Perception of participatory mechanisms and their impact on the legitimacy of local decision: An empirical study in the 47 municipalities of the Mascara province

BENATA Mohamed [1], BESTANI Abdelkarim [2*], MECHERI Mohamed [3]

[1] University of Mustapha Stambouli, laboratory MCLDL, Algeria
mohammed.benata@univ-mascaara.dz

[2] University of Mustapha Stambouli, laboratory MCLDL, Algeria
abdelkarim.bestani@univ-mascaara.dz

[3] University of Mustapha Stambouli, laboratory MCLDL, Algeria
mecheri26@yahoo.com

Date of transmission: 04/01/ 2026 date of acceptance: 05/03/ 2026

****

Abstract:

This paper notes the relationship between the processes of participation and perceived legitimacy of the local decision-making process, in a specific context of 47 municipalities, in the Mascara Province of Algeria. The given study is grounded on the quantitative survey of 952 respondents on the basis of which descriptive statistics analysis and the logistic regression modeling are conducted to outline the factors which determine citizen participation and the influence of effects which impact the perception of legitimacy. The results suggest that the overall participation is 38.2, and the territorial participation is considerably different as there is 45.3 in urban and 23.6 in rural territories. The model found the trust in institutions (0.684, p = 0.001), perceived transparency (0.523, p = 0.01), and experience of participation (0.412, p = 0.05) to be significant predictive variables of legitimacy. The study contributes to the literature on participatory democracy in Algerian regional contexts and proposes certain guidelines on improving participatory government structures on the local level.

key words: Participatory democracy, legitimacy, local governance, statistical modeling, participatory mechanisms

* Corresponding Author

Introduction:

Un-happiness with the old system of political institutions is increasingly becoming a world-wide phenomenon and citizen participation system is emerging as a potential democratic innovation to rebuild the relationship between citizens and decision-makers **(Fung, 2015).** The same case applies to Algeria where there is growing pressure on the nation to have more inclusive and community-based democracy. The main issue facing the effectiveness of the policy of the people and the democracy itself is the local decision legitimacy, which consists of acknowledging that citizens make their decisions in fair and transparent way that is worthy of support by citizens **(Tyler, 2006).**

The case study of the wilaya of Mascara, with its 47 municipalities scattered within the agricultural lands, mountainous Beni-Chougrane, and urban lands, is also a very topical subject of analyzing these dynamics. Demographic growth in the region has been constant, with the area increasing in population by 784,073 in 2008 against 407,663 in 1977 (National Statistics Office [ONS], 2023), which contributes to the challenges in local governance. Moreover, the wilaya is highly geographically and socio- economically diverse, thus, presenting an ideal pack in which to examine the differences in the view of participation across the territory.

This article is aimed at analyzing the role of the participation mechanisms on the perception of the local decision legitimacy in this specific context systematically. The peculiar aspect of our work will be a mixed-method study that will consist of the descriptive analysis and statistical modeling of a large sample of 952 respondents in all the municipalities of the wilaya.

1. Theoretical framework and literature review

The quest to gain legitimacy has become a major issue in the management of contemporary government, especially in relation to citizen involvement. With a noticeable rise in the level of skepticism towards traditional ways of representation, it is of paramount importance to comprehend how and why citizens arrive at considering some political decisions, as rightful and binding. This part provides the theoretical frameworks of the analysis of participatory legitimacy, the critical frameworks explaining that legitimacy is not extended by the legal authority, but rather constructed by the use of certain procedural and deliberative properties.

1.1. The theoretical foundations of participatory legitimacy

Procedural legitimacy is a theory created by Tyler (2006), which argues that the image of legitimacy in decisions lies more on the quality of the process of making the decisions than the result of the decision. This strategy focuses on the role of citizens' voices, procedural impartiality, trust in the administration, and respectful treatment (Tyler, 2006). This view implies that the quality of the mechanisms of participation is highly relevant to perceived legitimacy, as opposed to the content of decisions in the context of participatory mechanisms.

Moreover, the theory of deliberative democracy **(Habermas, 1996; Dryzek, 2000)** emphasizes the quality of deliberation as the basis of democratic validity.

This approach holds that the development of legitimacy is based on inclusive deliberative processes in which the parties involved in the processes converse and are willing to change their preferences **(Dryzek, 2000)**. These theoretical frameworks offer good grounds for the theoretical underpinnings of how legitimacy is constructed in local participatory mechanisms.

1.2. International empirical evidence

Comparative studies have revealed significant differences in the effects of participatory mechanisms on perceived legitimacy. Research in 30 democracies found that political participation at the local level is likely to enhance the credibility of the entire political system (Hooghe and Marien, 2013). However, this effect is moderated by the institutional environment and quality of democracy.

Michels (2012) experience of participatory budgets in Europe revealed that influencing legitimacy relies on such factors as the inclusivity of the processes, transparency of the procedures, and the capacity of the mechanisms to have a real effect on final decisions. Likewise, a meta-analysis of 100 studies investigating citizen participation proved that citizen participation has a strong interaction with mistrust in institutions that mediate the relationship between participation and legitimacy **(Jacquet and Does, 2021).**

1.3. Algerian context and local specificities

The involvement of citizens in Algeria is defined by the context of the development of the law, and the 2020 Constitution reinforced the process of participatory democracy. Nevertheless, as one recent study mentions, the adoption of these measures in various regions is still not even (ONS, 2023). The wilaya of Mascara, with its geographical and socioeconomic variety, is a microcosm of the issues of citizen involvement in Algeria.

2. Methodology

This section aims to present the methodological approach adopted to examine the research questions raised.

2.1 Échantillonnage et collecte des données

The research is premised on a questionnaire survey completed by 952 people in the 47 municipalities of the Mascara province. Stratification was performed to provide maximum representativeness based on the official demographic criteria **(ONS, 2023).** The data were collected between January and March 2024, with a response rate of 72.

Table 1: Sampling Methodology

	Stratification criterion	**Justification**
Geographical distribution	Proportional to the demographic weight of the 16 daïras	Ensure balanced territorial coverage
Type of habitat area	68% urbain, 32% rural	Reflect the actual distribution of the population
Genre	Quotas aligned with the local age pyramid	Controlling representation bias
Age category	Proportionality according to the age groups 18-25, 26-40, 41-60, 60+	Capturing generational differences

2.2 Measuring instrument and variables

The questionnaire was a structured questionnaire consisting of 65 items organized into five major parts and modified versions of internationally reliable measures, with special consideration given to the contextual peculiarities of Algeria. A pre-test was conducted on 30 respondents to test the reliability of the instrument, with satisfactory internal consistency results (Cronbach's alpha = 0.84). Perceived legitimacy was the key dependent variable, which was assessed using a composite index that included:

1) Perceived congruence between actions and citizen demands.
2) General local decision satisfaction:
3) Trust in local institutions
4) Perception of fairness in decision processes.

2.3 Econometric model

To examine the determinants of perceived legitimacy, we used a logistic regression model whose overall form is as follows:

$$\mathbf{logit(P(Y=1)) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + ... + \beta_k X_k + \varepsilon}$$

Where:

P(Y=1) represents the probability that perceived legitimacy is high

β_0 is the model constant

β_1 to β_k are the coefficients of the independent variables

X_1 to X_k represent the predictor variables

ε is the error term

The logit function is defined as follows:

$$\mathbf{logit(p) = ln(p/(1-p))}$$

The specific model estimated in this study is as follows:

$$\mathbf{Perceived\ Legitimacy = \beta_0 + \beta_1(Institutional\ Trust) + \beta_2(Transparency) + \beta_3(Experience\ Participation) + \beta_4(Education) + \beta_5(Urban\ Zone) + \beta_6(Genre) + \beta_7(Age) + \varepsilon}$$

The maximum likelihood method was used to estimate parameters with adjusted complex survey data.

2.4 Analytical approach

We used three supplementary techniques: descriptive analysis, factor analysis, and logistic regression. To model it, we invoked the SURVEYLOGISTIC procedure, which is specifically effective when dealing with complex survey data with a stratified sampling design.

3. Results

This section presents the main findings of the study, beginning with a description of the sample's characteristics.

3.1 Descriptive profile of the sample

The sample was sufficiently representative compared to the official data of the wilaya. The marginally high overrepresentation of university graduates (+3.3) is due to the sampling strategy that focused on individuals who are most likely to get involved in participatory mechanisms. This is in line with what Fung (2015) notes of the characteristic profile of members of participation processes.

Table 2: Sociodemographic characteristics of the sample (n=952)

Variable	Category	Nb	Percentage	Provincial data
Genre	Masculin	501	52,6%	50,8%
	Féminin	451	47,4%	49,2%
Age group	18-25 ans	210	22,1%	24,3%
	26-40 ans	305	32,0%	33,5%
	41-60 ans	315	33,1%	31,2%
	60 ans et plus	122	12,8%	11,0%
Education level	Primaire ou moins	156	16,4%	18,2%
	Secondaire	352	37,0%	38,5%
	Universitaire	444	46,6%	43,3%
Residence zone	Urbaine	647	68,0%	65,8%
	Rurale	305	32,0%	34,2%

3.2 Participatory practices and perception of legitimacy

The participation level of 38.2 is moderate, showing that there is a participatory dynamic within the wilaya of Mascara. The fact that the majority of public meetings (58.3) are the primary form supports the results of Smith (2009) regarding adherence to traditional forms of consultation in the regions. The greater satisfaction in terms of neighborhood committees (3.6/5) indicates that more localized formats produce a more participatory experience, which supports the literature on territorial anchoring published by Geissel (2009) regarding the role of territorial anchoring in participatory mechanisms.

Table 3: Participation in participatory mechanisms by type

Type of device	Participants	Participation rate	Average satisfaction
Public meetings	215	58,3%	2,9/5
Local associations	155	42,1%	3,4/5
Written consultations	79	21,5%	2,7/5
Digital platforms	35	9,7%	3,1/5
Neighborhood committees	62	16,8%	3,6/5
Global participation	**368**	**38,2%**	**3,1/5**

3.3 Analysis of territorial disparities

The comparison indicates vast territorial differences in all key indicators. The participation gap (+21.7% in the city) validates the results of Baechtiger et al. (2018) regarding the inequality of access to participatory mechanisms by region. The access to information gap is especially significant (+1.1), which is in line with the results of Nabatchi and Leighninger (2015) on the barriers to information dissemination in rural communities.

Table 4: Comparison of perceptions by geographic area

Indicator	Urban area(n=647)	Rural area(n=305)	Gap	Significance
Participation rate	45,3%	23,6%	+21,7%	p < 0,001
Average satisfaction	3,0/5	2,4/5	+0,6	p < 0,01
Trust institutions	3,1/5	2,5/5	+0,6	p < 0,01
Perceived transparency	2,9/5	2,3/5	+0,6	p < 0,001
Access information	3,2/5	2,1/5	+1,1	p < 0,001

3.4 Results of the econometric modeling

The result of the logistic regression model that was applied to determine the determinants of a high degree of perceived legitimacy indicates a strong and acceptable relationship. As the results, which are found in Table 5, suggest, procedural factors are the most important causes of legitimacy, and the majority of demographic characteristics do not have a significant impact.

Table 5: Determinants of Perceived Legitimacy – Logistic Regression Model

Predictive variable	Coefficient β	Standard error	Grade Report	Significance
Constant	-1,234	0,215	-	p < 0,001
Institutions of trust	0,684	0,089	1,981	p < 0,001
Perceived transparency	0,523	0,078	1,687	p < 0,01
Participation experience	0,412	0,095	1,510	p < 0,05
Education level	0,287	0,102	1,332	p < 0,05
Urban area	0,195	0,087	1,215	NS
Gender (feminine)	-0,123	0,091	0,884	NS
Age	0,056	0,076	1,058	NS

- **Model fit indices :**
- $\chi^2 = 45.32$ ($p < 0.001$)
- Nagelkerke $R^2 = 0.48$
- Classification accuracy: 76.3%
- Hosmer-Lemeshow test: $\chi^2 = 7.45$ ($p = 0.49$)
- Mean VIF: 1.82 (absence of multicollinearity)

The final equation of the estimated model is as follows:

logit(High Legitimacy) = -1,234 + 0,684(Trust) + 0,523(Transparency) + 0,412(Participation) + 0,287(Education)

The model shows that trust in institutions is the strongest predictor of perceived legitimacy (OR = 1.981), which validates Tyler's (2006) idea that institutional trust is vital. Perceived transparency (OR = 1.687) and experience of participation (OR = 1.510) became important levers, and traditional demographic variables had no significant impact after considering other variables, which aligns with the results of Jacquet and van der Does (2021) regarding the procedural nature of the determinants of legitimacy.

4. Discussion

This section interprets the key findings of the study, beginning with the primary results from the econometric analysis.

4.1 Interpretation of the main results

The significance of institutional trust as the basis of perceived legitimacy is essential, which is supported by our findings. This observation resembles the study of participatory governance, where the importance of legitimizing public decisions is emphasized as one of the mechanisms in the political mistrust environment (Michels, 2012). In the Mascara case, this implies that the need to increase legitimacy should revolve around restoring trust, as opposed to merely increasing the number of participatory mechanisms.

The low rates of digital tool penetration (9.7) identified in our research beg the question of localizing the mechanisms of participation to local realities. According to Smith (2009), democratic innovations need to be situational to be effective and probably incorporate the resolution of the digital divide in areas such as Mascara.

4.2 Theoretical implications

We find that our findings are in line with integrative strategies of legitimacy that are both procedural and substantive (Schmidt 2013). Our model, whose variables are based on the importance of processes (trust, transparency), is correlated with the theory of procedural legitimacy (Tyler, 2006), and the values of participatory experience are correlated with the concept of deliberative democracy (Dryzek, 2000).

The zero effect of traditional demographic variables following the control of process-related variables may indicate that, as Fung (2015) postulates, participatory inequalities can be surmounted through the establishment of well-designed processes instead of mechanisms that directly aim at addressing a particular demographic group.

4.3 Practical implications for local governance

Our findings can be recommended to local policymakers in the Mascara Province to take specific courses of action.

1) *Empower informational transparency:* Enhance information access to decisions and their motivation using the best practices recorded by Nabatchi and Leighninger (2015).
2) *Mix up forms of participation:* Change systems to the particular features of the various regions by creating hybrid mechanisms that involve both face-to-face and online participation.
3) *Institutionalize feedback*: Create regular feedback systems to respond to citizens' contributions.
4) *Strategies related to trust-building:* Particularly work on restoring trust by being transparent and becoming more accountable.

4.4 Limits and research perspectives

We had a number of methodological limitations in our study. On the one hand, the sample, even large, can be represented by a self-selection bias of citizens who already

know about the problems of participation. On the other hand, the weakness of causal inferences that the development of perceptions over time has is related to the fact that the data used in the study is cross-sectional. Future research ought to come up with longitudinal measures to determine the shift in perceptions following specific reforms. The contextual particularities of Mascara would also be determined in comparison with the whole dynamics of the country by

comparing it with the other Algerian wilayas. The series of mixed methods (quantitative-qualitative) applied would help to provide deeper understanding of the mechanism behind relationships in our model.

Conclusion

The paper enlightened the basis of perceived legitimacy of local choices in 47 municipalities of Mascara Wilaya. Our findings also confirm that institutional trust and transparency of processes are more eminent sources of legitimacy as compared to the formal existence of participatory processes.

The 952 respondents econometric modelling justified the hypothesis that the concept of legitimacy is multidimensional and relies on structural and perceptual factors (accessibility of mechanisms and trust, transparency). The prudent application of the mechanisms of participation to the local reality is required by these findings in this specific case of Mascara with its heterogeneous geography and its dynamic demographic.

In a bigger scale, the study can be included in the literature on participatory democracy in Algerian regional contexts since it captures empirically the expectations of citizens and institution failures. It results in the following research on the conditions under which the participatory mechanisms can be locally owned in this case, and the importance of designing participatory mechanisms that would simultaneously stabilize the trust and transparency, not to mention the participatory experience of citizens.

References

Bächtiger, A., Dryzek, J. S., Mansbridge, J., & Warren, M. E. (2018). *The Oxford Handbook of Deliberative Democracy*. Oxford University Press.

Brodaty, T., Crépon, B., & Fougère, D. (2007). Les méthodes micro-économétriques d'évaluation et leurs applications aux politiques actives de l'emploi. *Économie et Prévision*, 177 (1), 93-119.

Dryzek, J. S. (2000). *Deliberative Democracy and Beyond: Liberals, Critics, Contestations*. Oxford University Press.

Fung, A. (2015). Putting the public back into governance: The challenges of citizen participation and its future. *Public Administration Review*, 75 (4), 513-522.

Geissel, B. (2009). Participatory governance: Hope or danger for democracy? A case study of local agenda 21. *Local Government Studies*, 35 (4), 401-414.

Habermas, J. (1996). *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*. MIT Press.

Hooghe, M., & Marien, S. (2013). A comparative analysis of the relationship between political trust and forms of political participation in Europe. *European Societies*, 15 (1), 131-152.

Jacquet, V., & van der Does, R. (2021). The consequences of deliberative minipublics: A systematic review. *European Political Science Review*, 13 (3), 303-324.

Michels, A. (2012). Citizen participation in local policy making: Design and democracy. *International Journal of Public Administration*, 35 (4), 285-292.

Nabatchi, T., & Leighninger, M. (2015). *Public Participation for 21st Century Democracy*. Jossey-Bass.

Office National des Statistiques. (2023). *Recensement général de la population et de l'habitat - Wilaya de Mascara*. ONS Algérie.

Schmidt, V. A. (2013). Democracy and legitimacy in the European Union revisited: Input, output and throughput. *Political Studies*, 61 (1), 2-22.

Smith, G. (2009). *Democratic Innovations: Designing Institutions for Citizen Participation*. Cambridge University Press.

Tyler, T. R. (2006). *Why People Obey the Law*. Princeton University Press.