韌性治理與氣候變遷政策接受度是否存有關聯性? 台灣城市的差異和形式?

Is There Relationship between Resilient Governance and Acceptance of Climate Change Policy in Taiwan: Differences and Patterns

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Abstract

Resilience is the ongoing capacity of cities to resist, adapt, transform and prepare for shocks and stresses, be they of environmental, social, institutional or economic origin, with the aim of maintaining the functions of the city and improving response to future shocks (Figueiredo, Honiden, & Schumann, 2018). The purpose of this study was to examine the predictive power of each dimensions of resilient governance (economic, social, environmental, institutional) on acceptance of climate change policy (ACCP) in a Taiwan sample. The sample consisted of 1089 employees of the Environmental Protection Administration (EPA) from six special municipalities (Taipei, New Taipei, Taoyuan, Taichung, Tainan, Kaohsiung). The research found that for all six cities economic dimension of resilient governance was significantly negatively correlated with acceptance of climate change policy (ACCP), while social and institutional dimensions of resilient governance were significantly positively correlated with acceptance of climate change policy (ACCP). Moreover, institutional dimension of resilient governance that consistently predicted acceptance of climate change policy (ACCP) of EPA employees across six special municipalities in Taiwan.

Tables 1 to 6 describe the relationships amongst the dimensions of RG and acceptance of climate change policy (ACCP) in each EPA of six municipalities. The results indicated that economic dimension of RG was significantly negatively correlated with ACCP, while social dimension and institutional dimension were significantly positively correlated with ACCP for EPAs in six municipalities.

Table 1. Intercorrelations amongst RGs and ACCP in Taipei city's EPA (n=216)

| Variable | M | SD | Economic | Social | Environmental | Institutional | ACCP |
|---------------|-------|------|----------|--------|---------------|---------------|-------|
| Economic | 18.42 | 5.89 | (.78) | | | | |
| Social | 26.56 | 5.76 | 34** | (.56) | | | |
| Environmental | 27.13 | 4.53 | 16* | .19** | (.53) | | |
| Institutional | 31.19 | 4.84 | 33** | .30** | .18* | (.56) | |
| ACCP | 31.04 | 5.73 | 25** | .24** | .21* | .14* | (.82) |

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| Table 2. Intercorrelations amongst RGs and ACCP | in New Tainei city's EPA (n=203) |
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| Variable | M | SD | Economic | Social | Environmental | Institutional | ACCP |
|---------------|-------|------|----------|--------|---------------|---------------|-------|
| Economic | 24.02 | 4.34 | (.72) | | | | |
| Social | 25.04 | 4.35 | 21** | (.50) | | | |
| Environmental | 30.13 | 5.13 | 14* | .17** | (.42) | | |
| Institutional | 31.47 | 4.42 | 43* | .25* | .20* | (.56) | |
| ACCP | 32.18 | 4.82 | 28* | .30* | .24** | .40* | (.64) |

Table 3. Intercorrelations amongst RGs and ACCP in Taoyuan city's EPA (n=169)

| Variable | M | SD | Economic | Social | Environmental | Institutional | ACCP |
|---------------|-------|------|----------|--------|---------------|---------------|-------|
| Economic | 26.10 | 5.79 | (.73) | | | | |
| Social | 25.44 | 5.65 | 21* | (.52) | | | |
| Environmental | 30.16 | 4.42 | 17* | .25** | (.44) | | |
| Institutional | 31.70 | 4.72 | 48** | .34* | .18** | (.60) | |
| ACCP | 40.13 | 5.65 | 34** | .40** | .30* | .40** | (.65) |

Table 4. Intercorrelations amongst RGs and ACCP in Taichung city's EPA (n=187)

| Variable | M | SD | Economic | Social | Environmental | Institutional | ACCP | |
|---------------|-------|------|----------|--------|---------------|---------------|-------|--|
| Economic | 25.33 | 4.90 | (.82) | | | | | |
| Social | 23.10 | 4.50 | 43* | (.67) | | | | |
| Environmental | 30.23 | 4.42 | 01 | .19* | (.52) | | | |
| Institutional | 32.10 | 4.62 | 46** | .40* | .12* | (.64) | | |
| ACCP | 26.07 | 3.42 | 32* | .31* | .24* | .30* | (.72) | |

Table 5. Intercorrelations amongst RGs and ACCP in Tainan city's EPA (n=168)

| Variable | M | SD | Economic | Social | Environmental | Institutional | ACCP |
|---------------|-------|------|----------|--------|---------------|---------------|-------|
| Economic | 18.63 | 4.70 | (.76) | | | | |
| Social | 28.04 | 4.30 | 29** | (.54) | | | |
| Environmental | 23.21 | 4.22 | 25** | .19* | (.44) | | |
| Institutional | 30.35 | 4.44 | 52** | .20* | .18* | (.75) | |
| ACCP | 31.47 | 3.40 | 46** | .43** | .38** | .46** | (.72) |

Table 6. Intercorrelations amongst RGs and ACCP in Kaohsiung city's EPA (n=146)

| Variable | M | SD | Economic | Social | Environmental | Institutional | ACCP |
|---------------|-------|------|----------|--------|---------------|---------------|-------|
| Economic | 25.50 | 4.24 | (.79) | | | | |
| Social | 24.60 | 4.14 | 17* | (.50) | | | |
| Environmental | 32.30 | 5.42 | 18* | .18* | (.45) | | |
| Institutional | 32.02 | 5.37 | 35* | .29* | .26** | (.66) | |
| ACCP | 30.31 | 3.65 | 35* | .27* | .30* | .52** | (.70) |

Note: Reliabilities of scales were in parentheses along diagonals. *p<.05. **p<.01. M, Mean; SD, standard deviation; ACCP, acceptance of climate change policy.

The results indicated that Institutional dimension was the only resilient governance that consistently predicted ACCP at five EPAs of municipalities, except Taichung city. Therefore, the significance of RG as related to collaboration, negotiation, and joint policymaking rests within the collaborative relationships between cities, groups, or civil society.

References