

Enhancing the Sense of Belonging to Place Through Place Making: A Case Study of Baghdad City Center - Al-Rusafa

Mohammed Hadi Nafl, Ehsan Sabah Hadi Alsarrai

Center of Urban and Regional Planning for Post Graduate, University of Baghdad, Baghdad, Iraq

City centers are characterized by a variety of activities and urban structures that reflect the community's identity. Over time, however, these centers have faced challenges such as traffic congestion, neglect, dominance of commercial activities, and a decline in social and cultural activities, Which led to the decrease of human belonging in the urban public places. Therefore, it is essential to develop strategies to enhance human belonging and urban identity. This research focuses on the issue of the lack of social interaction that enhances human belonging in Baghdad's city center - Rusafa, due to changes in land use and underutilized spaces. The aim of the research is to fill the knowledge gap in the concept of placemaking and develop planning strategies that meet the needs of the center and its people, with the hypothesis that these strategies will influence the spatial response of the center and activate a place capable of meeting the people's needs. From this standpoint, the study will identify the key general concepts of place, urban public place, placemaking, and the city center. Subsequently, questions for a survey will be developed to obtain responses from experts and residents to understand the impact of the social aspect on the concept of place attachment in the urban public space of Baghdad's city center - Rusafa. The analysis will lead to identifying the most effective measures to enhance community belonging to urban public spaces.

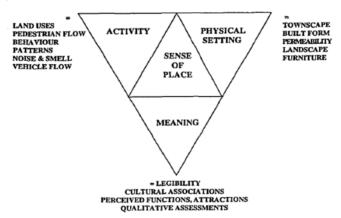
Keywords: Place, place making, the city center, urban public place.

1. Introduction

In linguistic terms, "place" equates to "location" and is pluralized as "places", spaces, areas, and zones. It refers to the site where humans live, including their residence, workplace, social life aspects, and the surrounding natural environment such as deserts, forests, rivers, and weather conditions (Al-Obaidi, 1987, p. 19) In an urban context, there are two main approaches to defining place: the first focuses on the physical aspect, such as buildings, their distribution, and their relationship with streets (Cullen); the second relies on psychological

perception through senses and mental maps (Lynch, 1960; Alexander, 1979). Jane Jacobs integrated these two approaches by describing urban places in terms of human activities associated with physical aspects, enhancing the quality of the place (Yu Ye, Dong, 2017, p. 3). To define public space, there are multiple aspects to consider. One definition emphasizes ownership issues, describing it as a place not controlled by individuals or organizations, thus open to the general public (Madani, 1996, p. 144). There are also definitions based on access and use issues, defining public urban space as places accessible to the public where people go for group and individual activities (Carr, 1992, p. 50). Generally, when we mention the term "place" instead of "space," it implies the human dimension present in the place and its impact on it, as they are places that all city residents have the right to use.. The urban place comprises three main elements: the physical space, which includes the nature of the urban fabric, buildings, furniture, outdoor spaces, and permeability; the activity, encompassing vibrancy and diversity in activities such as pedestrian flows, cultural events, and varied land uses, which distinguish successful urban areas (Montgomery, 1998, p. 98); and perception and meaning, which include the message conveyed by the place and its psychological impact on people, enhancing functional and cultural attachment (Punter, 1991, p. 200). Place attachment is linked to emotional and functional aspects, involving a sense of belonging, identity, and rootedness, depending on how well the place meets individuals' needs and goals, thereby enhancing place identity and developing social and psychological bonds

(Ujang, 2010, p. 11).



Thus, the integration of these three elements represents a successful place (Montgomery, 1998, p. 1) To this end, many interventions have emerged to enhance the sense of belonging to urban public spaces. Among these interventions is the concept of placemaking, which is a comprehensive approach and practical method for continuously improving places, cities, and regions. It encourages people to reshape public spaces and strengthen the relationship between people and the places they share. Placemaking refers to a collaborative process that allows us to shape urban public spaces with the aim of enhancing shared value. Beyond merely focusing on urban design improvements, placemaking can encourage creative usage, and special attention to cultural and social aspects that define the general character and continuously enhance the development of the place. Additionally, it emphasizes community participation. An effective placemaking process can leverage local community assets, inspire them, and

utilize their potential (PPS & Metropolitan Planning Council, 2008, p. 5).

Placemaking includes four types: standard, which focuses on creating a high-quality place with community involvement (Wyckoff, 2014, p. 4); strategic, which aims to attract talent and achieve specific economic goals (Wyckoff, 2014, p. 5); creative, which integrates arts and culture into the built environment (Wyckoff, 2014, p. 5); and tactical, which relies on small, incremental improvements to attract larger investments (Wyckoff, 2014, p. 5). These processes aim to enhance urban areas, making them safer and more attractive while maintaining social, environmental, and economic values. They contribute to strengthening the connections between people and their places through community engagement and leveraging local assets. The following table outlines the types of placemaking, their issues, solutions, and outcomes.

Table 1 (Placemacking Types)

Type	Problems	Solutions	The payoff
Standard Placemaking	The lack of effective reliance on public spaces to create vibrant and healthy atmospheres for the community.	Relying on the activation and reuse of public spaces involves extensive participation from the public and stakeholders. This is achieved through the use of short-term and long-term techniques rooted in community engagement and the principles of new urban design.	Increasing the number of high-quality spaces with distinctive activities and a strong sense of place contributes to the attractiveness of these areas. This includes adding more vibrant and active public spaces that are considered livable. Communities and areas that receive significant attention from residents, businesses, and visitors reflect a high level of attraction and desirability.
Strategic Placemaking	Communities are not always competitive in attracting and retaining talented workers.	Enhancing activation through increasing housing options and transportation means, and improving urban amenities, also contributes to attracting talented workers.	Achieving faster gains in quality of life and population diversity, providing job opportunities, increasing income, and enhancing education.
Creative Placemaking	Cities generally face structural transformations and changes in residential patterns.	Enhancing economic activity and revitalizing social life is achieved through implementing creative initiatives that breathe new life and vitality into targeted areas. This sparks development and promotes economic sustainability.	Achieving gains in livability, job diversity, and income in the area. Additionally, offering innovative products and services tailored to cultural industries contributes to enhancing economic diversity and improving the standard of living.
Tactical Placemaking	Many physical improvements require high costs, and it is understood that policymakers face hesitation in allocating resources due to potential risks.	Experimenting with various solutions using low-cost projects while measuring their effectiveness, and incorporating community participation.	Enabling the community and policymakers to see the results and level of support for different options before committing to permanent projects contributes to enhancing transparency and effective participation.

Source: Wyckoff Mark, Definition of placemacking, MSU land policy institute, 2014, P7

Regarding the sense of belonging, there are causes for this feeling in the urban environment. Place attachment is influenced by three main factors: dependence on place, place identity, and the sense of belonging and rootedness. Dependence on place refers to the importance of a location in providing features and conditions that support individuals' goals and activities, with attachment being enhanced when the place meets high-value objectives for people (Shumaker, 1983, pp. 216-219). Place identity refers to the natural and cultural elements and regional life that distinguish a particular area from others (Paasi, 2009, pp. 464-484) and the processes and meanings attributed to it (Groote & Haartsen, 2008, pp. 181-194). In urban environments, identity is often recognized through environmental elements, activities, and events (Cheshunehzangi, 2012, p. 36). Urban designers often focus on physical appearance but must consider the symbolic meanings of the place (Stedman, 2003, p. 16). The sense of belonging refers to the conscious connection to a place and how individuals define their position within the social structure through their interaction with the place (Benson, 2013, pp. 796-797). Rootedness, on the other hand, represents the unconscious feeling of place and self-integration with it, providing individuals with a safe point and a spiritual connection to the place (Arefi, 1999, p. 179).

2. Case and Methodology

In this study, we examine the center of Baghdad, Rusafa, which is considered the heart of the city and its economic and historical hub. Baghdad is located in central Iraq on the banks of the Tigris River and is distinguished by its strategic geographical location, which made it a vital center for ancient trade routes. The historical area of Baghdad was established during the Abbasid Caliphate in the 8th century AD and retains over 1,200 years of historical and architectural heritage. The current area of Baghdad extends over approximately 204 square kilometers, with a population of over 7.92 million people in 2024, compared to its old size, which was confined within walls with a diameter not exceeding three kilometers. This expansion means an increase in area by more than thirty times and a population increase by more than twenty-seven times compared to the early 20th century. With the growth of the new city, new local centers have emerged, competing with the old historical center, reflecting the urban development and expansion of Baghdad over the years. Over time, several urban problems have emerged in the center of Baghdad—Rusafa, leading to a decline in place attachment and weakening its identity. Commercial use dominates the center, neglecting other uses such as recreational and mixed-use, turning it into a shopping area dominated by wholesale stores and warehouses. Additionally, the riverfront is neglected despite its potential for recreational, cultural, and social activities, with the high value of the location overlooking the Tigris River. The city also suffers from a lack of public gathering spaces, relying solely on urban squares, while there is a need for public urban spaces that include important axes for movement and urban gathering. The increase in the number of cars compared to the size of the existing streets has led to congestion in the center, affecting the movement of visitors and workers.

And for this case study, a quantitative methodology was adopted, with the questionnaire using the Likert scale as the measurement tool. These concepts were translated into questions directed at experts and the local community to measure the impact of the social dimension, which represents people's attachment to the urban area and its effect on the placemaking process. The goal is to identify the key actions required to enhance place attachment in the urban center of Baghdad.

The questions presented to the experts and residents included the following Questions related to the placemaking axis, represented by the dependent variable:

- 1- Human-scale design in the placemaking process enhances positive interaction between individuals and the place.
- 2- Mixed-use developments enhance vibrancy and sustainability in placemaking.
- 3- Flexibility in design, which allows for future modifications in response to changing community needs, increases the effectiveness of urban spaces.
- 4- The placemaking process enhances cultural and social diversity, providing inclusive spaces for all individuals.
- 5- Community participation in the planning and design process is essential in placemaking.
- 6- Urban public spaces strengthen the social fabric by providing shared spaces that allow for interaction and communication between individuals from diverse social and cultural backgrounds.
- 7- The success of the placemaking process is measured by its ability to attract investments and promote local economic growth.
- 8- Partnerships between the public and private sectors in the placemaking process lead to solutions that serve both economic and social goals.
- 9- Placemaking contributes to reducing the economic gap between different areas by providing job opportunities and supporting local businesses.

As for the questions related to the independent axis (the social axis), which represents place attachment, they included the following:

- 1- Increasing social interaction and physical activity contributes to improving public health by enhancing walkability.
- 2- Easy access to attractive and safe places can enhance social connections, collective memory, and community engagement.
- 3- The process of placemaking aims to create welcoming and safe places in the city center through ease of access.
- 4- The urban public space in the city center should be viewed comprehensively, encompassing psychological aspects in addition to physical and design elements.
- 5- Working with the community to develop a holistic vision of urban public space can lead to improved place experience and resident satisfaction.
- 6- Enjoyment in the urban environment is reflected in individuals' perceptions of the place, relying on the social aspect rather than commercial and residential activities.

- 7- Strengthening social bonds between individuals and the place can increase the level of emotional attachment to the place.
- 8- Focusing on social aspects in the urban environment can enhance the attractiveness of the place and contribute to making it more vibrant and interactive.
- 9- Enjoyment in the urban environment increases by promoting the use of public transportation.

The descriptive analysis of the data

1- Expert Sample

Table 2 (Job Titles of the Expert Sample)

Percentage	Frequency	Job Title
Engineer	7	%35
Assistant Engineer	1	%5
Chief Engineer	7	%35
Academic	3	%15
Expert	1	%5
Officer	1	%5
Total	20	%100

Source: Prepared by the researcher based on SPSS V.26

It is evident from Table (2) that the number of engineers in the sample is 7, representing 35% of the total sample size. The number of assistant engineers is 1, accounting for 5% of the sample. The number of chief engineers is also 7, constituting 35%. Academics in the sample number 3, which is 15% of the total. The sample includes 1 expert, making up 5%, and 1 officer, also representing 5% of the sample size.

Educational Attainment

Table 3 (Educational Attainment of the Expert Sample)

Educational Attainment	Frequency	Percentage
Bachelor's Degree	3	%15
Master's Degree	16	%80
PhD	1	%5
Total	20	%100

Source: Prepared by the researcher based on SPSS V.26

It is evident from Table (3) that the number of individuals in the sample holding a Bachelor's degree is 3, representing 15% of the total sample size. The number of individuals with a Master's degree is 16, accounting for 80% of the sample. The sample includes only 1 individual with a PhD, making up 5% of the total sample size.

2- Population Sample

Table 4 (Occupation of the Population Sample)

` I	<u> </u>	1 /
Occupation	Frequency	Percentage
Employee	7	%7
Merchant	8	%8
Self-employed	84	%84

Nanotechnology Perceptions Vol. 20 No.S3 (2024)

Retired	1	%1
Total	100	%100

Source: Prepared by the researcher based on SPSS V.26

It is evident from Table (4) that the number of employees in the population sample is 7, representing 7% of the total sample size. The number of merchants is 8, accounting for 8% of the sample. The number of self-employed individuals is 84, constituting 84% of the total sample, which represents the highest percentage. The number of retired individuals is only 1, making up 1% of the sample.

Educational Attainment

Table 5 (Educational Attainment of the Population Sample)

Educational Attainment	Frequency	Percentage
Primary School	7	%7
Secondary School	41	41%
High School	29	29%
Bachelor's Degree	21	21%
Master's Degree	2	2%
Total	100	%100

Source: Prepared by the researcher based on SPSS V.26

It is evident from Table (5) that the number of individuals in the sample holding a primary school certificate is 7, representing 7% of the total sample size. The number of individuals with a middle school certificate is 41, accounting for 41% of the sample. The number of individuals with a high school certificate is 29, constituting 29% of the sample. The number of individuals with a Bachelor's degree is 21, making up 21% of the sample, and the number of individuals with a Master's degree is 2, representing 2% of the total sample size.

Residence

Table 6 (Residence of the Population Sample)

Residence Type	Frequency	Percentage
Resident	33	%33
Daily Visitor	67	%67
Total	100	%100

Source: Prepared by the researcher based on SPSS V.26

It is evident from Table (6) that the number of residents in the city center is 33, representing 33% of the total sample size. The number of daily visitors to the city is 67, accounting for 67% of the total sample size.

Years of Presence in the Place

Table 7 (Years of Presence in the Place for the Population Sample)

Years of Presence	Frequency	Percentage
5-10 years	39	%39
11-15 years	37	%37
More than 15 years	24	%24
Total	100	%100

Nanotechnology Perceptions Vol. 20 No.S3 (2024)

Source: Prepared by the researcher based on SPSS V.26

It is evident from Table (7) that the number of individuals who have been present in the city center for 5-10 years is 39, representing 39% of the total sample size, which is the highest percentage of presence. The number of individuals who have been present in the city center for 11-15 years is 37, accounting for 37% of the sample. Meanwhile, the number of individuals who have been present in the city center for more than 15 years is 24, making up 24% of the total sample size.

Description and Diagnosis of Study Variables

The purpose of this study is to demonstrate the reality and suitability of the study in the center of Baghdad (Rusafa side) by presenting and interpreting the results in light of the respondents' answers to the questionnaire items. The results of the descriptive statistical analysis of the study variables were presented using the arithmetic mean, standard deviation, and the relative importance of the sample's opinions based on their responses. The study relied on the five-point Likert scale for the sample's questionnaire responses, meaning that each variable's level ranged between 1 and 5. Table () illustrates this by calculating the range of responses to determine the category length for each degree of the five-point Likert scale, with the results as follows:

Category length
$$=\frac{\text{Range}}{\text{Number of categories}} = 0.80$$

The range is the difference between the smallest and largest values (largest value - smallest value). The range = 5 - 1 = 4.

The following table shows the results of measuring the range of the arithmetic mean of the responses (unit of measurement).

The descriptive analysis of the data

Table 8 (Weighted Average and Response Scale)

Weighted Average	1-1.8	1.81-2.60	2.61-3.40	3.41 -4.20	4.21-5
Response Scale	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
Response Level	Very weak	weak	good	good	Very good
Evaluation	Low		Moderate	High	

Source: Ezz Abdel Fattah (2008: 541)

Dependent Variable (Placemaking)

Table 9 (Descriptive Statistics of Respondents' Results for the Dependent Variable

Placemaking) Disagree Strongly Strongly Agree (4) Neutral (3) Relative Importance Agree (5) Disagree (1) (2)Standard Deviation requency ercentage Percentage Percentage Frequency Percentage Percentage requency requency requency Ouestions Mean Q:1 Experts 15.0 10.0

	Population	63	63.0	20	20.0	8	8.0	6	6.0	3	3.0	4.34	1.056	86.8
0.2	Experts	0	0	0	0	1	5.0	15	75.0	4	20.0	1.85	.489	37
Q:2	Population	41	41.0	39	39.0	9	9.0	11	11.0	0	0	4.10	.969	82
0.2	Experts	12	60.0	7	35.0	1	5.0	0	0	0	0	4.55	.605	91
Q:3	Population	38	38.0	30	30.0	12	12.0	17	17.0	3	3.0	3.83	1.198	76.6
0.4	Experts	13	65.0	6	30.0	1	5.0	0	0	0	0	4.60	.598	92
Q:4	Population	63	63.0	27	27.0	8	8.0	1	1.0	1	1.0	4.50	.772	90
0.5	Experts	12	60.0	7	35.0	0	0	1	5.0	0	0	4.50	.761	90
Q:5	Population	64	64.0	30	30.0	4	4.0	2	2.0	0	0	4.56	.671	91.2
0.6	Experts	6	30.0	13	65.0	1	5.0	0	0	0	0	4.25	.550	85
Q:6	Population	39	39.0	39	39.0	14	14.0	7	7.0	1	1.0	4.08	.950	81.6
0.7	Experts	4	20.0	13	65.0	3	15.0	0	0	0	0	4.05	.605	81
Q:7	Population	54	54.0	39	39.0	2	2.0	4	4.0	1	1.0	4.41	.805	88.2
0.0	Experts	9	45.0	11	55.0	0	0	0	0	0	0	4.45	.510	89
Q:8	Population	45	45.0	42	42.0	9	9.0	2	2.0	2	2.0	4.26	.860	85.2
0:0	Experts	5	25.0	12	60.0	3	15.0	0	0	0	0	4.10	.641	82
Q:9	Population	46	46.0	44	44.0	4	4.0	6	6.0	0	0	4.30	.810	86

Table (9) indicates the means, standard deviations, and relative importance related to the perspectives of the two surveyed samples (experts and residents) regarding the placemaking variable. This variable was measured through nine questions at the item level. For the expert sample, the results ranged from the highest response level achieved by item four (Placemaking enhances cultural and social diversity, and provides inclusive spaces for all individuals), which had a mean value of (4.60) with a standard deviation of (0.598). On the other hand, item two (Mixed-use developments enhance vibrancy and sustainability in placemaking) had the lowest response level, with a mean value of (1.85) and a standard deviation of (0.489).

For the resident sample, the results ranged from the highest response level achieved by item five (Community involvement in the planning and design process is essential for placemaking), with a mean value of (4.56) and a standard deviation of (0.671), indicating that the surveyed residents emphasize the necessity of community involvement in the planning process of placemaking. Conversely, item three had the lowest response level, with a mean value of (3.83) and a standard deviation of (1.198).

As for the analytical discussion of the questionnaire results for both specialists and the community regarding the placemaking aspect, specialists view the placemaking process as a crucial factor in enhancing cultural and social diversity. This is achieved by ensuring that public urban spaces are inclusive of all social strata, as the diversity within the community is considered a strength of the public urban area, especially in the city center, which serves as a reflection of the entire community rather than a specific group. Therefore, it is essential to provide inclusive spaces for everyone. On the other hand, the specialists' lowest responses were about the idea that mixed-use developments enhance vibrancy and sustainability in placemaking, due to the challenges posed by functional dispersion, which is seen as a negative aspect that weakens the identity of the public urban area and reduces its attractiveness to residents and visitors. For the community sample, the responses highlighted the importance of local community involvement in the planning and design process as a vital factor for the success of placemaking. This involvement helps meet residents' needs, enhances the sense of ownership and belonging, and promotes sustainability and appropriateness while reducing conflicts and increasing transparency. Conversely, the lowest responses were related to the Nanotechnology Perceptions Vol. 20 No.S3 (2024)

role of flexibility and adaptability according to community needs. This is attributed to the community's focus on current immediate needs, as they tend to concentrate on present issues rather than future changes, making them less aware of the importance of flexibility in design.

Independent Variable (Social Dimension)

Table 10 (Descriptive Statistics of Respondents' Results Social Dimension)

			ngly ee (5)	Agree (4)		Neutral (3)		Disagree (2)		Strongly Disagree (1)			uo	nce
Questions	Sample	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage	Mean	Standard Deviation	Relative Importance
Q:1	Experts	10	50.0	9	45.0	0	0	1	5.0	0	0	4.40	.754	88
Q.1	Population	52	52.0	37	37.0	8	8.0	3	3.0	0	0	4.38	.763	87.6
Q:2	Experts	12	60.0	8	40.0	0	0	0	0	0	0	4.60	.503	92
Q.2	Population	55	55.0	35	35.0	7	7.0	2	2.0	1	1.0	4.41	.793	88.2
Q:3	Experts	12	60.0	8	40.0	0	0	0	0	0	0	4.50	.513	90
Q.5	Population	43	43.0	35	35.0	12	12.0	8	8.0	2	2.0	4.09	1.026	81.8
Q:4	Experts	10	50.0	10	50.0	0	0	0	0	0	0	4.50	.607	90
Q.4	Population	48	48.0	39	39.0	8	8.0	4	4.0	1	1.0	4.29	.856	85.8
Q:5	Experts	11	55.0	8	40.0	1	5.0	0	0	0	0	4.20	.616	84
Q.5	Population	54	54.0	35	35.0	6	6.0	5	5.0	0	0	4.38	.814	87.6
Q:6	Experts	6	30.0	12	60.0	2	10.0	0	0	0	0	3.80	.951	76
Q.0	Population	45	45.0	32	32.0	9	9.0	11	11.0	3	3.0	4.05	1.123	81
Q:7	Experts	5	25.0	8	40.0	5	25.0	2	10.0	0	0	4.65	.489	93
Q.7	Population	44	44.0	39	39.0	9	9.0	8	8.0	0	0	4.19	.907	83.8
0.8	Experts	13	65.0	7	35.0	0	0	0	0	0	0	4.45	.510	89
Q:8	Population	54	54.0	39	39.0	7	7.0	0	0	0	0	4.47	.627	89.4
Q:9	Experts	9	45.0	11	55.0	0	0	0	0	0	0	4.30	.571	86
Q.9	Population	44	44.0	44	44.0	5	5.0	7	7.0	0	0	4.25	.845	85

Table (10) indicates the means, standard deviations, and relative importance related to the perspectives of the two surveyed samples (experts and residents) regarding the social dimension. This dimension was measured through nine questions at the item level. For the expert sample, the results ranged from the highest response level achieved by item seven (Enhancing social bonds between individuals and the place can increase the level of emotional attachment to the place), which had a mean value of (4.65), approaching the upper limit of the agreement scale of (5), with a standard deviation of (0.489). This means that the expert respondents emphasize that increasing the level of emotional attachment to a place is linked to enhancing social bonds between individuals and the place. Conversely, item six received the lowest response level, with a mean value of (3.80) and a standard deviation of (0.951).

For the resident sample, the highest response level was also achieved by item eight (Focusing on social aspects in the urban environment can enhance the attractiveness of the place and contribute to making it more lively and interactive), with a mean value of (3.47) and a standard deviation of (0.627). This indicates that the resident respondents acknowledge the contribution of the social aspect in enhancing the attractiveness of the place. Conversely, item six received

Nanotechnology Perceptions Vol. 20 No.S3 (2024)

the lowest response level, with a mean value of (4.05) and a standard deviation of (1.123).

Regarding the analytical discussion of the questionnaire results for both specialists and the community concerning the social dimension, the results for the specialists emphasized that enhancing social bonds between individuals and the place can increase the level of emotional attachment to the place. This is because positive social interaction fosters a sense of belonging and engagement within the community, making individuals feel that the place is an integral part of their identity and daily life, motivating them to maintain it. On the other hand, the specialists opined that enjoyment in the urban environment is reflected in individuals' perceptions of the place based on all aspects, not just one. They emphasize the importance of balancing various economic, social, and cultural factors, as focusing solely on the social aspect might overlook the significance of commercial and cultural activities in achieving sustainable and comprehensive development. When examining the community results, the focus was on the social aspects in the urban environment, which can enhance the attractiveness of the place and make it more lively and interactive. This focus encourages the building of strong bonds between individuals and the place, creating a sense of belonging and community. Public spaces designed to promote social interaction, such as parks, squares, and communal seating areas, encourage people to meet and interact, thereby enhancing social and cultural activities and increasing the vibrancy of the place. Additionally, neighborhoods that provide opportunities for social interaction are often safer and more attractive to residents and visitors, which increases their appeal and contributes to sustainable development. Regarding item six, the community's views aligned with those of the specialists concerning the reliance on the social aspect alone for enjoyment in the public urban environment. The community believes that enjoyment includes other activities alongside social events, such as shopping and artistic performances, which are integral to the social aspect in achieving enjoyment in the urban environment.

Inferential Statistics

Testing and Analyzing the Correlation between Study Variables To cover the inferential aspect of the research, the research hypotheses were tested as follows:

Table 11 (Correlation Coefficients between the Independent Variable and the Dependent Variable)

variables	type	Correlation Coefficient	Significance sig.(1-tailed)
Ci-1 Dii	Experts	-0.291	0.214
Social Dimension	Residents	0.408	0.000

Source: Prepared by the researcher based on the outputs of SPSS v.26

Table (11) illustrates the correlation coefficients between the independent variable and the dependent variable. The correlation coefficient between the social dimension and placemaking for the expert sample is (-0.291), which is an acceptable correlation at a significance level of (0.214), indicating it is not significant and lacks statistical significance. Conversely, the correlation coefficient between the social dimension and placemaking for the resident sample is (0.408), which is acceptable at a significance level of (0.000), indicating it is significant and has statistical significance.

Linear Regression Analysis

To demonstrate the effect of the independent variable on the dependent variable (placemaking), a simple regression analysis will be conducted.

Table 12 (Analysis of Variance (ANOVA) for the Simple Linear Regression Model to demonstrate the impact of the social dimension on placemaking for Expert Sample)

ANOVA								
	Sum of Squares	df	Mean Square	F	Sig.			
Regression	.822	1	.822	1.660	0.214			
Residual	8.915	18	.495					
Total	9.737	19						
R=0.291	$R^2=0.084$							

Source: Prepared by the researcher based on the outputs of SPSS V.26

The calculated F-value is (1.66) with a significance level of (0.214), which is greater than the significance level of (0.05). Therefore, there is no significant impact of the social dimension on placemaking. From the Adj (2R) value of (0.084), it is evident that the social dimension explains only (8%) of the variations in placemaking.

Based on this, the simple linear regression equation is as follows:

$$\hat{Y} = 5.185 - 0.451 \, \text{X}$$

where X represents the social dimension.

Additionally, from the value of the marginal slope coefficient (β) of (-0.451), it is indicated that an increase in the social dimension by one unit will lead to an increase in the placemaking variable by (29%).

Table 13 (Analysis of Variance (ANOVA) for the Simple Linear Regression Model to demonstrate the impact of the social dimension on placemaking for Resident Sample)

ANOVA								
	Sum of Squares	df	Mean Square	F	Sig.			
Regression	7.619	1	7.619	19.577	0.000			
Residual	38.141	98	.389					
Total	45.760	99						
R=0.408	$R^2=0.167$							

Source: Prepared by the researcher based on the outputs of SPSS V.26

The calculated F-value is (19.577) with a significance level of (0.000), which is less than the significance level of (0.05). Therefore, there is a significant impact of the social dimension on placemaking. From the Adj (2R) value of (0.167), it is evident that the social dimension explains (16%) of the variations in placemaking. Based on this, the simple linear regression equation is as follows:

$$\hat{Y} = 2.433 + 0.437 X$$

where X represents the social dimension.

Additionally, from the value of the marginal slope coefficient (β) of (0.437), it is indicated that an increase in the social dimension by one unit will lead to an increase in the placemaking *Nanotechnology Perceptions* Vol. 20 No.S3 (2024)

variable by (43%).

3. Conclusion

After preparing two questionnaires, one for experts and the other for the residents of the study area, and conducting the necessary tests to verify the validity of the questionnaires' distribution and the accuracy of the data, and selecting the analysis method, which is simple linear regression, the study reached a main conclusion. It indicated that the independent variable, the social dimension (responsible for the sense of belonging to the urban place), has affected the placemaking dimension. From this perspective, it becomes clear that the process of placemaking can enhance the community's sense of belonging to the public urban place through several planning and design measures.

- 1- Enhancing Security and Safety in the Urban Area
- Public Lighting: Improve street and square lighting to increase nighttime safety.
- Emphasis on Natural Surveillance: Through clear pathways and minimal branching in the area.
- Continuous Presence: Ensure a mix of daytime and nighttime activities to maintain a constant presence of people in the area, effectively reducing crime.
- 2- Developing Public Spaces and Social Facilities
- Parks and Squares: Create and develop public parks and squares to serve as gathering areas for residents, emphasizing streets as both gathering spots and transport routes.
- Social Facilities: Provide social facilities such as libraries, cultural centers, and art centers.
- Community Activities: Organize social and cultural events and activities to enhance social interaction among residents.
- Activating the Riverfront: Develop the riverfront area with recreational and sports facilities.
- 3- Community Participation
- Workshops: Conduct workshops and dialogue sessions with the local community to discuss challenges and solutions in the area.
- Surveys: Conduct surveys to gather residents' suggestions and opinions on improving the area.
- Continuous Communication: Establish continuous communication channels between government agencies and the local community to ensure effective participation in all stages of planning and implementation.

References

- 1. Al-Obaidi, Hassan Majeed, *Theory of Place in the Philosophy of Ibn Sina*, Dar Al-Sha'un Al-Thaqafiyah Al-Amma, 1987, p19
- 2. Yu Ye, Dong Li & Xingjian Liu, How block density and typology affect urban vitality: an exploratory analysis in Shenzhen, China, Urban Geography, 2017, P3
- 3. Madani ,pour, A , Design of uban space, New York , Wiley 1996, p 144
- 4. Carr, S, M. Francis, LG Rivilin and AM Stone, Public space, New York, Cambridge University Press, 1992, P 50
- 5. Montgomery, J. Making a City: Urbanity, Vitality and Urban Design. Journal of Urban Design .1998, 3:1, 93-116
- 6. Punter, J. (1991) Portici Potion in The design of Urban space , Landscape Design , p200 , pp 24-27
- 7. Ujang, N. Place Attachment And Continuity of Urban Place Identity. Asian Journal of Environment-Behavior Studies, . (2010) , 11, 41-74
- 8. PPS & Metropolitan Planning Council ,2008, A guide To Neighborhood Placemaking In Chicago, The Richardson H. Driehaus Foundation, Illinois, 2008, p5
- 9. Wyckoff Mark, Definition of placemacking MSU land policy institute, 2014, p7
- 10. Wyckoff Mark, Definition of placemacking MSU land policy institute, 2014, p47
- 11. Wyckoff Mark, Definition of placemacking MSU land policy institute, 2014, p5
- 12. Shumaker, S. & Taylor, R. "Toward a Clarification of People-Place Relationships: A Model of Attachment to Place." in Environmental Psychology: Directions and Perspectives, ed. N. R. Feimer and E. S. Geller (New York: Praeger, 1983, p.219-256
- 13. Paasi, A. (2009). "Regions and regional dynamics," in The SAGE Handbook of European Studies, ed. C. Rumford (Los Angeles, CA: SAGE), 464–484. doi: 10.4135/9780857021045.n26
- 14. Groote, P., and Haartsen, T. (2008). "The communication of heritage: creating place identities" in The Ashgate Research Companion to Heritage and Identity, eds B. Graham and P. Howard (Hampshire: Ashgate Publishing), 181–194
- 15. Cheshunehzangi, A., & Heath. ,Urban Identities: Influences on Socio-Environmental Values and Spatial Inter-Relations., Procedia-Social and Behavioral Sciences, T. (2012),p, 36, 253-264
- 16. Stedman, C.R, Is It Really Just a Social Construction? The contribution of the physical environment to sense of place"Society and Natural Resources, . (2003), p, 16
- 17. Benson, Michaela, Jackson, Emma, Place-making and Place Maintenance: Performativity, Place and Belonging among the Middle Classes, sage, 2013, pp. 796-797
- 18. Arefi. M"Non-place and Placelessness as Narratives of Loss: Rethinking the Notion of Place". Journal of Urban Design. . (1999), p,179