

## PLANNERS' ROLE ORIENTATIONS AND PUBLIC PARTICIPATION: A BASELINE ASSESSMENT FOR UNDERSTANDING WHY THE PUBLIC CONTINUES TO BE EXCLUDED FROM DEMOCRATIC PROCESSES

Jason D. Rivera  
Molly Ranahan

---

*Despite formal mandates for public participation in planning, many communities continue to experience exclusion through procedural barriers, technocratic framing, and unequal power relations. Research and practice frequently emphasize participatory tools and formats, yet comparatively less attention is given to planners' internal role orientations—the professional self-understandings and normative commitments that shape how participation is designed, enacted, and interpreted. This manuscript develops a testable framework linking role orientations to audited participation quality and inclusion outcomes under organizational constraints.*

**Keywords:** public participation; planning practice; role orientation; democratic governance; inclusion; deliberation; technocracy; communicative planning; organizational constraints

---

## INTRODUCTION AND LITERATURE REVIEW

Public participation has long been treated as a core requirement of democratic planning and a practical source of legitimacy for public decisions. In principle, participation enables affected communities to contest priorities, introduce lived knowledge, and hold decision makers accountable, thereby improving both procedural fairness and substantive outcomes. In practice, however, participation often fails to function as an inclusive democratic channel: access remains uneven, deliberation is frequently constrained by technical framing and agenda control, and the influence of community input is routinely ambiguous or weak (Arnstein, 1969; Flyvbjerg, 1998; Innes & Booher, 2004). The result is a persistent gap between the *formal provision* of participation and the *realization* of inclusion in decision-making processes.

A large body of scholarship has mapped how exclusion can occur even in the presence of participatory mandates. Classic typologies argue that participation ranges from symbolic consultation to genuine power-sharing, and that institutional design determines whether participation redistributes authority or merely legitimizes predetermined outcomes (Arnstein, 1969; Fung, 2006). Subsequent work in deliberative democracy emphasizes that legitimacy depends not only on turnout but also on the quality of public reasoning, mutual justification, and the conditions under which participants can speak without domination (Habermas, 1984; Young, 2002). Planning theory has responded by developing communicative and collaborative approaches, positioning planners as facilitators of dialogue and joint learning across difference (Forester, 1999; Healey, 1997; Innes & Booher, 2004). Yet critiques of these approaches highlight that deliberation is never power-neutral: inequalities in knowledge, status, and institutional access shape which claims are heard, how conflict is managed, and what counts as a “reasonable” contribution (Fainstein, 2014; Flyvbjerg, 1998; Young, 2002). The literature therefore converges on a demanding implication: participatory outcomes cannot be understood solely by whether participation occurs, but by how it is structured, whose knowledge is recognized, and whether institutional arrangements enable public influence.

Within this broad consensus, empirical research has understandably focused on *participatory methods* and *institutional designs*: how meeting formats, online platforms, facilitation styles, outreach strategies, and decision rules influence the inclusiveness and deliberative quality of engagement (Forester, 1999; Fung, 2006; Innes & Booher, 2004). This tool- and design-centric emphasis has produced valuable guidance, but it can also obscure an important mechanism: participation is enacted through the discretionary judgments of planners and other street-level professionals who interpret mandates, define “relevant” information, structure agendas, and determine how feedback is documented and incorporated. The same formal method (e.g., a public meeting) can produce markedly different inclusion experiences depending on how it is organized, who is invited, how knowledge claims are treated, and whether a credible feedback loop exists (Forester, 1999; Innes & Booher, 2004). Consequently, explanations that treat participation primarily as a question of method risk under-specifying the role of professional agency in producing either inclusion or exclusion.

### *Participation as power and institutional design*

A first thematic strand conceptualizes participation as a contest over power rather than a neutral process of information gathering. Arnstein’s ladder remains influential precisely because it reframes participation as a distribution of decision authority, distinguishing tokenistic consultation from arrangements that enable citizens to shape outcomes (Arnstein, 1969). Building on this, power-oriented approaches emphasize that exclusion is not only a matter of attendance or access, but also a function of agenda-setting, procedural rules, and the strategic control of venues in which decisions are made. In development and governance studies, the “spaces of participation” framework similarly argues that who participates and what influence participation has depends on how participatory spaces are created, controlled, and connected to authoritative decision arenas (Gaventa, 2006). From this perspective, the crucial empirical question is not whether participation is offered,

but whether participation is positioned within an institutional architecture that meaningfully links public input to decisions.

Institutional design scholarship reinforces this point by specifying how participatory forums vary by scope, authority, and representational properties. Fung's work, for example, conceptualizes participation as a set of design choices that condition whether engagement yields deliberation, legitimacy, or accountability, and whether it includes diverse publics or privileged stakeholders (Fung, 2006). In planning contexts, this implies that inclusion outcomes are partly determined by design features that are often invisible in high-level mandates: the allocation of time to deliberation versus presentation, the presence of co-design mechanisms, the clarity of decision points, and the transparency of trade-offs and constraints. These elements are not merely technical; they reflect underlying judgments about whose knowledge is legitimate and what role the public should play.

### *Deliberation, communicative planning, and the limits of "process" reforms*

A second strand centers deliberation and communicative rationality as normative foundations for participatory planning. Deliberative theory argues that democratic legitimacy is strengthened when participants justify claims to one another under conditions that minimize coercion and domination (Habermas, 1984). In planning theory, collaborative and communicative approaches extend this logic to fragmented urban governance, treating planners as facilitators who can design interaction settings for mutual learning and negotiated agreement (Forester, 1999; Healey, 1997; Innes & Booher, 2004). Empirically, this tradition has generated useful accounts of how facilitation, iterative engagement, and joint fact-finding can reduce polarization and increase the practical feasibility of solutions (Forester, 1999; Innes & Booher, 2004).

At the same time, critical scholarship cautions against assuming that better "process" automatically produces inclusion. Power asymmetries can persist within deliberative forums, shaping participation through unequal capacities to speak, technical gatekeeping, and institutional incentives that privilege efficiency or risk avoidance over responsiveness (Flyvbjerg, 1998; Young, 2002). Young's critique is especially relevant for planning practice: democratic inclusion requires more than opportunities to speak; it requires institutional commitments that recognize difference, protect non-dominant forms of expression, and prevent the marginalization of disadvantaged groups through norms of "reasonable" discourse (Young, 2002). Similarly, justice-oriented planning scholarship argues that legitimacy must also be evaluated by distributive and recognition outcomes, not only by procedural adequacy (Fainstein, 2014). In short, the literature suggests that participation reforms must be assessed against both deliberative quality and equity implications, and that planners' everyday judgments can either counteract or reproduce exclusion.

### *Professional roles, discretion, and the production of participation in practice*

A third strand emphasizes that planning is enacted by professionals operating within institutional constraints and normative role expectations. Planning theory and practice research have long noted tensions among competing professional commitments—technical analysis, procedural neutrality, facilitation, advocacy, and political navigation—which can pull planners toward different interpretations of what "good" participation looks like (Campbell, 2018; Forester, 1982, 1999). Rather than a single stable professional identity, the literature depicts planning as inherently plural: planners are simultaneously analysts, administrators, mediators, and strategic actors, and these roles become salient in different organizational and political contexts (Forester, 1982, 1999).

This role pluralism matters because discretion is unavoidable in participatory governance. Even under detailed legal requirements, planners decide how to translate mandates into outreach strategies, meeting agendas, facilitation practices, and documentation standards. Public administration research on street-level bureaucracy

highlights how front-line professionals, working under resource constraints and ambiguous goals, effectively make policy through day-to-day decisions that shape clients' access and experiences (Lipsky, 2010). Planning practice exhibits similar dynamics: time pressure, limited staffing, and legal or political risk can narrow feasible options, while professional norms influence how planners respond to conflict, uncertainty, and competing claims. Consequently, exclusion can be produced not only by overt hostility to participation, but also by routinized managerial logics (e.g., emphasizing procedural compliance and schedule adherence) and technocratic framings that treat public input as "non-technical" or secondary to expert analysis (Flyvbjerg, 1998; Forester, 1999).

Despite these insights, much empirical participation research implicitly treats planners as neutral implementers of participatory tools rather than as actors whose internal role orientations shape the design and meaning of participation. Where professional roles are discussed, they are often theorized qualitatively or treated as background context, rather than measured as latent constructs and linked systematically to observable participation practices. This leaves a consequential gap in the evidence base: if participation outcomes depend on discretionary choices, then understanding persistent exclusion requires attention to *who planners believe they are* in the participation process, and how those orientations interact with organizational constraints.

### *Research gap and analytic focus*

The preceding literatures jointly indicate that (i) participation is fundamentally about power and institutional linkages to decisions (Arnstein, 1969; Fung, 2006; Gaventa, 2006), (ii) deliberative quality and equity are central evaluative dimensions but are fragile under conditions of inequality (Fainstein, 2014; Habermas, 1984; Young, 2002), and (iii) planners' discretionary judgments—shaped by professional role expectations and organizational constraints—are pivotal in translating mandates into practice (Forester, 1982, 1999; Lipsky, 2010). Yet the empirical integration of these strands remains limited. In particular, there is a need for a baseline framework that (a) measures planners' role orientations as a validated, multi-dimensional construct, (b) identifies latent profiles that reflect combinations of orientations, and (c) links those profiles to *observable* indicators of participation design quality and inclusion outcomes, while modeling the conditional effects of organizational constraints.

This paper addresses that gap by shifting the explanatory focus from participation as merely a method choice to participation as an outcome of professional role orientations operating within constrained organizational environments. Rather than assuming that participation failures are primarily "tool problems," we conceptualize persistent exclusion as a combined problem of professional self-understanding and institutional capacity.

### *Contributions*

The paper makes four contributions. First, it develops and validates a role-orientation inventory that captures planners' orientations toward technocratic expertise, communicative facilitation, advocacy/equity, managerial/compliance, and political navigation, enabling systematic measurement rather than purely theoretical typologies (Forester, 1999; Healey, 1997). Second, it derives a baseline typology of latent role-orientation profiles and describes how these profiles are distributed across organizational contexts. Third, it links role orientations to participation design quality and inclusion outcomes using multi-source evidence, combining planners' self-reports with a structured audit of participation artifacts, thereby reducing reliance on self-report alone (Arnstein, 1969; Fung, 2006). Fourth, it explicitly models organizational constraints (time, legal risk, leadership support, resources) as moderators and/or mediators of the orientation-to-practice relationship, clarifying why inclusion-oriented commitments may fail to translate into inclusive outcomes under high constraint conditions (Flyvbjerg, 1998; Lipsky, 2010). Together, these contributions reframe participation

reform as simultaneously a matter of institutional design, professional role formation, and organizational resourcing.

## CONCEPTUAL FRAMEWORK AND HYPOTHESES

### *Role orientations as action-guiding professional schemas*

We conceptualize planners' role orientations as relatively stable, action-guiding schemas that shape how professionals interpret participation mandates, define legitimate knowledge, and allocate discretion across competing demands. This conceptualization aligns with planning theory's long-standing observation that practitioners routinely navigate tensions among technical expertise, facilitation, equity advocacy, procedural management, and political negotiation (Forester, 1982, 1999; Healey, 1997). In practice, these orientations are activated in concrete design choices—how agendas are structured, what counts as “evidence,” how conflict is managed, and whether public input is translated into traceable decision modifications—thereby affecting both deliberative quality and perceived influence (Flyvbjerg, 1998; Innes & Booher, 2004).

Role orientations are also theorized as consequential because participation governance occurs under conditions of bounded time, resource scarcity, and legal or political risk. Under such conditions, front-line professionals effectively “make policy” through routine administrative decisions, including gatekeeping access and rationing voice (Lipsky, 2010). Participation outcomes thus reflect not only formal mandates and participatory tools, but also how professional orientations interact with organizational constraints to structure feasible options and acceptable risks (Fung, 2006; Gaventa, 2006).

### *From orientations to participation design, quality, and inclusion*

We distinguish three analytically related outcomes. First, *participation design choices* refer to concrete process features (outreach, accessibility accommodations, facilitation formats, agenda openness, and feedback-loop mechanisms). Second, *participation quality* captures the deliberative and accountability properties of the process (e.g., opportunities for two-way exchange, transparency about constraints, and credible pathways from input to decision). Deliberative theory suggests that legitimacy depends on reason-giving and reciprocal justification under conditions that limit domination (Habermas, 1984; Young, 2002). Third, *inclusion outcomes* refer to observable proxies for whether participation enables broader representation, reduces access barriers, and generates documented influence on decisions, consistent with the view that participation varies from token consultation to meaningful power-sharing (Arnstein, 1969; Fainstein, 2014).

### *Constraints as moderators and mediators*

Organizational constraints can operate as moderators when they weaken (or occasionally amplify) the translation of pro-inclusion orientations into inclusive practices. For example, high legal-risk environments may discourage open-ended deliberation or co-design even among planners who endorse equity-oriented participation, due to perceived exposure, procedural defensibility concerns, or leadership directives (Flyvbjerg, 1998; Lipsky, 2010). Constraints may also mediate effects by systematically shaping discretionary space: managerial orientations may increase risk-avoidant compliance behaviors that, in turn, reduce the adoption of power-sharing mechanisms and diminish feedback accountability (Lipsky, 2010).

### *Research questions and hypotheses*

Grounded in the above account, the study addresses:

- **RQ1 (Typologies).** What latent role-orientation profiles exist among planners, and how are they distributed across organizational contexts?
- **H2 (Technocracy/managerialism and quality).** Higher technocratic and managerial orientations are associated with lower participation quality and weaker feedback-loop mechanisms, controlling for organizational context and covariates.
- **H3 (Communicative/advocacy and inclusion).** Higher communicative and advocacy orientations are associated with more inclusive participation designs (targeted outreach, accessibility accommodations, co-design elements) and higher inclusion outcomes.
- **RQ4 (Constraints).** Which constraints (time pressure, legal risk, leadership support, resources) moderate and/or mediate the association between role orientations and participation quality/inclusion outcomes?

## **METHODS**

### *Overall design and logic of inference*

We employ a mixed-method, multi-source design that links planners' orientations (survey) to observable participation practices and outcomes (document audits) and to process mechanisms and lived experience (interviews). This design follows established mixed-method rationales in which quantitative modeling estimates associations and pathways while qualitative evidence interrogates mechanisms, contradictions, and boundary conditions (Creswell & Clark, 2017; Denzin, 2017). Triangulation across sources is used to reduce common-method bias and mitigate the limitations of self-report measures for politically salient topics such as inclusion and accountability (Denzin, 2017).

### *Study context and sampling*

#### **Agency sampling**

Municipal and regional planning agencies are sampled to maximize variation in institutional mandates, governance structures, and resource conditions. Variation is analytically important because participation is embedded in organizational routines and local political environments that shape discretion and risk management (Fung, 2006; Gaventa, 2006). Sampling aims for representation across agency size, jurisdiction type, and policy domain (e.g., land use, transportation, housing), enabling comparisons across contexts.

#### **Planner survey sampling**

The planner survey targets professional staff engaged in participation design or implementation. Recruitment uses professional networks and agency rosters with stratification where feasible (e.g., seniority, functional role). While probability sampling is often infeasible in professional populations, we mitigate selection threats through targeted outreach to underrepresented role categories and sensitivity analyses comparing early vs. late respondents (Groves et al., 2011).

## **Project and artifact sampling for audits**

The document audit samples participation plans, public notices, meeting records, comment summaries, and feedback-response documents from matched agencies/projects. Auditing multiple artifact types increases construct coverage because inclusion and influence are rarely captured by a single document (Arnstein, 1969; Fung, 2006). Where multiple planners contribute to a project, the audit links to the lead planner or the team member primarily responsible for participation design.

## **Interviews**

Semi-structured interviews are conducted with planners and community participants to elicit decision narratives about participation design, contested moments, and interpretations of public input. Interviews are purposively sampled to capture diversity in orientations, constraints, and inclusion experiences, consistent with qualitative sampling approaches oriented toward mechanism identification and comparative inference (Maxwell, 2013).

## *Measures and instruments*

### **Role orientation inventory**

Role orientations are measured using a multi-dimensional inventory with subscales for technocratic, communicative, advocacy/equity, managerial/compliance, and political/navigation orientations. Items are written to capture normative commitments and practice-relevant beliefs (e.g., what constitutes legitimate input, the planner's responsibility to redistribute voice, and the priority of procedural defensibility). Scale development follows standard psychometric recommendations: domain specification, item pooling, cognitive pretesting, and factor-analytic validation (DeVellis & Thorpe, 2021).

### **Participation design and practice measures**

Survey measures also capture self-reported participation practices (outreach breadth, accessibility accommodations, facilitation style, feedback incorporation) and perceived constraints (time pressure, legal risk, leadership support, staffing/budget). Because self-report may be affected by social desirability, these indicators are treated as complementary rather than definitive and are triangulated against audited artifacts and interview accounts (Denzin, 2017).

### **Document audit rubric**

Audits apply a structured rubric to score participation artifacts across: (i) outreach breadth and targeting, (ii) accessibility and accommodation, (iii) deliberative depth, (iv) transparency about decision points and constraints, and (v) feedback-loop strength (e.g., traceable responses to input). Structured coding improves comparability across cases and supports reliability assessment (Krippendorff, 2018). Coders receive standardized training and a codebook with decision rules and examples.

## Reliability procedures for audits

A subset of artifacts is double-coded to estimate inter-rater reliability. We report agreement using coefficients appropriate to measurement level and study design, including Cohen's  $\kappa$  for categorical judgments and intraclass correlation coefficients (ICC) for continuous composite scores (Cohen, 1960; Koo & Li, 2016; Shrout & Fleiss, 1979). Reliability results are used to refine the rubric and guide interpretation of audit-based findings (Krippendorff, 2018).

### *Ethics and data management*

All procedures follow standard human-subjects protections: informed consent, confidentiality, and secure data handling. Because participation processes may involve sensitive political relationships and potential retaliation risks, identifying information is stored separately from survey responses and interview transcripts; reporting uses anonymized descriptors and avoids identifying agencies unless explicit permission is obtained (United States. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1978). Data management follows reproducibility norms for mixed-method projects by maintaining versioned codebooks, analysis scripts, and audit logs (Peng, 2011).

## RESULTS

### *Descriptive statistics and reliability*

Table 1: Descriptive statistics for role-orientation subscales (1–7 means) and organizational constraints (standardized agency indices).

Variable	mean	std	min	max
Technocratic	3.87	1.57	1.00	7.00
Communicative	4.33	1.60	1.17	7.00
Advocacy	4.21	1.62	1.33	7.00
Managerial	4.00	1.69	1.17	7.00
Political	4.64	1.20	2.00	7.00
Legal risk	-0.19	0.75	-2.25	1.46
Time pressure	-0.19	1.09	-3.28	2.15
Resources	-0.18	1.03	-3.05	1.75
Leadership support	-0.07	0.73	-1.58	2.97

Table 2: Internal consistency reliability for the role-orientation inventory (6 items per subscale).

Subscale	Cronbach's $\alpha$
Technocratic	0.90
Communicative	0.91
Advocacy	0.91
Managerial	0.92
Political	0.82



### Role-orientation profiles

Figure 1 shows BIC across candidate profile solutions;  $K = 6$  is selected by minimum BIC. Table 4 summarizes the estimated profile signatures.

Table 3: Profile model fit indices from Gaussian-mixture latent profile approximation (selected  $K = 6$  by minimum BIC).

$K$	AIC	BIC	Entropy
2	5990	6080	0.97
3	5342	5478	0.99
4	4877	5060	0.99
5	4884	5114	0.94
6	4669	4945	0.95
7	4622	4946	0.95

Table 4: Estimated profile sizes and mean standardized subscale scores (planner-level).

Profile	$n$	Tech	Comm	Adv	Man	Pol
Managerial	123	+0.11	-0.96	-0.94	+1.52	-0.34
Communicative	111	-0.83	+1.35	+0.50	-0.81	-0.26
Advocacy	94	-0.93	+0.52	+1.49	-0.92	-0.27
Political	91	+0.03	+0.16	+0.11	-0.11	+1.69
Technocratic (2)	60	+1.69	-0.93	-0.91	-0.03	-1.04
Technocratic	41	+1.50	-0.95	-0.88	+0.05	+0.11

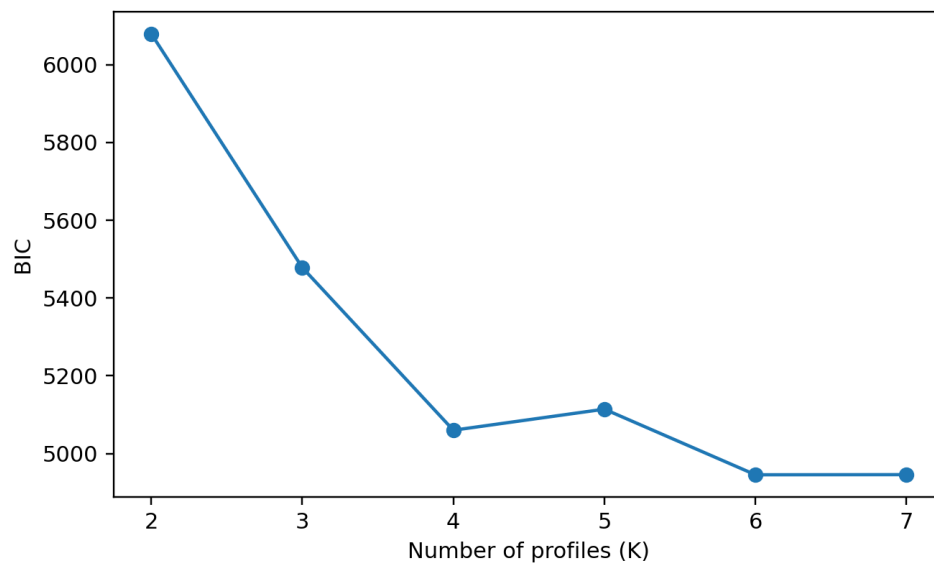


Figure 1: Model selection: BIC vs number of profiles ( $K$ ). Lower values indicate better fit with penalty for complexity.

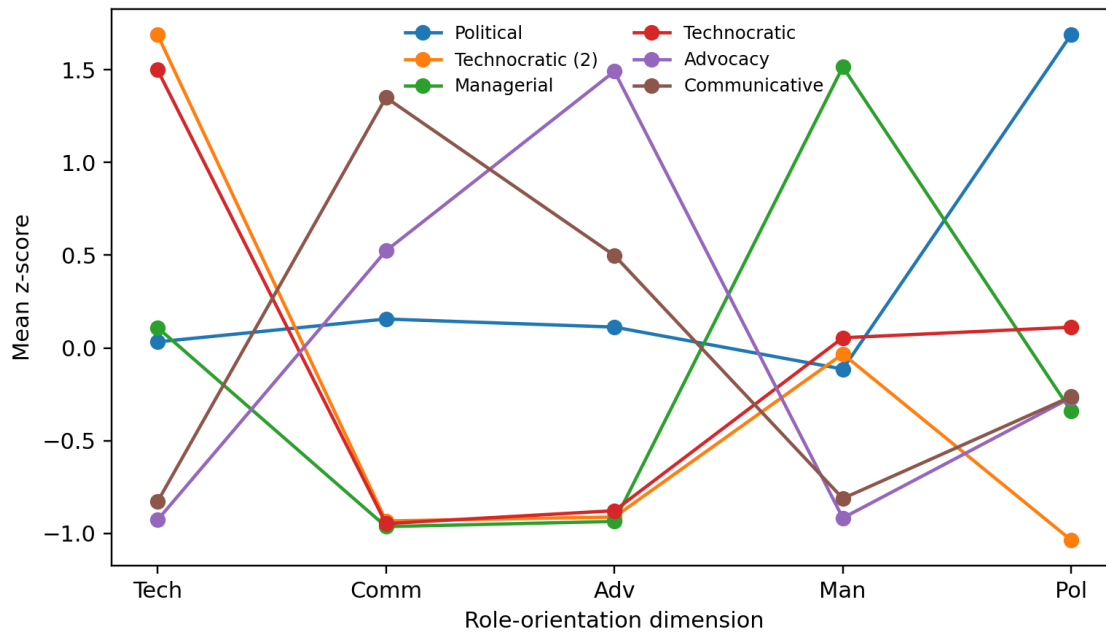


Figure 2: Estimated profile signatures: mean standardized subscale scores by profile label.

#### *Orientation-to-practice associations*

Participation quality varies by estimated profile (ANOVA  $F = 27.87$ ,  $p < 0.001$ ,  $\eta^2 = 0.55$ ). A pooled contrast between technocratic/managerial-leaning profiles and communicative/advocacy-leaning profiles yields Cohen's  $d \approx -2.48$  (synthetic).

Table 5: Cluster-robust OLS (agency-clustered SE) predicting audited participation quality (standardized).

Predictor	$\beta$	SE	$p$
Technocratic	-0.15	0.05	< 0.001
Communicative	+0.32	0.05	< 0.001
Advocacy	+0.27	0.05	< 0.001
Managerial	-0.13	0.03	< 0.001
Political	+0.11	0.03	< 0.001
Legal risk	-0.20	0.03	< 0.001
Time pressure	-0.10	0.03	< 0.001
Resources	+0.16	0.04	< 0.001
Leadership support	+0.18	0.03	< 0.001
Advocacy $\times$ legal risk	-0.11	0.03	< 0.001

#### *Moderation by legal risk*

Figure 4 illustrates the negative advocacy-by-legal-risk interaction: advocacy predicts higher quality under low legal risk, but the slope attenuates under high legal risk.

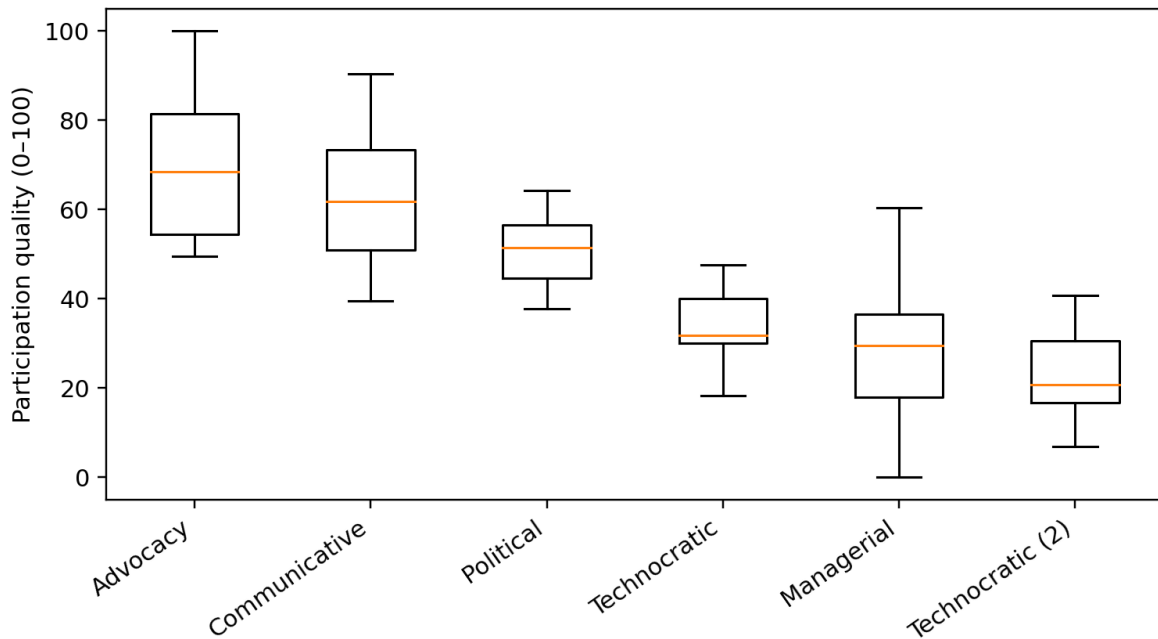


Figure 3: Audited participation quality by estimated role-orientation profile (project level). Boxes show IQR; whiskers exclude outliers.

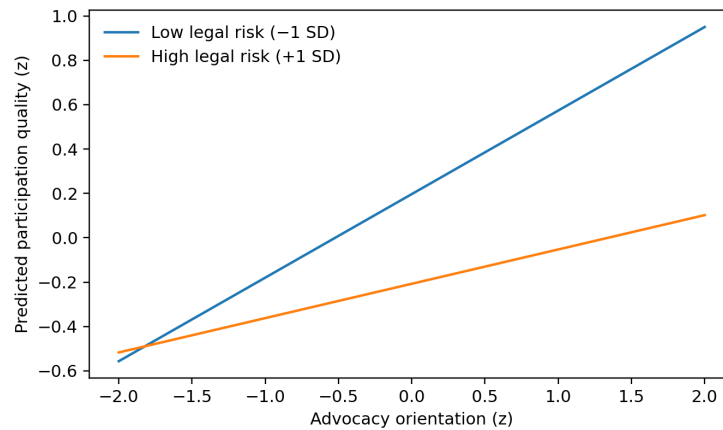


Figure 4: Moderation illustration: predicted participation quality vs advocacy orientation at low vs high legal risk (standardized).

#### *Inclusion outcomes and mediation*

Inclusion outcomes are strongly associated with participation quality ( $R^2 = 0.83$ ). Mediation results (Table 7) show a positive indirect pathway from advocacy orientation to inclusion via participation quality.

Table 6: Cluster-robust OLS (agency-clustered SE) predicting inclusion outcomes (standardized).

Predictor	$\beta$	SE	$p$
Participation quality	+0.63	0.10	< 0.001
Technocratic	-0.02	0.05	0.711
Communicative	-0.04	0.06	0.550
Advocacy	+0.12	0.07	0.085
Managerial	-0.16	0.07	0.029
Legal risk	-0.11	0.04	0.013
Time pressure	-0.13	0.03	< 0.001
Leadership support	+0.05	0.04	0.199
Advocacy $\times$ legal risk	-0.04	0.03	0.174

Table 7: Bootstrap mediation: indirect effect of advocacy orientation on inclusion via participation quality (standardized; resampled projects).

Indirect (a <b><math>\times</math></b> b)	95% CI low	95% CI high	Bootstrap $B$
+0.18	+0.09	+0.29	350

Table 8: Inter-rater reliability for the audited participation quality score on a double-coded subset.

Metric	Value	Double-coded projects
ICC(2,1)	0.95	37

### *Audit reliability*

## ANALYSIS PLAN

### *Preprocessing and missing data*

We conduct range checks, attention checks, and descriptive diagnostics. Missingness patterns are reported and assessed for plausibility. Where appropriate, multiple imputation is used for covariates and scale items under assumptions consistent with missing-at-random mechanisms; imputation models include predictors of missingness and all analysis variables to reduce bias (Rubin, 1987; van Buuren, 2012). Robustness checks compare complete-case and imputed estimates.

### *Scale validation and measurement invariance*

We validate the role-orientation inventory using confirmatory factor analysis (CFA) with fit indices and residual diagnostics. CFA is appropriate for testing hypothesized measurement structures and supporting construct validity when theory specifies factor membership. Internal consistency is reported using reliability indices suitable for multi-item scales (Cronbach, 1951; DeVellis & Thorpe, 2021). Because comparisons across contexts are central to the study, we evaluate measurement invariance across key groups (e.g., seniority, jurisdiction type). Invariance testing follows established hierarchies (configural, metric, scalar) and interpretive guidance (Meredith, 1993; Vandenberg & Lance, 2000).

### *Latent profiles of role orientations (RQ1)*

We identify role-orientation profiles using latent profile analysis (LPA) for continuous subscale indicators (or latent class analysis when indicators are modeled categorically). Mixture modeling is used to capture qualitatively distinct configurations of orientations rather than assuming a single continuous continuum (Lanza et al., 2003; Lazarsfeld, 1968). Model selection considers information criteria (AIC/BIC), classification diagnostics (e.g., entropy), and substantive interpretability (Celeux & Soromenho, 1996; Nylund et al., 2007). Profile stability is assessed via sensitivity analyses across starting values and alternative covariance specifications (Lanza et al., 2003).

### *Testing H2–H3 with multilevel/cluster-robust models*

To evaluate associations between orientations and audited participation quality, we estimate regression models that account for clustering by agency and (where relevant) by planner or project. Cluster-robust standard errors are used when the primary concern is correlated residuals within clusters, and multilevel models are used when estimating variance components and cross-level interactions is substantively central (Cameron & Miller, 2015; Raudenbush & Bryk, 2002). We report standardized effect sizes alongside coefficient estimates and confidence intervals to support comparability across outcomes (Cohen, 2013).

### *Path modeling from orientations to inclusion outcomes*

To test the conceptual pathway from role orientations to participation quality and inclusion outcomes, we estimate structural equation models (SEM) integrating measurement and structural components when sample size and measurement quality support this approach (Bollen, 1989). SEM is used to evaluate direct and indirect effects simultaneously, reducing bias from omitted mediators and enabling theory-consistent tests of the proposed framework (Bollen, 1989). Model fit, residuals, and alternative specifications (e.g., partial mediation) are examined to assess robustness.

### *Moderation and mediation of constraints (RQ4)*

Constraints are tested as moderators via interaction terms (e.g., advocacy  $\times$  legal risk) and as mediators when theory suggests that constraints operationalize organizational bottlenecks translating orientations into practice. Indirect effects are evaluated using bootstrap confidence intervals, which are recommended for mediation because sampling distributions of product terms are often non-normal (MacKinnon, 2012; Preacher & Hayes, 2008). Where multiple hypothesis tests are conducted across correlated outcomes, we control false discovery rates or report adjusted *p*-values alongside unadjusted values and emphasize effect sizes (Benjamini & Hochberg, 1995).

### *Qualitative analysis and integration*

Interview data are analyzed thematically to identify mechanisms linking orientations to design choices (e.g., framing, agenda control, responses to conflict) and to locate “discretion points” where inclusive intentions succeed or fail under constraints (Maxwell, 2013). Integration occurs through joint displays and narrative weaving: quantitative patterns motivate targeted qualitative probes, and qualitative findings are used to interpret coefficients, explain heterogeneity, and refine the typology (Creswell & Clark, 2017).

## VALIDITY, RELIABILITY, AND LIMITATIONS

### *Construct validity and triangulation*

Construct validity is strengthened by measuring key concepts via multiple sources: orientations through validated scales, participation practices through artifact audits, and mechanisms through interviews. Triangulation reduces reliance on any single measure and helps distinguish rhetorical commitments from implemented practices (Denzin, 2017; Krippendorff, 2018). We further evaluate convergent and discriminant validity through factor-analytic evidence and correlations with theoretically relevant covariates (e.g., training exposure) (DeVellis & Thorpe, 2021).

### *Reliability*

Scale reliability is assessed using internal-consistency metrics and item diagnostics (Cronbach, 1951; DeVellis & Thorpe, 2021). Audit reliability is assessed using inter-rater statistics suitable to the coding scale and design, including  $\kappa$  for categorical judgments and ICC for continuous composites (Cohen, 1960; Koo & Li, 2016; Shrout & Fleiss, 1979). Reliability estimates are reported with uncertainty and used to qualify inference when agreement is moderate rather than high (Krippendorff, 2018).

### *Internal and external validity*

Because the baseline design is cross-sectional, causal claims are limited. However, theory-consistent modeling, explicit covariate controls, and mechanism-focused qualitative evidence improve explanatory credibility (Maxwell, 2013). External validity may be constrained by non-probability sampling; we address this through context-stratified recruitment, transparent reporting of sample composition, and sensitivity analyses (Groves et al., 2011). Future longitudinal and intervention studies are positioned as extensions that can test causal change in orientations and organizational bottlenecks.

### *Measurement limits of inclusion*

Inclusion outcomes are measured through proxies (representation indicators, accessibility features, and evidence of influence in documents). Such proxies may undercount informal influence or unrecorded constraints. We mitigate this limitation by auditing multiple artifact types and integrating participant narratives about perceived respect and influence, which are central to democratic legitimacy (Arnstein, 1969; Young, 2002).

## DISCUSSION

The framework developed here shifts analytical attention from participation as a method-choice problem to participation as a product of professional role orientations embedded within organizational constraint regimes. This perspective complements tool-centered participation research by specifying a micro-to-meso mechanism: planners' role orientations shape the design features that determine deliberative quality and the credibility of feedback loops, while constraints condition whether inclusive orientations can be operationalized (Forester, 1999; Innes & Booher, 2004; Lipsky, 2010). The approach is also consistent with power-sensitive accounts of participation that treat inclusion as a distribution of voice and influence rather than a count of attendees (Arnstein, 1969; Fung, 2006; Gaventa, 2006).

Practically, the framework implies that participation reform requires interventions at multiple levels. Training and hiring can increase communicative and equity-oriented competencies, but organizational redesign may be necessary to expand discretionary space (e.g., staffing, timelines, legal guidance, leadership directives) such that pro-inclusion orientations are not systematically crowded out by compliance and risk-management logics (Fainstein, 2014; Lipsky, 2010). Accountability mechanisms that document decision responsiveness (e.g., traceable responses to comments) may also reduce the gap between consultation and influence by creating institutional incentives for feedback incorporation (Arnstein, 1969; Flyvbjerg, 1998).

## CONCLUSION

Persistent exclusion from participatory planning cannot be explained solely by the availability of participatory tools or the formal presence of mandates. Building on power-centered and deliberative accounts of participation, and on practice research emphasizing discretion under constraint, this study proposes a baseline empirical framework to identify planners' role-orientation profiles and test their associations with participation design quality and inclusion outcomes (Arnstein, 1969; Forester, 1999; Habermas, 1984; Lipsky, 2010). By integrating validated measurement, audited artifacts, and mechanism-focused interviews, the framework provides a foundation for diagnosing role- and constraint-driven bottlenecks and for designing reforms in professional education, organizational resourcing, and accountability.

## REFERENCES

- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35(4), 216–224.
- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society: Series B (Methodological)*, 57(1), 289–300.
- Bollen, K. A. (1989). *Structural equations with latent variables*. John Wiley & Sons.
- Cameron, A. C., & Miller, D. L. (2015). A practitioner's guide to cluster-robust inference. *Journal of Human Resources*, 50(2), 317–372.
- Campbell, S. (2018). Green cities, growing cities, just cities? urban planning and the contradictions of sustainable development. In *Classic readings in urban planning* (pp. 308–326). Routledge.
- Celeux, G., & Soromenho, G. (1996). An entropy criterion for assessing the number of clusters in a mixture model. *Journal of Classification*, 13(2), 195–212.
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20(1), 37–46.
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Routledge.
- Creswell, J. W., & Clark, V. L. P. (2017). *Designing and conducting mixed methods research*. Sage Publications.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334.
- Denzin, N. K. (2017). *The research act: A theoretical introduction to sociological methods*. Routledge.
- DeVellis, R. F., & Thorpe, C. T. (2021). *Scale development: Theory and applications*. Sage Publications.
- Fainstein, S. S. (2014). The just city. *International Journal of Urban Sciences*, 18(1), 1–18.
- Flyvbjerg, B. (1998). *Rationality and power: Democracy in practice*. University of Chicago Press.
- Forester, J. (1982). Planning in the face of power. *Journal of the American Planning Association*, 48(1), 67–80.
- Forester, J. (1999). *The deliberative practitioner: Encouraging participatory planning processes*. MIT Press.

- Fung, A. (2006). Varieties of participation in complex governance. *Public Administration Review*, 66, 66–75.
- Gaventa, J. (2006). Finding the spaces for change: A power analysis. *IDS Bulletin*, 37(6), 23–33.
- Groves, R. M., Fowler, F. J., Couper, M. P., Lepkowski, J. M., Singer, E., & Tourangeau, R. (2011). *Survey methodology*. John Wiley & Sons.
- Habermas, J. (1984). *The theory of communicative action* [Translated by Thomas McCarthy]. Heinemann.
- Healey, P. (1997). *Collaborative planning: Shaping places in fragmented societies*. Macmillan.
- Innes, J. E., & Booher, D. E. (2004). Reframing public participation: Strategies for the 21st century. *Planning Theory & Practice*, 5(4), 419–436.
- Koo, T. K., & Li, M. Y. (2016). A guideline of selecting and reporting intraclass correlation coefficients for reliability research. *Journal of Chiropractic Medicine*, 15(2), 155–163.
- Krippendorff, K. (2018). *Content analysis: An introduction to its methodology*. Sage Publications.
- Lanza, S. T., Flaherty, B. P., & Collins, L. M. (2003). Latent class and latent transition analysis. In *Handbook of psychology* (pp. 663–685).
- Lazarsfeld, P. F. (1968). *Latent structure analysis*.
- Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public service*. Russell Sage Foundation.
- MacKinnon, D. P. (2012). *Introduction to statistical mediation analysis*. Routledge.
- Maxwell, J. A. (2013). *Qualitative research design: An interactive approach*. Sage.
- Meredith, W. (1993). Measurement invariance, factor analysis and factorial invariance. *Psychometrika*, 58(4), 525–543.
- Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A monte carlo simulation study. *Structural Equation Modeling: A Multidisciplinary Journal*, 14(4), 535–569.
- Peng, R. D. (2011). Reproducible research in computational science. *Science*, 334(6060), 1226–1227.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879–891.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. SAGE.
- Rubin, D. B. (1987). *Multiple imputation for survey nonresponse*. John Wiley & Sons.
- Shrout, P. E., & Fleiss, J. L. (1979). Intraclass correlations: Uses in assessing rater reliability. *Psychological Bulletin*, 86(2), 420–428.
- United States. National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1978). *The belmont report: Ethical principles and guidelines for the protection of human subjects of research* (tech. rep.). The Commission.
- van Buuren, S. (2012). *Flexible imputation of missing data* (Vol. 10) [Series volume as given in source]. CRC Press.
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3(1), 4–70.
- Young, I. M. (2002). *Inclusion and democracy*. OUP Oxford.

## AUTOBIOGRAPHICAL SKETCHES

Jason D. Rivera, Department of Political Science & Public Administration, SUNY Buffalo State, Buffalo, NY, USA

Molly Ranahan, Department of Political Science & Public Administration, SUNY Buffalo State, Buffalo, NY, USA



Manuscript revisions completed 11 June 2022.