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Exploring political personalities: The micro-foundation of local policy innovation in China

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Abstract

This article argues that policymakers' individual attributes influence their willingness to engage in policy innovation, and that this influence is responsive to, but not determined by, changes in the institutional structure. We derive these findings by employing principal component analysis of original data from surveys of local policymakers in China, to inductively locate different personalities. We find statistically significant personalities that influence a willingness to innovate, and that this influence is responsive to changes such as heightened risk. In addition to parsing the influence of extrinsic and intrinsic motivations on policy innovation, we further find that the traditional risk-acceptant policy-entrepreneur personality does not explain innovation well.

1 | INTRODUCTION

Policy innovation[1] is an important source of endogenous institutional change, and promotes better governance by allowing policymakers to test policies before being adopted by other local governments or scaled-up nationally (Hopkins, 2016; Sheingate, 2003). Despite these advantages, developing new policies comes with the attendant possibility of failure and challenges vested interests. Policy innovation is thus an inherently risky action, so why do policymakers engage in innovation?

Scholars contend that the determinants of policy innovation are extrinsic motivations like promotion and punishment incentives (Mintrom & Norman, 2009), with subsequent diffusion attributed to learning from earlier adopters, economic competition among proximate jurisdictions, imitation of larger jurisdictions, and coercion by governments (Shipan & Volden, 2008). However, in an authoritarian context policy innovation may be riskier, even seen as a challenge to political leaders. Despite the potential perceived threat, policy innovation is even more vital to social stability, regime durability and good governance than in democratic contexts since authoritarian

systems generally lack feedback mechanisms from lower levels of government and society (Teets & Hasmath, 2020). Several authoritarian leaders have seemingly recognized this benefit, with examples of policy innovation occurring in Russia (Gel'man & Lankina, 2008), Vietnam (Malesky, 2008) and Chile under Pinochet (Weyland, 2005). Indeed, policy innovation is a key ingredient to the "China model of development" (Hasmath, 2017), where the central government relied on local governments to gradually reform institutions. In these authoritarian cases, local governments are theorized to innovate in response to governance challenges, under the watchful eye of the central government (Hasmath et al., 2019; Heilmann, 2008).

These extrinsic explanations of policy innovation offer a strong understanding of the political opportunity structure, but suffer from the inability to explain variation—if risk is offset by promotion and punishment incentives, why is policy innovation not more uniform? In response, several scholars argue that intrinsic motivations better explain policy innovation. Roberts and King (1991) posit that there is an "innovative personality" that encourages certain officials to innovate even if the structural factors are not conducive. These "policy entrepreneurs," in the classic Kingdon (1995) sense, distinguish themselves through "their desire to significantly change current ways of doing things in their area of interest" (Mintrom & Norman, 2009, 127). Overall, researchers find that these policymakers have a high degree of self-efficacy and are risk-takers (see Kim, 2010; Littunen, 2000). Despite attempts to incorporate individual variation into structural explanations, these studies are often based on small samples and rely on the use of personality typologies, making the findings difficult to generalize or use for theory building (Frisch Aviram et al., 2020).

Our study addresses this gap by focusing explicitly on the interaction between extrinsic and intrinsic motivations for policy innovation in the case of subnational officials in China. We argue that individual preferences for policy innovation are a vital, but often missing part of the explanation, and that the interaction between these preferences and institutional incentives determine policy innovation. Moreover, we argue that these preferences, or "innovative personalities," are foundational to explaining policy innovation in that even as the institutional context shifts to discourage innovation, certain policy entrepreneurs will continue to innovate.

We use the case of China because it is a single-party state with annual performance evaluations as a governing mechanism that creates clear extrinsic motivations. These evaluations assign points for accomplishing specific tasks set by the government, and the points enable promotion and bonuses (Landry et al., 2018). This strong bureaucratic system means that we should expect less variation in local officials' behavior, making China a crucial case for an individual-preferences argument (Eckstein, 1975; Bennett, 2004:29).[2] As a crucial or "most likely" case, if we find significant variation in such a strong authoritarian bureaucracy correlated to willingness to innovate, this gives us stronger evidence of the importance of individual-level factors. Furthermore, the case of China allows a natural-experimental design, in that under Xi Jinping's rule since 2012, previously high levels of policy innovation have been declining due to heightened political risk (Teets et al, 2017). We are thus able to examine if intrinsic motivation influenced policy innovation even as the incentives (extrinsic motivation) disappear.

2 | INDIVIDUAL PERSONALITY AND POLICY INNOVATION

To better understand how individual-level attributes interact with structural incentives, we rely on theories of political behavior rooted in cognitive psychology, notably personality theory. Political

behaviorists empirically examine the interactions between genetic and environmental factors in shaping political behavior (Alford et al., 2005; Fowler et al., 2008). This emerging literature provides a good empirical basis for revisiting discussions of political personality and other individual characteristics that drive political decision-making (Feldman, 2003; Gerber et al., 2011).

The literature on political behavior has highlighted the importance of personality traits as a cause of political orientations (Funk et al., 2013; Xu & Peterson, 2017). Adorno et al. (1950) first proposed the concept of an "authoritarian personality" as the social psychological basis of Hitler's fascist regime (see also Fromm, 1964). Subsequent research has recognized a prominent feature of the authoritarian personality is a respect for, and attachment to, authority. This corresponds theoretically to "conservative" traits in democracies such as conventionalism, structure, and the need for cognitive closure (Amodio et al., 2007; Jost et al., 2003; Ksiazkiewicz et al., 2016). Carney et al. (2008) find that two traits, "openness to new experiences" and "conscientiousness" are highly associated with individual differences underlying political orientation. Altemeyer (2007) studying the authoritarian personality, outlines three basic features: "authoritarian submission", where individuals blindly submit to authority; "authoritarian aggression" in individuals when they believe truth and physical advantage is on their side; and, "conventionalism", where one believes that everybody should follow norms and customs. These personality types hold conservative attitudes about culture, resolutely defend the norms and conventions advocated by authority, and comply with a patriarchal family structure (Altemeyer, 2007; Feldman & Johnston, 2014).

With respect to policy innovation, personality theory links to a literature regarding the "innovative personality" that is associated with a willingness to take risks, as well as the ability to cooperate (Baum et al., 2014; Littunen, 2000). Roberts and King (1991) extend a traditionally structural understanding of policy innovation to include individual-level attributes by arguing that there is an "innovative personality" that encourages certain policymakers to innovate even if the structural factors are not conducive. Mintrom and Norman (2009, 127) developed a "policy entrepreneur" framework to theorize about these individuals who are willing to accept high degrees of risk: they are characterized by "social acuity" or the "effective understanding of others" and an "ability to engage in policy conversations"; are "effective at defining problems" and thereby gaining attention; and, "effective at building teams." This utilization of individual-level attributes corresponds with growing literature on risk propensity and personality (Nicholson et al., 2005). Scholars in fields such as economics, policy studies, and international relations study how loss aversion and other psychological factors distinguish among different risk thresholds and subsequent behaviors (Kahneman & Tversky, 1979; Mercer, 2005; Weyland, 2008).

This developing area of "meso-theory" offers promise in linking together the micro-theory of individual attributes like personality with the macro-theory of institutional structures and incentives to produce behavioral outcomes (Hopkins, 2016; Lewis & Steinmo, 2012). Many of these studies—which dominate the China-oriented literature (see next section)—focus on how policy entrepreneurs overcome collective action problems through the use of incentives, which can be material, solidary, or purposive. As Clark and Wilson (1961, 134–135) define, material incentives consist of rewards such as career advancement or compensation; solidary incentives operate through networks and relationships and increase the cost of non-participation; and purposive incentives relate to values or ethics that "change the benefit/cost ratio" of utility maximization (Mintrom, 2000, 57).

For these scholars, the rational choice models traditionally used to explain policy innovation ignore how institutional environments condition individual perceptions of structural

incentives: "These results [from the meso-theory literature] underscore the importance of institutions in determining the motivations of policy entrepreneurs, and suggest future research should focus on the interplay among individual, institutional, and political factors" (Hopkins, 2016, 333). While the linkages between personality and outcomes are increasingly being explored with respect to the Western democratic world (Yilmaz & Saribay, 2016), far fewer studies have investigated the extent to which this framework travels to authoritarian contexts.

3 | POLICY INNOVATION IN CHINA

Despite its authoritarian structure, scholars have pointed to China's gradual adaptive change hallmarked by policy experimentation as one of the key sources behind the regime's resiliency (Heilmann, 2008; Teets & Hasmath, 2020). Central policymakers historically encourage innovation at the local level, including national awards for governance innovations. Thus, despite the associated uncertainty and risk,[3] we observe a great deal of policy innovation at the subnational level since 1980, including pilot programs to change the household registration system, village- and township-level elections, and social welfare programs (see Hasmath & MacDonald, 2018; Heilmann et al., 2013; Teets & Hurst, 2014).

The extant literature on policy innovation in China mirrors the general literature in that it mostly focuses on material incentives to encourage policymakers to innovate. The Party-state bureaucracy manages officials through a performance management system that evaluates all officials annually for promotion or punishment (Heberer & Trappel, 2013). Heilmann (2008) and Heilmann et al. (2013) have argued that this system encourages local officials—through an "experimentation under hierarchy" approach—to innovate in response to governance challenges, and then integrate the local experiences back into national policy formulation. This explanation posits that local officials innovate because they are directed and incentivized to do so in a system of hierarchal authority (Zhu & Zhang, 2016). Although the promotion-incentive explanation is dominant, other scholars contend that certain policy entrepreneurs seem to be motivated by less tangible factors such as maintaining state legitimacy (Chen & Yang, 2009). For example, in Hammond's (2013, 134–135) analysis of the creation of the Minimum Livelihood Guarantee policy, this was advocated by a Minister of the Ministry of Civil Affairs in response to his perception of poverty as a major challenge to social stability, despite the initial lack of interest from the central government. Additionally, He (2018) and Zhu (2018) trace how entrepreneurial officials advocate for policy change without central support, and sometimes in the face of substantial challenges.

These cases of innovation being motivated by performance legitimacy suggest that purely material-incentive explanations are unsatisfying to fully explain the impetus for policy experimentation both from theoretical and empirical perspectives. Theoretically, this explanation assumes that all sub-national officials respond in similar ways to structural incentives. However, decisions made under conditions of risk and uncertainty might evidence more variability in outcomes depending on loss aversion (Kahneman & Tversky, 1979). Empirically, Heilmann et al. (2013) find that out of 53 cases of high-technology zone policy experiments, 39 cases evidence medium to very high "functional deviation" from the intended goals. To better explain these outcomes, we argue that individual-level attributes interact with institutional incentives in a way that creates variations in outcomes, even in a hard case like China where institutional

incentives are particularly strong. If we are correct, this means that individual preferences matter a great deal and need to be included in any explanation of policy innovation.

4 | RESEARCH DESIGN, PRIOR EXPECTATIONS, AND DATA COLLECTION

This project focuses on four interrelated questions: first, to what extent do Chinese policymakers vary in personalities and intrinsic preferences? Second, do political personalities identified in the literature on innovation explain variation in policymaker preferences? To what extent does variation in policy preferences predict willingness to engage in policy innovation? Finally, how do intrinsic preferences interact with broader structural pressures, and does that explain the propensity of different types of actors to innovate under conditions of heightened risk?

In order to answer these questions, we use a principal component analysis with instrumental variables (PCAIV) approach that combines both principle component analysis and multivariate regression (Pech & Laloë, 1997). As outlined by Cozzolino et al. (2019, 2470), "PCA is a dimension reduction tool that can be used to condense a large set of variables to a small set that still contains most of the information in the large set." This technique has been used widely in the biological and natural sciences to deal with complex systems within which both individual and environmental factors matter: "Principal component analysis (PCA) involves a mathematical procedure that transforms a number of (possibly) correlated variables into a (smaller) number of uncorrelated variables called principal components." (Paul et al., 2013, 32). Given its widespread use in the natural sciences, we argue that this technique is appropriate for studying personality, which involves multiple complex and interrelated preferences and environmental factors.

Moreover, this technique allows us to address a widespread methodological critique of social science data analysis: multicollinearity. Multicollinearity occurs when regressors on the right-hand side are correlated, and this often raises questions of consistency in the parameter estimates and standard errors for those correlated variables. This has led to a methodological interest in instrumental variables, particularly in the social sciences where these problems are routine (Acemoglu et al., 2001). By reducing the dimensionality of our data to key components, we are able to address potential problems of multicollinearity, and better understand the core distinctions in personality types.

As illustrated in Table 1, our survey instrument was designed to measure three main characteristics existing in the literature: 1. risk acceptance and personal efficacy (i.e., entrepreneurship), 2. authoritarian personality (i.e., deference to higher-level government authority) and 3. democratic personality (i.e., openness to incorporating societal input). Based on the behavioralist literature, we measure personal efficacy and risk tolerance (Kahneman & Tversky, 1979; Mercer, 2005; Mintrom, 2000). We measure risk tolerance in two ways: through a sequence of questions focused explicitly on risk thresholds, which we aggregate into a "risk index" using PCA, and secondly, through a series of survey questions about the importance of risk in one's decision to innovate. Our instrument also includes a question on the importance of one's own skill in determining decisions to innovate, in order to measure feelings of personal efficacy. Additionally, the survey included a series of questions about orientation toward authority in order to measure "authoritarian personality,", as well as a series of questions about societal feedback in order to gauge relatively more "democratic personalities."

By measuring root preference structures that are devoid of substantive political content, we then use PCA to identify four distinct personality types. Aggregate personality involves

TABLE 1 Personality variable operationalization

Concept	Survey questions
Orientation toward authority (authoritarian personality)	• Importance of directives from central government (#4) • Importance of cadre evaluation system (#5) • Concerns that failed experiments harm career advancement (#19)
Importance of societal feedback (democratic personality)	• Concerns about government legitimacy and support of population (#11) • Importance of participation of social organizations in policy process (#32) • Concerns for social backlash from policy changes (#20)
Degree of "entrepreneurship" (risk and efficacy)	• Importance of personal preference to change policy even if sometimes risky (#13) • Importance of one's own skill and ability as most important factor in whether initiatives successful (#22) • Will you adopt new policy if chance of it being successful is 30%/50%/70% (risk tolerance proxy to generate risk index)? (#1,2,3) • Learning from past experience is important (#9)

numerous traits, thus using PCA allows us to model this complexity via the identified components—what we refer to as "personality types." PCA is central to the research design because it allows us to inductively identify aggregate patterns and common mechanisms rather than artificially forcing theoretical constructs and assumptions on our data. PCA also allows to address problems of multicollinearity between assumed "independent variables" by using these uncorrelated predicted values for each personality type to analyze "willingness to innovate under heightened risk" using a standard ordered logit regression methodology in the instrumental variable (IV) portion of our research design.[4]

In order to understand the interaction of personality and structural incentives, we designed our survey instrument to measure how base preferences interact with structural factors like officials' incentive structures around promotion and punishment.[5] Most importantly, we also included an additional question (not included in our PCA models) to serve as a test of how personalities interact with structural changes under risk. In particular, the Xi Jinping administration represents an important qualitative break with previous administrations as the ongoing anti-corruption campaign has significantly increased risk for local officials. Thus, the IV portion of our analysis uses a proxy measure for increased risk in recent years as a dependent variable to predict the ways that different personalities will respond to a heightened risk environment.

Overall, our PCAIV research design allows us to use PCA to inductively analyze the extent to which intrinsic preferences and personalities vary, and whether preferences can be aggregated into personality types suggested in the literature on policy innovation. This also reduces the complexity of the data, while retaining the original information, and produces a series of uncorrelated predicted values for personalities that we use as instrumental variables in standard multivariate regression to understand and predict how individuals respond to conditions of heightened risk. In doing so, we are able to explain both the congruence between structural incentives and local policy in some localities, *and* the divergence between top-down pressures and local innovation in others. In short, local leaders matter, and understanding variation in personalities can help us to understand local policy innovation.

4.1 | Prior expectations

Relying on the behavioralist literature, we anticipate that risk-propensity is strongly rooted in personality. Thus, we should expect different personalities to vary in their response to structural pressures, based in part on how they perceive relative gains and losses (Kahneman & Tversky, 1979). As Nicholson et al. (2005) highlight, risk takers can be divided into three types: stimulation seekers, goal achievers, and risk adapters, with the latter two distinguished as "risk-bearers" as opposed to risk takers. These findings link to the literature on policy entrepreneurship, where we expect that the influence of structural pressures is moderated by individuals' risk propensity and feelings of personal efficacy (Mintrom & Norman, 2009). We should expect that officials who score highly in predicted levels of "entrepreneurship" may perceive the benefits of innovation to be worth it, even under conditions of heightened risk, because they are more tolerant of risk and confident in their ability to adapt. In terms of political personalities, the literature on authoritarian personality (Adorno et al., 1950), and the Chinese literature on cadre evaluations (Heberer & Trappel, 2013), would lead us to expect authoritarian personality types to be highly sensitive to structural shifts in the risk environment, because of strong adherence to top-down signals and deference to hierarchy.

4.2 | Data collection

We administered surveys resulting in 937 completed surveys conducted in two waves: from May to December 2017, resulting in 678 observations, and in the summer of 2018 in May and June, which yielded another 259 observations.[6] Our survey was initially cancelled several times in 2016, due to political sensitivities around the Party discipline and anti-corruption campaigns. Instead of conducting the survey as a foreign entity, we were ultimately able to embed our questions as one part of a general survey on local governance administered as part of cadre training programs.[7] We relied on this strategy in order to be able to survey such a sensitive population, but it potentially restricts the sample or biases it in ways for which we cannot control. For example, we cannot know the selection process for attending that particular training, how this might bias our data, or how our population compares to the total universe of cases—the thousands of local officials working throughout China. Additionally, because our survey was compulsory for those in the cadre-training course, we are not able to calculate the nonresponse rate of our survey. However, it was not compulsory for subjects to answer every question, and we calculated a non-response rate for each question within our sample as reported in the methodological Appendix Table 2A.

Despite a number of factors out of our control, we conducted a thorough review of summary statistics with respect to key demographic variables, such as position, region, gender, education, and age, all of which could potentially skew our findings. This analysis, along with summary statistics and histograms with normal distribution overlays for each variable, can be found in the online methodological Appendix Table 2A. This table shows that key variables are normally distributed: the population has an average age of 42, and an average working experience of almost 19 years. This table also shows considerable variation in terms of position level, so our population is representative of leaders throughout the Chinese hierarchy. As one might expect given our target population of political leadership, the sample skews toward the educated, with more than 600 participants having completed tertiary education or above. The samples also are heavily male, with only 188 female participants. This is in line with what we would expect given

our target population. Additionally, in terms of regional distribution, our sample covers participants from eight different provinces, but is not evenly distributed across all provinces: 35% of our sample comes from Shandong province, 20% from Guangdong, and 15% from Hebei province. The remaining five provinces (Anhui, Gansu, Hubei, Yunnan, and Shanxi) individually account for between 5 and 10% of our total sample, respectively. This means our sample is skewed toward the more developed provinces, but nevertheless, the remaining five provinces represent a heterogeneous range of developmental and socio-political sub-national environments. In short, the sample does allow us to make general inferences about a large subsection of local officials throughout China. Our goal is not to have a perfectly representative sample, but a sample that is large enough and "representative enough" to make inferences regarding our core questions surrounding variability in personality traits. We contend that our analysis of this sample gives us confidence that we meet that bar.

One final caveat is in order about single country origin of our data. Our research design is set up and framed around a specific target population: local leaders in China. Methodologically, our primary objective is whether we can say something substantive about our research questions as they apply within China, and our sample size is large enough for this. However, we cannot make any claims about the generalizability of our findings to other comparative contexts. In addition to a governance structure that blends strong-authoritarianism with quasi-federalism, Xi Jinping has strengthened authoritarian institutions to consolidate central power during this period of time. For these reasons, our baseline assumptions are that we should expect large segments of our population to be highly sensitive to hierarchy. In this regard, the origin of our data makes this a "least likely case study" for the importance of alternative personality types and variation in behavior. To the extent that more democratic-oriented or entrepreneurial personalities exist within the Chinese bureaucracy, we might assume that this type of variation does carry over to other bureaucracies throughout the world, most of whom are comparatively liberal relative to China and have less authoritarian selection pressures. In this regard, our case selection might be considered a methodological advantage because the existence of significant variation in political personalities in China bolsters the case for generalizability. Moreover, the congruence between our findings on personality differences and the empirical literature in behavioralist and personality theory lends support to the argument that these findings might be replicable in other political contexts.

5 | RESULTS

PCA calculates a factor loading for each of the variables based on correlation matrices: "The PCA method aims to extract the main orthogonal contributors (principal components) which explain most of the variance of the data matrix analysed" (Cozzolino et al., 2019, 2469). Therefore, the results are reported as factor loadings, which are essentially the weights of each of the original variables as relates to each of the identified components. A general rule of thumb is that a factor loading above .3 is considered to be a strong relationship, so we only report those loadings that meet this threshold. The larger the factor loading—those closest to approaching −1 or 1—have a more significant impact on defining each component. For these reasons, we also highlight original variables that are particularly important for defining the personalities identified by the PCA. We also only report components that have an eigenvalue above one, which essentially is an indicator that the component explains more variance in the data than a

single variable. As mentioned, our survey instrument included three questions that were designed to measure risk propensity by asking what likelihood of failure one would be willing to accept in order to innovate. We used PCA to aggregate these answers into a "risk index" score for respondents, as reported in the PCA analysis below.[8]

The results in Table 2 summarize the first four of our components, which we find are clearly linked to distinct personality types.[9] As we expected, two of these personality types— components 2 and 3—are distinctly "authoritarian" in nature. The PCA further illustrates its utility for inductive analysis in distinguishing *between* authoritarian personality types. We label component 2 "strategic autocrat" because of significant loadings on factors we would typically associate with entrepreneurial personalities—agreement with the question that innovation is the product of one's own individual preference. However, we see significant loadings on factors traditionally associated with Chinese autocrats: high agreement on the importance of the cadre

TABLE 2 PCA analysis of personality types[a]

Variable	Component 1 Citizen-oriented	Component 2 Strategic autocrat	Component 3 Bureaucratic autocrat	Component 4 Policy entrepreneur
Risk Index				0.407
Risk of Failure			0.622	
Importance of Promotion				0.39
Uncertainty and Risk a Hindrance			0.468	
Individual Preference		0.343		0.345
One's Own Skill				0.491
Importance of Past Experience				0.35
Importance of Central Directives		0.572		
Importance of Cadre Evaluation		0.373		
Importance of Innovation for Promotion				0.389
Policymakers Make Policy				
Only Leaders Make Policy				
Importance of Citizen Demand	0.444			
Social Stability as Impetus	0.448			
Social Backlash a Hindrance	0.366		0.418	
Lack of Social Support a Hindrance	0.634			
Societal Input Associated with Positive Outcomes				0.338
% Variance Explained	16.06%	9.42%	8.33%	8.06%
Cumulative % Variance Explained	16.06%	25.48%	33.81%	41.87%
Eigenvalue	2.57	1.5	1.33	1.28

[a]Orthogonal "Varimax" Rotation, N = 721; Rho = .63; minimum eigenvalue for components = 1.

evaluation system,[10] and most strikingly, the importance of central directives. With a factor loading of .572, hierarchical directions from the central government are the defining feature of this personality type. In this regard, this component fits most closely assumptions regarding Chinese policymakers.

We labeled component 3 "bureaucratic autocrat" because it is defined most clearly by fear of punishment from supervisors. Those in this category most frequently cited the fear of failure as an obstacle to innovation, with a factor loading of 0.622, it is the most defining aspect of this component. These personalities also score highly in terms of other variables capturing risk: citing uncertainty and risk as an impediment to innovation, as well as the risk of social backlash. In general, this component also captures classical assumptions about autocratic policymakers and support prospect theory's emphasis on downside risk.

We label component one "citizen-oriented" and component 4 "policy entrepreneur." Component 1 shows a clear clustering of factors focused on social support and input into the policy process. With a high loading of 0.634, the most important question focused on how social support was a central enabling or inhibiting factor in shaping innovation. Component 4 resembles the classic policy entrepreneur hypothesized from the literature. We find high scores on factors related to individual attributes and promotion, including high loadings focused on the importance of one's own skill, one's prior experience, and reliance on one's individual preferences and judgment. The risk index and promotion considerations also factor heavily.

To what extent do these components explain variation in the data? Although we might expect autocratic or policy entrepreneur characteristics to be the most distinguishing, scores on citizen orientation appeared to explain more of the variation. This does not necessarily mean that there are more of these types of individuals, but rather that scores on these questions explain more variation in our data than other components: 16.06% of the overall variance. Somewhat surprisingly, the policy entrepreneur component explained only 8% of overall variance.[11]

To illustrate the distinction between personality traits of the two most dominant political personalities—the citizen-oriented and strategic autocrat—the loadings of these top two components are detailed in Figure 1.

Whereas the citizen-oriented leader loads highly on measures related to citizen feedback, the strategic autocrat has a strong preference for the importance of central dictates, the importance of the cadre evaluation system, as well as promotion and elite leadership as core principles of policy innovation. This component also evidences high scores related to the importance of one's own preferences for innovation, which seems to be interacting with the more top-down tendencies of a standard autocratic system. This interaction describes a personality that is willing to engage in experimentation aligning with central directives, perhaps as a promotion strategy.

Although these components clearly show how local leaders vary, it does not necessarily tell us about the relative prevalence of personality types or their predictive utility. To address the question of how these personalities are distributed, we built a "personality index" that aggregates an individual's predicted scores on each of these four personality types. Based on the PCA analysis above, we identified two personality types—the citizen-oriented and entrepreneurial components—that were *relatively* more democratic in orientation in that they are defined by non-hierarchical characteristics. Scores on these personality traits were inverted, such that a high score on one of these components resulted in a higher negative score in our index. Strong positive scores on the autocratic personality components remained positive. We added these scores into a composite personality index, which uniquely identified each respondent on a scale
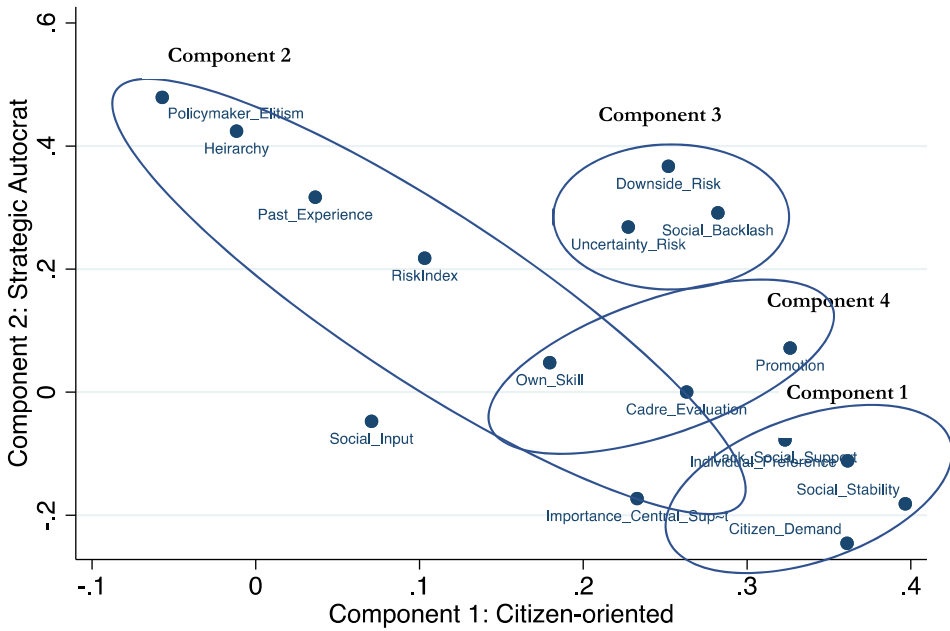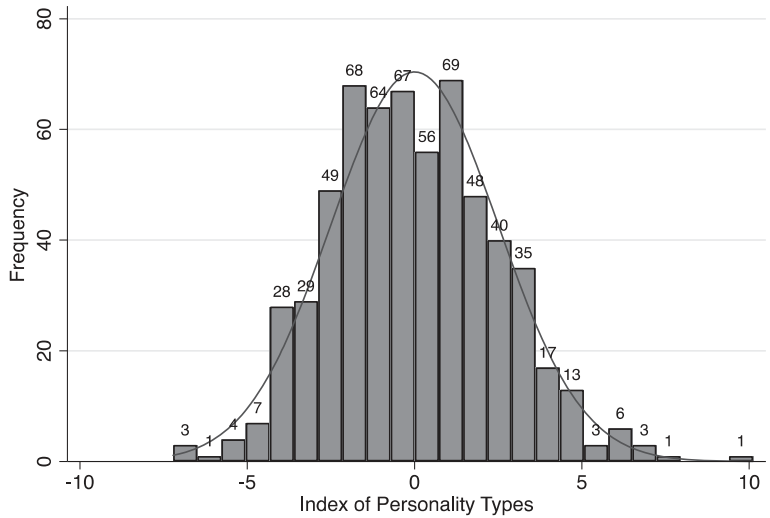
FIGURE 1 Component loadings and personality clusters

FIGURE 2 Distribution of personalities based on personality index

of −10 to 10, with more positive scores indicating a more autocratic personality. The distribution of these scores is reported in Figure 2.

These results show a relatively normal distribution, with tests for normality indicating that this distribution is normal based on kurtosis but not based on skewness. For this reason, the joint Chi-squared test for normality just misses the 0.05 threshold. Nevertheless, the distribution shows that there is significant variation within our sample. While the mean score indicates that our population does skew toward the authoritarian side of the spectrum, authoritarian personalities do not represent a super majority within our sample. In other words, more democratic oriented leaders exist and represent a sizable component of the local leadership. As a robustness

check, we then use predicted values of personality type as instrumental variables to predict responses to an out of sample question through a series of ordered logit models. This allows us to test the predictive utility of personality types and explore the interaction of individuals with strong structural incentives.

In an evolutionary framework, the interaction between individual and structural factors is the focus for understanding change. In order to simulate that interaction, we used a natural experiment design to test how respondents view innovation "in recent years" since Xi Jinping took office. This allows us to test the responsiveness of these personality types to shifting structural pressures facing government officials. The Xi Jinping administration represents an important qualitative break with past administrations by dramatically raising the level of risk for local officials engaging in policy experimentation with institutional changes in power recentralization and anticorruption campaigns. Since 2012, more than one million officials have been investigated and punished, resulting in the "paralysis" of officials afraid to make any decision that might draw attention (Ahlers & Stepan, 2016). Regarding policy innovation, Heilmann (2016) finds that the number of provincial-level policy pilots declined from 500 in 2010, to about 70 in 2016, and over the same period, the share of national regulations with experimental status dropped from nearly 20% to about 5 %. Clearly, increased risk and uncertainty are decreasing the amount of policy innovation in China. To identify interrelationships between political personalities and policy innovation under conditions of structural change, we use survey responses to a question about if policymakers are willing to innovate "recently" (a euphemism for Xi Jinping's administration). To be clear, due to political sensitivities, we do not mention the current administration in the survey but instead asks the following: "do you agree with this statement: 'local officials have been unwilling to innovate in recent years'?" This is not a measurement of whether or not policy experimentation is actually occurring, but the perception of local officials as to whether they see a reduction in policy experimentation under the current administration. Based on the personality literature, we expect officials with varying political personalities to perceive the current environment differently. Under increasing political risk, we predict that those personalities most influenced by structural incentives will follow central signals and halt experimentation. Overall, this should appear in the data like a reduction in perceptions of willingness to experiment for the "strategic autocrats" and the "bureaucratic autocrats."

In order to test the relationships between personality types and structural shifts, we generated a series of ordered logit models that use agreement with the "innovation in recent years" question as our dependent variable. Table 3 presents findings that use both the personality index and distinct personality types to predict agreement with this question. In addition, we include four control variables based on the literature on policy innovation in China for gender, education level, position level, and whether one is a cadre who is rotated or spends their entire career in one area.

The results from the first two models show that our personality index is highly significant and in the hypothesized direction. More autocratic personalities are more likely to agree with this question. In other words, they are highly sensitive to changes in the risk environment, even after controlling for other factors such as position level that might reduce sensitivity to environmental risk. Model 3, which uses predicted values on the four distinct personality types as instrumental variables, demonstrates that the strategic autocrat is the personality type significantly correlated with greater perception of risk. In these models, as well as a series of robustness checks reported in the online methodological Appendix Table 6A, citizen-oriented personalities and entrepreneurial personalities appear more resistant to shifting perceptions of risk.[12] Both sets of models show that autocratic personalities are consistently more willing to

TABLE 3 Relationship between personality types and structural pressures

	(1)	(2)	(3)
DV: Agree with "Innovation in Recent Years is More Difficult"			
Personality index	0.122*** (0.03)	0.137*** (0.04)	
Education level	−0.049 (0.13)	−0.048 (0.16)	0.027 (0.16)
Gender	−0.091 (0.18)	−0.084 (0.19)	−0.065 (0.20)
Age		0.007 (0.01)	0.014 (0.01)
Rotation		−0.117 (0.12)	−0.215 (0.28)
Position level		0.111 (0.08)	0.053 (0.15)
Citizen-oriented predicted			−0.005 (0.06)
Strategic autocrat predicted			0.305*** (0.07)
Autocratic bureaucrat predicted			0.125 (0.07)
Entrepreneur predicted			−0.064 (0.26)
Observations	603	539	539
Pseudo R^2	0.010	0.012	0.022
Chi-squared	16.820	18.754	33.528

Note: Standard errors in parentheses.
* $p < .05$, ** $p < .01$, *** $p < .001$.

agree that innovation is risky under the current administration. None of our control variables are significant once we add personality types.

Although all personality types seem to be less willing to experiment under conditions of heightened risk and uncertainty, the political personalities influenced by citizen input are slightly less sensitive to shifts in the environment. Officials with more citizen-oriented political personalities might continue to experiment, but perhaps not at the same pace, visibility, and scope as before. Given that this personality type has proven to be one of the most important in explaining willingness to innovate, this trend does not bode well for the future of local policy experimentation that is often cited as the cornerstone of China's responsive authoritarianism.

The utilization of an evolutionary framework helps specify interactions between individuals and institutions. The individual attributes drawn from the behavioral social-science literature like risk tolerance, personal efficacy, orientation toward authority, and importance of cognition (learning via feedback) are important in constructing political "personalities". We find that policymakers' individual attributes influence their willingness to innovate, which is responsive to, but not determined by, changes in the institutional structure. Thus, our theory of individual "personalities" for policy innovation explains variation in response to increasing risk and the uncertainty of policy innovation.

Our hypotheses that those political personalities more attuned to promotion incentives and pressure from the central government are less likely to innovate under conditions of increasing risk are supported, as is our hypothesis that the citizen-oriented political personality is more likely to innovate under these same conditions. However, we find two surprising outcomes. One is how much of an impact the citizen-oriented political personalities have on explaining variation in the data set, explaining 16.1% of the variation in our data—significantly more than

any other component. The other surprising finding is the relatively small impact of the "policy entrepreneur" personality found in the majority of the policy innovation literature. The political personality most important for policy innovation may not be the risk-acceptant policy entrepreneurs as Kim (2010) and Littunen (2000) argue, but rather the multistakeholder-oriented leaders that Mintrom and Norman (2009, 127) argue are characterized by "social acuity" and "effective at building teams". This mirrors the findings of the literature on policy innovation in democracies that changing policies are driven by officials responding to citizen needs (Berry & Berry, 1990). Additionally, the policy entrepreneurs are more responsive to changing structural incentives than the citizen-oriented officials, meaning that they are more likely to stop innovating as the central government signals a more restrictive policy space.

In general, these findings support the validity of using an interactive framework for analyzing the motivations for policy innovation – one that focuses on the interaction of agent variation and structural incentives. Consistent with the behavioralist social-science literature, we find evidence for the significance of both individual and structural factors, which highlights how dissimilar individuals may respond differentially to common incentives and structural shifts that increase risk.

6 | IMPLICATIONS AND CONCLUSION

This study demonstrates first, that even under conditions of a strong authoritarian regime, individuals fundamentally vary in terms of base-level preferences, displaying distinct political personalities. However, political personalities alone are insufficient for understanding policy innovation. We must also explain how individual characteristics interact with structural factors, namely, how do we understand the interaction between preferences and institutions? The discipline of political science has traditionally struggled with this, especially during times of structural change (see Sheingate, 2003).

Our research addresses this gap by focusing explicitly on the interaction between extrinsic and intrinsic motivations of local government policymakers for policy innovation using the case of China. We find that individual preferences for policy innovation are a vital but often missing part of the explanation, and that the interaction between these preferences and institutional incentives determine policy innovation. Moreover, we find that these preferences, or innovative personalities, are foundational to explaining policy innovation in that even as the institutional context shifts to discourage innovation, certain policy entrepreneurs will continue to innovate. We use the case of China since its strong top-down, bureaucratic system would predict that we should expect less variation in local officials' behavior. As we find significant variation in such a strong authoritarian bureaucracy correlated to willingness to innovate, this gives us stronger evidence of the importance of individual-level factors. Moreover, the case of China allows a natural-experimental design in that under Xi Jinping's rule beginning in 2012, previously high levels of policy innovation have been declining due to heightened political risk (Chen & Göbel, 2016). By testing policymakers' continued willingness to innovate, we are able to examine if intrinsic motivation influences innovation even as the incentives (extrinsic motivation) to innovate disappear. Our evolutionary approach to studying policy innovation allows us to study the complex interaction between individuals and systems to show how and when changing structural conditions cause changes in behavior. Specifically, our results speak to concerns that the ongoing anti-corruption campaign and significant recentralization of power in China are having a negative impact on the pace and scope of reform that many believe characterize the

resiliency of the Communist Party. Our data shows that many local government officials are risk-averse and deferential to hierarchy. As the level of risk increases substantially throughout the system, or promotion incentives for policy innovation are not clear, it seems that a significant proportion of local government officials will stop experimenting, as we see in the recent data on policy experimentation. However, we also find that a certain number of officials will continue to innovate, even in the face of significant structural pressures, but the relative prevalence of these individuals and their continued willingness to innovate under more prolonged or more severe forms of risk remains an open question for future study.

The question of institutional change under conditions of autocracy is of key concern to scholars of institutions, comparative authoritarianism, and China alike. Dominant accounts of institutional change under autocracy tend to focus on top-down selection pressures and elite politics, at the expense of more bottom-up or horizontal drivers of change (Boix & Svolik, 2013; Brownlee, 2007; Gandhi & Przeworski, 2006). In contrast, this study started from current empirical findings in evolutionary theory that agent heterogeneity is a fundamental component of any complex system. This helps to explain why the literature on policy innovation in China, and more broadly in other countries, has found that extrinsic motivations such as promotion and punishment are insufficient for understanding the extent and types of innovation observed over time and across geography. Our findings provide significant support for the notion of a more disaggregated and interactive view of institutions and policy innovation. At the most basic level, it is clear that officials vary significantly in the way they perceive selection mechanisms, and to the extent to which personalities and preferences shape their behavior. Both individual entrepreneurship and bureaucratic selection matter to local officials, but our evidence demonstrates that they matter differentially. Based on these findings, we contend that it is important to comprehensively understand the determinants of policy innovation in a single-party, authoritarian bureaucracy, since this experimentation has the potential to endogenously reshape policies and institutions. This is vital to understanding durability and adaptation in authoritarian regimes that lack mechanisms of information collection about policy performance and citizen satisfaction. We offer this methodology as one easily incorporated into research designs to measure individual preferences along with structural pressures to better understand change.

ENDNOTES

[1] We conceptualize "policy innovation" broadly as "whenever a government adopts a new policy, including subnational levels of government" (Walker, 1969), and do not make a distinction between creation and subsequent diffusion as long as the policy is new to that jurisdiction.

[2] Eckstein's "most-likely crucial case" is one that "must closely fit a theory if one is to have confidence in the theory's validity"; thus, the failure of a theory to explain a most likely case greatly undermines our confidence in the theory.

[3] Subnational officials have terms less than three years, which is often not long enough to show results. More-over, officials do not know if the results will be positive, or challenge elite power or other vested interests, causing the official to lose his/her position (see Teets & Hasmath, 2020). These factors create significant uncertainty and risk, which also vary across policy areas (see Chen & Yang, 2009).

[4] Pairwise correlations between predicted components are in the online methodological Appendix Table 4A.

[5] The survey question does not distinguish among innovation in different policy areas, some of which might have more associated risk.

[6] See Table 1A for the English translation of the survey in the online methodological Appendix, and a copy of the survey instrument in Chinese can be found in Table 7A.

[7] Additionally, due to a new data security law, our survey partner was unable to share the entire dataset with us but could only share the results of selected questions.

[8] We included robustness checks in the methodological Appendix. Some questions included in the risk index had a relatively high nonresponse rate, so we replicated the PCA analysis without the risk index included. These results, reported in the online Appendix Table 5A, are largely similar to the ones presented here, except that the entrepreneurial component had a larger eigenvalue, and therefore explains more variation in the data.

[9] There is significant provincial variation in personalities as noted in the Appendix tables 7 and 8.

[10] While our results uphold existing findings of the importance of the cadre evaluation system (see table 3A in the Appendix), we do see variation in level of importance. However, this measure cannot distinguish why cadres select this option, and the literature suggests that these might range from ambition to simple desire for recognition of hard work.

[11] As a robustness check, we conducted PCA without the constraining variables of the risk index. This model yielded approximately 84 additional observations, and showed the entrepreneurial component to be the second most important component in explaining variance. These results are reported in the online methodological Appendix Table 5A.

[12] We constructed an alternative personality index using PCA that did not include variables that comprise our risk index due to high nonresponse rates within our sample, in the hopes of expanding our observations and providing a robustness check. Those results are reported in the methodological Appendix Table 6A. Although not significant, the results in model 3 tell a similar story. We report these as our primary findings because there is not a huge difference in the number of resulting observations, as well as the fact that the models in Table 3 are based on more data.

DATA AVAILABILITY STATEMENT

REFERENCES

Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). The colonial origins of comparative development: An empirical investigation. *American Economic Review*, *91*(5), 1369–1401.

Adorno, T., Frenkel-Brunswik, E., Levinson, D. J., & Nevitt Sanford, R. (1950). *The authoritarian personality*. Verso.

Ahlers, A., & Stepan, M. (2016). Top-level design and local-level paralysis: Local politics in times of political centralization. *MERICS*: Papers on China No. 1, 34–39.

Alford, J. R., Funk, C. L., & Hibbing, J. R. (2005). Are political orientations genetically transmitted? *American Political Science Review*, *99*(2), 153–167.

Altemeyer, B. (2007). *The authoritarians*. University of Manitoba Press.

Amodio, D. M., Jost, J. T., Master, S. L., & Yee, C. M. (2007). Neurocognitive correlates of liberalism and conservatism. *Nature Neuroscience*, *10*, 1246–1247.

Baum, J. R., Frese, M., & Baron, R. A. (2014). Born to be an entrepreneur? Revisiting the personality approach to entrepreneurship. In *The psychology of entrepreneurship*, (pp. 73–98). East Sussex: Psychology Press.

Bennett, A. (2004). Case study methods: Design, use, and comparative advantages. In D. F. Sprinz & Y. Wolinsky-Nahmias (Eds.), *Models, numbers, and cases: Methods for studying international relations* (pp. 19–55). University of Michigan Press.

Berry, F. S., & Berry, W. D. (1990). State lottery adoptions as policy innovations: An event history analysis. *American Political Science Review*, *84*(2), 395–415.

Boix, C., & Svolik, M. W. (2013). The foundations of limited authoritarian government: Institutions, commitment, and power-sharing in dictatorships. *The Journal of Politics*, *75*(2), 300–316.

Brownlee, J. (2007). *Authoritarianism in an age of democratization*. Cambridge University Press.

Carney, D. R., Jost, J. T., Gosling, S. D., & Porter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology*, *29*(6), 807–840.

Chen, X., & Göbel, C. (2016). Regulations against revolution: Mapping policy innovations in China. *Journal of Chinese Governance*, *1*(1), 78–98.

Chen, X., & Yang, X. (2009). The innovative model of local government: Local cadres' perspectives and considerations. *Public Administration*, *6*(3), 1–11.

Clark, P., & Wilson, J. (1961). Incentive systems: A theory of organizations. *Administrative Science Quarterly*, *6*(2), 129–166.

Cozzolino, D., Power, A., & Chapman, J. (2019). Interpreting and reporting principal component analysis in food science analysis and beyond. *Food Analytical Methods*, *12*(11), 2469–2473.

Eckstein, H. (1975). Case study and theory in political science. In F. I. Greenstein & N. W. Polsby (Eds.), *Handbook of political science, vol. 7, strategies of inquiry* (pp. 79–138). Reading, MA: Addison-Wesley Press.

Feldman, S. (2003). Values, ideology, and the structure of political attitudes. In D. O. Sears, L. Huddy, & R. Jervis (Eds.), *Oxford handbook of political psychology* (pp. 477–508). Oxford University Press.

Feldman, S., & Johnston, C. (2014). Understanding the determinants of political ideology: Implications of structural complexity. *Political Psychology*, *35*(3), 335–358.

Fowler, J. H., Baker, L. A., & Dawes, C. T. (2008). Genetic variation in political participation. *American Political Science Review*, *102*(02), 233–248.

Frisch Aviram, N., Cohen, N., & Beeri, I. (2020). Wind(ow) of change: A systematic review of policy entrepreneurship characteristics and strategies. *Policy Studies Journal*, *48*(3), 612–644.

Fromm, E. (1964). *The heart of man: Its genius for good and evil*. Harper & Row.

Funk, C. L., Smith, K. B., Alford, J. R., Hibbing, M. V., Eaton, N. R., Kreuger, R. F., Eaves, L. J., & Hibbing, J. R. (2013). Genetic and environmental transmission of political orientations. *Political Psychology*, *34*(6), 805–819.

Gandhi, J., & Przeworski, A. (2006). Cooperation, cooptation, and rebellion under dictatorships. *Economics and Politics*, *18*(1), 1–26.

Gel'man, V., & Lankina, T. (2008). Authoritarian versus democratic diffusions: Explaining institutional choices in Russia's local government. *Post-Soviet Affairs*, *21*, 40–62.

Gerber, A. S., Huber, G. A., Doherty, D., Dowling, C. M., Raso, C., & Shang, E. H. (2011). Personality traits and participation in political processes. *The Journal of Politics*, *73*(3), 692–706.

Hammond, D. R. (2013). Policy entrepreneurship in China's response to urban poverty. *Policy Studies*, *41*(1), 119–146.

Hasmath, R. (2017). White cat, black cat or good cat? The Beijing consensus as an alternative philosophy for policy deliberation. *China's World*, *2*(1), 12–24.

Hasmath, R., & MacDonald, A. (2018). Beyond special privileges: The discretionary treatment of ethnic minorities in China's welfare system. *Journal of Social Policy*, *47*(2), 295–316.

Hasmath, R., Teets, J. C., & Lewis, O. A. (2019). The innovative personality? Policymaking and experimentation in an authoritarian bureaucracy. *Public Administration and Development*, *39*(3), 154–162.

He, A. J. (2018). Manoeuvring within a fragmented bureaucracy: Policy entrepreneurship in China's local healthcare reform. *The China Quarterly*, *236*, 1088–1110.

Heberer, T., & Trappel, R. (2013). Evaluation processes, local cadres' behaviour and local development processes. *Journal of Contemporary China*, *22*(84), 1048–1066.

Heilmann, S. (Ed.). (2016). *China's political system*. Rowman & Littlefield.

Heilmann, S. (2008). From local experiments to national policy: The origins of China's distinctive policy process. *The China Journal*, *59*, 1–30.

Heilmann, S., Shih, L., & Hofem, A. (2013). National planning and local technology zones: Experimental governance in China's Torch Program. *The China Quarterly*, *216*, 896–919.

Hopkins, V. (2016). Institutions, incentives, and policy entrepreneurship. *Policy Studies Journal*, *44*(3), 332–348.

Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, *129*(3), 339–375.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica*, *47*, 263–291.

Kim, Y. (2010). Improving performance in U.S. state governments: Risk-taking, innovativeness, and proactiveness practices. *Public Performance and Management Review*, *34*(1), 104–129.

Kingdon, J. W. (1995). *Agendas, alternatives and public policies*. Longman.

Ksiazkiewicz, A., Ludeke, S., & Krueger, R. (2016). The role of cognitive style in the link between genes and political ideology. *Political Psychology*, *37*(6), 761–776.

Landry, P. F., Lü, X., & Duan, H. (2018). Does performance matter? Evaluating political selection along the Chinese administrative ladder. *Comparative Political Studies*, *51*(8), 1074–1105.

Lewis, O. A., & Steinmo, S. (2012). How institutions evolve: Evolutionary theory and institutional change. *Polity*, *44*(3), 314–339.

Littunen, H. (2000). Entrepreneurship and the characteristics of the entrepreneurial personality. *International Journal of Entrepreneurial Behavior and Research*, *6*(6), 295–310.

Malesky, E. J. (2008). Straight ahead on red: How foreign direct investment empowers subnational leaders. *The Journal of Politics*, *70*, 97–119.

Mercer, J. (2005). Prospect theory and political science. *Annual Review of Political Science*, *8*, 1–21.

Mintrom, M. (2000). *Policy entrepreneurs and social choice*. Georgetown University Press.

Mintrom, M., & Norman, P. (2009). Policy entrepreneurship and policy change. *Policy Studies*, *37*(4), 649–667.

Nicholson, N., Soane, E., Fenton-O'Creevy, M., & Willman, P. (2005). Personality and domain-specific risk taking. *Journal of Risk Research*, *8*(2), 157–176.

Paul, L. C., et al. (2013). Methodological analysis of principal component analysis (PCA) method. *IJCEM International Journal of Computational Engineering & Management*, *16*(2), 32–38.

Pech, N., & Laloë, F. (1997). Use of principal component analysis with instrumental variables (PCAIV) to analyse fisheries catch data. *ICES Journal of Marine Science*, *54*(1), 32–47.

Roberts, N. C., & King, P. J. (1991). Policy entrepreneurs: Their activity structure and function in the policy process. *Journal of Public Administration Research and Theory*, *1*(2), 147–175.

Sheingate, A. D. (2003). Political entrepreneurship, institutional change, and American political development. *Studies in American Political Development*, *17*(2), 185.

Shipan, C. R., & Volden, C. (2008). The mechanisms of policy diffusion. *American Journal of Political Science*, *52*(4), 840–857.

Teets, J. C., & Hasmath, R. (2020). The evolution of policy experimentation in China. *Journal of Asian Public Policy*, *13*(1), 49–59.

Teets, J. C., Hasmath, R., & Lewis, O. A. (2017). The incentive to innovate? The behavior of policymakers in China. *Journal of Chinese Political Science*, *22*(4), 505–517.

Teets, J. C., & Hurst, W. (Eds.). (2014). *Local governance innovation in China: Experimentation, diffusion, and defiance*. Routledge.

Walker, J. L. (1969). The diffusion of innovations among the American states. *American Political Science Review*, *63*(3), 880–899.

Weyland, K. (2005). Theories of policy diffusion lessons from latin american pension reform. *World Politics*, *57*(2), 262–295.

Weyland, K. (2008). Toward a new theory of institutional change. *World Politics*, *60*(2), 281–314.

Xu, X., & Peterson, J. B. (2017). Differences in media preference mediate the link between personality and political orientation. *Political Psychology*, *38*(1), 55–72.

Yilmaz, O., & Saribay, A. S. (2016). An attempt to clarify the link between cognitive style and political ideology: A non-western replication and extension. *Judgment and Decision making*, *11*(3), 287–300.

Zhu, X. (2018). Executive entrepreneurship, career mobility and the transfer of policy paradigms. *Journal of Comparative Policy Analysis: Research and Practice*, *20*(4), 354–369.

Zhu, X., & Zhang, Y. (2016). Political mobility and dynamic diffusion of innovation: The spread of municipal pro-business administrative reform in China. *Journal of Public Administration Research and Theory*, *26*(3), 535–551.

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