Explaining Support for Undemocratic Leaders in Democracies in the Middle East

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In 2008 Amaney Jamal and Mark Tessler, co-principal investigators of the Arab Barometer project,² published preliminary findings from the first wave of the regional survey and found that 86% of the survey's 5,740 respondents agreed that despite its problems, democracy is better than any other form of government.³ Such high levels of professed support for democracy stand in contrast to the region's longstanding freedom deficit, reported by the United Nations Development Programme's annual Arab Human Development Report and dozens of scholarly works since at least 2005.4 Given the overwhelming and paradoxical support for democracy, Jamal and Tessler investigated two specific questions about this support: (1) what factors explain a preference for either an Islamic democracy or a secular democracy, and (2) why do some who support democracy feel that having a strong nondemocratic leader is good for democracy. The authors used a series of logistic regression models to discover that individual evaluations of the political system are one of the most significant factors explaining both the preference for Islamic democracy and autocratic leaders within democracy. The authors conclude that though their findings have little predictive power and say little about future transitions to democracy in the Arab world, they do help prove that citizens' opinions, attitudes, and values (including Islam) are not to blame for persistent authoritarian rule. Instead of hopelessly blaming Muslim culture for the repressive political environment in the Middle East, "those who wish to advance the cause of democracy in the Arab world should focus their investigations not on the alleged antidemocratic impulses of ordinary women and men, but rather on the structures and manipulations ... of a political leadership class that is dedicated to preserving its power and privilege."5

Though Jamal and Tessler's original article successfully presented a brief and compelling view into some of the nuances behind popular support for democracy in the Arab world, additional details can be teased out from the data. In this paper I first replicate the authors' original models using the original data from the first wave of the Arab Barometer⁶ in order to take a deeper look into the article's second main question—the incongruous finding that 12% of those who support democracy feel that an autocratic leader who does not deal with elections or parliament is good. I then show that by using ordinal logistic regression—an alternative, and perhaps more appropriate, sta-

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- 2. Mark Tessler et al., "Arab Barometer" (2007), http://www.arabbarometer.org.
- 3. Amaney Jamal and Mark Tessler, "Attitudes in the Arab World," *Journal of Democracy* 19, no. 1 (January 2008): 97–
- 4. See Amaney Jamal, Barriers to Democracy: The Other Side of Social Capital in Palestine and the Arab World (Princeton: Princeton University Press, 2007); Eva Bellin, Stalled Democracy: Capital, Labor, and the Paradox of State-Sponsored Development (Ithaca, New York: Cornell University Press, 2002); Lisa Blaydes, Elections and Distributive Politics in Mubarak's Egypt (Cambridge: Cambridge University Press, 2011); Salwa Ismail, Political Life in Cairo's New Quarters: Encountering the Everyday State (Minneapolis: University of Minnesota Press, 2006), among others.

- 5. Jamal and Tessler, "Attitudes in the Arab World," 109.
- 6. Available at http://www.icpsr.umich.edu/icpsrweb/ICPSR/studies/26581.

tistical modeling method for ordinal survey data—we can find better insights and patterns in the data. Finally, I extend the original model to test two additional hypotheses: whether (1) a preference for gradual political change or (2) associational life can also account for the paradoxical propensity for autocracy within a democracy.⁷

Logistic regression and simulated results

As mentioned previously, of the 86% of respondents who agreed that despite its problems, democracy is the best form of government, 12% felt that it is good to have a strong non-democratic leader who does not deal with elections or parliament. This finding is both paradoxical and somewhat sensible. Those who support democracy should reasonably be expected to support its corresponding executive, legislative, and electoral institutions. At the same time, most political regimes in the Middle East have pseudo-democratic institutions headed by autocratic leaders who use these institutions to further entrench their autocratic rule. For example, former Egyptian president Hosni Mubarak used competitive parliamentary elections as a mechanism for distributing patronage benefits from the ruling party—not to allow for genuine competition in policy-making.⁸ It is likely that many in this 12% conflate democracy with pseudo-democratic institutions, believing that having an autocratic leader who delegates a marginal measure of power to a legislature or to the electorate is a good thing, despite the fact that these institutions do not represent actual participatory democracy.

Jamal and Tessler propose two hypotheses to explain the support for autocratic leaders among those who support democracy. Western popular and academic discourse has long blamed Islam for the persistence of authoritarianism in the Arab world, asserting that (1) Islam promotes communalism over individualism, which is an essential component of liberal democracy, (2) Islamic law is illiberal and inherently incompatible with democracy, and (3) Islam fosters antidemocratic attitudes and values among its adherents.⁹ Perhaps survey respondents who were more religious felt that an autocratic leader in a democracy was a good thing.

Alternatively, individual political evaluations might explain the propensity to support a non-democratic leader. Discontent with Arab governments that claim to be democratic, but which fail to establish or effectively use democratic institutions, could lead respondents to feel that in an ideal world democracy is the best form of government, but because democracy does not work well in their own countries, a strong leader is needed to maintain order and control.

In their article, Jamal and Tessler test both of these hypotheses, measuring personal religiosity by how often a respondent reads the

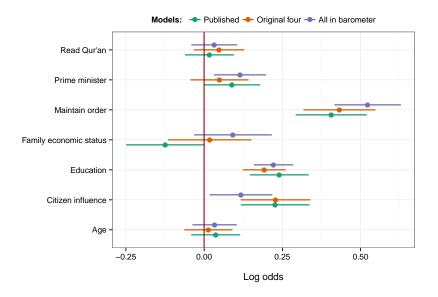
7. All the models and graphics in this paper can be replicated exactly using code available at http://github. $\verb|com/andrewheiss/Attitudes-in-the-Arab-World.|$ Statistical analysis in this paper was done in R, using additional modeling functions in the MASS package. All graphics were created using Hadley Wickham's ggplot2 package.

8. Blaydes, Elections and Distributive Politics in Mubarak's Egypt.

9. Jamal and Tessler, "Attitudes in the Arab World," 101.

Qur'an, and measuring individual political evaluations by their opinion of how well democracies maintain order, how much influence citizens have on the government, and how much trust they have in the prime minister. The authors control for age, education, and economic well-being. 10 The authors then collapse the four possible opinions of a strong non-democratic leader into a binary variable ("very good" and "good" become "good"; "very bad" and "bad" become "bad") in order to use a binary logistic regression model for analysis.

There are minor discrepancies between the data used for the Journal of Democracy article and the data available to the public. The barometer data available at ICPSR includes 6,902 observations from 6 countries: Jordan, Palestine, Algeria, Morocco, Lebanon, and Yemen. In the original article, Jamal and Tessler use 5,740 observations from 5 countries: Jordan, Palestine, Algeria, Morocco, and Kuwait. Responses from Kuwait were not included in the final barometer data due to problems with many of the interviews, unfortunately discovered after publication of the original article. Jamal and Tessler do not include Lebanon and Yemen in their article.



10. See the appendix for summaries of all included variables

Figure 1: Comparison of coefficients and standard errors for the model original published in the Journal of Democracy (Jordan, Palestine, Algeria, Morocco, and Kuwait), a replicated model using only Jordan, Palestine, Algeria, and Morocco, and a replicated model using all countries in the 2007 Arab Barometer (Jordan, Palestine, Algeria, Morocco, Lebanon, and Yemen).

Because of these issues, there are slight differences between the published model results and my replication of the study.¹¹ The coefficient plot in Figure 1 visually demonstrates these differences, showing the variation in coefficients for (1) the published model using Jordan, Palestine, Algeria, Morocco, and Kuwait, (2) a replicated model using Jordan, Palestine, Algeria, and Morocco, with Kuwait omitted, and (3) a replicated model using Jordan, Palestine, Algeria, Morocco, Lebanon, and Yemen. Most variables in the different models fall within their re-

11. Precise summaries of all the models in this paper can be seen at http://www.andrewheiss.com/research/733 replication.html.

spective confidence intervals, with the exception of family economic status, which has the most widely varied point estimates of all the models' variables. Regardless of these discrepancies, when combining all countries included in the barometer, the model shows that personal religiosity has no significant effect on support for a non-democratic leader, while personal political evaluations—specifically whether democracies are good at maintaining order and whether citizens can influence policy—do have a significant effect. Those who who have more pessimistic views of democracy are more likely to prefer an autocratic leader.

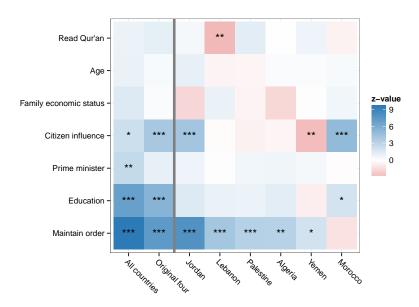
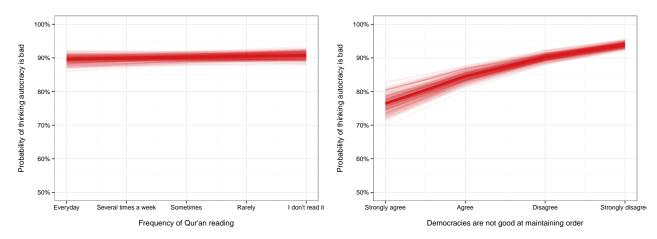


Figure 2: Grid of coefficient t-values for the model using all countries, the model using the original four countries, and each individual country. Coefficients are sorted vertically by the size of the t-value in the left-most model, and the models are sorted horizontally by the size of the bottom-most coefficient. Significant at *p < .05; **p < .01; ***p < .001.

These findings are generally consistent at a country level as well (see Figure 2). Whether or not someone thinks democracy can maintain order has a significant effect on the probability of supporting an autocratic leader in every country except Morocco, and a belief that citizens can influence the political system and policy process is significant in Jordan, Morocco, and Yemen. Similarly, personal religiosity has no impact on support for a non-democratic leader in all countries except Lebanon (not included in the original article), where personal religiosity actually has a negative effect on support for autocratic leaders.

The impact these variables have on the probability of supporting undemocratic leaders can be better understood by visualizing the predicted probabilities of agreeing with the survey question. For example, the model found that the frequency of reading the Qur'an had no significant impact on support for autocracy. Figure 3 shows the probability of thinking that a nondemocratic leader is "bad" or "very

bad" for each possible level of Qur'an reading, holding all other model variables at their modal values. As is readily apparent, the probability of believing that an autocratic leader is essentially identical across all possible frequencies of reading the Qur'an. In contrast, whether or not someone thinks democracies are good at maintaining order does have a visibly powerful impact on the dependent variable, seen in Figure 4. Those who agree most that democracies cannot maintain order have around a 70% chance of thinking autocracies are bad, while those who believe the opposite have just over a 90% chance of answering the same.



A more appropriate method

As mentioned above, Jamal and Tessler's dependent variable is a binary measure of whether or not someone thinks an autocratic leader is bad. However, the original question in the barometer gave respondents four choices of answers: very good, good, bad, and very bad. Collapsing survey answers into categories is a common practice in social science research as it simplifies the interpretation of regression results, but doing so eliminates substantial nuance from statistical models and hides important insights and results. Specifically, combining answers removes granularity from the data, hiding differences in the magnitude of the response levels. For example, collapsing the responses "very bad" and "bad" into a single "bad" category can include both those who vehemently oppose non-democratic leaders and those who merely say autocracy is bad in the absence of a "no opinion" option. Rather than force responses into binary categories, an ordinal logistic regression model can be used to measure the impact of the model's independent variables on each possible response category, thus showing patterns within the different possible answers.

There are few substantive differences between the ordered logistic

Figure 3 (L) and Figure 4 (R): Predicted probability of responding that autocracy is bad across all frequencies of reading the Qur'an and all possible opinions of democracy maintaining order, over 250 simulated draws of model coefficients, with all other model variables held constant at their modal values.

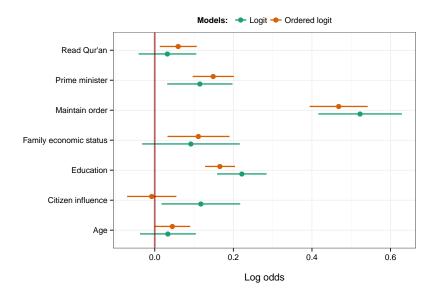


Figure 5: Comparison of coefficients and standard errors for the all country logistic regression model and its corresponding ordered logistic version.

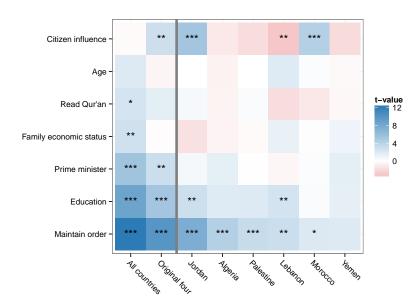
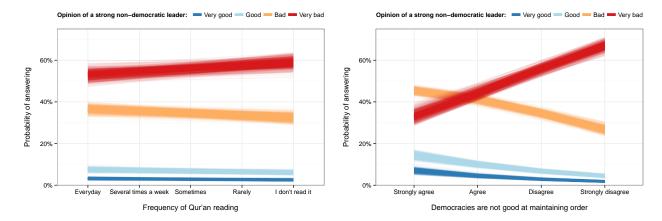


Figure 6: Grid of coefficient z-values for the model using all countries, the model using the original four countries, and each individual country. Coefficients are sorted vertically by the size of the zvalue in the left-most model, and the models are sorted horizontally by the size of the bottom-most coefficient. Significant at *p < .05; **p < .01; ***p <.001.

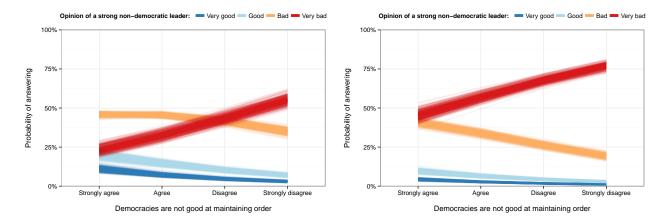
and binary logistic regression models for explaining support for nondemocratic leaders (see Figure 5). In the model that includes all countries, all ordered logit coefficients have smaller standard errors than their binary counterparts, and with the exception of citizen influence on government policy, all point estimates fall within the original logit confidence intervals, indicating a potentially more accurate model fit. Personal religiosity, or frequency of reading the Qur'an, is statistically significant in the ordered logit model, but only by a small order of magnitude. The ordered logistic model also causes a few other minor shifts in significance within individual countries (see Figure 6), primarily in Yemen, where no variable in the model explains significant variation in support for democracy. Despite these differences, Jamal and Tessler's original conclusions are still valid—on average, personal religiosity does little to explain why people might support autocratic leaders, while individual evaluations of the political system (especially opinions of how well democracies maintain order and how much citizens can influence the political system) are a much more powerful predictor of support for non-democratic leaders.



These arguably more accurate models lend themselves to richer interpretations of predicted probabilities, which provide more nuanced findings. Instead of a single line showing the probability of agreeing that autocracy is bad, as in Figures 3 and 4, we can estimate the probability of selecting each of the possible answers. Figures 7 and 8 are identical to Figures 3 and 4, but show patterns within the different answers across varying frequencies of Qur'an reading. Figure 7 shows that regardless of how religious they are, holding all other variables constant, the average respondent will consider a strong nondemocratic leader very bad about 50% of the time, bad 40%, good 8%, and very good 2%—findings that are nearly identical to the logit predictions that someone will feel autocracy is bad 90% of the time. Figure 8, on the other hand, reveals substantial nuance that was previously hidden in Figure 4. A person who feels that democracies are not good at maintaining order is more than twice as likely to feel that a strong non-democratic leader is good (16% vs. 5%). Additionally, the intensity of opposition to autocracy reverses as political evaluations improve. The most probable response for those who either disagree or strongly disagree that democracies are not good at maintaining order is "very bad" while those who agree or strongly agree are most likely to answer only "bad." If we assume that there is a substantive

Figure 7 (L) and Figure 8 (R): Predicted probabilities of responding that autocracy is very good, good, bad, or very bad across all frequencies of reading the Qur'an and all possible opinions of democracy maintaining order, over 500 simulated draws of model coefficients, with all other model variables held constant at their modal values. Compare to Figures 3 and 4.

difference between "bad" and "very bad," we learn that as individual political evaluations improve, people become more strongly opposed to democracy.

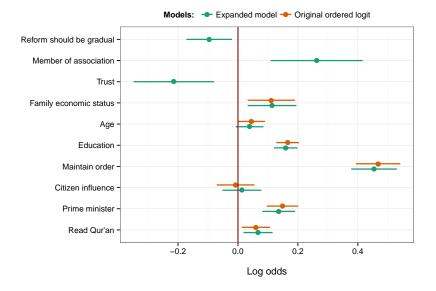


Political evaluations have even more of an effect when combined with education, a significant variable in the combined country model and in Jordan and Lebanon. Figure 9 shows the predicted probabilities of support for a non-democratic leader across potential opinions of how well democracies maintain order, with all other variables held at their modal value except education, which is set to its minimum (illiterate). Among the lowly educated, there appears to be a 50% chance of saying that autocratic leaders are "bad," but for those who feel that democracies are not good at maintaining order, there is a 20% chance of thinking non-democratic leaders are both "very bad" and "good." In other words, illiterate people who have poor opinions of democracy are still most likely to think that autocracy is bad, but they are divided in their second-choice answers. As political evaluations improve, the probability of answering "very bad" increases until it becomes the dominant answer for those with the highest opinion of democracies. This second-choice ambivalence disappears as people become more educated. Figure 9 is identical to Figure 10, but with education set to its maximum value (master's degree or higher). Among the highly educated, support for autocracy is overwhelmingly negative—those with poor political evaluations have an equal 40% chance of answering "bad" or "very bad," and the probability of answering "very bad" increases markedly as political evaluations improve, becoming the clear dominant answer for those with high opinions of democracy.

Figure 9 (L) and Figure 10 (R): Predicted probabilities of responding that autocracy is very good, good, bad, or very bad across all possible opinions of democracy maintaining order, over 500 simulated draws of model coefficients, with all other model variables except education held constant at their modal values. Figure 9 sets education to its minimum (illiterate) while Figure 10 sets education to its maximum (MA or higher).

Gradual change and social capital

Political evaluations partially explain why people might simultaneously support democracy and a strong non-democratic leader, but there is still a substantial amount of unexplained variation in this model. Two additional theories can potentially be used to explain why people might support autocracy. Jamal and Tessler briefly mention the first in their original article, but do not pursue it: a preference for gradual or incremental political reform corresponds to support for dictatorship, especially for those who have little trust in democracy. Perhaps people want political reform to happen quickly, shepherded by a strong leader. For example, if someone feels that democracy is unable to maintain order, people may feel that a strong autocratic leader is necessary to push reforms through quickly. The second is based on Jamal's first book wherein she argues that civil society associations in authoritarian contexts do not contribute to democratization, despite the fact that associational life has long been touted as a critical component of democracy.¹² In authoritarian regimes, members of associations that are closely linked to the regime have higher levels of interpersonal trust and lower levels of civic engagement. Perhaps these same dynamics of trust, associational life, and civic engagement have an effect on support for an autocratic leader. While the Arab Barometer did not measure any dimensions of associational civic engagement, we can test the effects of interpersonal trust and associational membership.13



12. Jamal, Barriers to Democracy: The Other Side of Social Capital in Palestine and the Arab World.

13. The survey questions used for these additional theories are summarized in the appendix.

Figure 11: Comparison of coefficients and standard errors for the original and the expanded all country ordered logistic regression models.

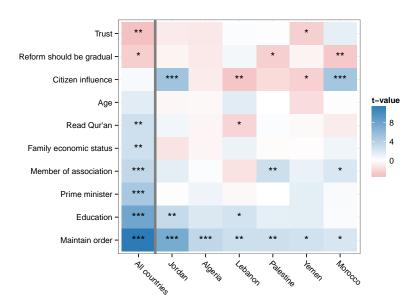


Figure 12: Grid of coefficient z-values for the model using all countries and each individual country. Coefficients are sorted vertically by the size of the zvalue in the left-most model, and the models are sorted horizontally by the size of the bottom-most coefficient. Significant at *p < .05; **p < .01; ***p < .001.

As shown in Figure 11, each of the additional variables have a significant impact on the probability of supporting an autocratic leader. In all countries combined, those who prefer gradual change are more likely to say that a non-democratic leader is good. The role of associational life has diverging results. Those who are members of associations are more likely to feel that autocratic leaders are bad, potentially indicating that in general, associational life improves views of democracy. In contrast, those with higher levels of trust are less likely to think that autocratic leaders are bad. This latter finding has echoes of Jamal's theory of authoritarian associational life-members of associations that are linked to the regime have higher levels of trust and tend to support autocratic leaders in order to receive state patronage and financial resources. These patterns are roughly similar across individual countries in the survey, albeit with less statistical power (see Figure 12). Both gradual change and associational membership are important factors in Palestine and Morocco, while trust is only significant in Yemen.

Though these variables are significant, they have a minimal effect on the overall probability of supporting a dictator in a democracy. Holding all variables at their modal values and assuming social trust and no association membership (see Figure 13), the predicted probability of thinking a non-democratic leader is "very bad" decreases from approximately 50% to 40% as people disagree with gradualism, while the probability of thinking that a non-democratic leader is only "bad" increases from approximately 35% to 40%, becoming equiprobable with "very bad." There is almost no effect on positive valuations.

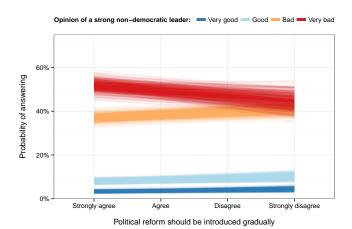
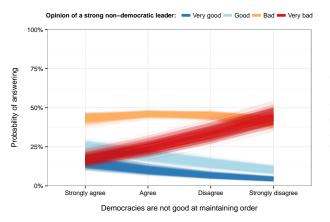
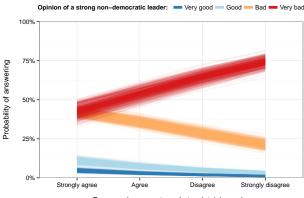


Figure 13: Predicted probabilities of responding that autocracy is very good, good, bad, or very bad across all possible opinions of ideal speed of political reform, over 500 simulated draws of model coefficients, with all other model variables held constant at their modal values.

Thus far, all graphs of simulations have held all variables at their modal values. We can set the most significant values to their extremes to gain a better understanding of the impact of the model's various significant variables to evaluate the model's predictive power. Figure 14 shows predicted probabilities across different political evaluations for a hypothetical person who trusts others, distrusts the prime minister, feels citizens have no influence on government policy, has no education, prefers immediate change, and is not a member of an association. Even in the extreme, the most probable opinion of a nondemocratic leader is "bad"—however, the other three answers are essentially equiprobable, with "good" the most likely. As political evaluations improve, the probability of choosing "very bad" increases until becoming dominant. Figure 15 shows the opposite scenario (a hypothetical person who has good political evaluations, high education, etc.), where "very bad" is clearly the most dominant answer regardless of whether or not the respondent feels democracies are good at main-

Figure 14 (L) and Figure 15 (R): Predicted probabilities of responding that autocracy is very good, good, bad, or very bad across all possible opinions of democracy maintaining order, over 500 simulated draws of model coefficients. Figure 14 assumes high trust, low political evaluations, illiteracy, preference for immediate change, and no association membership, with all other model variables held constant at their modal values. Figure 15 reverses the magnitude of the variables in 14.





Democracies are not good at maintaining order

taining order. The model still overwhelmingly predicts poor opinions of a strong non-democratic leader, but does reveal interesting nuances regarding the second, third, and fourth most probable answers.

Conclusion

It is difficult to explain the curious finding that 12% of those who support democracy feel that an autocratic leader who does not deal with democratic institutions is good, but as we have seen, individual political evaluations, opinions about the speed of optimal speed of political reform, and aspects of associational life all have a significant impact on the variation in support for autocratic leaders in democracies. By using ordinal logistic regression—a more appropriate modeling method given the more granular nature of the survey data—we can uncover important trends and insights hidden by Jamal and Tessler's original binary logistic model. As seen in graphs of predicted probabilities for different configurations of the model's variables, our three key hypotheses explain much of the variation between feeling autocracy is "bad" and "very bad," which can be useful if we believe that there is a substantive difference between the two responses. Perhaps no model will be able to fully explain why a minority of democracy supporters believe in autocratic leaders, but, as we have seen, our tested hypotheses do provide useful insights into the nature of democratic support throughout the region.

Software

All the models and graphics in this paper can be replicated exactly using code available at http://github.com/andrewheiss/Attitudes-in-the-Arab-World. Precise summaries of all the models in this paper can be seen at http: //www.andrewheiss.com/research/733_replication.html.

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Appendix

| Variable | Possible responses (all countries) |
|---|--|
| Opinion of a strong, non-democratic leader | Very good (3.56%); Good (9.1%); Bad (33.85%); Very bad (43.67%); NA (9.82%) |
| Frequency of Qur'an reading | Everyday (20.04%); Several times a week (21.62%); Sometimes (28.5%); Rarely (12.32%); I don't read it (13.74%); NA (3.8%) |
| Trust in prime minister | Great deal of trust (20.39%); Quite a lot of trust (26.88%); Not very much trust (17.2%); None at all (29.95%); NA (5.59%) |
| Citizens have power to influence the government | Strongly agree (16.68%); Agree (35.28%); Disagree (25.75%); Strongly disagree (14.82%); NA (7.48%) |
| Democracies are not good at maintaining order | Strongly agree (7.08%); Agree (19.91%); Disagree (41.47%); Strongly disagree (18.36%); NA (13.18%) |
| Education | Illiterate (12.82%); Elementary (12.5%); Primary (18.01%); Secondary (23.25%); College diploma (9.26%); BA (19.86%); MA or higher (4%); NA (0.29%) |
| Age | 18-24 (21.43%); 25-34 (29.73%); 35-44 (22.78%); 45-54 (14.05%); 55-64 (6.97%); 65-74 (3.49%); 75+ (1.12%); NA (0.43%) |
| Family economic situation | Very good (4.39%); Good (51.51%); Bad (30.35%); Very bad (11.23%); NA (2.52%) |
| Political reform should be introduced little by little instead of all at once | Strongly agree (50.32%); Agree (31.32%); Disagree (5.42%); Strongly disagree (4.68%); NA (8.26%) |
| Are you a member of any organization or formal group? | No (81.14%); Yes (17.27%); NA (1.59%) |
| Would you say that most people can be trusted? | No (69.68%); Yes (26.11%); NA (4.22%) |