# Generation, Age, and Time: The Dynamics of Political Learning during Russia's Transformation

William Mishler University of Arizona Richard Rose University of Aberdeen

When the Soviet Union collapsed, most Russians had lived their entire lives in a quintessentially authoritarian culture. Having been socialized in this environment, how could citizens acquire the attitudes and behaviors necessary to support a new, more pluralistic regime? Cultural theories of political learning emphasize the primacy of childhood socialization and hold that altering initial attitudes is a decades-long process that depends on generational replacement. Institutional theories emphasize adult relearning in response to changing circumstances regardless of socialization. Lifetime learning integrates the competing perspectives. Multilevel models using New Russia Barometer data from 1992 to 2005 confirm the persistence of some generational differences in Russian political attitudes but demonstrate even larger effects resulting from adult relearning. Lifetime learning provides the most comprehensive account and suggests that Russians would quickly acquire the attitudes and behaviors appropriate to democracy—if Russian elites supply more authentic democratic institutions.

ow can citizens, socialized by authoritarian regimes in quintessentially authoritarian cultures, learn the attitudes and behaviors necessary to become loyal and effective citizens of new democratic regimes? The rapid emergence of democracies in much of postcommunist Europe has revived interest in processes of political learning and relearning. It also has rekindled debate about the strength and durability of generational differences in political socialization, the adaptability of adults to political change, and the length of time necessary for significant change to occur.

Two theories dominate: cultural theories of learning emphasize the importance of early life socialization.

Individuals in authoritarian societies are taught, virtually from birth, to embrace attitudes, values, and behaviors supportive of the regime (Almond and Verba 1963; Eckstein 1966). Youths not only are indoctrinated directly to accept the legitimacy of the regime, its basic institutions and authorities, but also are taught indirectly and often unconsciously a series of lessons about citizens' subject roles in society and politics (Hahn 1991; Kelly 2005; White 1979). These basic political attitudes are hypothesized to be deeply ingrained and to change only slowly over extended periods, thus maintaining a regime in equilibrium from one generation to the next. When changes in this equilibrium infrequently occur,

William Mishler is professor of political science, University of Arizona, Tucson, AZ 85721 (mishler@email.arizona.edu). Richard Rose is professor of politics, Centre for the Study of Public Policy, University of Aberdeen, Aberdeen, Scotland AB24 3QY (prof\_r\_rose@yahoo.co.uk).

This is a revised version of a manuscript first presented at the European Consortium for Political Research General Conference, September 8–10, 2005, Budapest, Hungary. The research was supported in part by a British Economic and Social Research grant on 'Diverging Paths of Post Communist Regimes' (RES000-23-0193). We appreciate the data management assistance of Neil Munro and the critical comments and suggestions of Harold Clarke, Steven Finkel, Bradford Jones, Orsolya Lazar, Marianne Stewart, the participants in the ECPR workshop, and the several anonymous reviewers for this journal.

We use the term "cultural theories" throughout to refer to a variety of loosely related, theoretical constructs that seek to explain political institutions and behavior in terms of the shared customs, values, and beliefs of a social group. While generalizing for simplicity's sake, we recognize that there are important differences among different conceptions of culture. More traditional cultural theorists (for example, Eckstein 1988; White 1979) advance a deeper, more fundamental, holistic and viscous conception of culture. More contemporary conceptions of political culture (such as Gibson, Duch, and Tedin 1992; Gibson 1996; Miller, Miller, and Reisinger 1994) adopt a much thinner, more individualist, micro-oriented, and malleable conception of culture that is largely synonymous with public opinion (see Mishler and Pollack 2003, for a fuller discussion). Our discussion of cultural theory draws primarily on the deeper, more traditional conception of culture since this is the one emphasized in most research on Russia and other authoritarian societies. Our treatment of cultural theories is, thus, consistent with Eckstein's (1988, 789) claim that "Political culture theory may plausibly be considered one of two still viable general approaches to political theory and explanation proposed since the early fifties . . . the other being political rational choice theory."

American Journal of Political Science, Vol. 51, No. 4, October 2007, Pp. 822-834

they are assumed to be functions of major social and political dislocations (Eckstein 1988) or processes that Mannheim ([1927] 1952) described as "intergenerational discontinuity."

Political socialization, however, is not identical for all subgroups. Differences in gender, ethnicity, or family position can produce important variations in socialization (Dalton 1977, 1994; Finifter and Mickiewicz 1992). Generational differences are considered especially important both because different generations come to political consciousness during different historical periods and because economic development typically ensures that different generations are socialized under different social and economic conditions (Abramson and Inglehart 1992; Jennings and Niemi 1974).

Institutional theories, by contrast, emphasize adult political experiences or political "relearning" based on individuals' rational assessments of "the net present value" of contemporary institutions and circumstances (March 1988; North 1990). While not denying the initial importance of childhood socialization, institutional theories hold that attitudes and behaviors are malleable and adaptable. Thus, later life experiences are expected to play a greater role in shaping adult opinions. Moreover, generational differences in initial political attitudes should diminish over time as they are overwhelmed by the common lessons of contemporary experience (Demartini 1985).

Cultural and institutional theories are not antagonistic, however, and can be conceived as different aspects of a lifetime learning model (Mishler and Rose 2001; Rose, Mishler, and Haerpfer 1998). According to this perspective, the political lessons of childhood are variously reinforced, revised, or replaced over time by later life experiences. In stable societies, where continuity is substantial and change incremental, early life socialization and later life experience may teach fundamentally the same lessons and have indistinguishable effects. By contrast, in societies undergoing abrupt transformations, discontinuities between early life socialization and adult experience provide considerably more scope for adult relearning. From a lifetime learning perspective, the debate between cultural and institutional explanations reduces to an empirical question about the relative importance and durability of early life socialization and later life experiences on political attitudes and behaviors.

The collapse of the Soviet Union brought about abrupt and simultaneous discontinuities in the political regime, economy, and society, making post-Soviet Russia an ideal setting in which to compare the effects of early and later life political learning. Whereas cultural theories (Keenan 1986; White 1979) anticipated that it would take decades or longer for the Russian culture to adapt

to new political and economic institutions, institutional theories held that Russians would rapidly adapt to the incentives and constraints that new political and economic institutions provided (cf. McFaul and Stoner-Weiss 2004; Reddaway and Glinski 2001). This research tests these competing perspectives using data from a unique series of national probability surveys conducted in Russia between January 1992 and January 2005. We begin by elaborating the theoretical expectations about generational learning and relearning and examine generational differences in attitudes toward the community, regime, and political authorities. We then estimate a lifetime learning model focusing on the dynamics of regime support in Russia during the transition. Finally, we consider the implications of lifetime learning for the future of Russia's transition.

# Generation, Age, and Time

Cultural theories of political learning assign particular importance to generations as the basic unit of political socialization. Although "deep" models of durable Russian values postulate intergenerational continuity reaching back for centuries (Lynch 2005), most students of Soviet/Russian public opinion report strong generational differences in political attitudes linked to historical experiences (Bahry 1987; Hough 1980; Inkeles and Bauer 1959; Silver 1987).

There are at least two reasons that generations are important. The first is historical. All generations in society may be socialized broadly into a common political culture, but different aspects of that culture may be emphasized depending upon the particular historical environment (war, depression, etc.) within which different cohorts were socialized. In Russia, older generations came of political age during Stalin's reign of terror while younger generations were socialized under *glasnost* and *perestroika*. Logically, as a result, they should have been socialized differently about the nature of the communist regime and their relationships to it.

Social and economic change provides a second reason that generations can matter. Modernization and globalization mean that successive generations grow up literally in different worlds. Russians coming of age in the 1980s not only were better educated than those socialized in the 1930s but also enjoyed higher living standards and greater access to information about Russia and the world beyond.

While generational differences may be produced by either unique historical epochs or macrosocial change, the natures of those differences are potentially distinct. 824 WILLIAM MISHLER AND RICHARD ROSE

		Changes in Political	Attitudes Over Time
es		No	Yes
nal Differenc	No	Fixed Personality	Institutional Learning
		No Generational Differences in Attitudes and No Systematic Change	No Generational Differences but Life Cycle or Time-Related Change

**Cultural Socialization** 

Discrete Historical or Monotonic Macrosocial Differences with Limited or No Change

#### FIGURE 1 Typology of Political Learning

In "normal" societies, modernization tends to be unidirectional. Progress may occur faster or slower, but the direction of change typically is the same. Thus, generational differences in political attitudes caused by macrosocial change should be continuous and monotonic in nature. By contrast, generational differences produced by unique historical epochs are more likely to be discrete and unrelated.

Generatio

Yes

Whatever the cause of generational differences, cultural theories assume that initial differences persist substantially unchanged as generations age. The "primacy principle" (Searing, Wright, and Rabinowitz 1976) argues simply that early life socialization trumps later life experience in shaping adult attitudes and behaviors (e.g., lessons learned early are the lessons learned best). The "structuring principle" (Searing, Schwartz, and Lind 1973) argues that attitudes learned early in life interpret and shape later life learning in a classic path-dependent process reinforcing early life socialization.

Institutional theories question the cultural assumption that historical epochs uniquely affect different generations. They assume, instead, that major institutional changes and events have similar contemporaneous effects on different generations. For example, institutional theories predict that the experience of *glasnost* and *perestroika* in Russia should have much the same effect, ceteris paribus, on the political attitudes of all generations and not just on those coming of age in the 1980s and 1990s.

This is not to say that significant events or life experiences affect everyone in the same way or to the same degree. From an institutional perspective, however, individual characteristics, especially economic interests, are more likely than generational membership to condition individual responses to contemporary experiences. Moreover, because social and economic circumstances (and therefore individual interests) change in predictable ways

as people age, institutional theories of political learning imply that experiential learning will vary systematically across the life cycle.

Lifetime Learning

Generational Differences and Either Life Cycle or

Time-Related Change

Figure 1 provides a typology distinguishing the cultural, institutional, and lifetime learning theories according to their assumptions about the nature, extent, and durability of generational effects on political attitudes and behavior. Cultural theories predict substantial generational differences in political attitudes (either continuous/monotonic or discrete, depending on their origins) that change little over an individual's lifetime. Institutional theories predict few generational differences in political attitudes but substantial changes among individuals across either generations or the life cycle. Lifetime learning allows both substantial generational differences in political attitudes and substantial changes in political attitudes over time.<sup>2</sup>

# **Defining and Measuring Generations**

Distinguishing the effects of generation and age requires time-series data covering an extended period, since age and generation are identical at any historical moment and highly collinear in the short run. To assess political learning in Russia, we use data from the New Russia Barometer (NRB), which has monitored popular responses to the political and economic changes in Russia since the collapse of the Soviet Union (Rose 2004). The NRB consists of 14 surveys conducted between January 1992 and January

<sup>2</sup>A fourth category in the typology logically prohibits both generational differences and attitude change. It assumes extreme intergenerational continuity and implies something akin to biologically determined personalities, which are fixed at birth and unchanging through life (Alford, Funk, and Hibbing 2005).

2005 with national probability samples of 1,600 to 2,000 citizens ages 18 and older.<sup>3</sup>

Identifying specific political generations is partly a function of historical interpretation and partly a matter of empirical analysis.4 Building on Rose and Carnaghan (1995), NRB respondents initially were classified into six discrete generations based on historical considerations.<sup>5</sup> Preliminary analyses indicated, however, that attitudinal differences between adjacent pairs of generations typically were small and nonsignificant, although the differences across all generations were consistently significant and usually strong. Based on the empirical results, therefore, the six initial groupings were combined into three larger, longer, and more distinct "megagenerations." Members of the survivor generation are defined as those born before 1945, the end of the Great Patriotic War. Older members of this generation fought against the Nazis and endured Stalin's reign of terror. Younger members grew up in the immediate aftermath of the war, coming of age when its social and economic consequences were still painfully evident. The youngest member of the survivor generation was 47 years old when interviewed in NRB I and 60 years old when interviewed in NRB XIV.

Russians born between 1945 and 1965 were socialized after the traumas of the survivor generation had ended,

<sup>3</sup>Each survey is an independent cross section of the population and not part of a panel design. Although the content of the surveys changes over time to reflect changing conditions in Russia, the NRB includes a core of questions asked consistently over time to facilitate comparisons. For further details on survey sampling and questionnaire construction, see the NRB website at http://www.abdn.ac.uk/cspp/catalog1\_0.shtml.

<sup>4</sup>Socialization research indicates that political learning begins early in life with a majority of individuals having acquired their basic political orientations by the end of adolescence (Easton and Dennis 1969). Accordingly, we treat the age of 15 as a realistic midpoint in the process of early life socialization and define generations in terms of the historical experiences that Russians would have experienced by about this age.

<sup>5</sup>The oldest of the six original generations consisted of those born before 1931, most of whom came of age during the crucible of the Great Patriotic War. The second generation, born between 1932 and 1945, came of age during the years after World War II. The third generation was born between 1945 and 1955 and socialized during the 1960s, when Stalinism was discredited and the first challenges to the Soviet empire emerged in Hungary, Czechoslovakia, and Poland. The fourth generation was born between 1956 and 1965 and came of age during the 1970s, arguably the high-water mark of the Soviet Union on the world stage. A fifth generation, born between 1966 and 1975, reached political maturity in the 1980s, a liberalizing era defined by *glasnost* and *perestroika*, but culminating with the collapse of the Soviet Union. Finally, a sixth generation of Russians, born after 1976, were socialized politically in the post-Communist era in which the international power and prestige of the state were severely diminished and economic dislocations were severe but in which there were increased individual freedoms and competition between political ideas.

during an era of Soviet expansion. This generation witnessed the spread of Soviet influence throughout Eastern Europe and the rise of the USSR as a world superpower. According to Brown, this period was "politically and socially the most stable of all periods of Soviet history; it was also the most cynical" (1994, 125). As a result, while the state's socialization mechanisms stressed positive support for the regime, informal socialization often stressed ways for individuals to protect themselves from the regime or to exploit the system for personal advantage (Ledeneva 1998; Shlapentokh 2001). Thus, socialization theory predicts that the *normal generation* should be less patriotically committed to the Soviet regime than should members of the survivor generation. Finally, Russians born after 1965 belong to a transitional generation. Older members of this generation came of age during the era of glasnost and perestroika. They later witnessed the collapse of the regime and the series of profound social, economic, and political changes that quickly followed. The youngest members of the generation were born in 1987, too late to remember the Soviet system from direct experience or to vote in the presidential election of 2003. For most in this generation, the old regime is only vaguely remembered, and the new regime is accepted as normal in the same way that communism was accepted by earlier generations. Socialization theory suggests that the transitional generation should be relatively more positive about the new regime and less nostalgic about its predecessor.

# Generational Differences in Attitudes and Behavior

Theories of political support typically distinguish a hierarchy of political objects including, but not limited to, community, regime, and authorities (Easton 1965). At the most fundamental level, individuals are assumed to be socialized virtually from birth to support the community, usually expressed as national pride or patriotism. Support for the regime, its institutions, and organizing principles is a second level, which is assumed to develop somewhat later and to be somewhat less deeply ingrained. Support for authorities is a third level and refers to citizens' attitudes toward leaders and parties holding political office. Socialization theory hypothesizes that this should be the last of the three levels to develop, the least deeply ingrained and the most malleable.

Figure 2A plots generational variations in Russian national pride across the 7-year period (1998–2005) for which NRB data are available on this question. Consistent with cultural expectations, modest but predictable

**B:** Support for Old Regime A: National Pride 85% 50 Support (+/-100) Percent Proud 30 65% -10 2005 1998 2003 2000 2001 1994 1995 1996 1998 2000 2001 2003 2004 **D:** Support for President C: Support for New Regime → Young →Middle Support (1-10) Support (+/-100) `\* Old -35 1993 1995 1996 1998 2000 2001 2003 2004 199<sub>2</sub> 199<sub>3</sub> 199<sub>4</sub> 199<sub>5</sub> 199<sub>6</sub> 199<sub>8</sub> 200<sub>0</sub> 200<sub>1</sub> 200<sub>3</sub> 200<sub>4</sub> 2005

FIGURE 2 Generational Differences in Support for Community, Regime, and Authorities in Russia

differences in pride exist across generations. Overall, 73% of respondents across all surveys say that they are "very proud" or "somewhat proud" to be citizens of Russia while only 27% respond "not very proud," "not at all proud," or do not answer. As cultural theory predicts, the oldest cohort is most patriotic (80% on average across the period). Differences between the two younger generations, however, are negligible.

Contrary to cultural theory, however, pride in Russia declines significantly over time among all groups. Pride declines by 8 percentage points among the oldest cohort, by 6 points among the middle generation, and by 3 points among the youngest. The net effect of these changes is to reduce the initial 9-point gap between generations to a 4-point gap by 2005. Although the magnitudes of the generational changes in pride are different, the direction of change is consistently downward, suggesting that national pride has been influenced in similar ways by contemporary experiences across the generations. These common generational changes are evidence of institutional learning; the initial generational differences suggest cultural learning, while the combination of the two indicates that a lifetime learning model provides the best overall fit to the data.

Even larger and more consistent differences in political learning are evident in the patterns of generational support for the former communist and current political regimes. Figure 2B tracks generational differences in

support for the former Soviet regime. When respondents are to evaluate the "political system before *perestroika*," the median Russian gives the old regime a score of +24 on a scale where "plus 100 is the best and minus 100 is the worst." Consistent with cultural theory, older generations express significantly more support on average than younger generations for the former communist regime.

Nevertheless, it also is apparent that support for the former regime increases over time among all generations. Immediately following the collapse of the old regime, the attitudes of all generations toward the old regime fluctuate dramatically. For example, the mean level of support for the previous regime among members of the oldest generation in 1992 is moderately positive (+15) but fluctuates significantly before peaking in 2001 at a mean of +51, a gain of more than 30 points across the period. Among members of the middle generation, support for the old regime increases by a similar amount (33 points), albeit starting from a lower level (0). Among members of the youngest generation, support for the former regime is lowest and rises from -3 in 1992 to a high of 21 in 1998, fluctuating modestly thereafter.

Because the *rate* of change in support for the old regime varies widely across generations, differences in support between generations increase significantly over time, from 18 points in 1992 to 31 points in 2004 before declining slightly in 2005. The average change in support for the former regime within generations over time

(30 points) is slightly larger than the average difference across generations at the same times (24 points). Both differences, however, are large and statistically significant, indicating that both cultural and institutional learning are at work.

An opposite pattern is observed (Figure 2C) with respect to support for "the current regime with multiple parties and free elections." The youngest generation is effectively neutral overall toward the new regime (-1 on the +/-100 point scale) while the oldest generation is moderately negative (-21) and the middle generation lies between the other two (-.13). All three generations, however, become significantly more supportive of the new regime over time. Moreover, while generational differences initially are small, they increase substantially over time. The difference between the youngest and oldest generations is only 8 points in 1992, but triples to 25 points by 2005.

Generational trends in support for the new regime are highly correlated, suggesting that generations respond similarly to common experiences. Rising support for the regime across all generations in the early 1990s is followed by declining support in the mid-1990s. Support rises again through 2004 before dropping sharply in 2005. Overall, the average change in regime support over time is more than twice the size of the average difference across generations (35 vs.15 points), suggesting that institutional learning plays a much larger role than early life socialization in shaping adult support for the current regime.

Regarding support for political authorities, the NRB periodically asks Russians "what assessment would you give to (Yeltsin/Putin) as President, where 1 is a very bad mark and 10 is the best." Support for Putin predictably is higher than for Yeltsin (by 6.0 vs. 3.4 on the 10-point scale) although support for both varies across generations and over time (Figure 2D). Contrary to cultural expectations that the Stalinist generation with its more authoritarian heritage would be more deferential and supportive of political authorities, it is the youngest generation that expresses the most favorable attitudes toward the Russian president. This is the case, moreover, for both Yeltsin and Putin.

Over time, support for Yeltsin falls significantly among all three generations, albeit rebounding slightly in 1998. In contrast, support for Putin grows significantly over time among the youngest (glasnost) generation while remaining relatively stable or declining slightly among the older generations. Differences in support over time within generations are about the same size as the differences across the generations at any given time, suggesting that cultural and institutional learning have similar effects. This biggest change in support among all generations, however, was occasioned by Putin's replacement of

Yeltsin—a classic example of institutional learning as all generations respond swiftly and similarly to the same institutional change. While cultural theory allows changes in presidential approval based on changes in the incumbent, the theory predicts contrary to the evidence, here, that different generations should have responded differently to these change based on the different values imprinted on them in childhood or as adolescents.

827

# **Models of Political Learning**

Inspection of generational differences and trends shows generally the size, consistency, and persistence of generational effects on political attitudes in Russia. It also indicates that the similarities in institutional learning across generations are typically larger than the differences among them. What is not clear from these patterns, however, is the cause of these cross-generational differences—whether socialization into historical epochs, macrosocietal change, or some combination of factors. Nor is it apparent what causes the substantial institutional learning observed across generations over time.

To address these questions, we construct a very simple model predicting citizens' support for the past and current regimes based on generation, age, and time. 6 Because age and generation are highly correlated, even in a data set spanning nearly 14 years, their inclusion in a single equation is problematic. To overcome this, we distinguish the independent effects of aging by constructing a variable that measures individuals' position/age within their generational cohorts. Thus an 18-year-old in the youngest (18–35) generation has a cohort-age of 1, while an individual who is 35 years old has a cohort-age of 18 in that same generation. While the use of cohort-age solves the multicollinearity problem, it does so in a way that maximizes the potential impact of generations on political learning while minimizing potential age or life cycle effects. Thus, it favors the historical socialization hypothesis.

To assess the effects of the passage of time on regime support, we simply count the number of months between the disintegration of the Soviet Union and the start of each survey. The inclusion of time in this model, however, poses another problem. Since time is an aggregate level attribute while generation and age are individual attributes, the resulting model is inherently multilevel,

<sup>6</sup>We focus on the two regime support variables rather than national pride, presidential approval, or voting because of the long, uninterrupted time series for these two variables. Use of the other variables substantially reduces the degrees of freedom available for the multi-level models. Also, the regime support variables are not biased in favor of institutional learning as is the case for presidential approval.

TABLE 1 Multilevel Model (Restricted Maximum Likelihood Estimates) of the Effects of Generation, Age, and Time on Popular Support for Russia's Past and Present Regimes, 1992–2005

	Former Communist Regime		Former Communist Regime		Current Pluralist Regime		Current Pluralist Regime	
Variable/Effect	Estimate	t	Estimate	t	Estimate	t	Estimate	t
I: Individual Level								
Generations (All)			10.58***	-25.10			-6.34***	-7.45
Generation 2	6.69***	5.40			-6.54***	-4.57		
Generation 3	19.88***	21.08			-12.78***	-7.31		
Cohort-Age	0.46***	4.86	0.43***	4.56	-0.25*	-2.71	-0.31**	-2.32
(Years in Generation)								
II: Aggregate Level								
Time (months of transition)	0.12**	3.35	0.12**	3.39	0.21***	5.31	0.22***	-2.32
III: Cross-Level Interactions								
Generation $2 \times \text{Time}$	0.09**	4.09			$-0.05^{*}$	-2.19		
Generation $3 \times \text{Time}$	0.09***	4.34			-0.08*	-2.77		
Generations × Time			0.03**	3.85			$-0.04^{*}$	-2.80
Cohort-Age × Time	-0.001	-0.330	-0.001	-0.420	0.010	0.550	0.010	0.670
Pseudo R <sup>2</sup>	5.2	2%	4.9	9%	7.	1%	7.	6%

Notes: \* $p \le .05$ ; \*\* $p \le .01$ ; \*\*\* $p \le .001$ . N = 2600 for level I; 13 for level II. Source: New Russia Barometer I-XIV.

consisting of individual Russians "nested" within yearly aggregates (Steenbergen and Jones 2002). This means that Ordinary Least Squares procedures are inappropriate for estimating such a model and suggests the use of multilevel modeling procedures instead.<sup>7</sup>

Table 1 reports a series of Hierarchical Linear Models estimating the effects of generation, cohort-age, and time on support for the past and present regimes in Russia.<sup>8</sup> Two sets of models are included. The first includes separate dummy variables for each generation and treats

<sup>7</sup>The use of individual level models to estimate aggregate level effects artificially inflates the "Ns" and distorts the standard errors for aggregate level estimates, thereby rendering statistical significance tests unreliable. Moreover, OLS assumes that relationships observed in the data are constant or "fixed" with respect to the underlying structure of the data. However, the "nesting" of individual level cases (Russians) within aggregate level units (years) raises the possibility that individual level relationships will vary systematically across higher level units. For example, the effect of generational differences in support for the old regime may be greater in 1992, when memories of Communism are fresh, than in 2005 when those memories may have begun to fade. While it is possible within OLS to interact individual level variables with variables distinguishing higher level units (in this case, time/year), the use of hierarchical or multilevel modeling procedures facilitates the analysis of random effects models while correcting the standard errors associated with higher level variables.

<sup>8</sup>All models in this analysis are estimated using HLM6 software developed by Raudenbush, Bryk, and Congdon (2004). For details on the methodology, see Raudenbush and Bryk (2002).

generations as having independent and discrete effects, consistent with historical socialization. The second treats generational influences as continuous, which is consistent with macrosocietal change or, less likely, a special form of continuous historical socialization.

All of the models in Table 1 are weak, providing only a 5 to 8 percentage point improvement in "fit" over the null model. Nevertheless, they provide a measure of support for each of the competing theories of political learning. Consistent with cultural theories, the models confirm the importance of generational differences in regime support but suggest, contrary to most expectations, that generational effects are continuous and monotonic. This can be seen in the statistically significant and steadily increasing (or decreasing) coefficients for successive generations. <sup>11</sup> For communist regime support, the coefficients show

<sup>&</sup>lt;sup>9</sup>The youngest generation is excluded as the reference category.

<sup>&</sup>lt;sup>10</sup>The coefficients in the models are Restricted Maximum Likelihood estimates (RMLE). The "t" statistic indicates the statistical significance of the estimates using robust standard errors, and the pseudo R² at the bottom of each model indicates the combined percentage of variance reduction in regime support both within and across years compared to a null model consisting only of the individual and aggregate level intercepts.

<sup>&</sup>lt;sup>11</sup>This is true both for the three-generation model reported here and for the original model, which divided Russians into six shorter and more finely grained generations.

that the middle generation is about 7 points (on a 201point scale) more supportive than the youngest generation, whereas the support of the oldest generation for the former regime is about 20 points higher than the youngest generation and about 13 points higher than the middle generation. Conversely, the middle generation is about 7 points less supportive of the new Russian regime than are members of the youngest generation, whereas members of the oldest generation are 13 points less supportive of the new regime compared to the youngest generation. The monotonic effects of generation on regime support also are apparent in the strong and statistically significant coefficients for the continuous measure of generation in the second of each pair of models. Therefore, we treat generation as continuous in subsequent analyses, in part to save degrees of freedom.

While generational differences exhibit the strongest effects on support for the old regime, cohort-age and time also have significant effects consistent with institutional learning and life cycle effects. Older members within each cohort tend to be significantly more favorable toward the old regime and less supportive of the new regime, although support for both regimes tends to increase gradually among all generational groups over time. Moreover, the effects of age and time are larger than their coefficients might appear to suggest. Whereas there are only three generations in this analysis, time varies from 1 to 156 months, and cohort-age ranges from 1 to 31 years. This means that the overall difference in support for the old regime between the youngest and oldest generations is about 20 points. By comparison, support for the old regime increases from the first to the last month by 19 points, and the difference in support between the youngest and oldest members of a cohort is as much as 14 points, other variables held level. The impact of time on support for the new regime is even larger (33 points) and is almost twice as large as the impact of generations (19 points).

The effects of cohort-age on both past and present regime support are relatively constant (i.e., fixed) over time as indicated by the nonsignificant coefficients for the cross-level interactions between cohort-age and time at the bottom of the columns in Table 1. This is consistent with life cycle effects that assume people at the same point in life respond similarly to similar stimuli regardless of how differently they might have been socialized. In contrast, the interactions between generation (however measured) and time are consistently significant, indicating that the generation gaps in support for the past and present regimes grow significantly larger over time. Older generations grow relatively more nostalgic for the old regime over time compared to younger generations

but also steadily close the gap with younger generations in terms of their support for the new regime.

To further test the effects of cultural and institutional learning, a lifetime learning model was constructed in stages adding six social structure variables and, then, six institutional performance variables to the baseline generation model. The six social structure variables, frequently linked to socialization experiences, include gender, education, social status, religion, ethnicity, and urban versus rural residence. Their inclusion enables us not only to assess the effects of early life socialization on later life political attitudes but also to estimate the extent to which generational effects are the result of macrosocial changes such as rising education levels over time. Public assessments of the performance of the new regime include egocentric and sociotropic economic evaluations, political corruption assessments, perceptions of individual freedoms and of government fairness, and presidential approval.<sup>12</sup>

Table 2 estimates Hierarchical Linear Models for past and present regime support using the most important social structure and performance measures from the initial cultural and institutional models. <sup>13</sup> The pseudo R<sup>2</sup>s at the bottom of the table show that the lifetime learning models perform substantially better than the baseline models in Table 1. The lifetime learning model produces a 9.5 percentage point reduction in variance in support for the former regime and an improvement of more than 30 points over the baseline model for current regime support.

Institutional learning accounts for most of the improvement in both models. Although most of the social structure variables had statistically significant effects on support for the former regime in the initial cultural models, only education and town size survive in the lifetime model of former regime support when institutional variables are added, and only SES survives in the model for current regime support. Additionally, none of the cross-level interactions between social structure and time

<sup>&</sup>lt;sup>12</sup>Definitions of all variables used in these analyses are included in the appendix.

<sup>&</sup>lt;sup>13</sup>Given only 13 degrees of freedom at the aggregate level (level II), it is not possible to include all 14 cultural and institutional variables in a single model together with generation, cohort-age, time, and the 16 possible level I by level II interactions. Thus, we constructed the lifetime model by including only the most important variables from the cultural and institutional analyses and then adding and dropping variables at the margins to fine-tune the model. This turned out to be a relatively easy process since very few of the cross-level interactions came close to being significant and because most of the social structure variables either were nonsignificant or became nonsignificant when institutional performance variables were included. In the end, all variables that are significant at least at the .05 level are included in the final model. To save space, the results from the initial cultural and institutional analyses are not shown but are available from the authors.

TABLE 2 Multilevel Lifetime Learning Model (Restricted Maximum Likelihood Estimates) of Support for Russia's Former and Current Regimes, 1992–2005

	Former R Significant		Current Regime: Significant Variables	
Variable/Effect	Estimate	t	Estimate	t
I: Individual Level				
A: Cultural Learning				
Generation	6.25	9.80	-1.87	-4.27
Cohort-Age	0.28**	3.13	-0.19	-4.27
Education	-3.31	-8.80		
SES			0.93*	2.56
Town size	-5.70	-6.88		
B: Institutional Learning				
Perceived Freedom	-7.46	-6.41	5.17	8.34
Perceived Fairness	-7.14	-5.13		
Presidential Approval	-2.31	-5.20	2.88	8.39
Perceived Corruption			-1.70	-10.13
Family Finances	-2.72	-4.83	0.92*	2.44
Current/Future Economic Evaluations	-0.10	-5.53	0.53	24.37
II: Aggregate Level				
Time (months of transition)	0.21	7.40	0.26	20.60
III: Cross-Level Interactions				
Generation $\times$ Time	0.03*	2.71	$-0.01^{*}$	-2.55
President × Time	0.04	6.85		
Corruption × Time			-0.05	-24.24
Pseudo R <sup>2</sup>	14.4%		38.8%	
Improvement over Baseline Model (Table 1)	9.5%		31.2%	
Improvement over Baseline + Cultural Learning	6.5%		27.6%	
Improvement over Baseline + Institutional Learning Alone	1.9%		1.1%	

*Notes*: All variables significant at .001 level unless otherwise indicated; \* $p \le .05$ ; \*\* $p \le .01$ .

N = 2600 for level I; 13 for level II. *Source*: New Russia Barometer I-XIV.

are significant in either model, indicating that the effects of cultural socialization, while small, are relatively constant across the 13 years encompassed by the data. Predictably, cultural socialization has even smaller effects on support for the current regime which did not exist at the time that most Russians initially were socialized.

By contrast, institutional learning has substantial effects on support for the old regime and even bigger effects on current regime support. Although the old regime no longer exists and can no longer be a direct source of institutional learning, political attitudes toward the old regime continue to be influenced indirectly as members of the public make comparative assessments of the performance of the current regime against the remembered past. Thus, virtually all of the performance variables have sta-

tistically significant effects on support for the old regime and produce substantial reductions in the unexplained variance. The institutional learning variables by themselves have a pseudo R<sup>2</sup> of 12.5%—an improvement of more than 7 percentage points over the baseline model and of 5 percentage points over a pure cultural socialization model. Predictably, the model performs even better in explaining support for the current regime, producing a 30 percentage-point improvement over the baseline model and a 28-point improvement over the cultural model.

Among the institutional variables, political and economic performance are about equally important in shaping regime support. Russians' appreciation of their new freedoms has somewhat larger effects on attitudes toward

the old regime. By contrast, macroeconomic evaluations and perceptions of corruption have somewhat greater effects on attitudes toward the current regime. <sup>14</sup> Attitudes toward the old regime also are relatively more affected by personal economic experiences (egocentric evaluations), whereas current regime support is much more sensitive to national economic (sociotropic) evaluations.

Unlike the cultural model in which none of the cross-level interactive terms was significant, two institutional performance variables, perceived corruption and presidential approval, have significant interactions with time in one or the other models. This indicates that the process of institutional learning is more dynamic than that of cultural socialization, which is consistent with both theories. Specifically, public evaluations of government corruption had only modest negative effects on support for the new regime at the start of the transition (RMLE = -1.70), but its negative impact (slope) increases (grows more negative) over time. Thus, its total impact on current regime support at the end of the period is nearly three times larger than at the start (-1.7 vs. -4.8).

Presidential approval exhibits an interesting different pattern. Its impact on support for the old regime becomes less negative over time while its impact on support for the current regime becomes less positive. Predictably, the overall level of presidential approval declines during the Yeltsin years and then rises sharply once Putin replaces Yeltsin. Despite the public's increasing approval of the president in later years, the evidence from Table 2 indicates that the impact of this increasing approval on support for the regime declines steadily over time. As Russians become more familiar with the new regime, they become less likely to judge it based on assessments of political leaders or their personalities and more likely to evaluate it with reference to the political and economic performance of the regime. This, in itself, is a form of institutional learning.

While institutional learning dominates attitudes toward both the current and past regimes in Table 2, cultural learning cannot be entirely dismissed given the stubborn persistence of significant generational effects. Predictably, generational effects are strongest with respect to support

<sup>14</sup>Since the old regime is gone and its economic system along with it, the measure of economic performance used to predict support for the old regime is a measure of public evaluations of the current economy. However, because the current political and economic regimes are so closely identified in the minds of many Russians, the inclusion of current macroeconomic evaluations in the equation for current regime support could potentially bias the model in favor of economic effects. To avoid this problem, we replace current economic evaluations in the model for current regime support with a comparable model of economic expectations. Thus, support for the past regime is explained in terms of current economic evaluations whereas support for the current regime is explained in terms of future economic evaluations.

for the old regime that most Russians learned initially to support. The coefficient for generation's effect on former regime support is among the strongest in the lifetime model and is only moderately diminished (from 10.58 to 6.25) from the baseline model. Generational effects are reduced considerably (in relative terms) in the model of current regime support (from -6.34 to -1.87), although they remain statistically significant.

The reductions in generation and cohort-age effects in the lifetime learning models as compared to the two baseline models are due almost entirely to the effects of institutional learning. Generational effects are virtually unaffected by the addition of the social structure variables, suggesting that generational differences in Russian regime support since 1992 are not the result of macrosocietal differences across generations such as rising education levels, modernization, or globalization. By contrast, the mediating effects of institutional learning on generational differences demonstrate the importance of life cycle differences in political interests, especially the different economic interests of younger and older citizens in Russia's new and much more market-oriented economy. The significant effects of cohort-age on both current and former regime support lend additional importance to life cycle effects. Older Russians are consistently more nostalgic for the old regime and less supportive of the new regime, whether measured across or within generations.

Nevertheless, generational effects remain statistically significant, albeit diminished, in both models even after controlling for institutional learning. Having controlled, in effect, for macrosocietal and life cycle changes via the social structural and institutional performance variables, the residual generational differences are likely the residues of historical socialization. Thus, political learning clearly is a complex process that begins early in life and continues unabated thereafter. Generational and life cycle effects operate in tandem. Although institutional learning appears to dominate in contemporary Russia, cultural learning is important too as lifetime learning theories predict.

#### Conclusion

When the Soviet Union collapsed and Russia began the transformation into a system with multiple parties and competitive elections, cultural theories did not offer much hope for a successful transition to a stable, less authoritarian regime in Russia. Russian citizens were thought to have been so deeply and consistently socialized into authoritarian values and subject roles that the political culture would take many decades to change. Institutional theories offered more hope given their emphasis on experiential

learning and their assumption that adult citizens can rationally adapt to the new institutions and circumstances as they confront them. From an institutional perspective, Russians could be expected to make "real time" assessments of the performance of the new regime both in absolute terms and by comparison to the old regime, adjusting their political attitudes and behaviors relatively quickly in response.

The process of political learning during the first 14 years of Russia's transformation offers a measure of support for both cultural and institutional theories and, thus, for lifetime learning. The evidence of significant generational differences in a variety of political attitudes shows the importance of early life socialization in Russia. Since these differences are largely monotonic across the generations, this normally would suggest that they are functions of macrosocietal change. However, the persistence of these differences even when generational differences in education, gender composition, and social status are controlled undermines this interpretation and points to discrete historical socialization. Nevertheless, while generational effects exist and persist into adulthood, they also are relatively small. For most attitudes and behaviors, generational differences are a fraction of those produced in all generations over time by contemporary political and economic experiences.

For most attitudes and behaviors, institutional learning, based on individual assessments of contemporary political and economic experiences, has much greater effects

on regime support. Thus, the evidence presented here suggests that Russians' lifelong socialization into an authoritarian culture by an authoritarian regime is not in itself an insurmountable obstacle to the development of democracy in Russia. This is not to deny the reality of the communist legacy or of Russians' authoritarian socialization. It is to emphasize that, however they are socialized, individuals have a great capacity to learn from experience the lessons needed to cope with a changing political world. Indeed, Russians already have gone a long way toward embracing the new, more pluralist regime that has replaced the Soviet system. They have done so in large measure because they have experienced first hand the greater freedom and fairness of the new regime and the economic opportunities it is providing.

The logic of adaptive learning, however, is that people will learn to accept whatever regime is supplied by elites, whether more democratic or more authoritarian than the previous regime. Although term limits are supposed to produce a new president of Russia in 2008, it is too early to tell whether this will happen and, if so, what direction a new leader will take the regime (Rose, Mishler, and Munro 2006). While there is nothing in this analysis to suggest that the development and consolidation of democracy in Russia are inevitable, our analyses provide strong reasons to believe that, if and when more democratic institutions and leaders emerge, Russian citizens will quickly learn the attitudes and behaviors necessary to accommodate and support them.

### Appendix Coding of Variables

Variables	Question Wording and Coding			
National Pride	How proud are you of being a Russian citizen? Very proud; Fairly proud; Not very proud; Not at all proud.			
Current (Past) Regime Support	Here is a scale for evaluating the political system (the political system we had before perestroika). The top, plus 100, is the best; the bottom, $-100$ , is the worst. Where would you put our current political system on the scale?			
Generation	Based on self-reported Age in years: 1. 18–35; 2. 36–55; 3. 56+.			
Gender	1. Female; 0. Male.			
SES	In our society, there are people of high social position and people of low social position. On this scale where 1 is the lowest and 10 is the highest, where would you place yourself now?			
Education	1. Incomplete secondary education or less; 2. Secondary/Vocational; 3. Some higher education or more.			
Church Attendance	How often do you go to church or religious services? 5. At least once a week; 4. Once or twice a month; 3. A few times a year; 2. About once a year; 1. Less Often/Never.			
Town Size	Population in thousands: 1. <20; 2. 20–50; 3. 50–100; 4. 100–500; 5. 500–1000; 6. 1000+.			
Ethnic Russia	1. Ethnic Russian; 0. Other.			

#### Appendix Continued

Variables	Question Wording and Coding
Perceived Freedom	Mean response to four questions: Compared to our system of government before perestroika, would you say our current system is better, much the same, or worse than the old system in terms of whether:? Everybody has a right to say what they think; One can join any organization one likes; Everyone can decide individually whether or not to take an interest in politics; Everybody has freedom of choice in religious matters. 5. Much better; 4. Somewhat better; 3. Much the same; 2. Somewhat worse; 1. Much worse.
Perceived Fairness	Compared to our system of government before perestroika, would you say our current system is better, much the same, or worse than the old system in terms of whether:? Government treats everybody equally and fairly. 5. Much better; 4. Somewhat better; 3. Much the same; 2. Somewhat worse; 1. Much worse.
Perceived Corruption	How widespread do you think bribe-taking and corruption are in this country? 1. Very few public officials are corrupt; 2. Less than half are corrupt; 3. Most public officials are engaged in it; 4. Almost all public officials are engaged in it.
Presidential Approval	What assessment would you give to Vladimir Putin (Boris Yeltsin) as President, if "1" is very bad and "10" is the best mark?
Current (Future) Economic Evaluations	Here is a scale for evaluating how well the economy works. The top, plus 100, is the best; the bottom, $-100$ , is the worst. Where on this scale would you put our current economic system (the economic system in five years)?
Family Finances	How would you compare your family's current economic situation with what it was before perestroika? 5. Much better now; 4. Somewhat better; 3. Same; 2. Somewhat worse; 1. Much worse now.
Time (Month)	Coded 1 for January 1992 and increasing by 1 each month thereafter.

Source (all variables): New Russia Barometer I - XIV: http://www.abdn.ac.uk/cspp/catalog1\_0.shtml.

#### References

- Abramson, Paul R., and Ronald Inglehart. 1992. "Generational Replacement and Value Change in Eight West European Societies." *British Journal of Political Science* 22(2): 183–228.
- Alford, John R., Carolyn L. Funk, and John R. Hibbing. 2005. "Are Political Orientations Genetically Transmitted?" American Political Science Review 99(2): 153–67.
- Almond, Gabriel A., and Sidney Verba. 1963. *The Civic Culture*. Princeton, NJ: Princeton University Press.
- Bahry, Donna. 1987. "Politics, Generations and Change in the USSR." In *Politics, Work, and Daily Life in the USSR*, ed. James R. Millar. New York: Cambridge University Press, pp. 66–99.
- Brown, Archie. 1994. "The Brezhnev Era, 1964–1982." In *The Cambridge Encyclopedia of Russia and the Former Soviet Union*, ed. Archie Brown, Michael Kaser, and Gerald S. Smith. Cambridge: Cambridge University Press, pp. 122–125.
- Dalton, Russell. 1977. "Was There a Revolution? A Note on Generational vs. Life Cycle Explanations of Value Differences." *Comparative Political Studies* 9(1): 458–73.
- Dalton, Russell. 1994. "Communists and Democrats: Democratic Attitudes in the Two Germanies." *British Journal of Political Science* 24(4): 469–93.
- Demartini, Joseph R. 1985. "Change Agents and Generational Relationships: A Re-evaluation of Mannheim's Problem of Generations." *Social Forces* 64(1): 1–16.

- Easton, David. 1965. A Systems Analysis of Political Life. New York: Wiley.
- Easton, David, and Jack Dennis. 1969. *Children in the Political System: Origins of Political Legitimacy*. New York: McGraw Hill.
- Eckstein, Harry. 1966. *Division and Cohesion in Democracy: A Study of Norway*. Princeton, NJ: Princeton University Press.
- Eckstein, Harry. 1988. "A Cultural Theory of Political Exchange." *American Political Science Review* 82(3): 789–804.
- Finifter, Ada W., and Ellen Mickiewicz. 1992. "Redefining the Political System of the USSR: Mass Support for Political Change." *American Political Science Review* 86(4): 857–74.
- Gibson, James L. 1996. "A Mile Wide But an Inch Deep'(?): The Structure of Democratic Commitments in the Former USSR." *American Journal of Political Science* 40(2): 396–420.
- Gibson, James L., Raymond M. Duch, and Kent L. Tedin. 1992. "Democratic Values and the Transformation of the Soviet Union." *Journal of Politics* 54(2): 329–71.
- Hahn, Jeffrey. 1991. "Continuity and Change in Russian Political Culture." *British Journal of Political Science* 21(4): 393–421.
- Hough, Jerry F. 1980. *Soviet Leadership in Transition*. Washington, DC: Brookings Institution.
- Inkeles, Alex, and Raymond A. Bauer. 1959. *The Soviet Citizen: Daily Life in a Totalitarian Society.* Cambridge, MA: Harvard University Press.

- Jennings, M. Kent, and Richard G. Niemi. 1974. The Political Character of Adolescence. Princeton, NJ: Princeton University Press
- Keenan, Edward. 1986. "Muscovite Political Folkways." *The Russian Review* 45: 115–81.
- Kelly, Catriona. 2005. Comrade Pavlik: The Rise and Fall of a Soviet Boy Hero. London: Granta.
- Ledeneva, Alena V. 1998. *Russia's Economy of Favours*. Cambridge: Cambridge University Press.
- Lynch, Allen C. 2005. *How Russia Is Not Ruled*. New York: Cambridge University Press.
- Mannheim, Karl. [1927] 1952. "The Problem of Generations." In *Essays on the Sociology of Knowledge*, ed. Karl Mannheim. London: Routledge and Kegan Paul, pp. 276–320.
- March, James G. 1988. *Decisions and Organizations*. Oxford: Blackwell.
- McFaul, Michael, and Kathryn Stoner-Weiss. 2004. "The Evolving Social Science of Postcommunism." In *After the Collapse of Communism*, ed. Michael McFaul and Kathryn Stoner-Weiss. New York: Cambridge University Press, pp. 1–20.
- Miller, Arthur H., Vicki L. Hesli Miller, and William Reisinger. 1994. "Reassessing Mass Support for Political and Economic Change in the Former USSR." *American Political Science Review* 88(2): 399–411.
- Mishler, William, and Detlef Pollack. 2003. "On Culture Thick and Thin: Toward a Neo-Cultural Synthesis." In *Political Culture in Post-Communist Europe*, ed. Detlef Pollack and Jorg Jacobs. London: Ashgate, pp. 239–56.
- Mishler, William, and Richard Rose. 2001. "What Are the Origins of Political Trust? Testing Institutional and Cultural Theories in Post-Communist Societies." *Comparative Political Studies* 34(1): 30–62.
- North, Douglass C. 1990. *Institutions, Institutional Change and Economic Performance*. New York: Cambridge University Press.
- Raudenbush, Stephen, and Anthony Bryk. 2002. *Hierarchical Linear Models: Applications and Data Analysis Methods*. Thousand Oaks, CA: Sage.

- Raudenbush, Stephen, Anthony Bryk, and Richard Congdon. 2004. *HLH6*. Lincolnwood, IL: Scientific Software International
- Reddaway, Peter, and Dmitri Glinski. 2001. *The Tragedy of Russia's Reforms: Market Bolshevism against Democracy*. Washington, DC: United States Institute for Peace.
- Rose, Richard. 2004. Russian Responses to Transformation: Trends in Public Opinion Since 1992. University of Strathclyde Studies in Public Policy Number 390.
- Rose, Richard, and Ellen Carnaghan. 1995. "Generational Effects on Attitudes to Communist Regimes: A Comparative Analysis." *Post-Soviet Affairs* 11(1): 28–56.
- Rose, Richard, William Mishler, and Christian Haerpfer. 1998. Democracy and Its Alternatives: Understanding Post-Communist Societies. Baltimore: Johns Hopkins University Press.
- Rose, Richard, William Mishler, and Neil Munro. 2006. *Russia Transformed: Developing Popular Support for a New Regime*. London, New York: Cambridge University Press.
- Searing, Donald D., Joel J. Schwartz, and Alden E. Lind. 1973. "The Structuring Principle: Political Socialization and Belief Systems." *The American Political Science Review* 67(2): 415–32.
- Searing, Donald D., Gerald Wright, and George Rabinowitz. 1976. "The Primacy Principle: Attitude Change and Political Socialization." *British Journal of Political Science* 6(1): 83–113.
- Shlapentokh, Vladimir. 2001. A Normal Totalitarian Society: How the Soviet Union Functioned and How It Collapsed. Armonk, NY: M. E. Sharpe.
- Silver, Brian D. 1987. "Political Beliefs of Soviet Citizens: Sources of Support for Regime Norms." In *Politics, Work and Daily Life in the USSR*, ed. James R. Millar. New York: Cambridge University Press, pp. 100–41.
- Steenbergen, Marco R., and Bradford S. Jones. 2002. "Modeling Multilevel Data Structures." *American Journal of Political Science* 46(1): 218–37.
- White, Stephen. 1979. *Political Culture and Soviet Politics*. London: Macmillan.