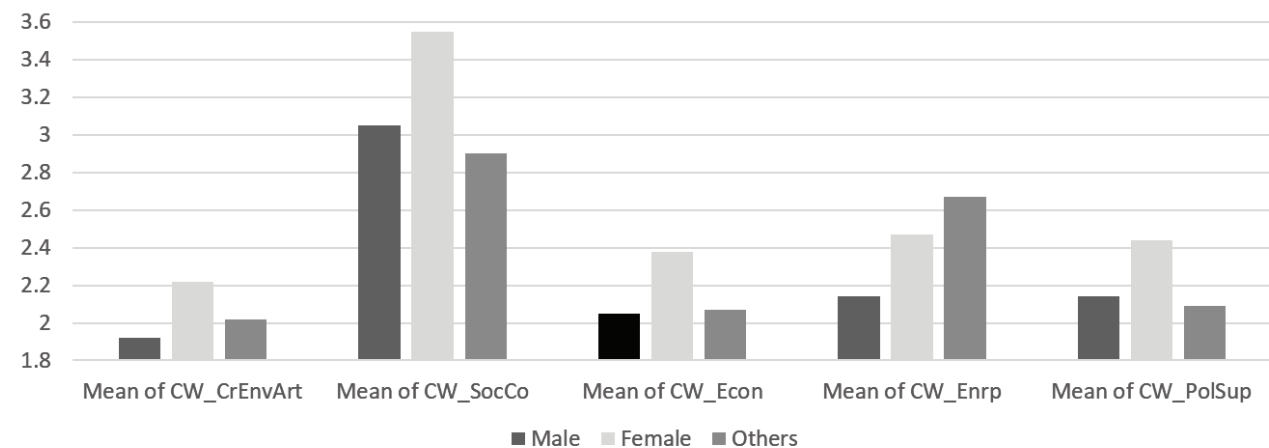


Figure 3: The means plot of creative environments and activities, social cohesion, economic contribution, motivation of entrepreneurs, and political support for gender

contribution ($p < 0.05$), diversity of function ($p < 0.05$), motivation of entrepreneurs ($p < 0.05$), and political support ($p < 0.10$) variables.

Considering the results in Tables 5 and 7, Figure 3 shows notable gender differences for the variables, creative environments, and activities. Males (mean = 1.926) agree more with the setting for creative endeavours and activities than females (mean = 2.236). As a result, the difference between these two groups of participants is the most significant between the genders (mean difference = -0.310). The results indicated that males are more agreeable or neutral regarding social cohesion (mean = 3.051) than females (mean = 3.539). The mean differences between these two groups are the largest and most significant differences between the genders of participants (mean difference = -0.488). Furthermore, the results indicated that males are more likely to concur regarding economic contribution, motivation of entrepreneurs, and

political support (mean = 2.030, 2.142, 2.132) than females (mean = 2.373, 2.469, 2.440). In other words, the difference in mean levels between these two groups is the most significant among the genders (mean difference = -0.343, -0.327, and -0.308, respectively).

Furthermore, Table 8 presents the outcomes of the post-hoc Tukey HSD test, in conjunction with Table 7, for understanding the significant differences between age groups for the diversity of function, innovation, and technology. Results showed that quality of life and physical comfort, motivation of entrepreneurs, and political support varied between groups but not between individuals within those groups. A significant difference in diversity of function also existed between the groups of participants aged 18–24 and 25–34 ($p = 0.10$). Furthermore, the innovation and technology variables ($p < 0.10$ and $p < 0.05$) indicate significant differences between the age groups of 25–34, 45–54, and 55–64.

Table 8: Tukey HSD post-hoc test for Age and Significant Variables

LB — UP MD (Sig.)	18-24	25-34	35-44	45-54	55-64	65 & above
Diversity of Function						
18-24	-	-0.914 — -0.014	-0.731 — 0.216	-0.813 — 0.401	-0.813 — 0.846	-0.534 — 1.441
25-34	-0.464(0.082*)	-	-0.242 — 0.654	-0.329 — 0.846	-0.334 — 1.296	-0.057 — 1.894
35-44	-0.258(0.716)	0.206(0.837)	-	-0.554 — 0.657	-0.554 — 1.102	-0.275 — 1.698
45-54	-0.206(0.950)	0.258(0.862)	0.052(1.000)	-	-0.689 — 1.133	-0.397 — 1.717
55-64	0.016(1.000)	0.481(0.641)	0.274(0.955)	0.222(0.988)	-	-0.761 — 1.636
65 & above	0.454(0.838)	0.918(0.143)	0.712(0.417)	0.660(0.582)	0.438(0.933)	-
Innovation and Technology						
18-24	-	-0.629 — 0.115	-0.287 — 0.496	-0.161 — 0.842	-0.263 — 1.107	-0.352 — 1.279
25-34	-0.257(0.468)	-	-0.009 — 0.732	0.112 — 1.082	0.006 — 1.352	-0.085 — 1.526
35-44	0.105(0.982)	0.362(0.115)	-	-0.264 — 0.736	-0.367 — 1.001	-0.456 — 1.174
45-54	0.340(0.488)	0.597(0.019**)	0.236(0.823)	-	-0.671 — 0.834	-0.750 — 0.996
55-64	0.422(0.597)	0.679(0.095*)	0.317(0.833)	0.081(1.000)	-	-0.948 — 1.032
65 & above	0.464(0.677)	0.720(0.186)	0.359(0.861)	0.123(0.999)	0.042(1.000)	-

Notes: * $p < 0.100$, ** $p < 0.050$; upper diagonal elements are LB — UB; lower diagonal elements are MD (Sig.); LB = Lower Bound; UB = Upper Bound; MD = Mean Differences; Sig. = p -value significant.

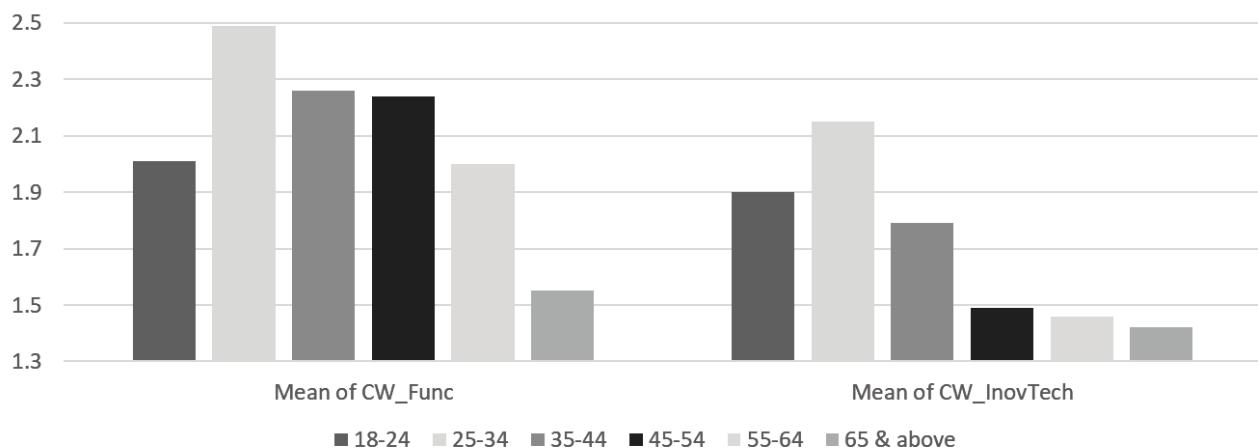


Figure 4. Means plot of diversity of function and innovation and technology for age

Based upon Tables 5 and 8, Figure 4 shows the differences in the range of function between respondents ages 18–24 and 25–34. The age group of 18–24 is more likely than age groups 25–34 to believe in diversity of function (mean = 2.481). The differences among age groups are the most notable and substantial (mean difference = 0.464). A significant difference in the ‘Innovation and Technology’ variable is evident between 25–34 and 45–54, as well as between 25–34 and 55–64. Participants aged 45–54 and 55–64 were significantly more inclined to agree with “Innovation and Technology” than those aged 25–34 (mean = 2.145). The mean difference between these two age groups is significant (mean difference = 0.549 and 0.679, respectively).

6 Discussion

The measurement instrument demonstrates sufficient internal consistency and reliability across its components. The scale encompasses demographic information and general satisfaction with the environment. About 65.6% of participants, including students, are identified as creative. The site is recognised for its rich history and diverse activities, which is appealing to various human profiles. Dissatisfaction arises from issues such as cleanliness, lighting, and limited outdoor activities. Parking concerns for drivers and eroding sidewalks for cyclists and pedestrians are noted. Accessibility for disabled users is emphasised. EFA reveals a nine-factor structure related to competencies, leading to the one-way ANOVA test. Results show that creative individuals exhibit lower social cohesion and tolerance, suggesting potential oppression. Males rate creative environments lower, indicating a need for diverse activities. The study highlights the necessity for awareness and tolerance to address these issues, forming a comprehensive model for waterfront development in line with national and international guidelines.

In comparison to previous studies, the Kyrenia Ancient Harbour has demonstrated a high level of awareness, perhaps through visitor engagement or community involvement initiatives. Statistical analysis reveals the extent to which the Kyrenia Ancient Harbour supports entrepreneurial activities, potentially contributing to economic development. Assessing the available spaces and activities indicates that Kyrenia Ancient Harbour needs more attention to align with the literature’s emphasis on creativity (Chan et al., 2022; Halawa & Poerbo, 2023; Kostopoulou, 2013; Miloš & Dragana, 2021; Üzümcüoğlu & Polay, 2022a; Sepe, 2013; Girard et al., 2014). The survey

and analysis shed light on how the Kyrenia Ancient Harbour needs more attention to foster innovation and the development of novel concepts. The degree of tolerance within the community and space explored to determine this matches the literature’s expectations (Florida, 2003; Landry, 2000; Üzümcüoğlu, 2023; Sözer Şenol, 2022; Toomey et al., 2021). According to expectations, it was at an average level. An evaluation of the physical infrastructure and amenities highlights the average comfort level for individuals frequenting the Kyrenia Ancient Harbour. Investigating political backing and initiatives reveals the inappropriate level of political support, a factor crucial for sustainable development (Taufen et al., 2022; Bunce & Desfor, 2007; Gordon, 1997; Üzümcüoğlu & Polay, 2022c; Zeković & Maričić, 2022; Toomey et al., 2021; Wang et al., 2020; Perić, 2020). Statistical results indicate that the Kyrenia Ancient Harbour contributes to social cohesion and community bonding. The diverse functions hosted at the harbour demonstrate versatility, aligning with the literature’s expectations (Petrtýlová & Matej, 2022; Erdoğan, 2022; Shangi et al., 2020; Dong, 2004; Amireh, 2020; Xie, 2023). Assessing low efforts to preserve cultural heritage showcases Kyrenia Ancient Harbour’s commitment level to cultural conservation.

The findings also underscore the tourism impact of Kyrenia Ancient Harbour, revealing its significance as a cultural and recreational destination. With its rich history and diverse array of activities, the harbour attracts visitors from various backgrounds, contributing to the local economy through tourism revenue. However, despite its allure, the study highlights areas for improvement to fully capitalise on its tourism potential. Enhancing cleanliness, lighting, and outdoor amenities could enhance the visitor experience and encourage longer stays. Addressing concerns such as parking availability and sidewalk conditions for cyclists and pedestrians would further enhance accessibility and satisfaction for tourists. Moreover, promoting cultural heritage preservation initiatives could enrich the harbour’s appeal, attract heritage-conscious travellers, and foster a deeper connection with the local community. Overall, by leveraging its unique attributes and addressing identified shortcomings, Kyrenia Ancient Harbour has the potential to emerge as a premier tourist destination, bolstering economic growth and cultural exchange in the region.

7 Conclusion

In conclusion, this study addresses a notable research gap in urban waterfront development, emphasising the

significance of user perceptions and community engagement throughout the planning process. The inclusion of creative individuals in development planning is crucial for fostering innovation and efficiency. The identified twelve guiding principles, consolidated into nine principal elements, provide a structured approach for evaluating waterfront projects and offer a theoretical foundation for future studies. The combination of qualitative and quantitative research methods, exemplified in this study, serves as a practical model for researchers to follow, ensuring a comprehensive understanding of waterfront development.

In addition to addressing research gaps in urban waterfront development, this study sheds light on the significant tourism impact of projects like the Kyrenia Ancient Harbour. By emphasising user perceptions and community engagement, waterfront developments can attract a diverse range of tourists, contributing to local economies and cultural exchange. The study's focus on the Kyrenia Ancient Harbour underscores the potential for tourism growth through enhanced visitor experiences and the preservation of cultural heritage. However, to fully leverage tourism opportunities, stakeholders need to prioritise factors like cleanliness, accessibility, and cultural preservation. By implementing suggested strategies and fostering community involvement, waterfront destinations can maximise their tourism potential, driving economic growth and promoting sustainable development practices.

The specific focus on the Kyrenia Ancient Harbour enhances practical applicability, allowing for detailed assessments of identified principles. The use of statistical tests contributes to a reliable model, providing actionable insights for stakeholders involved in waterfront development projects. The study's emphasis on potential impacts and suggested mitigation strategies offers practical guidance for ensuring sustainability. However, the study's focus on a specific case limits generalisability, urging future research to explore diverse case studies for broader applicability. Additionally, given the evolving nature of development processes, periodic reassessment of recommendations is advised to adapt to changing circumstances. Stakeholders and researchers can utilise these findings to inform inclusive and sustainable urban waterfront development practices, emphasising community involvement and creative input in planning processes.

Data Availability

The datasets used and/or analysed during the current study are available from the corresponding author upon reasonable request.

Competing interests: The authors declare no competing interests.

Ethical approval: The data collected from the study was done in accordance with the ethical guidelines from Eastern Mediterranean University as part of a corresponding author Ph.D. project. It gained approval from the committee of the EMU's Scientific Research and Publication Ethics Board (BAYEK).

Informed Consent: Randomly selected participants were required to confirm their participation and complete consent forms at the site. The consent section appears in Appendix A, the first part of the questionnaire.

Bionotes

Asst. Prof. Dr. Doğa Üzümcüoğlu received a Ph.D. in Architecture from Eastern Mediterranean University. He is currently an academic member of the Department of Architecture at Rauf Denktaş University. He teaches architectural design, urban design, and the theory of city image and identity. His research focuses on creative environments, urban design issues, and urban waterfront development concerns. He has several research projects, including citation-indexed papers on urban waterfronts, creative environments, and urban design principles. In addition to his academic studies, he has worked on several practical architectural projects. ORCID ID: 0000-0001-8968-5103

Mukaddes Polay is a Professor of Architecture at the Eastern Mediterranean University. In the Department of Architecture, she teaches architectural design, urban theory, and landscape. Her research focuses on city identity, urban spaces, and architectural education. A number of her research projects and citation index papers pertain to urban design, historic urban quarters, and architectural education. In addition, she has a book concerning city identity and a chapter in various publications. ORCID ID: 0000-0002-4797-2056

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Appendix A

A measurement scale for waterfront development applications involving creative individuals

It is purely for scientific purposes; you will not be asked to write your name. Thank you in advance for your participation.

Direction

Put a check (✓) to your corresponding answer. (If you have more than one option please mention)

Consent

Do you agree with the following statements? Use the following scale and sign the related box with (✓) please.

5. Totally, 4. Yes, 3. Neutral, 2. Not much, 1. Certainly not

I am not under pressure to fill in this questionnaire form.	5	4	3	2	1
I am free to answer all questions.	5	4	3	2	1
I know that my name will not be seen in the results of this questionnaire.	5	4	3	2	1
I know that I may stop filling in this questionnaire any time I wish.	5	4	3	2	1

- Please do not continue answering the Questionnaire, if you have signed 1 or 2 for the above statements.

1. Personal Information

What is your nationality?

Cypriot	Yes ()
Turkish	Yes ()
Other "please specify"	

What is your profession?

Please specify	
----------------	--

Gender			Age						Employment				Education						
Male										Working	University student	Retired	Unemployed	Housewife	Never attended school	Primary or secondary	High school	University	Master /Ph.D. / ...
Female																			
Other																			
			18 - 24																
			25 - 34																
			35 - 44																
			45 - 54																
			55 - 64																
			65 - Above																

You are:

Tourist	Yes ()
Local	Yes ()
Resident	Yes ()
Other "please specify"	

2. Satisfaction level of the users in terms of creative city concept

How often do you visit here?

Everyday	Yes ()
Weakly	Yes ()
Monthly	Yes ()
Seasonal	Yes ()

Do you like to spend your time here?

Yes ()	No ()
---------	--------

Are you suggesting this place to others?

Yes ()	No ()
---------	--------

Do you feel pleased with the environment opportunities?

Yes ()	No ()
---------	--------

Do you find this place accessible?

Yes ()	No ()
---------	--------

3. Satisfaction level of the users in terms of creative waterfront model

5. Very favourable, 4. Favourable, 3. Neutral, 2. Unfavourable, 1. Very unfavourable

Protection of the culture.

Q1 Adequacy of cultural promotion	5	4	3	2	1
Q2 Competence of cultural spaces	5	4	3	2	1
Q3 The capability of contextual protection (historic and/or cultural heritage)	5	4	3	2	1
Q4 Protection level of the existing unique culture	5	4	3	2	1
Q5 Festival opportunities in the place	5	4	3	2	1
Q6 Access to local foods	5	4	3	2	1
Q7 Access to local arts	5	4	3	2	1
Q8 Adequacy of art activities	5	4	3	2	1

Tolerances.

Q9 Welcoming level of the place	5	4	3	2	1
Q10 Sufficiency level of open-minded people	5	4	3	2	1
Q11 Freedom level	5	4	3	2	1

Promoting entrepreneurship.

Q12 Competence of consultancy and/or fund opportunities	5	4	3	2	1
Q13 Competence of collaborative discussion spaces for stakeholders	5	4	3	2	1
Q14 Adequacy of investment activities	5	4	3	2	1

Creative environment opportunities.

Q15 The capability of exhibition spaces	5	4	3	2	1
Q16 Suitability of performance areas	5	4	3	2	1
Q17 Adequacy of open and closed spaces that stir creative productivity	5	4	3	2	1

Creative activity opportunities.

Q18 Sufficiency of creative ideas, which comes true	5	4	3	2	1
Q19 Competence of creative work activities	5	4	3	2	1
Q20 The capability of creative actions	5	4	3	2	1

Innovation and technology.

Q21 Sufficiency of innovative ideas, which comes true	5	4	3	2	1
Q22 Sufficiency of technological ideas, which comes true	5	4	3	2	1
Q23 Adequacy of information tools for visitors	5	4	3	2	1
Q24 Existence of digital lighting system	5	4	3	2	1
Q25 Existence of development areas	5	4	3	2	1
Q26 Existence of R&D areas	5	4	3	2	1
Q27 Existence of study areas	5	4	3	2	1
Q28 Existence of simulation areas	5	4	3	2	1

Q29 Existence of energy consumption with water	5	4	3	2	1
Q30 Access to the internet	5	4	3	2	1

Awareness.

Q31 Adequacy of motivated people to keep the place clean	5	4	3	2	1
Q32 Adequacy of motivated people to promote their art, music, and literature in the place	5	4	3	2	1
Q33 Adequacy of responsive people for their environment and society	5	4	3	2	1

QoL and physical comfort.

Q34 The efficiency of protection of natural spaces	5	4	3	2	1
Q35 Suitability of accessibility	5	4	3	2	1
Q36 Appropriateness of functional variety	5	4	3	2	1
Q37 Adequacy of architecture quality	5	4	3	2	1
Q38 Adequacy urban design quality	5	4	3	2	1
Q39 Sufficiency of traffic and access to the car park	5	4	3	2	1
Q40 Sufficiency of transportation	5	4	3	2	1
Q41 Possibility of relaxation	5	4	3	2	1
Q42 Adequacy of access for disabilities	5	4	3	2	1
Q43 Access to cycling	5	4	3	2	1
Q44 Access for pedestrians	5	4	3	2	1
Q45 Adequacy for safety	5	4	3	2	1
Q46 Suitability of urban stuff (sitting, lighting, planting, etc.) and harmony each other	5	4	3	2	1
Q47 Adequacy of cleanliness	5	4	3	2	1
Q48 Access to urban balconies (view terraces)	5	4	3	2	1

Political support.

Q49 Sufficiency of rules and regulations, which were adapted into the place	5	4	3	2	1
Q50 Competence of funds opportunities for the development of the place	5	4	3	2	1
Q51 Adequacy of political support for the stage for stakeholders and investors	5	4	3	2	1

Social cohesion.

Q52 Sufficiency of attractiveness	5	4	3	2	1
Q53 Existence of different age groups	5	4	3	2	1
Q54 Existence of different ethnicities	5	4	3	2	1
Q55 Existence of different education levels	5	4	3	2	1
Q56 Existence of different genders	5	4	3	2	1

Diversity of function.

Q57 Adequacy of accommodation opportunities	5	4	3	2	1
Q58 Existence of water-based activities	5	4	3	2	1
Q59 Variety of activities	5	4	3	2	1
Q60 Access to the other functions	5	4	3	2	1
Q61 Access to recreational facilities	5	4	3	2	1
Q62 Sufficiency of shopping opportunities	5	4	3	2	1
Q63 Eligibility for sports activities	5	4	3	2	1

Economic contribution.

Q64 Welcoming level of the environment	5	4	3	2	1
Q65 The efficiency level of increased visitor numbers	5	4	3	2	1
Q66 Adequacy of strategic and/or economic agreements with other cities	5	4	3	2	1
Q67 Sufficiency of investment	5	4	3	2	1
Q68 Competence of employment opportunities	5	4	3	2	1
Q69 Acceptable cost of transportation	5	4	3	2	1
Q70 The sufficiency of tourist attraction level	5	4	3	2	1