

Why Do People Support Political Islam? Empirical Evidence from Eight Muslim Societies

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Abstract

Some recent studies have found little explanatory power of religious attachment to the attitude toward democracy or war in the Muslim societies. This result challenges the conventional wisdom that the religious factor is deeply connected to political turmoil in the Middle East. However, political scientists so far lack a powerful theory to explain the support of political Islam. The purpose of this article is to make a contribution in this regard with methodological rigor.

This article starts with a theoretical discussion about the concept of political Islam and the three major arguments for its popular support. Next, a research design is proposed, including the issues of conceptual definition, variable formation, data processing, and major hypotheses. Then I introduce an innovative psychometric approach, Item Response Theory (IRT), to this study. Specifically, the focus is why the application of IRT can contribute to political culture studies with methodological merit. Finally, the conclusion shows that the three explanations all explain the support of political Islam but in different aspects. People with greater personal piety or premodernist attitudes are more supportive of political Islam in attitude, but when it comes down to voting behavior,

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they are very rational to hold the incumbent government responsible, no matter whether Islamist parties are part of it.

Keywords: Political Islam, Religion and Politics, Item Response Theory

I. Introduction

Despite many stereotypical images, some recent studies have found little explanatory power of religious attachment to the attitude toward democracy or war in the Muslim societies (Tessler 2003, 177). This result challenges the conventional wisdom that the religious factor is deeply connected to political turmoil in the Middle East (Tibi 1998, 25-26). With international events like 911, War on Terror, and War on Iraq, this debate is intertwined with ongoing political situations in the Middle East. In fact, public concerns rarely focus on scholarly arguments, and the information brought by news media and the government is always dominating public discourse than do academic opinions.

While journalistic information may mislead people with oversimplified discussions, political scientists so far lack a powerful theory to explain the support of political Islam (Bill 1994). The purpose of this article is to make a contribution in this regard with methodological rigor by investigating three questions:

- (1) Are religious people in a Muslim society more likely to support political Islam?
- (2) What makes them support or not support political Islam at the individual level?
- (3) What is the relative explanatory power of the three existing arguments, which claim religious attachment, social protest, and premodernist attitudes are related to the support of political Islam?

This article has six sections. In the second section, a theoretical discussion will clarify the concept of political Islam

and summarize the three major arguments for its popular support. The research design is proposed in the third section, including the issues of conceptual definition, variable formation, data processing, and major hypotheses. Next, an innovative psychometric approach, Item Response Theory (IRT), is introduced to this study. Specifically, the focus is why the application of IRT can contribute to political culture studies with methodological merit. In the fifth section, the results of the regression analyses are presented and interpreted. Finally, the conclusion shows that the three explanations all explain the support of political Islam but in different aspects. People with greater personal piety or premodernist attitudes are more supportive of political Islam in attitude, but when it comes down to voting behavior, they are very rational to hold the incumbent government responsible, no matter whether Islamist parties are part of it.

II. A Theoretical Discussion

A. The Concept of Political Islam

Political Islam is the idea that believes Islam and politics can not be separated and Islamic principles, especially the law of shari'a, should be incorporated into the political system and guiding public policy through a non-violent effort.¹

Undeniably, this definition is not matched with many people's perception about political Islam, which is often labeled as Islamic fundamentalism or radical Islamism.² The major distinction between my definition and the above is that I exclude

¹ This is my definition of political Islam. A similar definition can be found in Hafez (2003, 4-6).

² Most of the academic works are very careful to define the term of "Islamic fundamentalism" or "radical Islamism". However, in the popular media or journalistic writings, these two terms are used with terrorism or militants indifferently, so is political Islam. Regarding the misuse, see Jawed (1999, 2-3) and Malik (1999, 20-37).

the anti-system element and stress the “de-privatization” characteristic about religion and politics.³ In some sense, many Muslim countries have never really privatized Islam; but except for a few cases such as Iran after the 1979 revolution or Afghanistan under the rule of the Taliban regime, most Muslim countries have a secular body of government that resembles to the West in terms of administrative power.⁴ Therefore, de-privatization can be thought as a matter of degree, from an end of theocracy (total de-privatization) to another end of a completely secularized polity. As an ideal concept, it is difficult to argue what a political system in both ends would look like. Nevertheless, if we apply this concept to the Muslim world, de-privatization means that Islam is not only a private faith, but also a blueprint of political life.

How do we know that people support political Islam? Apparently survey data and election results can provide objective information. However, even if people say they support political Islam or they vote for Islamist parties, what exactly do they support? Is it possible that they refer to social justice when they say they support political Islam? Or do they mean social service, political freedom, cultural identity, application of the shari’a, or all of the above? What is more, in some historical junctures when the conflict in the Middle East was intense such as the Gulf War in 1991, support of political Islam might mean an anti-West feeling or even a sympathetic expression toward radical Islamists (Piscatori 1991, 1-27). It is also likely that people support political

³ To define “privatization of religion”, Casanova explains that the concept of privacy is “the modern institutionalization of a private sphere free from government intrusion as well as from ecclesiastical control” (1992, 18). Therefore, “de-privatization of religion” can be thought as the recovery of the secular or ecclesiastical authority’s control over such a private sphere with regard to religious affairs.

⁴ As Khomeini (2000, 247) points out: “it is a common mistake that any one of the present systems of government is considered an Islamic State,” the current form of government in the Muslim countries is neither established on Islamic law, nor the ruler of the government is learned of Islamic law and can implement it justly (Khomeini 2000, 248-50).

Islam simply because this is a socially acceptable answer. There are too many possible reasons about the motive and interpretation behind the support. In fact, political Islam is an evolving concept, and trying to find an “essentialist” definition is in vain (Esposito 2000, 50-51). What we need to find out is the logical connection between the motive and the support and why such logic stands in the Muslim societies. In the following discussion, I will discuss three important elements that are often embraced in the definition of political Islam.

The first element is identity (Seul 1999). Political Islam is not only a cultural identity; it is a social and political identity which can bring social solidarity within a state boundary, or even across different state boundaries (Barnett 1998). In some sense, political Islam is often interpreted as a transcendental identity above ethnicity, race, class, and partisanship (Schwedler 2001). For example, when a serious social or political problem breaks out along the cleavage line, political Islam can be promoted as the unifying ideology to solve the difference.⁵ When an international crisis happens, political Islam can serve as the principle that guides foreign policy (Mufti 1996). While not every Muslim government is predominated by the identity of political Islam all the time with regard to its domestic and foreign policy, it is always an important factor and needs to be considered carefully. Otherwise, strong domestic pressure from supporters of political Islam may jeopardize the political order (Tareq and Ismael 1993). As a collective identity, political Islam is the foundation of political power, a source of social cohesiveness, a principle of public policy, and an unnegligible factor in international relations.

The second element is justice (Ahmad 1975).⁶ Many people

⁵ For example, while there is some tension between the state and Islamists in Algeria, the state policy to promote Islamic identity as a major part of Algerian nationalism is never stopped. See Willis 1996, 35-67.

⁶ Islam has a strong socialist tradition in its economic thoughts long before the modern era. Regarding the historical origin of the socialist thoughts, see Sonn 1996, 75-91.

perceive political Islam as a contention for social equality against socioeconomic and corruption problems in the Muslim society (Samara 1995, 15). The development of Islamist groups in many instances is based on the strong local networks of charity organizations and their social services (Wickham 1994). While these activities are not particularly political in most of the time, it acquires popular support for its philanthropic nature and becomes the best resource of political mobilization. Furthermore, some of the social services, such as education or religious teaching, have significant socialization effects on the formation of the value system and political opinions (Langohr 2001, 593-600). With the image of service providers in contrast to the impotent, careless, and corrupted ruling class, Islamists have a great momentum to appeal for political Islam against the ruling class, particularly when the government has a pro-West foreign policy and adopts a secular political stance (Bayat 2002). It is no wonder that the slogan, "Islam is the solution" (Robin 1990, 56), is usually visible in political demonstrations as a symbolic representation to contrast the moral superiority of political Islam with the injustice of the secular regime (Sadiki 2000).

The third element is life style (Gaffney 1994). One of the appeals in the discourse of political Islam is returning to the authentic Islamic life (Sivan 1985, 50-82). While different people may have different versions of what it is, Qu'ran is the ultimate source to quote.⁷ If we apply Casanova's "differentiation thesis" (1994, 19-25) that the process of modernization brings the functional differentiation of secular spheres out of the religious realm, mainly the state, economy, and science (1994, 19), then political Islam is clearly a rival thought at least in the political sphere, and perhaps in the economic sphere as well.⁸ Not all

⁷ Of course there are other religious texts as well, such as "Hadith (the saying of the prophet) or the whole body of legal tradition (the shari'a and its authoritarian code of conduct)", quoted from Nielsen (1993, 88). However, Qu'ran as the most important Islamic scripture is transcendental above time and space. It is proof-texts and serves as the final authority of justification (Antoun 2001, 37-53).

⁸ Esposito (1994, 20) points out: "Islamists assert that Islam is not just a collection of beliefs and ritual actions but a comprehensive ideology embracing

aspects of modernization are contradictory to political Islam, but in terms of morality, especially the concept of gender, sexuality, individualism, liberalism, and diversity, political Islam does have a very different model from the western standard (Mayer 2002). This is related to another controversial issue of civil law versus Islamic law, and the major difference is that the shari'a law basically presumes Islam as an all-embracing normative system and it legalizes political as well as personal relationships in a way that is regarded as violation of secularism and universal human rights from the western perspective (Tibi 1998, 204-07).

Identity, justice, and life style by no means exhaust what people think of political Islam, and these elements to certain extent are interrelated. However, the above discussion has identified what the essential elements might be in the discourse of political Islam and why these elements are important and controversial. The following three sections will review the three major explanations about why people support political Islam.

B. The Religious Attachment Explanation

This is the most widely held explanation, despite the fact that very few scholars use the scientific logic to articulate the explanatory rationale.⁹ The explanation is simple: Muslims support political Islam because they are religious; however, without a clear distinction between religious Islam and political Islam, this explanation is tautological and lack of scientific value. Therefore, it is necessary to develop a definition that can separate the two concepts theoretically.

Personal religiosity of Islam, as well as personal religiosity of many other religions, should be defined within the non-political domain. Strength of religious belief, frequency of religious practice, knowledge of religious faith, compliance to religious

public as well as personal life.”

⁹ A good discussion can be found in Hoffman 1995.

tenets regarding the regulation of private life, and how much cost (time, money, or energy) is devoted to religious activities are all possible indicators independent of the political arena and can be used to measure personal religiosity (Filsinger et al. 1979; Finney 1978). In this sense, a religious person may agree or disagree with the idea of political Islam, and so does a non-religious person. In other words, personal religiosity is about whether a person really believes or devotes to a religious faith, but political religiosity is about whether he or she believes that religion should serve as the guidance of politics. The two concepts should not be conflated.

Why are religious people more supportive of political Islam? Morality is the key motive behind the causal inference in the religious attachment explanation. In social psychology, the need of morality is a social instinct that people want to know how to behave in the society. Folsom (1918, 436) argues that morality can provide the “oughtness” or a sense of duty to curb individualistic impulses that may do harm to the larger survival unit. On the other hand, Huxley (1886) argues that morality provides a cosmology which can reduce the fear of their limited knowledge about the universe. While Folsom and Huxley have a different argument about whether the origin of morality is an instinct or a conscious lie, they both show the importance of morality in the human society even in the modern time.

The existence of morality is not only a psychological need, but also a sociological phenomenon as well. Maddock (1972) argues that the development of morality is an integral part of individual development and in which people invest their emotions into what they believe and anticipate its realization. Some sociologists tend to give morality a more rational ground and claim that morality is a result of social construction (Giddens 1991) instead of bodily impulses (Bauman 1993).¹⁰ In sum, morality is a cause and also a result of the developmental process for every individual. It involves many psychological and sociological effects through family and school education,

¹⁰ For the reference, see Shilling and Mellor 1998.

interpersonal interaction, and social influence. It shapes people's identity and then the identity becomes an interest of self-realization. The result of the above process is finally visible through the expression of attitude and behavior.¹¹

Islam as a religion provides a cosmology and the foundation of moral principles in the Muslim world (Friedland 2001, 127). Despite the varying interpretations from the modernist version to the fundamentalist version (Arjomand 1995, 193), Islam in the original form is indeed about the overarching principles of public and private life. As modernization goes on, there is no doubt that Islam can be adjusted to fit the modern society, but this depends on who interprets, how to interpret, and where the interpretation is made. More importantly, Islam still serves as the moral foundation that shapes people's identity and basic values. Accordingly, from psychological and sociological perspectives, it is reasonable to argue that people with greater personal piety are more supportive of political Islam since they want to reach self-fulfillment by expressing their attitude and behavior in accord to their identity and basic values.

C. The Socioeconomic Explanation

The gist of the socioeconomic explanation is that people are more likely to support political Islam because they are disappointed about the incumbent government in terms of poor performance in economic, social, or political conditions. Similar explanations have been well established to explain retrospective voting behavior in the democratic system.¹² The logic is straightforward: a poor socioeconomic situation would increase

¹¹ Many scholars call this phenomenon as "identity crisis", which means Islam as an overarching identity can solve the conflict between primordial identity (e.g. ethnicity), national identity (e.g. Algerian), regional identity (e.g. Arab-nationalism), or universal identity (pan-Islamism) in the modernization process (Soltan 1997).

¹² Fiorina (1981); Johnston and Pattie (2001); Kiewiet and Rivers (1984); Kramer (1977); Monroe (1979); Norpoth (1992).

social dissatisfaction toward the government and result in more support of opposition parties and their platforms. The motive is to seek the improvement of the socioeconomic situation by holding the incumbent government responsible. The attitude and behavior in the socioeconomic explanation is fully rationalistic.

Attribution of causes and ascription of responsibility are the key psychological mechanisms behind the socioeconomic explanation (Fox 1999, 290-91). In the context of the Muslim world, there are several regimes in which Islamist parties are invited as inside partners, such as the Turkish coalition government in 1996-1997, the Algerian coalition government since 1997, and the Bangladeshi coalition government since 2001. If people are not satisfied with the government, according to the logic of retrospective voting, they should protest Islamist parties as well. That means the socioeconomic explanation should make an opposite prediction: people are less supportive of political Islam if they are dissatisfied with the government since Islamist parties should be held responsible too.

I have to emphasize that the socioeconomic explanation at the individual level is still a psychological explanation despite the rationalistic nature. It is possible that the socioeconomic situation is improving but the general perception is worsening, or that the socioeconomic situation is worsening but the general perception is better. Therefore, if perception and reality are matched at the country level, there is more confidence that the socioeconomic explanation is truly based on rational thinking. Otherwise, we need to conduct further crossnational as well as longitudinal studies to understand why the inconsistency happens and what it means.

D. The Premodernist Explanation

The pre-modernist explanation is derived from the modernization theory and the key of the explanation lies in two questions. First, what are the premodernist attitudes? Second, why are premodernist attitudes associated with support of political Islam?

There are many literatures trying to define the concept of modernism and traditionalism, especially in 1960s and 1970s when the modernization theory was very popular in sociology and political science.¹³ I have no intention to argue what definition is best, but rather I adopt a definition that premodernist attitudes are related to three sets of attitudes: (i) intolerance toward diversity (ii) inertia or predisposition to accept the status quo (iii) localism or parochialism. The three sets of attitudes are all related to social conformity, a psychological phenomenon¹⁴ that drives people to support political Islam.

Many empirical findings in sociological studies show that the premodernist characteristics can explain why some people have less tolerance toward social difference.¹⁵ For example, Golebiowska (1995) find that education can predict political and religious tolerance well. She argue that education can change individual value priority because the fear of economic insecurity is reduced, and therefore education will lead to greater openness toward diversity. As to the rural-urban residence, Whitt and Nelsen (1975) argue that urbanization brings the dissolution of social boundary such as race, religion, occupation, and custom. Consciously or unconsciously, the tolerance toward social difference is increased since people have to live within a diversified social environment.

Similar conclusions are made to another set of premodernist attitudes. For example, Prandy (1979) finds that the acceptance of status quo is highly related to cognitive variables such as fatalism, dogmatism, and obedience to authority. In an early study, Loomis and Beegles (1948) also find that the familistic culture and predisposition of inertia in the traditional society are contrast to

¹³ Lerner (1958); Weber (1976); Harrison (1985); Almond and Verba (1960); Banfield (1958).

¹⁴ Allport (1939); Bernard (1941); Thomson (1997); Tyson and Kaplowitz (1977); Hurwitz and Peffley (1992).

¹⁵ Fischer (1971); Nelson et al. (1971); Inglehart (1990); Flanagan (1987).

the contractual culture and predisposition of efficiency in the modern society. These findings to certain extent can be related to a habitual orientation (Camic 1986), that is, people prefer living in a familiar environment and try to resist the unknown change and its subsequent result.

Finally, as what Lerner (1958) describes about the traditional society, localism and parochialism are not only related to lack of information and life experience outside the community, but also related to lack of imagination about the world (Eisinga et al. 1991). The inference is that as modernization proceeds, the improvement of socioeconomic situation will bring the differentiation of life-style and broaden the imagination of those who are even still in the original condition (Zablocki and Kanter 1976). In other words, cosmopolitanism, as opposed to parochialism, is a result of emancipation from objective and subjective limits of imagination in the traditional society.

The above discussion has tried to define the content of “premodernist attitudes”. One of the commonality is that people with these premodernist predispositions tend to feel greater psychological and social pressure when they have different opinions or behaviors from what they think socially acceptable. If Islam as a religion is predominately perceived as a traditional authority and as the way of life, then it is reasonable to argue that premodernist predisposition is positively related to support of political Islam because of conformity pressure and the tendency to remain in status quo (Lee 1992, 10). The motive may be unconscious, but the purpose is to prevent cognitive disruption resulted from external changes, under which people with greater premodernist predispositions have less ability to adapt into a new environment.

Some people may question whether the religious attachment explanation and the premodernist explanation are the same arguments.¹⁶ As mentioned above, the two arguments based on

¹⁶ It is straightforward to assume that people with greater premodern characteristics would tend to be more religious, and therefore the religious attachment and premodernist explanations are the same. However, the two

different psychological effects. Therefore, a person can be religious and modern, religious and premodern, non-religious and modern, or non-religious and premodern, and he or she can support or oppose political Islam whatsoever. While religious people may be possibly less modern, it is an empirical not a logical question.

III. Research Design

A. The Dependent Variable

Conceptually the dependent variable is to what extent people support political Islam, a belief that Islam and politics are inseparable. People in the Middle East support political Islam in many different ways, but all subject to specific political and social environments. Generally there are two forms, attitudinal and behavioral, of the support. In the attitudinal aspect, supporting political Islam is defined as revelation of positive attitudes toward connections between Islam and politics. I measure the dependent variable by the items in World Value Survey (WVS) that are related to respondents' religiopolitical orientation. In the behavioral aspect, I use respondents' voting choice to capture the degree of support of Islamist parties. Both measurements are operationalized and formulated as a unidimensional scale.

The rationale behind the two-aspect formation is considering the possibility of behavioral and attitudinal inconsistency. People who support political Islam in attitude are not necessarily supportive of Islamist parties, and vice versa. If the two measurements are in accordance with each other, the reliability of my measurements is corroborated. Otherwise, the inconsistency deserves more investigation.¹⁷ Descriptive statistics of the two

arguments are logically distinct. Whether the two explanations have a collinear problem is a matter of fact, not a matter of assumption, and so is any of the relationships between the three arguments. See Huang 2004, 22-23.

¹⁷ Two possible explanations can account for such inconsistency. The first is simply a result of measurement errors. The second is that the two measurements

measurements are presented in Table 9 in the Appendix.

B. The Explanatory Variables

There are six explanatory variables in this study. They are “Personal Piety”(PP), “Social Satisfaction”(SS), “Gender Equality”(GE), “Liberal Attitudes”(LI), “Faith in Democracy”(DE), and “Modernist Attitudes”(MN). The conceptual definitions and operationalization are discussed below. The procedures of variable formation are explained in part IV, section D. The result can be found in the Appendix.

(A) Personal Piety

Personal piety is defined as the degree to which people show religious belief, devotion to ritual practice, self-projection of religiosity, or any other revelation about the importance of religion in their life. This definition excludes any political view that involves with religious elements.¹⁸ To measure personal piety, all the items are organized into three broad categories: general mindset, belief, and miscellaneous. General mindset is designed to detect the importance of religion in people’s life. Belief refers to the strength of religious faith. The miscellaneous category comprises of all the other items relevant to religiosity. These items may not be unidimensional in theory, but they can be unidimensional in reality, depending on empirical results.

are not unidimensional and they measure different things. While it is somewhat arbitrary to judge how low the correlation means “inconsistency”, I find that the Spearman Rank correlations between the two measurements in applicable cases are generally weak (between 0.148 and 0.345). See Table 12 in the Appendix.

¹⁸ These items have been used to measure respondents’ religiopolitical orientation.

(B) Social Satisfaction

Social satisfaction is defined as the degree of positive evaluation toward social conditions. Specifically, I distinguish political satisfaction from general satisfaction since they refer to political and nonpolitical evaluation, respectively. The measurement of political satisfaction comprises of the items asking how satisfactory people think of their government. The measurement of general satisfaction comprises of the items asking how satisfactory people think of their life. The two measurements reflect overall satisfaction toward the society.

(C) Gender Equality

In Islamic culture, women are given a different social role from men. Therefore, gender equality is defined as the degree people consent to the equal rights of genders, or people disagree with the traditional view of women. The former emphasizes the concept of equality, and the later stresses a break with the traditional role. All the items are chosen around these two ideas. In general, people are more supportive of gender equality in a more modernized society.

(D) Liberal Attitudes

Liberalism is one of the essential elements behind modernization. It refers to tolerance of different lifestyles, respect for privacy, cosmopolitan worldviews, acceptance of new things and new people, support of individual rights, and emphasis on spiritual rather than material values. While the concept is clear, the unidimensional assumption for this variable is too strong for the sake of its multifarious nature. To measure the liberal attitudes, all the relevant items are organized into three categories, "Acceptance and Tolerance", "Internationalism and Peace Movement", and "Freedom, Spiritual Needs, and Reform-Minded Attitude". All the above concepts are connected to progressive and innovative aspects of modernization.

(E) Faith in Democracy

Faith in democracy is defined as the degree people believe in democratic institutions and its inner values. While the respondent may not satisfy with the performance of the democratic system, they do have faith in democracy if they acknowledge its values. Two groups of items are chosen. The first includes those items asking people whether they support a statement that violates the principle of democracy but may have some merits. The second includes those items asking people whether they agree with a statement that gives a negative evaluation toward democracy. People with strong faith in democracy are not expected to agree with both kinds of statements.

(F) Modernist Attitudes

Gender Equality, Liberal Attitudes, and Faith in Democracy are all modern concepts. To simplify our model, I use these three variables to form a composite variable “Modernist Attitudes”. This is implemented by the principal component analysis.¹⁹ In other words, Modernist Attitudes is a latent-trait measured by the outcome indicators, Gender Equality, Liberal Attitudes, and Faith in Democracy.

C. The Control Variable

Five control variables are included. They are “Sex”(v223), “Age”(v225), “Education” (v226), “Short-term Economic Situation”(v234), and “Subjective Class”(v235).²⁰ All of them are

¹⁹ I choose the principal component that can explain the most variance as the composite variable. In some cases, when no principal component has all positive loadings on the three variables, I use Liberal Attitudes and Faith in Democracy as reference items and choose the component that has positive loadings on these two. Given the particularity of the gender issue in the Muslim world, the measurement based on Liberal Attitudes and Faith in Democracy may be closer to the definition of Modernist Attitudes in the West.

²⁰ In the original framework, “Satisfaction toward Democratic Development”

meant to control respondents' demographic and socioeconomic background.²¹

Given the nature of the control variables, there is no dimensionality or item analysis for these variables since the information is factual-based rather than perceptual. Nevertheless, further investigation may be needed if any of them systematically shows a strong relationship with the dependent variable.

D. Case Selection

Two major concerns determine case selection. First, IRT method requires a large sample to be reliable. The case with a sample size smaller than 500 observations is excluded. Second, the data availability varies across different countries in WVS. Therefore, the cases in which the dependent variable can't be formulated are excluded. In addition, all the selected cases must have a Muslim population above 80%.²² Otherwise, the dependent variable should be the support of religious radicalism rather than political Islam, and this is beyond the scope of this article.²³

and "Income" are also included as control variables. However, a preliminary result shows that these two variables suffer from missing-value as well as multicollinearity problems in many cases. Since they have little explanatory power to the dependent variable, these two variables are dropped. A post-analysis indicates that the drop will not affect my conclusions.

²¹ The range of each control variable is as follows:

Sex: 1=men, 2=women.

Age: 1=(≤ 20), 2=(21-30)...7=(71-80), 8=(>80).

Education: 1= lowest, 9=highest.

Short-term Economic Situation: 1=the worst, 4=the best.

Subjective Class: 1=the lowest, 5=the highest.

²² Except for Bangladesh (83%) and Indonesia (88%), all the countries selected are more than 90%. The statistic is available from the CIA World Factbook 2003 at <http://www.cia.gov/cia/publications/factbook/>, checked on June/8/2004.

²³ Political Islam in this study is defined as the belief that Islam and politics should not be separated because of religious tenets. However, in some multi-ethnic or multi-religious societies, the support of political Islam does not necessarily reflect this belief; instead, it is a result of ethnic conflicts or power

Consequently, only 11 cases across 8 countries qualify the above criteria.²⁴ Among the 11 cases, the attitudinal measurement of political Islam is available in 9 cases and the behavioral measurement is available in 6 cases.²⁵

E. Research Hypothesis

There are three hypotheses corresponding to the three major arguments discussed in part II, section A, B, and C. Hypothesis 1, 2, and 3 are meant to test whether religious attachment, socioeconomic perceptions, and premodernist attitudes can explain the support of political Islam, respectively. However, given the

struggle. Consequently, if these multi-ethnic or multi-religious cases are selected, then the conceptual definition of political Islam becomes inconsistent, and the measurement also suffers the validity problem.

²⁴ The list of all the cases is as follows: the third wave of Bangladesh and Turkey, the fourth wave of Algeria, Bangladesh, Egypt, Indonesia, Jordan, Morocco4a, Morocco4b, Pakistan, and Turkey. Morocco has two cases in the fourth wave since they were done separately and the available items are also different.

²⁵ Political Islam has great political significance in all of the eight selected countries (Huang 2004, 291-94). However, Islamist parties in these countries have different internal dynamics and developmental strategies, and they also face different external political environments. Generally, Islamist parties in Turkey and Algeria have a higher level of popularity and adopt a more moderate strategy in the political arena recently. In Jordan and Morocco, Islamist parties are the only groups that can really become effective opposition forces. However, their influence is limited since the political legitimacy of the King is widely recognized in the society without serious challenge. In Egypt and Pakistan, Islamists are highly divided and the regime is able to control or collaborate with certain religious groups for political endorsement and compete with others for religious votes. Finally, Islamist parties in Indonesia and Bangladesh are weakest among the eight countries. In Indonesia, the main political parties in the post-Shuharto period all seek the support of Islamist groups to win the majority. Therefore, Islamists are not really a cohesive political force but rather the political allies of various political parties. In Bangladesh, Islamist parties are very unpopular for historical reasons since the main Islamist party, Jamat-e-Islami, opposed the liberation war against Pakistan. This can be seen from the Table 11 in the Appendix in which nearly half of the respondents said that they would never vote for Islamist parties.

multifarious nature of the concept of modernist attitudes, I test the three indicators separately in the first place and then replace them with the composite variable of Modernist Attitudes and test again. The six research hypotheses are listed as follow:

Hypothesis 1: The greater the personal religiosity, the greater the probability that people support political Islam.

Hypothesis 2: The greater the social satisfaction, the lower the probability that people support political Islam.

Hypothesis 3a: The more positive the attitudes toward gender equality, the lower the probability that people support political Islam.

Hypothesis 3b: The more liberal the attitudes, the lower the probability that people support political Islam.

Hypothesis 3c: The stronger the faith in democracy, the lower the probability that people support political Islam.

Hypothesis 3: The greater the modernist attitudes, the lower the probability that people support political Islam.

To avoid redundancy, more discussions of the above hypotheses can be found in Huang (2004, 40-43).

F. Data and Methods

World Value Survey (WVS) is the dataset I apply in this study.²⁶ Dichotomous IRT Theory is the major scaling method. The advantage is to reduce measurement errors by distinguishing all the responses only as positive or non-positive. While dichotomous recoding may waste information of attitudinal intensity, the measurement is more reliable and meaningful since the chance of errors is smaller and the response is clearly interpretable (e.g. agree or non-agree).

²⁶ The information about World Value Survey can be found at <http://www.worldvaluessurvey.org/>, checked on June/8/2004.

Two other scaling methods are also applied when dichotomous IRT theory is not appropriate. The first is polytomous IRT theory, by which I use the information of attitudinal intensity and needs only two items for measurements. The second is Classical Test Theory, by which I simply calculate the percentage of the positive responses for those scaled items. When a factor analysis indicates only two items available for measurements, polytomous IRT theory is applied; when there are three or four available items, dichotomous IRT theory is the choice; when the available items are more than five, Classical Test Theory is used. Except for the dependent variable, I scale missing-value observations by weighting the scores of close response patterns with the knowledge of the endorsement rates in the sample.

The rationale behind the above strategy is to use a simpler scaling method (CTT) when our data are good enough. Otherwise, we need a more sophisticated method (IRT) to reduce measurement errors. Meanwhile, the procedures such as dimensionality tests and item selection are precedent to scaling to make sure the measurement quality. The whole procedures are geared to reaching robust measurements step by step.

The scales formulated by Item Response Theory and Classical Test Theory are all continuous, therefore the method of multiple linear regression is appropriate for analyzing the attitudinal support of political Islam. However, the behavioral support of political Islam is formulated as a four-rank ordinal variable, and thus the method of ordinal logistic regression is applied.²⁷

²⁷ The method of ordinal logistic regression deserves more discussions, especially when the parallel assumption is not met (Long 1997; Long and Freese 2001). However, I believe that this restriction should not be overemphasized in this article for two reasons. First, there is no denying that the measurement quality of the behavioral dependent variable is not the same across the four ranks. The data of the three measurement items have more missing-value observations than other scaled items. Therefore the proportion of the Rank 2 answer swells more than it should be (see Table 11). Second, while I can combine the four ordered categories in certain ways to satisfy the parallel assumption, the point is that the measurement of the four ordered category is only an approximation to

IV. IRT Methods

Item Response Theory (IRT) is an important tool of measurement in psychometrics and educational testing.²⁸ Its development started in 1960s and it was widely accepted in these two fields after 1980s. Today IRT has become a popular measurement theory and replaced Classical Test Theory (CTT) as a new paradigm in many psychological and educational tests.²⁹ The main advantage of IRT over CTT is twofold. First, IRT is methodologically more sophisticated and requires fewer items to result in a reliable measurement. Second, IRT can be combined with categorical factor analysis to overcome some methodological problems of traditional factor analysis. In addition, there are still many nice properties of IRT over CTT. A good discussion can be found in Embretson and Reise 2000.

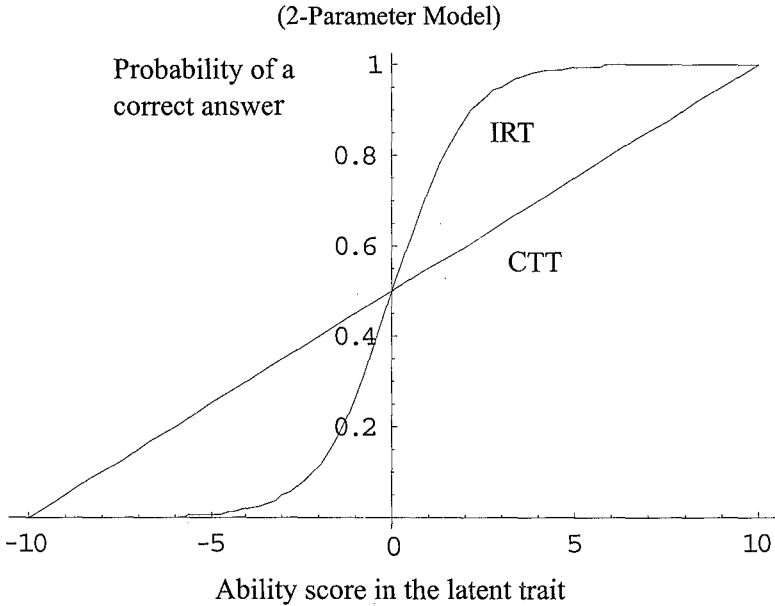
Since IRT is still new to political scientists, the following discussions are introductory in purpose. The focus is not the mathematical theory of IRT, but the fundamental questions of what it is, why I use it, and how I apply it.

respondent's voting choices. If we consider measurement errors in this approximation, the parallel assumption is not really applicable since it doesn't assume measurement errors. Instead, structural equation modeling is a more appropriate method given the restriction of the data quality, but this is beyond the scope of this article. See Huang 2004, 94-105.

²⁸ For a review and introduction of IRT, see Lord 1980; Hulin, Drasgow, and Parson 1983; Hambleton, Swaminathan, and Roger 1991; Embretson and Reise 2000.

²⁹ While many political scientists are unaware, the summed scales that they formulate by simple summation is a kind of scaling methods under CTT.

Figure 1 : Item Characteristic Curves of IRT and CTT



A. What Is IRT?

In a nutshell, IRT is a nonlinear latent-trait theory. It contrasts to CTT in its nonlinear assumption between the level of an unobservable (latent) trait and the predicted probability of observable outcomes. This relationship can be illustrated by two item characteristic curves (ICCs) in Figure 1. For simplicity, the following discussion is restricted to dichotomous IRT methods.

The mathematical form of ICC in IRT has two popular models, the logit (equation (1)) and the normal ogive (equation(2)) models as follow:

$$P(X_{is} = 1 | Z_{is}) = \frac{e^{Z_{is}}}{1 + e^{Z_{is}}} \quad \text{---(1)}$$

$$P(X_{is} = 1 | Z_{is}) = \int_{-\infty}^{Z_{is}} \frac{1}{(2\pi)^{1/2}} e^{\left(\frac{-t^2}{2}\right)} dt \quad \text{---(2)}$$

X_{is} is the answer of person s to the item i

Z_{is} is the combination score of person s and item i at the latent-trait scale

1 is the correct answer

The difference between the two models is generally negligible. The score Z can be estimated by 1- or 2- parameter models as equation (3) and (4) show:

$$Z_{is} = (\theta_s - \beta_i) \quad \text{---(3)}$$

$$Z_{is} = \alpha_i(\theta_s - \beta_i) \quad \text{---(4)}$$

θ_s is the ability score of person s

β_i is the location parameter of item i

α_i is the slope parameter of item i

For 3-parameter models, a guessing parameter (g) is added to equation (1) or (2) as follows:

$$P(X_{is} = 1 | Z_{is}, g_i) = g_i + (1 - g_i) \frac{e^{Z_{is}}}{1 + e^{Z_{is}}} \quad \text{---(5)}$$



$$P(X_{is}=1|Z_{is}, g_i) = g_i + (1 - g_i) \int_{-\infty}^{Z_{is}} \frac{1}{(2\pi)^{1/2}} e^{\left(\frac{-t^2}{2}\right)} dt \quad \text{---(6)}$$

Therefore, six models can be derived from the combinations of 2 ICCs and 1-, 2-, 3-parameter estimates of the Z score.

All of the parameters of θ , β , α , and g can be interpreted into ordinary language easily. Of the four parameters, only ability parameter θ is measured for each respondent and it indicates the level of the latent trait. This is the IRT score of our measurement in the variable formation process. Location parameter β is called “difficulty parameter” and it measures the threshold (usually defined as 50%) above which people will answer with a correct response. Slope parameter α is called “discrimination parameter” and it indicates how relevant of an item is to the latent trait. This is similar to the concept of factor loadings in factor analysis. Guessing parameter g refers to the chance that a respondent answers randomly but the response is correct. Parameter β , α , and g are all item parameters.

In reality, we have known respondents’ answers to each item. What we don’t know are their ability scores in the latent trait, which is assumed to be an underlying factor behind the observable outcomes. To estimate ability scores and other item parameters, we multiply each item’s ICC (equation (1) or (2)) and form a log-likelihood function, and then use all response patterns to estimate the best solution that maximizes the value of the log-likelihood function. In ordinary language, this procedure means that we want to know what is the most likely value of parameter θ , β , α , and g , given our knowledge of each respondent’s answers.

Technical issues of the Maximum Likelihood Method are beyond our scope here. Interested readers can find useful discussions from Embretson and Reise (2000, 187-225). However, one thing has to keep in mind that the above IRT models all assume a unidimensional assumption, which is not necessarily true. Therefore, making sure the appropriateness of our unidimensional

assumption is a precondition before using IRT methods for scaling. That is the reason why dimensionality tests are indispensable in the variable formation process. This issue will be addressed in part IV, section D.

B. Why Do I Use It?

Several assumptions and findings are crucial to the reasons why I apply IRT.

- (1) All survey data, despite the ordered categorical formats, are not interval and cannot be treated as continuous variables even if the data are coded as 5- or 7-point Likert scales.
- (2) While unifying data formats is not necessary for traditional factor analysis with continuous variables, it is a better way to deal with data of multiple formats. In this study, dichotomized recoding has two merits. The first is to unify the meanings of questionnaire items (positive or non-positive to a latent trait). The second is to reduce measurement errors resulted from different perceptions of response scales.
- (3) Methodologically, using binary data to do a traditional factor analysis is proven problematic. The problem results from using wrong correlations (Pearson correlation), which are only appropriate for continuous variables. However, even if the correlation is suited for nominal-dichotomous variables such as the phi coefficient, psychometricians have found that the factor loadings generated from traditional factor analysis are difficulty parameters in nature, but not measures of association between observed items and the latent trait (Gorsuch 1983).
- (4) A more valid correlation is the tetrachoric correlation, which assumes a bivariate normal distribution behind the 2×2 table that shows the association of two binary

variables. In other words, we assume that each binary variable represents a dichotomous measurement (by a threshold level) of a latent trait. What we need to do is to find out the most likely estimate of each threshold level and the correlation between the two traits, which is called “tetrachoric correlation” (Knol and Berger 1991).

- (5) Today most psychometricians agree that tetrachoric correlations should be used for binary item factor analysis (Hulin, Drasgow, and Parsons 1983). Several programs have been developed to implement this analysis, such as SYSTAT and MPLUS. However, two problems still remain: first, the tetrachoric correlation matrix may be non-positively defined and therefore produce unreliable results (the Heywood cases); second, more importantly, this method still suffers the problem of lacking methodological guidelines to justify the selection of items, which is the same problem that always happens in traditional factor analysis (Hattie 1985).
- (6) Among various IRT methods, the full-information item factor analysis (FIFA) is promising to cope with the above two problems (Bock, Gibbons, and Muraki 1988). FIFA is an innovative factor analysis that deals with binary variables and item response analysis simultaneously. On one hand, FIFA allows users adjusting the restricted prior distribution on item parameters. Simulation studies indicate that this method suppresses the Heywood case very well. On the other hand, FIFA provides a tool for exploratory factor analysis to conduct dimensionality tests, item selection, and scaling under the IRT framework. These functions enable FIFA to implement a series of procedures that guide the formation of each variable. The only commercial package for FIFA at this point is TESTFACT 4.0.

From the above discussion, methodological superiority makes

IRT a more appealing method than the traditional factor analysis. Application of IRT methods can improve the measurement quality and increase the transparency of the variable formation process.

C. What Difference Does It Make from the Traditional Method?

Although a thorough evaluation between the results of the traditional factor analysis, the factor analysis with tetrachoric correlations, and the full-information item factor analysis is beyond the scope of this study, it is necessary to demonstrate what difference these methods could make.³⁰

Table 1 : Comparisons of Dimensionality Tests between Different Factor Analyses

	Traditional Factor Analysis		Factor Analysis with Tetrachoric Correlations		Full-Information Item Factor Analysis
Executed Program	SPSS13.0	MPLUS2.13	MPLUS2.13	TESTFACT4.0	TESTFACT4.0
Estimator	Unweighted Least Squares	Unweighted Least Squares	Unweighted Least Squares	Unweighted Least Squares	Marginal Maximum Likelihood
The Best Factor Model	Uncertain	3	No Solution	2	1
Criterion	a. Ratio of Variance Explained: 1 b. Screen Test: 2 c. Eigenvalue>1: 3 d. Comprehensibility: 1 e. Cumulative Variance Explained (70%): 5	a. RMSEA	Incomputable	a. Screen Test b. Eigenvalue>1	a. Significance Tests

³⁰ For the discussion how a traditional factor analysis can yield a biased result with data of Likert scales, see Waller et al. 1996.

The following case is the variable formation process of Personal Piety in Turkey4.³¹ I start from the procedure of dimensionality tests. There are 12 items and 2908 observations remained in the sample by using the listwise method. The maximum number of factors with positive degrees of freedom is 7.³² If the number of extracted factor is larger than two, the Varimax rotation method is applied.

As can be seen in Table 1,³³ in addition to the inferior methodology, the major flaw of traditional factor analysis is unable to provide a clear criterion for dimensionality tests. Notice that MPLUS cannot generate a solution of any factor model for factor analysis with tetrachoric correlations because there is a zero cell in the 2×2 table of V194 and V195, with which the tetrachoric correlation is not computable. FIFA won't suffer this problem because the estimation of parameters is not undertaken by decomposing the correlation matrix. Instead, what FIFA does is to modify the normal ogive model in equation (6) by integrating a factor model into the estimation of the Z score (see equation (7) to (9)),³⁴ a combination score (just as the z-value of the standard normal distribution) by which I can calculate the probability of correct responses for a scaled item. In this way, it doesn't matter for FIFA whether there is any no-zero cell in computing tetrachoric correlations.

³¹ Turkey4 means the fourth-wave case of World Value Survey in Turkey. Likewise, Bangladesh3 means the third-wave case of World Value Survey in Bangladesh.

³² The formula is $D = \frac{1}{2}[(n-r)^2 - (n+r)]$, D is the degrees of freedom, n is the number of variables, r is the number of extracted factors (Kim and Mueller 1978, 50).

³³ The criteria to decide how many factors should be extracted are all rules of thumb. See Kim and Mueller 1978, 44-45; Jolliffe 1986, 93-103.

³⁴ For more detail, see Du Toit 2003, 585; Bock, Gibbons, and Muraki 1988.

$$Z_{is}(\theta_s) = c_i + a_{i1}\theta_{is1} + a_{i2}\theta_{is2} + \dots + a_{im}\theta_{ism} \quad \text{---(7)}$$

θ is the ability score; a is the slope parameter; c is the intercept parameter
 i refers to item; s refers to person; m refers to latent factors

$$\alpha_{ik} = \frac{a_{ik}}{d_i}, \delta_i = \frac{c_i}{d_i} \quad k = 1, 2, \dots, m \quad \text{---(8)}$$

Where

$$d_i = \sqrt{1 + a_{i1}^2 + a_{i2}^2 + \dots + a_{im}^2} \quad \text{---(9)}$$

α is the factor loading reported; δ is the standard difficulty reported;
 d is the standardization parameter

Note that the intercept parameter c in FIFA is not the location parameter β we saw in equation (3) and (4). Unlike most of the IRT models, the difficulty parameter in FIFA has a different scale from the latent trait, and it doesn't mean the location where a given chance of correct answers is 50%. The standardization of the difficulty parameter and the factor loadings in equation (8) and (9) is to compare those two properties across different items. In terms of ordinary language, equation (7) means that the probability of person s to answer item i correctly depends on (1) how difficult item i is, (2) how relevant each of m latent traits is related to item i , and (3) how great the scores of person s in those m latent traits.



Table 2 : Comparisons of Item Selection between Different Factor Analyses
(Bold-typed figures refer to the loadings greater than 0.5)

Item		Traditional Factor Analysis (SPSS10.0)	Factor Analysis with Tetrachoric Correlations (TESTFACT4.0)	Full-Information Item Factor Analysis (TESTFACT4.0)
1	V9	0.515	0.870	0.758
2	V22	0.207	0.557	0.533
3	V147	0.241	0.460	0.329
4	V185	0.175	0.472	0.342
5	V186	0.356	0.655	0.593
6	V192	0.588	0.813	0.759
7	V193	0.502	0.741	0.671
8	V194	0.982	0.966	0.983
9	V195	0.988	0.975	0.985
10	V196	0.482	0.774	0.674
11	V197	0.609	0.941	0.842
12	V198	0.322	0.663	0.604

Suppose that we are confident about the FIFA's result of dimensionality tests in Table 1, we can use one-factor model to compare the factor loadings generated by the three methods as Table 2 shows. If the cutoff point is set up at 0.5, it is clearly that the traditional factor analysis would give a very different result from the other two methods. This finding indicates: even if a tradition factor analysis gives the correct answer of how many dimensions should be chosen, it may still generate a wrong conclusion about which items should be selected for scaling. Therefore, I believe that the application of IRT is reasonable and more valid than using the traditional factor analysis.

In some sense, the choice between IRT methods and the factor analysis with tetrachoric correlations is less obvious. However, notice that the specialized software of binary item factor analysis such as MPLUS fails to generate a solution in this case. It indicates that the factor analysis with tetrachoric correlations also

has some problems when the data do not satisfy the assumptions of this method (no zero-cell in the 2×2 table). FIFA is not subject to this restriction and therefore is a better choice.

D. How Do I Apply IRT Methods in Political Culture Studies?

There are four procedures to formulate and measure the dependent as well as independent variables. They are item inclusion, dimensionality test, item selection, and scaling. The principles to proceed each step are discussed below.

(A) Item inclusion

The first thing to formulate a variable is to decide which item should be included. For example, in the WVS questionnaire, only 5 items are relevant to the connection between religiopolitical orientations. After being reworded, they can be presented as follows:

The latent trait: Support of political Islam

Assumption: The greater the support of political Islam, the higher the graded response will be chosen.

- V200. Politicians who do not believe in God are unfit for public office.
- V201. Religious leaders may influence how people vote in elections.
- V202. It would be better for this country if more people with strong religious belief held public office.
- V203. Religious leaders may influence government decisions.
- IV166. A good government should implement only the laws of the shari'a.

The scale for each item is a 5-point Likert scale. The most negative response is coded as 1 and the most positive response is coded as 5.³⁵

³⁵ In original questions, v201 and v203 are negatively phrased. In order to unify the data format for IRT analysis, all the responses are recoded in ascending order from the most negative ("1") to the most positive response ("5") according to the reworded questions.

While these five items are assumed to be unidimensional under the latent trait, there is no guarantee that these five items are empirically unidimensional, or that there must be some items serving best to the measurement. The judgment regarding these issues needs to be made on a case-by-case basis from methodological perspectives.

Before testing dimensionality, two criteria are applied to screen out the included items. The first category is the item with too many missing values, though the cutoff point is somewhat arbitrary. The principle is to avoid losing too many observations when the listwise method is applied. A general rule is when any single item with more than 30% of missing value or the remaining observations are down below 60% of all, some items should be excluded. The second category is the item with an extreme endorsement rate ($\geq 95\%$ or $\leq 5\%$). Although technically the full-information item factor analysis (FIFA) is possible for a mixed data-format of dichotomous and polytomous responses, the available commercial package for FIFA only allows dichotomous data.³⁶ Therefore, I need to recode all the responses into a positive or non-positive (including neutral) answer.³⁷ Endorsement rate is thus defined as the percentage of positive response in each item. In term of the country-specific measurement, an extreme endorsement rate indicates a bad measurement since little variation can be derived. These two criteria can help improve the measurement quality and avoid some estimation problems such as inconvergence or improper solutions.

³⁶ In addition to the commercial version of TESTAFCT 4.0, Professor Steven Schilling at the University of Michigan provided the author with a program "ORDFAC", which can deal ordinal data (Likert scale) for the explanatory and confirmatory factor analysis. ORDFAC is better in algorithm and it solves the problem of failing to converge in the TESTFACT4.0. However, ORDFAC do not have the scaling function as TESTFACT 4.0. This prevents the author from using ORDFAC to form a latent-trait scale. Regarding Full-Information Item Factor Analysis, see Du Toit 2003.

³⁷ The reason to code the neutral response into the non-positive category is to reduce the number of the missing-value case, and also to adopt a strict definition of endorsement to a questionnaire item.

(B) Dimensionality Tests

Survey data are susceptible to all kinds of factors confounding the measurement. Any single item is hardly reliable, let alone coherent with other related items. Dimensionality test is to help us decide whether the included items empirically capture the latent trait and how the quality of the measurement is.

To find out the factor structure, I use the chi-square test by the difference of $-2 \times \log$ likelihood to compare different factor models. Besides, AIC and BIC criteria can also serve the same purpose.³⁸ Once I find the best factor model, the process of item selection begins. The following is an example from the fourth-wave Algerian data.

The latent trait: support of political Islam (Algeria4)

Included Items: v200, v201, v202, v203, iv166

The Chi-Square statistics are

-2*Log-Likelihood=4799.67 for the one-factor model;

-2*Log-Likelihood=4748.43 for the two-factor model;

Therefore $\chi^2 = 4799.67 - 4748.43 = 51.24$; $df=4$, $p=0.000$

The two-factor model is better than the one-factor model.

(C) Item Selection

Even if a set of included items passes the unidimensionality test, the process of item selection is still needed to find out the best

³⁸ The formulas of degrees of freedom in AIC and BIC are as follows:

$$D = n \times r - \frac{1}{2} \times r \times (r - 1) + k - n$$

$$AIC = -2 \times \text{Loglikelihood} + 2 \times D$$

$$BIC = -2 \times \text{Loglikelihood} + \log(N) \times D$$

D : degrees of freedom; n : number of items; r : number of factors;

k : total number of response categories; N : number of observations

set of items for measurement. In IRT, the discrimination parameter indicates how much information a particular item contributes to a latent trait scale. In FIFA, the factor loading plays the same role as the discrimination parameter to indicate how relevant an item is to the latent variable in measurement. The higher the factor loading, the more informative the item.

There is no cutoff-point criterion for item selection with regard to the factor loading. Three or four items with high factor loadings above 0.7 would be the most desirable combination for scaling. A set of more than five items is too complicated when missing value estimation is considered, but the items fewer than three will make the scale little informative and at best ordinal in nature. When the selected items are more than five, I adopt Classical Test Theory because of its simplicity. When the selected items are fewer than three, polytomous IRT scaling is applied to increase the test information.

Given the presence of higher factor loadings, another desirable characteristic is that the selected items have varying difficulty parameters, which indicates the measurement covers a wider range of the latent trait. If all the items are too difficult or too easy, not much information can be drawn from the measurement. The quality of the construct scale is thus less reliable.



The following case is an example of item selection.

The latent trait: support of political Islam (Algeria4)

DISPLAY 14. STANDARDIZED DIFFICULTY, COMMUNALITY, AND VARIMAX FACTORS

	DIFF.	COMM.	FACTORS	
			1	2
1 V200	-0.744	0.271	<u>0.507</u>	-0.116
2 V201	0.308	0.238	-0.015	<u>0.488</u>
3 V202	0.283	0.541	<u>0.710</u>	0.198
4 V203	0.466	0.449	-0.031	<u>0.669</u>
5 IV166	-1.189	0.234	<u>0.480</u>	-0.065

As can be seen, the factor structure suggests two possible sets of items can be considered for scaling. In terms of factor loadings, except for v202 and v203, other items only show moderate correlation to the latent trait about 0.5. As a result, the decision depends on which set covers a wider range of the latent-trait scale. By this logic, factor 1 is preferred since the difficulty parameters of v200, v202, and iv166 spread a little bit more.

We can check the quality of the measurement by the one-factor model as below.

DISPLAY 12. STANDARDIZED DIFFICULTY, COMMUNALITY, AND PRINCIPAL FACTORS

	DIFF.	COMM.	FACTORS
			1
1 V200	-0.769	0.234	0.483
2 V202	0.255	0.525	0.727
3 IV166	-1.151	0.244	0.494

DISPLAY 13. PERCENT OF VARIANCE

	1
1	32.52530

While the three items are correlated to the latent trait in a moderate degree, this is a better measurement than summing up all the five items since the unidimensional assumption is not met here.

(D) Scaling

There are many combinations of IRT models and scoring methods to choose. The popular polytomous IRT models are Graded Response Model (GRM) and Partial Credit Model (PCM). The popular scoring methods are Maximum Likelihood Scoring (ML), Maximum A Posterior Scoring (MAP), and Expected A Posteriori Scoring (EAP). A simple rule to choose between GRM and PCM is whether the items have differing discriminations. GRM is more appropriate when selected items have greater difference in discrimination parameters; otherwise, PCM is more attractive since the raw score is a sufficient statistic for estimating the latent trait. As to the scaling technique, EAP is adopted since it is easier and accurate than ML and MAP if the prior is correct.³⁹

TESTFACT 4.0 and PARSCALE 4.1 are respectively the programs used for dichotomous IRT scaling and polytomous IRT scaling. TESTFACT uses FIFA model and EAP scoring. PARSCALE uses both GRM and PCM models and EAP scoring. The following is an example of the dichotomous and polytomous IRT scaling for the dependent variable in the case of Algeria4.

The latent trait: Attitudinal Support of Political Islam (Algeria4)
TESTFACT's EAP SCORING (1=NONPOSTIVE, 2=POSITIVE);
FIFA MODEL

Response Pattern (v200,v202,iv166)	score	frequency
(1,1,1)	-1.34	42
(1,1,2)	-0.75	133
(1,2,1)	-0.29	3
(1,2,2)	0.24	44
(2,1,1)	-0.81	63
(2,1,2)	-0.21	355
(2,2,1)	0.16	19
(2,2,2)	0.81	332

³⁹ More discussions on the methodological issues, see Embretson and Reise 2000, ch4 and ch7.

PARSCALE's EAP SCORING (1=STRONGLY DISAGREE, 5=STRONGLY AGREE); GRM MODEL

NONPOSITIVE ANSWERS ARE 1-3 (1-2 for IV166); POSITIVE ANSWERS ARE 4-5 (3-5 for IV166).

Response Pattern (v200, v202, iv166)	score	frequency
(1,1,1)	-2.93	4
(1,1,2)	-2.48	1
(1,1,3)	-2.09	2
(1,1,4)	-1.76	1
(1,1,5)	-1.45	2
(1,2,1)	-2.02	1
.....		
(5,1,1)	-2.06	5
(5,1,2)	-1.72	2
(5,1,3)	-1.35	7
(5,1,4)	-0.94	8
(5,1,5)	-0.45	3

The Spearman Rank correlation of the two scores is 0.869

At first glance, polytomous IRT scoring seems better than dichotomous IRT scoring since the former measurement is more precise. However, a careful thought would give a great caution to this view. Consider the three response patterns (1,1,1) (1,1,2) (1,2,1) in the polytomous IRT model. The responses are basically all negative. In TESTFACT, they all have the same score -1.34 (see the score of (1,1,1)), but in PARSCALE, they score differently from -2.93 to -2.02 . The question here is whether the intensity of the negative responses can be compared interpersonally, and whether the variance is true or artificially created. In this case, both scoring methods are acceptable since only three items are available. The use of TESTFACT is more conservative to make sure the scores interpretable; the use of PARSCALE is more progressive to utilize as much information as possible. In this study, when the selected items fewer than three, polytomous IRT scaling is applied; otherwise, dichotomous IRT

scaling is the default method. In addition, since the item discriminations are expected varying, GRM model is used in polytomous IRT scaling. Still, in order to unifying the scaling method, PARSCALE is used for the dependent variable since there are 4 cases in which TESTFACT is not applicable.⁴⁰

Sometimes a significant number of observations may have missing values in any of the selected items. This wastes much information and probably can affect our conclusion. Discarding these observations is an expedient way to deal with the problem, but we may lose too many observations this way. Therefore, the observations with missing values are estimated by using the endorsement rate as the weight.⁴¹ The following is an example.

The latent trait: Social Satisfaction (Pakistan4)

Selected Items: (v153, v163, v174)

Endorsement Rate: (0.39, 0.193, 0.43); e.g. 39% are positive to v153.

Coding Number: 1 for non-positive, 2 for positive, 9 for missing

(111) = -0.7, (112) = 0.25, therefore

(119) = (111) * (1 - 0.43) + (112) * 0.43 = -0.2915

By this method, all the response patterns with missing-value responses can be estimated.

⁴⁰ While TESTFACT is the default method for scaling, I want to increase the variations of the dependent variable to explain. This is another reason to apply the polytomous IRT method (PARSCALE).

⁴¹ However, the missing-value estimation is not applied to the dependent variable. I want to explain what is actually measured, not what is estimated.

V. The Findings of the Regression Analyses

A. Findings about the Attitudinal Support of Political Islam

Table 3 summarizes the regression analyses of the attitudinal support of political Islam in nine cases. Only the coefficients significant at the 0.05 level or above are reported. Notice that I don't center any variable because the highlights are the sign and the significance level of the coefficients. In addition, the analyses are confirmatory in nature and therefore I don't change the specification of the model.⁴²

In terms of explanatory power, Personal Piety, Gender Equality, and Education are much stronger than other variables. The signs of the coefficients confirm my hypotheses in six out of the nine cases, except for Gender Equality in Bangladesh⁴. This result indicates that people with greater personal piety, with a less positive attitude toward gender equality, or with a lower level of education are more likely to support political Islam attitudinally. As to other variables, Liberal Attitudes and Faith in Democracy in some countries show the expected relationships, but this finding is not very consistent to the extent that only less than half of the cases are corroborated. The remaining variables, especially Social Satisfaction, generally are neither significant in explanatory power nor consistent in signs, although occasionally the coefficients of these variables pass the significance level.

⁴² No multicollinearity problem is found in the reported regressions.

Table 3 : Regression Analyses of the Attitudinal Support of Political Islam (Using GE, LI, DE)

	Algeria4	Bangladesh4	Egypt4	Indonesia4	Jordan4	Morocco4a	Morocco4b	Pakistan4	Turkey4
Personal Piety	0.201*** (0.041)	0.263*** (0.038)	—	—	0.188*** (0.034)	0.262*** (0.046)	0.115** (0.043)	—	0.149*** (0.008)
Social Satisfaction	—	—	—	—	—	-0.109* (0.043)	—	0.057* (0.027)	-0.064** (0.021)
Gender Equality	-0.212*** (0.050)	0.145*** (0.042)	-0.132*** (0.034)	-0.352*** (0.056)	-0.227*** (0.045)	—	—	—	-0.313*** (0.028)
Liberal Attitudes	—	—	—	—	—	-0.122* (0.055)	-0.157*** (0.046)	—	-0.089*** (0.018)
Faith in Democracy	-0.096* (0.044)	-0.119*** (0.034)	—	—	—	—	—	-0.032* (0.015)	-0.097*** (0.019)
Sex	—	—	—	0.366*** (0.074)	—	—	—	-0.099* (0.045)	-0.119*** (0.031)

(next page)

Table 3 (continued)

	Algeria4	Bangladesh4	Egypt4	Indonesia4	Jordan4	Morocco4a	Morocco4b	Pakistan4	Turkey4
Age	—	—	—	—	—	—	—	0.212*** (0.019)	—
Education	—	-0.077*** (0.013)	-0.036*** (0.008)	—	—	-0.034* (0.015)	-0.080*** (0.016)	-0.078*** (0.010)	-0.043*** (0.008)
Short-term SES	—	—	—	—	—	—	0.121* (0.052)	-0.095** (0.032)	—
Subjective Class	-0.090* (0.037)	—	0.046* (0.021)	—	—	—	-0.222*** (0.043)	—	—
Intercept	—	—	—	—	—	—	—	—	-0.814*** (0.113)
Adjusted R ²	0.068	0.092	0.018	0.074	0.068	0.066	0.176	0.177	0.370
N	924	1182	2590	734	1026	833	710	1786	2899

Significance Level: * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$. Entry is unstandardized coefficient. Figures in parentheses are standard errors.

In Table 4, I replace Gender Equality, Liberal Attitudes, and Faith in Democracy with Modernist Attitudes to simplify the model. It is no surprise that the results are largely the same, and the minor changes of significance level and magnitude of coefficients in some variables are due to the canonical correlations between these variables and Gender Equality, Liberal Attitudes, and Faith in Democracy.⁴³ In other words, when I extract a latent factor from Gender Equality, Liberal Attitudes, and Faith in Democracy to formulate “Modernist Attitudes”, the unextracted factors will still show explanatory power through the variables that are collinear with GE, LI, and DE.

A general conclusion from Table 4 is that people in the Muslim societies tend to support political Islam in attitude because of their personal piety and premodernist attitudes, but not because of their dissatisfaction toward the government. Moreover, less educated people also tend to support political Islam attitudinally and this is in accord with the characteristic of premodernism.

With regard to the overall explanatory power of the model (see Table 4), all the cases can be divided into three categories. The first category comprises of the cases that I draw the above conclusions, including Algeria4, Bangladesh4, Jordan4, Morocco4a, Morocco4b, and Turkey4. The second category comprises of the cases in which none of my hypotheses are confirmed, including Egypt4 and Indonesia4. The last category only has the case of Pakistan4, which even shows falsification of my model.

⁴³ If a canonical correlation between two sets of variables is significant in certain magnitude, a linear combination of one set of the variables will leave its rest part still correlated to the other set of variables. Therefore, not all of the variance is covered by the composite variable MN if we use it to replace GE, LI, and DE.

Table 4 : Regression Analyses of the Attitudinal Support of Political Islam (Using MN)

	Algeria4	Bangladesh4	Egypt4	Indonesia4	Jordan4	Morocco4a	Morocco4b	Pakistan4	Turkey4
Personal Piety	0.200*** (0.041)	0.265*** (0.038)	—	—	0.192*** (0.034)	0.261*** (0.046)	0.109* (0.043)	—	0.164*** (0.008)
Social Satisfaction	—	—	—	—	—	-0.110** (0.042)	—	0.067* (0.027)	-0.066** (0.021)
Modernist Attitudes	-0.134*** (0.033)	-0.109*** (0.028)	—	—	-0.136*** (0.030)	-0.085* (0.034)	-0.107** (0.036)	—	-0.252*** (0.019)
Sex	—	—	-0.127*** (0.040)	0.278*** (0.074)	—	—	—	-0.094* (0.045)	-0.144*** (0.030)
Age	—	—	—	—	—	—	—	0.210*** (0.019)	—
Education	—	-0.074*** (0.013)	-0.039*** (0.008)	-0.047* (0.019)	—	-0.035* (0.014)	-0.078*** (0.016)	-0.076*** (0.010)	-0.044*** (0.008)

(next page)

Table 4 (continued)

	Algeria4	Bangladesh4	Egypt4	Indonesia4	Jordan4	Morocco4a	Morocco4b	Pakistan4	Turkey4
Short-term SES	—	—	—	—	—	—	0.114* (0.052)	-0.096** (0.032)	—
Subjective Class	-0.088* (0.037)	—	0.043* (0.021)	—	—	-0.079* (0.040)	-0.225*** (0.043)	—	—
Intercept	—	—	0.304** (0.117)	—	—	—	—	—	—
Adjusted R ²	0.061	0.086	0.013	0.028	0.059	0.066	0.171	0.175	0.365
N	924	1182	2590	734	1026	833	710	1786	2899

Significance Level: * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$. Entry is unstandardized coefficient. Figures in parentheses are standard errors.

B. Findings about the Behavioral Support of Political Islam

Table 5 summarizes the results of ordinal logistic regressions (PLUM in SPSS) of the behavioral support of political Islam in six cases. At first sight, it shows a different picture from Table 3 since Social Satisfaction becomes the most powerful variable instead of Personal Piety or Gender Equality. However, the signs of the coefficients of Social Satisfaction are not consistent. Moreover, while the explanatory power is weaker, Personal Piety and Gender Equality also show significant and expected relationships in more than half of the cases. Liberal Attitudes and Faith in Democracy only occasionally corroborate my hypotheses, but in most of the cases they don't.

If I replace Gender Equality, Liberal Attitudes, and Faith in Democracy with Modernist Attitudes, the results of the regression analyses can be seen in Table 6. Notice that Modernist Attitudes is right now significant in five of the six cases. It is not significant in the case of Bangladesh3 because only Gender Equality has relatively weak explanatory power among the three variables in the original model (see Table 5). Formulating a composite variable by linear combinations to certain extent even reduces the explanatory power.

The control variables generally show stronger relationships in the behavioral model than in the attitudinal model, but these findings concentrate in the two Bangladeshi and Turkish cases. Basically, most of the relationships do not depart from the usual expectation: male, less educated, and having lower class identification are related to more support of Islamist parties.



Table 5 : Regression Analyses (PLUM) of the Behavior Support of Political Islam (Using GE, LI, DE)

	Algeria ⁴	Bangladesh ³	Bangladesh ⁴	Pakistan ⁴	Turkey ³	Turkey ⁴
Personal Piety	—	—	0.193** (0.073)	—	0.188*** (0.025)	0.206*** (0.023)
Social Satisfaction	0.207* (0.086)	0.388*** (0.095)	-0.394*** (0.068)	-0.286*** (0.069)	0.969*** (0.079)	-0.318*** (0.060)
Gender Equality	-0.400*** (0.099)	0.177* (0.074)	—	—	-0.301*** (0.086)	-0.237** (0.078)
Liberal Attitudes	—	—	-0.187** (0.064)	—	—	-0.231*** (0.050)
Faith in Democracy	-0.190* (0.090)	—	—	—	—	—
Sex	—	—	—	—	-0.272** (0.106)	-0.404*** (0.085)
Age	—	—	0.105* (0.051)	0.205*** (0.048)	—	-0.102*** (0.030)
Education	—	-0.063* (0.029)	-0.063** (0.024)	—	-0.055* (0.028)	-0.076*** (0.021)
Short-term SES	—	0.251*** (0.075)	0.149* (0.074)	—	—	—
Subjective Class	—	-0.209** (0.076)	-0.170** (0.059)	—	—	-0.097* (0.043)
Threshold 1 (RANK=1)	-2.264*** (0.456)	—	—	-1.252*** (0.327)	-0.786* (0.387)	-1.680*** (0.311)

(next page)

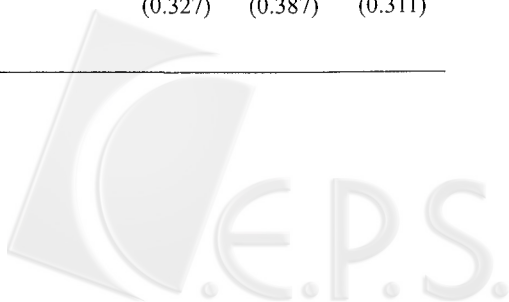


Table 5 (Continued)

	Algeria4	Bangladesh3	Bangladesh4	Pakistan4	Turkey3	Turkey4
Threshold 2 (RANK=2)	1.478*** (0.451)	2.026*** (0.507)	2.336*** (0.369)	3.047*** (0.338)	2.833*** (0.392)	2.381*** (0.309)
Threshold 3 (RANK=3)	2.083*** (0.454)	3.184*** (0.523)	3.250*** (0.380)	3.598*** (0.344)	3.223*** (0.394)	2.799*** (0.311)
Model Fitting	0.000	0.000	0.000	0.000	0.000	0.000
N	1189	893	1335	1950	1678	3082

Significance Level: * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$. Entry is unstandardized coefficient. Figures in parentheses are standard errors. The p-value smaller than 0.05 in the test of model fitting means acceptable fit.

Table 6 : Regression Analyses (PLUM) of the Behavior Support of Political Islam(Using MN)

	Algeria4	Bangladesh3	Bangladesh4	Pakistan4	Turkey3	Turkey4
Personal Piety	—	—	0.194*** (0.073)	—	0.190*** (0.025)	0.208*** (0.021)
Social Satisfaction	0.209* (0.086)	-0.358*** (0.094)	0.304*** (0.068)	-0.234*** (0.068)	0.986*** (0.079)	-0.307*** (0.060)
Modernist Attitudes	-0.233*** (0.065)	—	-0.177*** (0.054)	-0.159** (0.058)	-0.159* (0.064)	-0.291*** (0.053)
Sex	-0.332** (0.130)	—	—	—	-0.322** (0.104)	-0.406*** (0.084)

(next page)

Table 6 (Continued)

	Algeria4	Bangladesh3	Bangladesh4	Pakistan4	Turkey3	Turkey4
Age	—	—	0.103* (0.051)	0.206*** (0.048)	—	-0.102*** (0.030)
Education	—	-0.068* (0.029)	-0.060* (0.024)	—	-0.056* (0.028)	-0.080*** (0.021)
Short-term SES	—	0.221** (0.073)	0.161* (0.073)	—	—	—
Subjective Class	—	-0.193* (0.076)	-0.173** (0.059)	—	—	-0.100* (0.043)
Threshold 1 (RANK=1)	-2.476*** (0.447)	—	—	-1.240*** (0.323)	-0.792* (0.369)	-1.717*** (0.306)
Threshold 2 (RANK=2)	1.238** (0.439)	2.153*** (0.426)	2.357*** (0.364)	3.059*** (0.335)	2.809*** (0.373)	2.336*** (0.304)
Threshold 3 (RANK=3)	1.840*** (0.442)	3.310*** (0.445)	3.270*** (0.374)	3.610*** (0.340)	3.197*** (0.375)	2.754*** (0.306)
Model Fitting	0.000	0.000	0.000	0.000	0.000	0.000
N	1189	893	1335	1950	1678	3082

Significance Level: * $p \leq 0.05$; ** $p \leq 0.01$; *** $p \leq 0.001$. Entry is unstandardized coefficient. Figures in parentheses are standard errors. The p-value smaller than 0.05 in the test of model fitting means acceptable fit.



Table 7 : Holding the Ruling Parties Responsible for Social Conditions

Case(Wave)	The Time of the WVS Field Work	SS→VI	Islamist Party Defined	Are Islamist Parties in the Government Coalition?
Algeria4	Jan, 2002	Positive	MSP, Ennahda	Yes
Bangladesh3	Aug, 1996	Negative	Jamat-e-Islami	No
Bangladesh4	2000	Negative	Jamat-e-Islami	No
Pakistan4	Aug, 2001-Feb, 2002	Negative	Ji, JUP, Religious Groups	No
Turkey3	Dec, 1996-Jan, 1997	Positive	Welfare Party	Yes
Turkey4	Dec, 2000- Jan 2001	Negative	Virtue Party	No

SS→RANK refers to the regression coefficient of Social Satisfaction in Table 5 and 6.

Despite the strong explanatory power, the inconsistent signs of the coefficients of Social Satisfaction need further explanations. Recall the measurement of Social Satisfaction is defined as the degree of positive evaluation toward the current social condition. Particularly, I adopt the indicator, “Political Satisfaction” (see Table 15), as my measurement here. In this sense, it is assumed that Islamist parties are not part of the government coalition if what the votes of Islamist parties reflect is a way of social protest; otherwise, such votes are pro-government instead of against-government. In view of this speculation, I conduct a further analysis to see whether the relationship between social satisfaction and the behavior support of political Islam can be explained by whether Islamist parties are part of the government coalition. The result can be seen in Table 7.

What Table 7 shows is a rationalistic pattern of voting behavior because people would judge Islamist parties by thinking who should be responsible. When Islamist parties are part of the government coalition, negative evaluation of the government would decrease their popular support; on the contrary, negative

evaluation of the government would increase their popular support since people believe that the incumbent government should be responsible. The above finding indicates that the behavior support of Islamist parties is much more driven by retrospective evaluation rather than by religious attachment or premodernist attitudes.

Comparing the findings from the attitudinal and behavioral measurements, I can derive three conclusions as follows:

(1) People with strong religious attachment are more supportive of political Islam in attitude, but this support will not completely convert into behavior. On the other hand, they won't support political Islam attitudinally just because they are dissatisfied with the government, but they tend to vote for or against Islamist parties by their perception about which party should be blamed.

(2) The modernist attitudes in both attitudinal and behavioral models consistently shows strong explanatory power. This result indicates that the modernization theory is still supported for the explanation of religion and politics in the Muslim world.

(3) The cultural and socioeconomic explanations are both convincing, but in different aspects. Political Islam as a cultural discourse is appealing no matter how people think of the government. Nevertheless, the decision to vote for or against Islamist parties depends on which party should be held responsible. The problem of previous findings is to treat attitudinal support as equivalent to behavioral support,⁴⁴ but my finding suggests that it is not the case. The two different kinds of support are distinct.

Overall, if we believe that the attitudinal support and behavioral support are two distinct aspects of the growing popularity of political Islam, the inconsistent result of multiple linear and ordinal logistic regressions signals a strong message: most people in the Muslim country are rational just as the people in the western democratic societies in terms of voting behavior.

⁴⁴ For a review of pervious findings, see Huang 2004, 24-26.

However, Islam is a long-term tradition and provides the unmatched source of social legitimacy and moral model. It is less likely to dismiss such cultural influence on people's attitudes toward religion and politics. My finding confirms that religious people tend to be more supportive of political Islam attitudinally. Nevertheless, the modernization theory is still the most powerful explanation. This finding to certain degree challenges the liberalist argument that tends to label the modernization theory as an obsolete, western-centric, and self-serving hegemonic account.⁴⁵ From the scientific point of view, the modernization theory is well confirmed in both attitudinal and behavioral models.

VI. Conclusions

Religious people are indeed more supportive of political Islam, but such support is more attitudinal than behavioral. This reflects a cultural phenomenon that people tend to view Islam as a moral model and they believe religion should play a role in politics. Nevertheless, this doesn't mean people support political Islam to build a theocratic regime. My findings suggest that voting behavior in the Muslim world is rational just as the pattern we know in western democracies. People tend to punish the party that they believe responsible for bad socioeconomic conditions. Therefore, I conclude that moral model and social protest are two important reasons behind the support of political Islam, although we need extreme caution to interpret different ramifications with regard to different aspects of support.

Another conclusion is that the modernization theory is very powerful to explain the support of political Islam, both in attitude and in behavior. This might reflect a sociological phenomenon that people with more premodernist attitudes tend to live up to traditional authorities such as religious tenets. This conclusion is also corroborated by the strong explanatory power of education,

⁴⁵ For theoretical critiques, see Tipps 1973 and Appleby 1978. For cultural relativists' viewpoint, see Edgerton 2000 and Shweder 2000.

which shows a negative relationship to the support of political Islam.

Future research can use structural equation modeling or typological analysis to integrate the attitudinal and behavioral support of political Islam as a coherent dependent variable. If we can reach the same conclusion by both approaches, then the relative explanatory power of the three arguments will become even clear. Besides, we also need to shift the scope beyond the individual level and compare how the individual-level relationships would be affected by the country-level factors such as macroeconomic conditions, regime types, corruption, or level of modernization. Such a study should apply pooled-data measurements instead of the country-specific measurements applied here. Hierarchical linear modeling is a helpful tool suitable to proceed this multi-level analysis. In addition, it is also promising to see the integration of multiple indicators, structural equation modeling, and multilevel modeling into a unifying framework and generalize our understanding across different social contexts.

Finally, my model can not explain the cases of Egypt⁴, Indonesia⁴, and Pakistan⁴ very well. Conducting in-depth case studies is another direction that the improvement of this study can be made for the three cases.⁴⁶

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⁴⁶ In another study (Huang 2004, 170-266), I use pooled-data measurements from the same dataset and apply the same model with multilevel modeling. The result shows that my model can generally explain the three countries if several country-level characteristics are considered. This raises two further questions: (i) is it possible that the poor quality of the country-specific measurements in the three countries confounds the statistical results we saw in Table 3 and Table 4? (ii) if not, how can we explain the different results from using the two different ways of measurements? More future study is needed to determine which is more likely true.

Appendix : The Results of Variable Formation

For each variable, two tables are reported (except for RANK, which is not formulated by IRT methods). One describes the recoding scheme; the other reports the descriptive statistics of the included items. Bold-typed figures in the latter table refer to the scaled items for measurement. More detailed results are available by request.

(1) Attitudinal Support of Political Islam (RPO)

Table 8 : The Recoding Scheme of Attitudinal Support of Political Islam (RPO)

The recoding question:		
“If I support political Islam, would I give a positive answer to the following questions?”		
The latent trait: Religiopolitical Orientation (Attitudinal Measurement of Support of Political Islam)		
Data format: a positive answer is coded as 2; a non-positive answer (including neutral or negative response) is coded as 1.		
The assumption: The greater the support of political Islam, the greater the probability that people answer with a positive response to the following questions.		
<u>Religiopolitical Orientation (RPO)</u>		
<u>ID</u>	<u>Item</u>	
[RPO1]	V200	Politicians who do not believe in God are unfit for public office.
[RPO2]	V201	Religious leaders may influence how people vote in elections.
[RPO3]	V202	It would be better for this country if more people with strong religious beliefs held public office.
[RPO4]	V203	Religious leaders may influence government decisions.
[RPO5]	IV166	It is somewhat important that a good government should implement only the laws of the shari’a.

Table 9 : Descriptive Statistics of the Included Items of RPO

Item	Endorsement Rates of the Included Items (% of total observations)										
	AL4	BH4	EG4	IN4	JN4	MO4a	MO4b	PA4	TU4	BH3	TU3
V200	78.4	71	87.8	88.7	81.3	90.1	80.8	95	57.3	—	—
V201	36.8	14.5	31.3	7.7	17.3	8.5	15.8	13.6	12.4	—	—
V202	39.7	23.8	87.1	—	63.1	54.2	63.1	17.4	52.6	—	—
V203	32.4	17.1	—	5.1	—	28.2	—	—	—	—	—
IV166	87.2	—	90.2	75.1	91.6	—	—	—	—	—	—

Note: AL: Algeria; BH: Bangladesh; EG: Egypt; IN: Indonesia; JN: Jordan; MO: Morocco; PA: Pakistan; TU: Turkey; the figure in the back of the country code means the wave of World Value Survey; Morocco has two separate cases in the fourth wave, and they are coded as MO4a and MO4b; “—”: Data are missing; Bold-typed figures are scaled items.

(2) Behavioral Support of Political Islam (RANK)

Table 10 : The Recoding Scheme of Behavioral Support of Political Islam (RANK)

<u>Voting Preferences (RANK)</u>		
<u>Item</u>		
V220. If there were a national election tomorrow, for which party on this list would you vote? Just call out the number on this card. If DON'T KNOW: Which party appeals to you most?		
V221. And which party would be your second choice?		
V222. And is there any party on this list that you would never vote for?		
<u>The Recoding Scheme</u>		
<u>Rank</u>	<u>Defined Response Patterns (first choice, second choice, never vote)</u>	<u>Preferences</u>
4	(1,0,0), (1,1,0), (1,m,0), (1,0,m), (1,1,m), (1,m,m)	The Most

(next page)

Table 10 (continued)

Rank	Defined Response Patterns (first choice, second choice, never vote)	Preferences
3	(0,1,0), (m,1,0), (0,1,m), (m,1,m)	The Second
2	(0,0,0), (m,0,0), (0,m,0), (0,0,m), (m,m,0), (m,0,m), (0,m,m), (m,m,m)	In Between
1	(0,0,1), (m,0,1), (0,m,1), (m,m,1)	The Last
M	(0,1,1), (1,0,1), (1,1,1), (m,1,1), (1,m,1)	—

Note: Answering with an Islamist party is coded as “1”. Answering with a non-Islamist party is coded as “0”. Missing answers are coded as “m”. RANK M refers to conflicting answers and therefore is excluded.

Table 11 : The Percentage of Each Rank in Applicable Cases

Case	The Rank of Islamist Parties				The Percentage of Votes in the Recent National Election
	4	3	2	1	
Algeria ⁴	12.5	8	70.8	8.7	17.1 (May, 2002)
Bangladesh ³	3.7	7.3	42.6	46.4	9.7 (Jun, 1996)
Bangladesh ⁴	5.3	6.5	40.7	47.5	20/300 seats (Oct, 2001)
Pakistan ⁴	6	3.8	77.9	12.4	11.3 (Oct, 2002)
Turkey ³	11.8	3.6	61.6	23.5	21.4 (Dec, 1995)
Turkey ³	8.4	3.6	72	16	34.3 (Nov, 2002)

Note: 1. The list of Islamist parties can be found in Table 7 in the main text.

2. In Bangladesh⁴, the conservatives and Islamists formed a four-party alliance and therefore the vote percentage of each party is not available.

Data Source: World Value Survey and Election Around the World. The latter is available at <http://www.electionworld.org/>, checked on June/8/2004.



Table 12 : The Spearman Rank Correlations between RPO and RANK

Case	Correlation
Algeria4	0.261
Bangladesh4	0.177
Pakistan4	0.148
Turkey4	0.345
Note: All correlations are significant at $p=0.01$	

(3) Personal Piety (PP)

Table 13 : The Recoding Scheme of Personal Piety (PP)

The recoding question:

“If I am a religious person, would I give a positive answer to the following questions?”

The latent trait: Personal Piety

Data format: a positive answer is coded as 2; a non-positive answer (including neutral or negative response) is coded as 1.

The assumption: The greater the personal piety, the greater the probability that people answer with a positive response to the following questions.

General Mindsets (GM)

<u>ID</u>	<u>Item</u>
[GM1]	V9 Religion is important in my life.
[GM2]	V22 The respondent mentioned that religion is especially important to encourage children to learn at home.
[GM3]	V30 I would spend time with people at the mosque at least once or twice a month.
[GM4]	V40 The respondent mentioned that he/she belongs to religious organizations.

(next page)

Table 13 (continued)

<u>General Mindsets (GM)</u>		
<u>ID</u>	<u>Item</u>	
[GM5]	V55	The respondent mentioned that he/she is currently doing unpaid voluntary work for religious organizations.
[GM6]	V147	I have confidence about the mosques.
[GM7]	V196	God is important in my life.
[GM8]	V218	Above all, Muslim instead of other identities best describes me.
<u>Belief (BF)</u>		
<u>ID</u>	<u>Item</u>	
[BF1]	V187	The religious authorities are giving adequate answers to the moral problems and needs of the individual.
[BF2]	V188	The religious authorities are giving adequate answers to the problems of family life.
[BF3]	V189	The religious authorities are giving adequate answers to people's spiritual needs.
[BF4]	V190	The religious authorities are giving adequate answers to the social problems facing our country today.
[BF5]	V191	I believe in God.
[BF6]	V192	I believe in life after death.
[BF7]	V193	I believe people have a soul.
[BF8]	V194	I believe in hell.
[BF9]	V195	I believe in heaven.
<u>Miscellaneous (MS)</u>		
<u>ID</u>	<u>Item</u>	
[MS1]	V184	I belong to Muslim. [Asking religious denomination, "not a member" coded as 1, "Muslim" coded as 2, others religious denomination except "Muslim" coded as missing.]
[MS2]	V185	I attend religious services at least once a week these days.
[MS3]	V186	Independently of whether I go to religious services, I say I am a religious person.
[MS4]	V197	I do find comfort and strength from religion.
[MS5]	V198	I do take some moments of prayer, meditation or contemplation.
[MS6]	V199	I pray to God outside of religious services at least once a week.

Table 14 : Descriptive Statistics of the Included Items of Personal Piety (PP)

Item	Endorsement Rates of the Included Items (% of total observations)										
	AL4	BH4	EG4	IN4	JN4	MO4a	MO4b	PA4	TU4	BH3	TU3
V9	99.1	98.6	99.9	99.9	99.4	99.1	99.1	94.9	91.5	98.6	90.8
V22	81.3	98.3	87.3	93.1	84.8	87.1	65.2	86.3	41.3	77.7	42.1
V30	39.6	61.1	57.4	90.1	45.2	38	29.1	55.4	—	—	—
V40	7.3	43.2	—	—	—	0.8	—	—	—	33.6	3.1
V55	13.5	44.9	—	—	—	—	—	—	—	—	—
V147	89	98.6	84	96.8	91.7	99.7	94.1	88.2	71.1	98.5	62.4
V184	—	99.9	100	100	100	—	100	70.9	97.5	100	97
V185	47.3	56	42.2	64.7	44.1	46.1	42.1	74.2	34.8	63.8	41.8
V186	59	96.9	98.7	84.5	86.2	—	94.6	90.7	78.4	84	75.1
V187	90.6	62.3	92.2	79.6	66.3	97.4	95.1	62.3	—	—	—
V188	89.7	53.9	87.3	77.7	62.3	97.3	96.2	48.7	—	—	—
V189	97.6	77.9	92.8	84.4	65.7	98.4	95.9	65.1	—	—	—
V190	76.6	57.7	82.6	64.4	66.2	92.3	88.8	45.1	—	—	—
V191	99.8	99.5	100	99.9	99.8	—	100	100	97.5	98.6	97.6
V192	99.8	56	100	99.5	97.8	—	99.8	100	87.8	56.6	86.6
V193	99.3	99.4	100	99.1	99.6	—	100	100	89.2	98	91.2
V194	98.8	95.3	100	99.9	99.3	—	99.8	100	92	97.2	88.8
V195	99.8	99.5	100	99.9	99.6	—	99.7	100	92.4	97.9	89.5
V196	98.4	95.7	98.2	99.8	99.8	99.3	99.6	100	90.7	96.2	91.4
V197	99	98.9	99.9	100	99.7	99.8	99.8	95.8	91.1	98.8	89.4
V198	—	95.5	—	—	—	—	—	—	—	—	—
V199	—	89.2	—	—	—	75.1	72.8	—	—	—	—
V218	67.2	55	79.4	DK	72.5	—	DK	NA	64.4	71.5	21.9

Note: AL: Algeria; BH: Bangladesh; EG: Egypt; IN: Indonesia; JN: Jordan; MO: Morocco; PA: Pakistan; TU: Turkey; the figure in the back of the country code means the wave of World Value Survey; Morocco has two separate cases in the fourth wave, and they are coded as MO4a and MO4b; "DK": Data are available but the coding numbers are unknown; "NA": the item is not applicable; "—": Data are missing; Bold-typed figures are scaled items.

(4) Social Satisfaction (SS)

Table 15 : The Recoding Scheme of Social Satisfaction (SS)

The recoding question:

“Given my evaluation about the social situation nowadays, would I give a positive answer to the following questions?”

The latent trait: Social Satisfaction

Data format: a positive answer is coded as 2; a non-positive answer (including neutral or negative response) is coded as 1.

The assumption: The greater the social satisfaction, the greater the probability that people answer with a positive response to the following questions.

General Satisfaction (GS)

<u>ID</u>	<u>Item</u>
[GS1]	V11 Taking all things together, I am happy.
[GS2]	V80 I am satisfied with the financial situation of my household.
[GS3]	V81 All things considered, I am satisfied with my life as a whole these days.
[GS4]	V82 I feel freedom of choice and control over the way my life turns out.

Political Satisfaction (PS)

<u>ID</u>	<u>Item</u>
[PS1]	V143 I agree the statement that people should take more responsibility to provide for themselves rather than the statement that the government should take more responsibility to ensure that everyone is provided.
[PS2]	V153 I have confidence in the central government.
[PS3]	V154 I have confidence in political parties.
[PS4]	V155 I have confidence in the parliament.
[PS5]	V156 I have confidence in the civil service.
[PS6]	V163 I think the system for governing this country is good.
[PS7]	V173 I feel there is some respect for individual human rights nowadays in my country.

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Table 15 (continued)

		Political Satisfaction (PS)
ID	Item	
[PS8]	V174	I am satisfied with the way the people now in national office are handling the country's affairs.
[PS9]	V175	Generally speaking, I would say that this country is run for the benefit of all the people rather than run by a few big interests looking out for themselves.
[PS10]	IV163	I think the government protects freedom.
[PS11]	IV164	I think the government protects religion.

Table 16 : Descriptive Statistics of the Included Items of Social Satisfaction (SS)

Item	Endorsement Rates of the Included Items (% of total observations)										
	AL4	BH4	EG4	IN4	JN4	MO4a	MO4b	PA4	TU4	BH3	TU3
V11	83.7	77.5	89.6	95	83.4	79.3	84.6	76.6	76.6	85.1	89.9
V80	58.4	39.7	49.9	72	34.8	36.4	41.5	11.6	25.8	55.3	39.2
V81	54.2	41.9	50.2	79	47.4	46	53.4	28	51.1	63	53.8
V82	68.9	42.4	52.4	81.6	72.9	51.8	53.2	29.8	48.3	60.4	36.6
V143	40.5	43.7	32.3	53.6	23.9	27	28.1	13.5	31	60.9	56.9
V153	54	87.3	60.7	52.4	84.7	58.2	55.7	39	45.4	80.7	46.7
V154	19	79	50.6	33.1	29.7	17.8	19.6	28	27.8	70.8	28.5
V155	33	88.8	67.6	43	67	22.1	21	75.8	45.6	84.3	48.5
V156	58	96	63.4	59.4	67.5	39.6	42.2	49.8	62	80.2	67
V163	36.4	33.6	85.1	44.8	51.1	42.7	39.8	19.3	9.9	70.8	43.9
V173	35.7	73.3	71.7	61.7	73.8	37.8	47.9	54.4	26.6	—	—
V174	28.3	76.1	92.3	22.6	76.6	51.8	41.9	43	27.7	91.9	29.4
V175	12.8	43.8	31.5	30.1	30.7	24.8	20.9	10.9	16.8	60.4	19.8
IV163	—	—	76.4	88.7	74.6	—	—	—	—	—	—
IV164	—	—	84.8	97.6	81.3	—	—	—	—	—	—

Note: AL: Algeria; BH: Bangladesh; EG: Egypt; IN: Indonesia; JN: Jordan; MO: Morocco; PA: Pakistan; TU: Turkey; the figure in the back of the country code means the wave of World Value Survey; Morocco has two separate cases in the fourth wave, and they are coded as MO4a and MO4b; “—”: Data are missing; Bold-typed figures are scaled items.

(5) Gender Equality (GE)

Table 17 : The Recoding Scheme of Gender Equality (GE)

The recoding question:

“If I support gender equality, would I give a positive answer to the following questions?”

The latent trait: Gender Equality

Data format: a positive answer is coded as 2; a non-positive answer (including neutral or negative response) is coded as 1.

The assumption: The greater the support of gender equality, the greater the probability that people answer with a positive response to the following questions.

Equality of Rights (ER)

<u>ID</u>	<u>Item</u>	
[ER1]	V78	I don't agree that men should have more rights to a job than women when jobs are scarce.
[ER2]	V117	I agree that both the husband and wife should contribute to household income.
[ER3]	V118	I don't agree that generally men make better political leaders than women do.
[ER4]	V119	I don't agree that a university education is more important for a boy than for a girl.
[ER5]	IV86	I don't agree that men can have more than one wife.
[ER6]	IV87	I don't agree that wives must obey their husbands.

Social Role (SR)

<u>ID</u>	<u>Item</u>	
[SR1]	V50	The respondent mentioned that he/she belongs to women's group.
[SR2]	V65	The respondent mentioned that he/she is currently doing unpaid voluntary work for women's groups.
[SR3]	V110	It is not necessary that a woman has to have children in order to be fulfilled.
[SR4]	V112	I approve that a woman wants to have a child as a single parent but she doesn't want to have a stable relationship with a man.

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Table 17 (continued)

		Social Role (SR)
ID	Item	
[SR5]	V115	I agree that a working mother can establish just as warm and secure a relationship with her children as a mother who does not work.
[SR6]	V116	I disagree that being a housewife is just as fulfilling as working for pay.
[SR7]	V159	I have confidence in the women's movement.
[SR8]	IV81	I don't think that wearing veil is important for women.
[SR9]	IV84	I don't think that being religious is important for women.
[SR10]	IV85	I think that education is important for women.

Table18 : Descriptive Statistics of the Included Items of Gender Equality (GE)

Item	Endorsement Rates of the Included Items (% of total observations)										
	AL4	BH4	EG4	IN4	JN4	MO4a	MO4b	PA4	TU4	BH3	TU3
V50	4.4	14.4	—	—	—	2	—	—	—	—	—
V65	5.6	15	—	—	—	—	—	—	—	—	—
V78	19.9	16.5	0	40.2	12	8.4	16.5	17.9	31.5	23.1	35.5
V110	18.8	1.9	11.6	6.8	8.2	21.3	6	1.7	26.4	3.1	27.4
V112	6.2	3.7	4.9	4.2	2	1.7	3.5	0.1	7.8	—	13.4
V115	64.8	59.5	45.6	64.4	46.7	60.2	61.6	18.3	70	47.1	49.3
V116	33.6	70.9	25.6	77.4	24.3	41.4	28.6	23.8	24.5	79	24.1
V117	70.9	86.8	75.6	85.1	77.1	72.1	79.4	70.2	87.6	85.4	88.5
V118	30.4	32.7	15.5	39.5	12.4	28.2	30	50.8	40.6	43.6	41.9
V119	71.5	37.4	69	83.2	61.2	47.1	74.8	77.4	74.8	59.4	73.7
V159	29.5	80.1	73.8	50.7	53.8	38.8	44.1	28.7	66	76.7	77.3
IV81	10.5	—	2.5	15	8.1	—	—	—	79.7	—	—
IV84	4.8	—	0.4	0	1.6	—	—	—	14.5	—	—
IV85	90.4	—	89.8	97.4	96.6	—	—	—	96.6	—	—
IV86	36	—	80.7	71.2	69.9	—	—	—	59.9	—	—
IV87	9.9	—	9.5	14.9	19	—	—	—	12.8	—	—

Notes: AL: Algeria; BH: Bangladesh; EG: Egypt; IN: Indonesia; JN: Jordan; MO: Morocco; PA: Pakistan; TU: Turkey; the figure means in the back of the country code means the wave of World Value Survey; Morocco has two separate cases in the fourth wave, and they are coded as MO4a and MO4b; "—": Data are missing; Bold-typed figures are scaled items.

(6) Liberal Attitudes (LI)

Table 19 : The Recoding Scheme of Liberal Attitudes (LI)

The recoding question:		
“If I am a liberalist, would I give a positive answer to the following questions?”		
The latent trait: Liberal Attitudes		
Data format: a positive answer is coded as 2; a non-positive answer (including neutral or negative response) is coded as 1.		
The assumption: The greater the liberal attitudes, the greater the probability that people answer with a positive response to the following questions.		
<u>Acceptance and Tolerance (AT)</u>		
The respondent would not mind to have the following		
<u>ID</u>	<u>ITEM</u>	people as neighbors. (v68-V77c)
[AT1]	V68	People with a criminal record
[AT2]	V69	People of a different race
[AT3]	V70	Heavy drinkers
[AT4]	V71	Emotionally unstable people
[AT5]	V72	Christians (The same question as V77o)
[AT6]	V73	Immigrants/foreign workers
[AT7]	V74	People who have AIDS
[AT8]	V76	Homosexuals
[AT9]	V77	Minority group
[AT10]	V77c	People with a different religion
[AT11]	V79	When jobs are scarce, employers should not give priority to our people over immigrants.
[AT12]	V146	I agree the government should let people from other countries coming here to work as long as there are jobs available.

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Table 19 (continued)

<u>Internationalism, Peace Movement (IPM)</u>		
<u>ID</u>	<u>ITEM</u>	
[IPM1]	V51	The respondent mentioned that he/she belongs to peace movement.
[IPM2]	V66	The respondent mentioned that he/she is currently doing unpaid voluntary work for peace movements.
[IPM3]	V176	I agree that our government should provide economic aids to poorer countries somewhat more than we do now.
[IPM4]	V177	I think that international peacekeeping is better to be handled solely by the United Nations.
[IPM5]	V178	I think that protection of the environment is better to be handled solely by the United Nations.
[IPM6]	V179	I think that aid to developing countries is better to be handled solely by the United Nations.
[IPM7]	V180	I think that the refugee problem is better to be handled solely by the United Nations.
[IPM8]	V181	I think that the human right problem is better to be handled solely by the United Nations.
<u>Freedom, Spiritual Needs, Reformed-minded Attitudes (FSR)</u>		
<u>ID</u>	<u>ITEM</u>	
[FSR1]	V122	I think giving people more say in important government decisions or protecting freedom of speech is more important than maintaining order and fighting rising price.
[FSR2]	V127	I think the change toward less emphasis on money and material possessions in our future life is a good thing.
[FSR3]	V130	I don't think the change toward greater respect for authority is a good thing.
[FSR4]	V140	I agree our society at least needs to be reformed gradually.
[FSR5]	V145	I agree with the statement that news ideas are generally better than old ones instead of the statement that ideas are generally better if they have stood the test of time.
[FSR6]	IV165	A good government should make laws according to the people's wishes.

Table 20 : Descriptive Statistics of the Included Items of Liberal Attitudes (LI)

Item	Endorsement Rates of the Included Items (% of total observations)										
	AL4	BH4	EG4	IN4	JN4	MO4a	MO4b	PA4	TU4	BH3	TU3
V51	—	23	—	—	—	0.6	—	—	—	—	—
V66	—	30.1	—	—	—	—	—	—	—	—	—
V68	29.7	96.3	96.9	44.3	3.7	32.5	41	42.2	21	12.9	25.9
V69	72	28.4	34.2	65.2	79.4	87.2	91.7	93.5	73.2	82.7	67.8
V70	30.5	95.7	98.9	41.9	5.8	13.7	14.3	98.9	14.9	10.5	11.6
V71	55.7	71.9	72.1	50.6	32.6	29.4	34.6	60.4	26.3	34.4	24.1
V72	67.9	—	—	—	—	—	66.2	91.6	—	87.3	50.9
V73	76.5	32.9	57.7	59.6	60.3	84.7	82.9	70.9	66.1	70.5	63.6
V74	31.7	94.3	98.3	47.8	4.7	23	18.6	93	18.3	18	23.2
V76	19.3	95.1	99.6	45.2	1.6	9.1	6.5	100	11.3	16.3	11.2
V77	—	79.6	62	—	—	—	7.9	100	—	—	—
V77c	—	34.1	—	62.2	65.4	—	—	—	69.9	—	—
V77o	—	—	—	—	—	—	—	—	60.7	—	—
V79	3.8	2.8	0.3	7.7	2.8	2.3	4.5	19.4	25.6	3.9	17.2
V122	25.1	22.6	19	11.2	19.1	25.2	18.4	4.2	46.2	16.6	45.6
V127	39.9	36.4	55.6	27	60.8	66.2	66.8	70	70.4	30.2	67.9
V130	4.3	1.3	4.4	44.2	3.6	2.5	4.5	7	8.8	0.5	24
V140	79.6	55.6	83.1	83.5	52.2	93.5	87.9	83.2	80.1	71.5	76.3
V145	—	89.6	—	—	—	—	—	—	—	86.4	43.4
V146	63.8	55.5	47.2	30.5	35	70.1	76.1	59.1	48.6	—	41
V176	38.9	63.3	—	—	—	60.4	—	—	—	—	—
V177	47.9	45.3	40.8	28.1	14.4	41.3	36.5	—	—	—	—
V178	22.3	18.6	17.7	2.7	11.1	13.7	12.9	—	—	—	—
V179	48.8	25.4	59.2	24.4	33.1	36.8	39.9	—	—	—	—
V180	53.5	37.2	52.2	19	31	40.2	38.1	—	—	—	—
V181	36.3	33.6	31.8	8.3	19.1	11.4	12.5	—	—	—	—
IV165	97.2	—	86.8	89.5	81.7	—	—	—	—	—	—

Note: AL: Algeria; BH: Bangladesh; EG: Egypt; IN: Indonesia; JN: Jordan; MO: Morocco; PA: Pakistan; TU: Turkey; the figure in the back of the country code means the wave of World Value Survey; Morocco has two separate cases in the fourth wave, and they are coded as MO4a and MO4b; “—”: Data are missing; Bold-typed figures are scaled items; V72 and V77o are the same items.

(7) Faith in Democracy (DE)

Table 21 : The Recoding Scheme of Faith in Democracy (DE)

The recoding question:		
“If I have strong faith in democracy, would I give a positive answer to the following questions?”		
The latent trait: Faith in Democracy		
Data format: a positive answer is coded as 2; a non-positive answer (including neutral or negative response) is coded as 1.		
The assumption: The stronger the faith in democracy, the greater the probability that people answer with a positive response to the following questions.		
Faith in Democratic Institutions (FDI)		
<u>ID</u>	<u>ITEM</u>	
[FDI1]	V164	I don't agree that having a strong leader who does not have to bother with the parliament and elections is a good way to govern this country.
[FDI2]	V165	I don't think that having experts, not government, make decisions according to what they think is best for the country
[FDI3]	V166	I don't think having the army rule is a good way to govern this country.
[FDI4]	V167	I think having a democratic political system is a good way to govern this country.
Faith in Inner Values of Democracy (FIV)		
<u>ID</u>	<u>ITEM</u>	
[FIV1]	V169	I disagree the statement that economy runs badly in democracy.
[FIV2]	V170	I disagree that democracies are indecisive and have too much quibbling.
[FIV3]	V171	I disagree the democracies aren't good at maintaining order.
[FIV4]	V172	I agree that democracy may have problems but it's better than any other form of government.

Table 22 : Descriptive Statistics of the Included Items of Faith in Democracy (DE)

Item	Endorsement Rates of the Included Items (% of total observations)										
	AL4	BH4	EG4	IN4	JN4	MO4a	MO4b	PA4	TU4	BH3	TU3
V164	60.9	88.4	92.3	80.7	58.9	81.9	83.9	66.1	28.2	93.3	62.3
V165	19.5	23.4	32.9	52.2	13.1	24.5	36.1	81.1	25.6	15	44.3
V166	80.8	80.9		3.8	40.5	86.4	85.9	95.8	70.4	93.2	74.3
V167	92.7	98.3	98.6	95.9	94.7	95.8	96.1	88.1	91.9	98.1	91.7
V169	68.9	89.7	81.9	78.6	67.5	56.4	74.8	61.3	68.6	88.5	78.5
V170	36.8	86.8	71	75.3	56.3	21.4	38.1	71.3	42.1	69.4	38.7
V171	67.6	87.8	79.8	77.3	66.9	52.2	67.4	47	65.2	82.6	74.1
V172	88.4	98.3	97.7	71.2	90.3	95.4	96.4	82.2	88	97.4	92.7

Note: AL: Algeria; BH: Bangladesh; EG: Egypt; IN: Indonesia; JN: Jordan; MO: Morocco; PA: Pakistan; TU: Turkey; the figure in the back of the country code means the wave of World Value Survey; Morocco has two separate cases in the fourth wave, and they are coded as MO4a and MO4b; “—”: Data are missing; Bold-typed figures are scaled items.

References

- Ahmad, M. 1975. *Social Justice in Islam*. Lahore, Pakistan: Institute of Islamic Culture.
- Ahmed, N. 2003. "From Monopoly to Competition: Party Politics in the Bangladesh Parliament (1973-2001)." *Pacific Affairs* 76 (1): 55-77.
- Allport, F. H. 1939. "Rule and Custom as Individual Variations of Behavior Distortion Upon a Continuum of Conformity." *American Journal of Sociology* 44 (6): 897-921.
- Almond, G. A., and S. Verba. 1960. *The Civic Culture*. Newbury Park, CA: Sage Publications.
- Antoun, R. T. 2001. *Understanding Fundamentalism: Christian, Islamic, and Jewish Movements*. Walnut Creek, CA: AltaMira Press.
- Appleby, J. 1978. "Modernization Theory and the Formation of Modern Social Theories in England and America." *Comparative Studies in Society and History* 20 (2): 259-85.
- Arjomand, S. 1995. "Unity and Diversity in Islamic Fundamentalism." In *Fundamentalisms Comprehended*, eds. M. Marty and R. S. Appleby. Chicago: the University of Chicago Press.
- Banfield, E. 1958. *The Moral Basis of a Backward Society*. Glencoe: Free Press.
- Barnett, M. 1998. *Dialogues in Arab Politics*. New York: Columbia University Press.
- Bauman, Z. 1993. *Postmodern Ethics*. Cambridge: Polity.
- Bayat, A. 2002. "Activism and Social Development in the Middle East." *International Journal of Middle East Studies* 34: 1-28.
- Bernard, J. 1941. "Normative Collective Behavior: A Classification of Social Norm." *American Journal of Sociology* 47 (1): 24-38.
- Bill, J. 1994. "Comparative Middle East Politics: Still in Search of Theory." *PS: Political Science & Politics* 27: 518-19.
- Bock, R. D., R. Gibbons, and E. Muraki. 1988. "Full-information Item Factor Analysis." *Applied Psychological Measurement* 12: 261-80.

- Camic, C. 1986. "The Matter of Habit." *American Journal of Sociology* 91 (5): 1039-87.
- Casanova, J. 1992. "Private and Public Religions." *Social Research* 59 (1): 17-57.
- Casanova, J. 1994. *Public Religions in the Modern World*. Chicago: The University of Chicago Press.
- Du Toit, M., ed. 2003. *IRT from SSI*. Lincolnwood, IL: Scientific Software International.
- Edgerton, R. B. 2000. "Traditional Beliefs and Practice — Are Some Better than Others." In *Cultural Matters*, eds. L. E. Harrison and S. P. Huntington. New York: Basic Books.
- Eisinga, R., J. Lammers, and J. Peters. 1991. "Community, Commitment, and Conservatism." *European Sociological Review* 7 (2): 123-34.
- Embretson, S., and S. Reise. 2000. *Item Response Theory for Psychologists*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Esposito, J. L. 1994. "Political Islam: Beyond the Green Menace." *Current History* 93: 19-24.
- Esposito, J. L. 2000. "Political Islam and the West." *Joint Force Quarterly* 24: 49-55.
- Filsinger, E. E., J. E. Faulkner, and R. H. Warland. 1979. "Empirical Taxonomy of Religious Individuals: An Investigation Among College Students." *Sociological Analysis* 40 (2): 136-46.
- Finney, J. M. 1978. "A Theory of Religious Commitment." *Sociological Analysis* 39 (1): 19-35.
- Fiorina, M. 1981. *Retrospective Voting in American National Elections*. New Haven, CT: Yale University Press.
- Fischer, C. S. 1971. "A Research Note on Urbanism and Tolerance." *American Journal of Sociology* 76: 847-56.
- Flanagan, S. 1987. "Value Changes in Industrial Societies." *American Political Science Review* 81 (4): 1303-19.
- Folsom, J. K. 1918. "The Social Psychology of Morality and Its Bearing on Moral Education." *American Journal of Sociology* 23 (4): 433-90.
- Fox, J. 1999. "The Influence of Religious Legitimacy on Grievance Formation by Ethno-Religious Minorities." *Journal of Peace Research* 36 (3): 289-307.

- Friedland, R. 2001. "Religious Nationalism and the Problem of Collective Representation." *Annual Review of Sociology* 27: 125-52.
- Gaffney, P. D. 1994. *Islamic Preaching in Contemporary Egypt*. Berkeley: University of California Press.
- Giddens, A. 1991. *Modernity and Self-Identity*. Cambridge: Polity.
- Golebiowska, E. A. 1995. "Individual Value Priority, Education, and Political Tolerance." *Political Behavior* 17 (1): 23-48.
- Gorsuch, R. L. 1983. *Factor Analysis*. Hillsdale, NJ: Lawrence Erlbaum.
- Hafez, M. M. 2003. *Why Muslims Rebel? Repression and Resistance in the Muslim World*. Boulder: Lynne Rienner.
- Hambleton, R. K., H. Swaminathan, and H. J. Rogers. 1991. *Fundamentals of Item Response Theory*. Newbury Park, CA: Sage Publications.
- Harrison, L. E. 1985. *Underdevelopment is a State of Mind*. Lanham, MD: Center for International Affairs, Harvard University and University Press of America.
- Hattie, J. A. 1985. "Methodological Review: Assessing Unidimensionality of Tests and Items." *Applied Psychological Measurement* 9: 139-64.
- Hoffman, V. J. 1995. "Muslim Fundamentalists: Psychological Profiles." In *Fundamentalisms Comprehended*, eds. M. E. Marty and R. S. Appleby. Chicago: The University of Chicago Press.
- Huang, M. H. 2004. *Why Do People Support Political Islam? A Comparative Study of Eight Muslim Societies*. Ph.D. diss. Department of Political Science, University of Michigan.
- Hulin, C. L., F. Drasgow, and C. K. Parsons. 1983. *Item Response Theory*. Homewood, IL: DOW JONES-IRWINE.
- Hurwitz, J., and M. Peffley. 1992. "Traditional Versus Social Values as Antecedents of Racial Stereotyping and Political Conservatism." *Political Behavior* 14 (4): 395-421.
- Huxley, T. H. 1886. "Science and Morals." *Fortnightly Review* 46: 788-802.
- Inglehart, R. 1990. *Culture Shift in Advanced Industrial Society*. Princeton: Princeton University Press.
- Jawed, N. A. 1999. *Islam's Political Culture: Religion and Politics*

- in Predivided Pakistan*. Austin: University of Texas Press.
- Johnston, R., and C. Pattie. 2001. "Dimensions of Retrospective Voting." *Party Politics* 7 (4): 469-90.
- Jolliffe, I. T. 1986. *Principal Component Analysis*. New York: Springer-Verlag.
- Khomeini, I. R. 2000. "The Pillars of an Islamic State." In *Contemporary Debates in Islam: An Anthology of Modernist and Fundamentalist Thought*, eds. M. Moaddel and K. Talattof. New York: St. Martin's Press.
- Kiewiet, D. R., and D. Rivers. 1984. "A Retrospective on Retrospective Voting." *Political Behavior* 6 (4): 369-93.
- Kim, J. O., and C. W. Mueller. 1978. *Factor Analysis: Statistical Methods and Practical Issues*. Beverly Hills: Sage Publications.
- Knol, D. L., and M. P. Berger. 1991. "Empirical Comparison between Factor Analysis and Multidimensional Item Response Models." *Multivariate Behavioral Research* 26: 457-77.
- Kramer, G. H. 1977. "Short-Term Fluctuations in U.S. Voting Behavior, 1896-1964." *American Political Science Review* 65 (1): 131-43.
- Langohr, Vickie. 2001. "Of Islamists and Ballot Boxes: Rethinking the Relationship Between Islamism and Electoral Politics." *International Journal of Middle East Studies* 33: 591-610.
- Lee, R. R. 1992. "Religious Practice as Social Exchange: An Explanation of the Empirical Findings." *Sociological Analysis* 53 (1): 1-35.
- Lerner, D. 1958. *The Passing of Traditional Society: Modernizing the Middle East*. Glencoe: Free Press.
- Long, J. S., and J. Freese. 2001. *Regression Models for Categorical Dependent Variable Using Stata*. College Station, TX: Stata Press.
- Long, J. S. 1997. *Regression Models for Categorical and Limited Dependent Variables*. *Advanced Quantitative Techniques in the Social Sciences Number 7*. Thousand Oak: Sage Publications.
- Loomis, C. P., and J. A. Beegles. 1948. "A Typological Analysis of

- Social Systems.” *Sociometry* 11 (3): 147-91.
- Lord, F. M. 1980. *Applications of Item Response Theory to Practical Testing Problems*. Hillside, NJ: Erlbaum.
- Maddock, J. W. 1972. “Morality and Individual Development: A Basis for Value Education.” *The Family Coordinator* 21 (3): 291-302.
- Malik, I. H. 1999. *Islam, Nationalism, and the West: Issues of Identity in Pakistan*. New York: St. Martin Press.
- Mayer, A. E. 2002. “Islam and Human Rights: Tradition and Politics.” In *Human Rights & Religion*, ed. L. Gearon. Brighton: Sussex Academic Press.
- Monroe, K. 1979. “Economic Analyses of Electoral Behavior: A Critical Review.” *Political Behavior* 1 (2): 137-73.
- Mufti, M. 1996. *Sovereign Creations: Pan-Arabism and Political Order in Syria and Iraq*. Ithaca, NY: Cornell University Press.
- Nelson, H. M., et al. 1971. “Rural-Urban Differences in Religiosity.” *Rural Sociology* 36: 389-96.
- Nielsen, S. C., Jr. 1993. *Fundamentalism, Mythos, and World Religions*. Albany: State University of New York Press.
- Norpoth, H. 1992. *Confidence Regained: Economics, Mrs. Thatcher, and the British Voter*. Ann Arbor, MI: University of Michigan Press.
- Piscatori, J., ed. 1991. *Islamic Fundamentalisms and the Gulf Crisis*. Chicago: The Fundamentalism Project, American Academy of Arts and Sciences.
- Prandy, K. 1979. “Alienation and Interests in the Analysis of Social Cognitions.” *British Journal of Sociology* 30 (4): 442-74.
- Robin, P. 1990. “Jordan’s Election: A New Era?” *Middle East Report* 164/165: 55-57.
- Sadiki, L. 2000. “Popular Uprising and Arab Democratization.” *International Journal of Middle East Studies* 32: 71-95.
- Samara, A. 1995. *Political Islam: Fundamentalism or National Struggle? A Materialist Critique*. Jerusalem: Al-Mashriq for Development & Cultural Studies.
- Schwedler, J. 2001. “Islamic Identity: Myth, Menace, or Mobilizer?” *SAIS Review* 21 (2): 1-17.

- Seul, J. 1999. "'Ours is the Way of God': Religion, Identity, and Intergroup Conflict." *Journal of Peace Research* 36 (5): 553-69.
- Shilling, C., and P. A. Mellor. 1998. "Durkeim, Morality and Modernity." *British Journal of Sociology* 49 (2): 193-209.
- Sivan, E. 1985. *Radical Islam, Medieval Theology and Modern Politics*. New Haven: Yale University Press.
- Soltan, G. A. G. 1997. "State Building, Modernization, and Political Islam: The Search of Political Community(s) in the Middle East." *Revista CIDOB d'Afers Internacionals*, 37. <<http://www.cidob.org/Castellano/Publicaciones/Afers/soltan.html>>.
- Sonn, Tamara. 1996. *Interpreting Islam: Bandali Jawzi's Islamic Intellectual History*. Oxford: Oxford University Press.
- Shweder, R. A. 2000. "Moral Maps, 'First World' Conceits, and the New Evangelists." In *Cultural Matters*, eds. L. E. Harrison and S. P. Huntington. New York: Basic Books.
- Tareq, Y., and J. S. Ismael. 1993. "Arab Politics and the Gulf War: Political Opinion and Political Culture." *Arab Studies Quarterly* 15 (1): 1-7.
- Tessler, M. 2003. "Arab and Muslim Political Attitudes: Stereotypes and Evidence from Survey Research." *International Studies Perspective* 4: 175-81.
- Thomson, I. T. 1997. "From Conflict to Embedment: The Individual-Society Relationship, 1920-1991." *Sociological Forum* 12 (4): 631-58.
- Tibi, B. 1998. *The Challenge of Fundamentalism: Political Islam and the New World Disorder*. Berkeley, CA: University of California Press.
- Tipps, D. C. 1973. "Modernization Theory and the Comparative Study of Societies: A Critical Perspective." *Comparative Studies in Society and History* 15 (2): 199-226.
- Tyson, H. L., Jr., and S. A. Kaplowitz. 1977. "Attitudinal Conformity and Anonymity." *Public Opinion Quarterly* 4 (12): 226-34.
- Waller, N. G., et al. 1996. "Exploring Nonlinear Models in Personality Assessment: Development and Preliminary Validation of a Negative Emotionality Scale." *Journal of*

Personality 64: 545-76.

Weber, E. 1976. *Peasant into Frenchmen : the Modernization of Rural France, 1870-1914*. Stanford: Stanford University Press.

Wickham, C. R. 1994. "Beyond Democratization: Political Change in the Arab World." *PS: Political Science & Politics* 27 (3): 507-09.

Willis, M. 1996. *The Islamist Challenge in Algeria: A Political History*. Berkshire: Ithaca Press.

Whitt, H. P., and H. M. Nelsen. 1975. "Residence, Moral Traditionalism, and Tolerance of Atheist." *Social Forces* 54 (2): 328-40.

Zablocki, B., and R. M. Kanter. 1976. "The Differentiation of Life-Styles." *Annual Review of Sociology* 2: 269-98.



爲什麼人們要支持政治伊斯蘭的主張？ 八個穆斯林國家的經驗檢證

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摘要

近來有些研究發現，在穆斯林社會中，有關民眾對於民主或戰爭的看法，個人宗教虔誠度並沒有顯著的解釋力，這個結果挑戰了傳統上一般學者的觀點，認為宗教因素與中東國家在政治上的紛擾有密不可分的關係。儘管如此，政治學者至今仍然缺乏一個堅實的理論來解釋人們爲什麼支持政治伊斯蘭的主張，本文的目的就是希望藉由嚴謹的方法論爲基礎，對於八個穆斯林國家進行經驗檢證來回答這個問題。

首先，本文將釐清政治伊斯蘭的主張在理論上的概念爲何，並就三個既有的解釋論點進行討論。其次是研究設計的提出，包括了各變數的概念化定義、變數的形成、資料的處理，以及主要的假設等相關議題之討論。再來本文將介紹心理測量學中的「項目反應理論」，並解釋如何應用在本文的研究中，特別是對於政治文化研究所具有的方法論優點。最後，結論將顯示：雖然三個既有的解釋觀點都成立，但具有較強解釋力的層面並不相同；在態度層面，個人宗教虔誠度和前現代心理特質是較強的解釋論點，但在行爲層面，

不管伊斯蘭教政黨是執政或在野，人們都會基於責任政治的觀點，理性的決定其投票意向以監督執政者。

關鍵詞：政治伊斯蘭的主張，宗教與政治，項目反應理論

