Discussion on the Influence of Community Planners on Building Resilient Communities

Taking “Changji Corner” as an example

Ching-Hsi Chen Tsai^{1*}, Lih-Yau Song¹, Kuang-Hui Peng¹

¹ College of Design, National Taipei University of Technology

* Corresponding Author, Email: tsaichinghsi@gmail.com

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Abstract: Since 1999, the ‘Community Planner System’ in Taipei has mainly used community awareness to intervene in communities and to strengthen and implement local autonomy and governance through the integration of community differences. Community awareness positively influences the construction of resilient communities, especially when a community encounters environmental distress or various disorderly phenomena. This case study focuses on community planners in Datong District stationed at ‘Changji Corner’ and the community members they serve. A quantitative study was conducted using a structural questionnaire. The purposes of the study were (1) to understand the relationship among community awareness, involvement and autonomy and (2) to determine whether community autonomy is affected by community planners. All hypotheses were accepted: community identity and participation improve community autonomy, and local community planners significantly and positively impact community identity, involvement and autonomy. However, some values indicate that the public’s awareness of community planners is weak, which in turn affects willingness to participate in community activities. The unclear positions and ambiguous duties of community planners can affect the construction of resilient communities.

1. INTRODUCTION

1.1 The democratic evolution of bottom-up policies in Taipei

In 1987, the Taiwanese government announced the lifting of martial law and the opening up of Taiwan. In 1994, after the direct election of the mayor of the municipalities, Taiwan’s politics matured. The end of martial law not only lifted the laws restricting civil society organisations but also promoted the active organisation of grassroots associations. Environmental protests against improper development behaviour have also increased; in particular, in 1990, the Wild Lily movement questioned the administration’s one-way governance. The voice of public opinion has gathered the power of the people and citizens have begun to appeal to the government to make various reforms. Gradually, the public’s concern about their living environment has increased. Faced with the question of how to reconstruct community identity

and engage in community self-development, a series of rebellious campaigns have progressively catalysed rising community awareness. The interaction between citizens and the city is reflected in the timeline of urban spatial transformation, which is further echoed by the evident changes in Taipei. In other words, the public has begun to understand the form and quality of life of the community environment. It is no longer subject to unilateral development and design but a struggle for increased participation and practice.

The reaction of civil society has become the main force in Taipei's promotion of spatial significance (Huang, 2004). Since 1994, the municipal government has proposed the community development strategy of 'integrated community development', a necessity in light of Taiwan's democratic political transformation and the ongoing response to the advent of civil society. In the face of sudden major events (e.g. the 921 earthquake, the 88 massive rainfall) or social trends (e.g. urban renewal, rural regeneration), the concept of 'integrated community development' has been applied as an integrated platform (Lee, 2017). The Taipei city government has actively promoted various 'bottom-up' practices and applied community empowerment policies. In 1995, the Taipei city government issued a 'Regional Environmental Renovation Plan' to connect communities with community design. After 1999, the 'Community Planner System' (CPS) was proposed to form a partnership between citizens, professionals and the government, and the 'Community Planning Service Centre' (CPSC) was proposed in 2001. The latter project uses community-oriented colleges and universities as an interface for integrating community planners and community-related resources.

1.2 The predicament of community planners in Taipei today

Since 1995, necessity for a group has been incorporated in the Regional Environmental Renovation Plan to coordinate horizontal communication between communities and the government. Consequently, the CPS and CPSC were set up in response to the needs of many community participatory projects. Community involvement programmes have included professionals, community organisations and even social movement groups, redefining the public's imagination of spatial or political forms. However, in 2014, the Cross-Strait Service Trade Agreement triggered public grievances. The Taipei city government took the lead in proposing an 'open government' in 2015 to improve public confidence in the government and to raise public awareness of government administration; the public could participate in policy and examine the administrative system model. The 'Participatory Budgeting System' was implemented in 2016 to enable members of the public to express their views on the public budget. This policy not only directly satisfies the people's preferences but also subtly improves the relationship between the government and social groups and enhances public consciousness of government administration. This empowerment policy deepened citizen participation.

This policy incorporated two mechanisms – the 'Community Planner System' and the 'Community Planning Service Centre' – into the process (Figure 1). The localised CPS and CPSC attract many private enterprises to support participatory planning and integrate complex and influential public affairs, which can further fulfil community needs.

Figure 1. Taipei's participatory community planning framework

The 'Participatory Budgeting System', which claims to involve the largest number of participants and remains the most influential, ignores the influence of the locality and consequently directly or indirectly causes the number of proposals to decline. Accordingly, the implementation effect is poor (Figure 2; Tables 1, 2).

Figure 2. Simplified flowchart of participatory budgeting by citizens' initiative in Taipei

Table 1. Taipei initiative review stage statistics (1)

Item	2016	2017
Number of initiatives	174	347
Approved initiatives	83	161
Resident participations	1,067	2,627
Initiative participations	695	780
Public participations	1,762	3,407
Meetings	12	13
Residents' conferences	25	54

Table 2. Taipei initiative review stage statistics (2)

District	Item	2016	2017	District	Item	2016	2017
A	Conferences	3	5	G	Conferences	2	5
	Participants	45	39		Participants	49	63
	Initiatives	13	30		Initiatives	6	24
	Approved	7	11		Approved	2	12
B	Conferences	3	3	H	Conferences	3	5
	Participants	42	43		Participants	38	72
	Initiatives	12	18		Initiatives	12	24
	Approved	7	6		Approved	6	12
C	Conferences	6	8	I	Conferences	2	5
	Participants	175	121		Participants	49	81
	Conferences	60	84		Initiatives	6	21
	Participants	31	28		Approved	2	11
D	Initiatives	3	5	J	Conferences	4	6
	Approved	48	25		Participants	41	37
	Initiatives	10	19		Initiatives	15	26
	Approved	5	8		Approved	5	26
E	Conferences	3	7	K	Conferences	3	8
	Participants	42	46		Participants	44	194
	Initiatives	11	30		Initiatives	9	25
	Approved	5	10		Approved	4	14
F	Conferences	3	6	L	Conferences	2	6
	Participants	51	87		Participants	71	44
	Initiatives	10	20		Initiatives	10	50
	Approved	4	8		Approved	5	26

Note. A: Songshan; B: Xinyi; C: Da-an; D: Zhongshan; E: Zhongzheng; F: Datong; G: Wanhua; H: Wenshan; I: Nangang; J: Neihu; K: Shilin; L: Beitou

2. LITERATURE REVIEW

As mentioned in the preface, when communities face sudden developments or social trends that require more energy and innovation, they need to build stronger communities by enhancing community resilience and tolerance. Community autonomy and local community planners are thus highly important in building resilient communities, and it is necessary to explore this issue more deeply.

2.1 Community autonomy helps build the foundation of resilient cities

Community autonomy is one goal in integrated community development. Community actions involve a process of change, a set of methods, a series of plans and a social movement to achieve this goal (Li, 2006). The people in the community are the main participants, and professionals in the community – such as community planners and architects – are the driving force among them. In short, in order to achieve the goal of community autonomy, people's recognitions of the community should be united through a series of participatory processes to produce a high degree of sense of community (SOC). A group with high SOC has an enhanced capacity for community empowerment. SOC is a positive force for community autonomy. The two major factors affecting SOC cohesion include participation and community

identification. Therefore, correlation with SOC is designed as a scale of 'community autonomy' in this study.

2.1.1 Community identity

[McMillan and Chavis \(1986\)](#) pointed out that people have a sense of belonging to their communities and share emotions, memories and common beliefs and values with others in the community. Such a group of interdependent people can discuss, make decisions and share everything ([Bellah et al., 1985](#)). As the foundation of the community, community identity affects the most important psychological factors of public participation. When community members have strong community identity, they possess a high level of community awareness and can develop into a sustainable community (Lin (1994)).

2.1.2 Community participation

[Furze, Donnison, and Lewin \(2008\)](#) argued that, when defining 'participation', community participation must emphasise local residents' active and meaningful participation in relevant decision-making and development processes. The most important parts of this passage are the words 'local', 'active' and 'meaningful'. To put it simply, the responsibility for community design is given to the 'local' people, who are 'active' in expressing and taking responsibility for which 'meaningful' strategies and practices they need. In addition, only when local knowledge and opinions are valued can a local community have decision-making autonomy, long-term economic support, supportive environmental programmes and improved participation ([Pimbert & Pretty, 1997](#)). If community members participate in community affairs, the community can transform from an existing subject community to an autonomous community ([Xia, 1999](#)).

2.2 Community planners facilitate meaningful encounters

While the public was formerly satisfied with a standardised, ossified quality of public service, local governments must now respond with speed and agility to meet the public's needs ([Stone & Sanders, 1987](#)). Communities need institutionalised platforms to increase community autonomy through participation, and community planners who are concerned about local conditions are the key drivers behind building resilient communities.

2.2.1 Community planners

Community planners are workers with community expertise and local literacy. They are liaisons between governments and communities and have a role of communicating across boundaries. Community planners can enhance local quality of life and meet real community needs through broad visions and meticulous design. However, as [Hung-Jen and Waley \(2002\)](#) has argued, the current difficulties facing Taiwan's community planners include their superficial training, unclear roles, lack of insight and poor communication. Not filling a solely professional role is a very important topic for community planners. [Lin \(2010\)](#) discussed defining the content of

his work as a community planner. He invited experts and scholars to converse with professional associations and set up five tasks for community planners: (1) to provide professional consultation services for the community; (2) to engage in regional environmental diagnosis work; (3) to perform environmental transformation planning work; (4) to offer professional consultations on environmental transformation plans; and (5) to meet one's obligation to attend community meetings. These clarify community planning professionals' work content, deepening the position of community planners in the community and promoting community planners to create roots in the community.

2.2.2 Community planner studio

The Taipei city government created a 'Community Planner System' in 1999. Over 400 community planner teams have since worked with local residents to complete the renovation of public spaces in the community. For the 'Community Planner' studio, which has long been stationed in the community and assists the public, it is also effective to establish a platform for communication between the government and local communities. By polling the community online and taking root in communities, community planners can catalyse the regeneration of the city and remind residents of the importance of building a resilient community. The rooted studio management adopts a communication and coordination mechanism based on local conditions, constructing different levels, and implements various creative actions to explore local commonalities. The local community planner, accompanied by experts and scholars, assists community residents in discussing and reaching a consensus to prepare for urban regeneration. This is the core value of the community planner studio.

2.3 Resilience enables communities to better respond to extreme scenarios

Contemporary societies are fragile. While this fragility has different causes, a major factor is lack of social cohesion ([Manzini, E, 2015](#)). New forms of urban administration which provide high-quality public services and avoid excessive intervention present ways out of the 'bounded rationality' ([Forester, 1984](#)) of traditional city governance. For instance, urban planning administration models such as deliberated planning and collaborative planning have risen as new alternatives. [Manzini, E \(2015\)](#) defined the concepts of communities-in-place (groups of people who interact and collaborate in a physical context) and collaborative encounters, which are prerequisites for any kind of social resilience. Communities with greater social and civic connectivity and activity are better able to respond to extreme scenarios ([Thorpe, 2015](#)).

2.3.1 The concept of the resilient city has been expanded

At the community level, empowerment refers to collective actions taken to improve the quality of life in a community and the connections among community organisations. Community empowerment has always had a social and political function. Empowerment is a construct that links individual strengths and competencies, natural helping systems and proactive behaviours to social policy and change ([Rappaport, 1981](#)). Empowerment theory, research and intervention link individual well-being with the broader

social and political environment. Theoretically, the construct connects mental health with mutual help and the struggle to create a responsive community ([Perkins & Zimmerman, 1995](#)).

Whether directly, indirectly or consciously, community empowerment – starting with the creation of events, services and products – can generate meaningful interventions and resilient, sustainable ways of being and doing. The concept of resilience, which originated in ecology with the Canadian scholar Crawford Stanley Holling, has been applied in various disciplines and extended to a four-dimensional perspective: ecological, technical, social and economic. The concept of the ‘resilient city’ was initially applied to disaster preparedness but has been expanded in recent years. The so-called ‘resilient community’ here describes a community’s capacity to increase environmental, economic and social well-being and face other adaptive problems. Furthermore, a resilient community uses renovation, repair and other urban rehabilitation methods to make itself healthier and more dynamic.

2.3.2 A new generation of communities-in-place has been produced

Regardless of present and future crises, our societies should improve their cohesion and communities-in-place. Unfortunately, however, the current trends are overall in the opposite direction. Modern society is de-skilling people in practicing cooperation ([Sennett, 2012](#)), as a result, premodern communities such as families, neighbourhoods and villages – the traditional communities-in-place of the past – are progressively disappearing ([Giddens, 1991](#)). At the same time, intentional communities of the 20th century, which have been driven by strong ideologies and a sense of belonging, are weakening. Loose, flexible and temporary social networks are increasingly replacing such communities and facilitating fragile social systems. Once we begin to search for initiatives like these in society, various interesting cases appear – for example, groups of families who decide to share services to reduce economic and environmental costs as well as create new forms of neighbourhoods, such as cohousing (new models of production based on local resources and engaging local communities) or social enterprises. These are radical social innovations which appear as creative and successful communities. In recent decades, a growing number of collaborative organisations have merged with digital social networks. In short, they have produced a new generation of communities-in-place.

2.3.3 Communities-in-place as spaces of possibility are already localised

A resilient community is based on the elastic connection between assertion of individuality and connectivity within a community ([Williams & Cuoco, 2016](#)). As noted by [Manzini, E. and Till \(2015\)](#), the first and most evident contemporary resilient communities exist by choice, are multiple and non-exclusive and demand no special level of commitment. A second characteristic, which is dependent on the first, is that those who participate in such communities are looking to build their own solutions and identities by making personal choices from among the various options proposed. A third characteristic concerns the nature of contemporary communities: they are not to be seen as stable, lasting, homogeneous groups, but as spaces of possibility – ecosystems where a variety of social ties can coexist, different choices can be made and diverse strategies can be adopted to exchange

ideas, solve problems and introduce new perspectives. The fourth characteristic relates to community building processes. Building a resilient community requires the existence of communities-in-place.

3. RESEARCH DESIGN

3.1 Research object: Changji Corner

Datong District Community Planner Studio – ‘Changji Corner’ – included removing old dormitory walls and reorganising courtyards. It is expected to provide an open and friendly community public space to meet the diverse needs of the community residents. The proportion of elderly people living alone near the studio ranks in the top three accommodation types in Taipei (*Figure 3*). Since its establishment in 2015, the studio has carried out many local activities related to population issues, such as discussion of the local context in an old photo exhibition.

Population: 130,929
the elder: over15%
elderly who live alone: Third of TP
The age of visitors: Between 51-60

Figure 3. Elderly population statistics for Changji Corner

Figure 4. Targets of Changji Corner

Through seniors’ description of the community memory, the community planners guide them to consider the current situation of the community and urban development policies. The community’s historical texture will be reflected through community activities. According to the survey, the number of visits to the Changji Corner Studio is highest among those aged 51–60. Therefore, the community planner guided the elders to understand their cultural meanings, realise their own community situation and activate their imagination. Through the design of various interactive devices, the elderly

were invited to participate and collect textures from around the grounds, extracting the unique creativity of the community elders. To date, the implementation efficiency of the Changji Corner Project has been significant and its targets have been achieved through various local actions (*Figure 4*), including more than 500 interviews, 6,000 visitors, and over 1,700 Facebook fans. The space is expected to bring community planners and community residents together to carry out more social actions outside of public policy.

3.2 Research process and conceptual framework

This study explores the relevance of community identity and community involvement for community autonomy. It then investigates the involvement of community planners, who can increase community identity and participation. Finally, the study explores the impact of community planners on community autonomy. Visualisations of this conceptual framework (*Figure 5*) and the research process (*Figure 6*) are provided below.

Figure 5. Conceptual framework

Figure 6. Research process

3.3 Research hypotheses and applications

In order to achieve the goal of a resilient community, residents actively organise meaningful community activities to gradually develop their community identity, and community planners help to advocate for their

rights and powers. This study emphasises the importance of community autonomy and argues that the existence of community planners is necessary for the cohesion and development of a community. In light of the purpose of this study, the following five hypotheses are proposed to verify that community autonomy and community planners have a positive impact on building resilient communities (*Table 3*).

Table 3. Research hypotheses and analytical methods

	Hypothesis	Analytical Method
H1	Community identity has a positive impact on community autonomy.	Regression analysis
H2	Community participation has a positive impact on community autonomy.	
H3	Community planners significantly enhance community identity.	
H4	Community planners significantly increase community participation.	Independent sample <i>t</i> -test
H5	Community planners significantly increase community autonomy.	

3.4 Research objects and sampling methods

This study takes the community planner studio ‘Changji Corner’ (see *Figure 7*) as the research axis. The sampling range focused on the studio, with a radius of 400 to 800 meters that takes roughly 5–10 minutes to walk (based on the recommended walking distance and time indicated in the urban road sidewalk design manual). A total of 80 valid questionnaires were collected, and the data were analysed using SPSS.

Figure 7. Research scope

3.5 Questionnaire design

The design of the questionnaire was based on community autonomy and the relevant community planning literature (Zhizhen and Yazhen, 2012). It is divided into four parts. The first focuses on collecting basic information about the participant, while the second, third and fourth address various facets of their respective variables: degree of community recognition, degree of public participation and awareness of Changji Corner. The corresponding items were scored on a five-point Likert scale (*strongly agree, agree, neutral, disagree, strongly disagree*) to test their relevance to their respective constructs. The items are described in detail below (Tables 4–7).

Table 4. Community autonomy items (1)

Variable	Facet	Items
Community identity	Neighbourhood attraction	1-1 Emotions for the community
		1. The community I live in is an enviable community.
		2. I hope to live in this community for a long time.
		3. I can quickly tell the advantages of the community.
	Neighbourhood interaction	4. I am very proud to live in this community.
		1-2 Interaction with the community
		5. I met my neighbours and stopped to say hello or chat.
		6. I am always willing to help if my neighbours are in trouble.
		7. When I have difficulties, my neighbours will always lend a helping hand.
		8. My relationship with my neighbours is trusting each other.

Table 5. Community autonomy items (2)

Variable	Facet	Items
Community participation	Attend on own initiative	2-1 Participation in community affairs
		9. I will learn about the community's information, issues and trends.
		10. I will attend meetings on community activities, planning and decision-making.
		11. I served as a volunteer or community organisation cadre in the community.
		12. I will support and share the results of community decision-making.
		2-2 Interaction with the community
	Execute actively	13. I am willing to work with residents to make the community better.
		14. I am willing to pay or contribute to the community.
		15. I am willing to question or suggest the policy of the community.
		16. I am willing to work with residents to make decisions about the future of the community.

Table 6. Community planner items

Variable	Facet	Items
Community planner	Neighbourhood attraction	3-1 Cognition of Changji Corner
		17. I know where Changji Corner is.
		18. I know what Changji Corner is doing.
		19. I know the opening hours of Changji Corner.
		20. I know the meaning of Changji Corner.

Neighbourhood interaction	3-2 Participation in Changji Corner
	21. I participated in the action of Changji Corner.
	22. Participating in Changji Corner made me understand the community better.
	23. I question and comment on community action in Changji Corner.
	24. I am willing to make the community better with Changji Corner.

Table 7. Basic attribute items

25. Gender: ☐ Male ☐ Female
26. Age: ☐ Under 20 years old ☐ 21–35 years old ☐ 36–50 years old ☐ 51–65 years old ☐ 65 years old or older
27. Marriage: ☐ Married ☐ Unmarried ☐ Other
28. Housing: ☐ Own ☐ Lease ☐ Other
29. Occupation: ☐ Agriculture/fishery/poultry ☐ Public employees ☐ Industry ☐ Self-employment ☐ Service industry ☐ Business ☐ None (including retirement) ☐ Other
30. Education level: ☐ Below the national level ☐ Country (first) middle ☐ High school (job) ☐ Junior college ☐ Research institute
31. Average monthly income: ☐ 20,000 or less ☐ 20,001–40,000 ☐ 40,001–60,000 ☐ 60,001–80,000 ☐ 80,001–100,000 ☐ 100,001 or above
32. Local residence time: ☐ 5 years or less ☐ 6–10 years ☐ 11–15 years ☐ 16–20 years ☐ 21–25 years ☐ 26–30 years ☐ 30 years or more
33. Community participation experience: ☐ 2 years or less ☐ 2–5 years ☐ 5–10 years ☐ 10–15 years ☐ 15–20 years ☐ 20 years or more

4. RESULTS AND DISCUSSIONS

4.1 Basic attributes analysis

This study used a paper questionnaire to conduct a random sample survey. The investigation lasted from December 15, 2017, to January 15, 2018. A total of 80 questionnaires were collected, all of which were valid. The statistical analysis of the demographic data is presented in *Tables 8 and 9*. Respondents' ages ranged from less than 20 to over 65 years old. One-third (33%) were over 65 years old. Regarding gender, 44 were men and 36 were women. Those who had lived in the local area for more than 31 years accounted for 48.75% of the sample, and those who owned their home accounted for 58.75%. More than 68.75% of the sample had below a high school (vocational school) level of education, and university graduates accounted for 26.25%. A total of 48 respondents had an average monthly income of less than 20,000, accounting for 60% of the sample. Finally, 63.75% of participants had spent less than two years in community affairs.

Table 8. Distribution of demographic variables (*N* = 80) (1)

Demographic variable	<i>n</i>	Percentage
<u>Education</u>		
Elementary school	19	23.75
Junior high school	16	20.00
High school	20	25.00
University	21	26.25
Research institute or above	4	5.00
<u>Average monthly income</u>		
Under 20,000	48	60.00
20,001–40,000	21	26.25
40,001–60,000	15	18.75
60,001–80,000	2	2.50
80,001–100,000	0	0.00

100,001 or above	3	3.75
<u>Community participation experience</u>		
Under 2 years	51	63.75
2–5 years	10	12.50
5–10 years	6	7.50
10–15 years	3	3.75
15–20 years	3	3.75
20 years or above	7	8.75

Table 9. Distribution of demographic variables ($N = 80$) (2)

Demographic variable	<i>n</i>	Percentage
<u>Gender</u>		
Male	44	55.00
Female	36	45.00
<u>Age</u>		
Under 20 years old	7	8.75
21–35 years old	12	15.00
36–50 years old	16	20.00
51–65 years old	18	22.50
65 years old or older	27	33.75
<u>Marital status</u>		
Married	59	73.75
Unmarried	18	22.50
Other	3	3.75
<u>Housing</u>		
Own	47	58.75
Lease	23	28.75
Other	10	12.50
<u>Occupation</u>		
Agriculture/fishery/poultry	0	0.00
Public employees	0	0.00
Industry	4	5.00
Self-employment	5	6.25
Service industry	22	27.50
Business	11	13.75
None (including retirement)	24	30.00
Other	14	17.50
<u>Duration of local residence</u>		
5 years or less	12	15.00
6–10 years	8	10.00
11–15 years	8	10.00
16–20 years	5	6.25
21–25 years	4	5.00
26–30 years	4	5.00
30 years or more	39	48.75

4.2 Questionnaire reliability analysis and factor analysis

A total of 80 valid questionnaires were collected. The results of the reliability and validity analysis showed that the Cronbach's α values for the community identity, community participation and community planner variables were 0.837, 0.840 and 0.89, respectively. This outcome indicates high confidence in the scales used (*Tables 10 and 11*).

Table 10. Reliability analysis

Facet	Cronbach's α	Items
Community identity	0.837	1–8
Community participation	0.840	9–16
Community planner	0.893	17–24

Table 11. Factor analysis

Facet	Items	Kaiser-Meyer-Olkin (KMO)	Variance explained (%)
<u>Community identity</u>			
Neighbourhood attraction	1–4	0.802	69.42
Neighbourhood interaction	5–8	0.801	70.20
<u>Community participation</u>			
Attend on own initiative	9–12	0.766	67.58
Execute actively	13–16	0.819	69.40
<u>Community planner</u>			
Neighbourhood attraction	17–20	0.822	73.32
Neighbourhood interaction	21–24	0.814	79.11

4.3 Discussion of relevance

4.3.1 Discussion of regression analysis and research purpose

4.3.1.1 H1: Community identity has a positive impact on community autonomy

Overall, each facet of community identity is significantly correlated with autonomy (Table 12). The overall explanatory power is 82.6% and the β value is 0.167. The values for neighbourhood attraction ($\beta = .226$, $p < .001$) and neighbourhood interaction ($\beta = .233$, $p < .000$) indicate that the influence of community identity on community autonomy is positive.

Table 12. Regression of community identity on community autonomy

Community identity	Community autonomy			
Facet	R^2	F	β	
Neighbourhood attraction	-	-	.226***	* $p < .05$
Neighbourhood interaction	-	-	.233***	** $p < .01$
Community identity	.826	47.875	.167	*** $p < .001$

4.3.1.2 H2: Community participation has a positive impact on community autonomy

Overall, each facet of community participation is significantly correlated with autonomy (Table 13). The overall explanatory power is 83.6% and the β value is 0.164. The values for the attend initiatively ($\beta = .256$, $p < 0.000$) and execute actively ($\beta = .230$, $p < 0.000$) variables indicate that the influence of community participation on community autonomy is positive.

Table 13. Regression of community participation on community autonomy

Community participation	Community autonomy			
Facet	R^2	F	β	
Attend initiatively			.256***	* $p < .05$
Execute actively			.230***	** $p < .01$
Community participation	.836	51.240	.164	*** $p < .001$

4.3.2 Results of independent sample *t*-test

To verify that the involvement of community planners enhances community identity, community participation and community autonomy, the study divided subjects into two groups (22 respondents who participated in Changji Corner and 58 who did not) to conduct an independent sample *t*-test.

4.3.2.1 H3: Community planners significantly enhance community identity

The results show a p -value of .022 (*Table 14*), indicating that the two groups had significant differences in community identity based on participation or non-participation in community activities organised by community planners. The average number of those who did participate in the community was higher than those who did not participate. Community involvement helps promote community identity.

Table 14. Relationship between community events and community identity

<u>Events organised by Changji Corner</u>		<u>Community identity</u>		
	<i>M</i>	<i>SD</i>	<i>Sig.</i>	<i>t</i>
Non-participation	3.463	0.661	0.022	-2.335
Participation	3.852	0.666		

4.3.2.2 H4: Community planners significantly increase community participation

The results show a p -value of < .001 (*Table 15*), indicating that the two groups had significant differences in community participation due to participation or non-participation in community planning. The average number of participants was higher than that of non-participants, so the entry of planners helps increase community participation.

Table 15. Relationship between community events and community participation

<u>Events organised by Changji Corner</u>		<u>Community participation</u>		
	<i>M</i>	<i>SD</i>	<i>Sig.</i>	<i>t</i>
Non-participation	3.290	0.619	0.000	-4.076
Participation	3.943	0.646		

4.3.2.3 H5: Community planners significantly increase community autonomy

The results show a p -value of .001 (*Table 16*), indicating that the two groups had significant differences in community participation due to participation or non-participation in community planning. The average number of participants was higher than the number of non-participants. The entry of community planners helps increase community autonomy.

Table 16. Relationship between community events and community autonomy

<u>Events organised by Changji Corner</u>		<u>Community autonomy</u>		
	<i>M</i>	<i>SD</i>	<i>Sig.</i>	<i>t</i>
Non-participation	3.377	0.576	0.001	-3.561
Participation	3.897	0.587		

5. CONCLUSIONS

Purpose one (P1) is to understand the relationship between community awareness and community involvement in community autonomy and purpose two (P2) is to determine whether community autonomy is affected by community planners. Based on the statistical analysis, the research hypothesis and the purpose verification results are summarised as follows (*Table 17*).

Table 17. Results of research hypothesis and purpose verification

Research hypothesis		Validation results	Research purpose
H1	Community identity has a positive impact on community autonomy	Established	P1
H2	Community participation has a positive impact on community autonomy	Established	P1
H3	Community planners significantly enhance community identity	Established	P2
H4	Community planners significantly increase community participation	Established	P2
H5	Community planners significantly increase community autonomy	Established	P2

The hypotheses of this study were all verified. First, community identity and community participation have a positive impact on improving community autonomy. Second, local community planners have a significant and positive impact on community identity, community involvement and community autonomy.

However, some findings still indicate that the public's awareness of community planners is weak, which in turn affects their willingness to participate in community activities. The unclear position and ambiguous duties of community planners affect the construction of resilient communities. Local community planners can effectively help community residents build the foundation for a resilient community and develop such communities into powerful and responsible systems. This is the most significant issue for community planners. In light of the relationship established between community planners and the community, this study makes the following recommendations.

5.1 Enhance the possibility of community planners

Community planners should rearrange their roles and actively engage in community design to promote community-led solutions and play an active role in tackling the issues of revitalising and reconstructing spaces, changing lifestyles and upgrading the quality of living spaces. They should reorganise the definition of 'community planner', focus their business on community integration and use community awareness as the basis for community governance. Community planners should be encouraged to communicate with planners in different communities, share their community experiences and serve as the basis for ongoing community research. However, processes that promote community autonomy should retain their norms and public acceptance.

5.2 Maximally engage residents to work with community planners

With the professional assistance, community planners should determine the commonality of the community, strengthen its internal sense of belonging, provide a new perspective for community issues, eliminate community rigidities and lay the foundation for a resilient community. They should work with community residents to find ways to accumulate cultural capital and assist in determining the best allocation of community resources. In this process, spatial sensory and community innovation capacity could be regenerated. Residents could then form a truly resilient community by

participating in and redefining the community to adapt to the needs of a disaster.

5.3 Community planners will bring direct and positive changes to communities

In order to improve communities and open spaces, community planners should bring direct and positive changes to communities, encourage residents and social resources to participate in co-creation, transform open spaces into areas that are both enjoyable and functional, and combine all community resources. Co-creation with community planners involves fully participatory residents and helps people create and sustain public spaces that build resilient communities and eventually fulfil common needs.

REFERENCES

- Bellah, R. N., Madsen, R., Sullivan, W., Swidler, A., & Tipton, S. M. (1985). *Habits of the Heart: Middle America Observed*. Hutchinson London.
- Forester, J. (1984). "Bounded Rationality and the Politics of Muddling Through". *Public Administration Review*, 44(1), 23-31. doi: <https://doi.org/10.2307/975658>.
- Furze, G., Donnison, J., & Lewin, R. J. (2008). *The Clinician's Guide to Chronic Disease Management for Long-Term Conditions: A Cognitive-Behavioural Approach*. M & K Update Limited.
- Giddens, A. (1991). *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Stanford, CA: Stanford University Press.
- Huang, L.-I. (2004). "A Turning of the Paradigm-Participatory Planning and Historical Site Preservation During the 1990s in Taipei". *Journal of Architecture*, 351, 78-83.
- Hung-Jen, T., & Waley, P. (2002). "Is It a Change of the Planning Institution? - Discussion About the Community Planner Institution". Proceedings of Globalization Conference, Taipei.
- Lee, Y.-J. (2017). "Building Resilient Cities through Community Empowerment: Principles and Strategies for Taiwan". *International review for spatial planning and sustainable development*, 5(2), 35-46.
- Lin, C. (2010). "The Way out for the Community". *Space magazine*.
- Manzini, E. (2015). *When Everybody Designs: An Introduction to Design for Social Innovation*. Cambridge, MA: The MIT Press.
- Manzini, E., & Till, J. (Eds.). (2015). *Cultures of Resilience: Ideas*. London: Hato Press.
- McMillan, D. W., & Chavis, D. M. (1986). "Sense of Community: A Definition and Theory". *Journal of Community Psychology*, 14(1), 6-23. doi: [https://doi.org/10.1002/1520-6629\(198601\)14:1<6::AID-JCOP2290140103>3.0.CO;2-I](https://doi.org/10.1002/1520-6629(198601)14:1<6::AID-JCOP2290140103>3.0.CO;2-I).
- Perkins, D. D., & Zimmerman, M. A. (1995). "Empowerment Theory, Research, and Application". *American Journal of Community Psychology*, 23(5), 569-579. doi: <https://doi.org/10.1007/BF02506982>.
- Pimbert, M. P., & Pretty, J. N. (1997). "Parks, People and Professionals: Putting 'Participation' into Protected Area Management". *Social change and conservation*, 16, 297-330.
- Rappaport, J. (1981). "In Praise of Paradox: A Social Policy of Empowerment over Prevention". *American Journal of Community Psychology*, 9(1), 1-25.
- Sennett, R. (2012). *Together: The Rituals, Pleasures and Politics of Cooperation*. New Haven: Yale University Press.
- Stone, C. N., & Sanders, H. T. (1987). *The Politics of Urban Development*. University Press of Kansas.
- Thorpe, A. (2015). "Designing Conditions for 'Active' Redundancy or, the Difference between People and Phone Boxes". *Cultures of Resilience Ideas*. London: Hato Press. Retrieved from <http://culturesofresilience.org/wp-content/uploads/resources/CoR-Booklet-forHomePrinting.pdf#page=31>.
- Williams, D., & Cuoco, R. (2016). "Co-Creating a City Spectacle: Fashion as Facilitator of Social Ties and Forms: an Opportunity to Explore Fashion as Participatory Design in a City Locale". Retrieved from <http://culturesofresilience.org/co-creating-a-city-spectacle/>.
- Xia, Z. (1999). "Citizen Participation and Local Autonomy: Taiwan's Community Empowerment". *Cities and Design*, (9-10), 175-185.