

Trigger Factors of Terrorism: Social Marketing Analysis as a Tool for Security Studies – a Moroccan Case Study

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FOR THE FIRST TIME A MODEL identifying possible factors triggering potential attitude change towards terrorism has been generated, using regression analysis. This model has been developed along with a survey carried out in the area of Morocco widely accepted as the heart of recent terrorist activities in the country. Through standardized regression analysis, we have identified the factors that contribute positively or negatively to a change of state leading to potential terrorist activities. We identify a potential terrorist profile, blocking factors which prevent a change of state, and actions which may aid in the prevention of future acts of violence.

INTRODUCTION

To date, the arguments surrounding terrorism have mainly focused on two key areas: definitions and causes of terrorism. There is ample literature disputing the various definitions of terrorism, which also differ not only between governments but within them. For the purposes of this study, terrorism is the use of violence against civilians for impersonal non-monetary objectives by private actors. There are other odious activities that resemble terrorism, but by are properly referred to by other terms. For example, states engaging in violent oppression of civilians suspected of supporting their opponents are committing war crimes. There is now a considerable body of literature defining and dealing with terrorism as a social phenomenon, and that literature can best be sampled rather than duplicated as a whole. To start with, this paper falls in to the category of those studies which outline the causes

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behind terrorism. This paper also approaches the issue of terrorism at the individual level, thereby avoiding some of the structural arguments that some have raised. For example, to suggest that ‘poverty causes terrorism’ tends to exclude the primary author of the event – the accused terrorist – from the discussion. Finding evidence that individual terrorists were impoverished or were motivated by a desire to have a more equitable distribution of wealth and income, however, allows us to escape the pitfalls of excessive structuralism. We are attempting to offer a model that reveals potential correlations between socio-economics, media and world events factors and the intention to resort to terrorist activities. The variables in the multiple regression model offered and backed by the data are held to be the trigger factors that lead an individual to consider and then possibly embrace violence. In general, the field has located the causes that motivate terrorism in socioeconomic conditions, ideology, oppression, socialization/social networks, psychology, and the existence of a terrorist structure. Of these explanations, the arguments linked with psychological pathology should be dismissed, because they tend to be attributive, and linked (questionably) either to attempts to demonize the terrorists, or to exonerate their faith system from indictment (Atran 2003, 1532–9).

There are theories that also attribute terrorism to poor socioeconomic conditions. These theories tend to originate from a Marxian stream that views Islamist violence as a latter-day rebellion against globalization on the universal scale (Cronin 2002, 34). After 9-11, Alan B. Krueger and Jitka Malečková set out to test the idea that poverty causes terrorism at the individual level. They found that there is no link between terrorism and socioeconomic status (Krueger and Malečková 2002). When their book was reviewed by Atran, he found a positive co-relationship between education and terrorism (Atran 2008, 5). Krueger (2007) posits that terrorism appears to be co-related with oppressive governments, so that the more tyrannical the government, the higher the risk of terrorism. He is joined by Mohammed M. Hafez (2004), who argues that repression in Muslim countries is the primary cause of terrorism and violence, which are merely the forms that the inevitable rebellion takes.

For Hafez, the vehemence of repression is correlated with the mil-



itancy of ideologies used to confront the regimes. This reflects the arguments made by Bruce Hoffman and his associates (Hoffman 2006). For Hoffman, terrorism takes place after the articulation of a religious ideology which negates the other. To rid the world of the other, it uses an organization to conduct attacks. To that end, it can and will use both old and new forms of media, educational establishments, state and/or private support. Hoffman's approach has been contrasted with the Social Networking approach developed by Marc Sageman, and indeed, the two authors have exchanged sharp words in *Foreign Policy* (2008). For Sageman (2008) and likewise for Atran (2008), the social connections between the terrorists are a key element in radicalization. Using the Madrid attack cell as a case study, Atran also argues that there is an urgent need to understand the networks that create the terror attacks.

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Our work takes into consideration all the prior findings and methodologies discussed above. Our variables, set within a social marketing methodological framework, are derived from the works cited above, and we hope that we can make a positive contribution to the field by stimulating debate and discussion about the use of tools from marketing in the study of terrorism.

Social Marketing is 'selling' attitudes to influence associated behavior. It is a tool that can be used to achieve specific behavioural goals, to improve healthy habits and lifestyle, and to reduce social inequalities and their related issues; recent research has shown that social marketing is effective in changing people's behaviour (Stead et al. 2007). Breckler and Wiggins define attitudes as 'mental and neural representations, organized through experience, exerting a directive or dynamic influence on behavior' (1992, 409). Attitudes and attitude objects are functions of affective behavioural and cognitive components, the so-called ABC model. Attitudes are part of the brain's associative networks, consisting of affective and cognitive nodes linked through associative pathways (Anderson 1983; Fazio 1986). People interact with their environment based on how they perceive and interpret it. That is, people form an internal (cognitive) map of their external (social) environment, and these perceptions – rather than an objective external reality – determine their behavior. Perceptions of intent do affect aggression, and

Randy Borum demonstrates that there are internal and external factors that can affect one's perception of provocation or intent (2004).

[226] Crenshaw (1988, 12) suggests that the principles of social cognition apply both to terrorists and to their organizations. She notes that 'the actions of terrorists are based on a subjective interpretation of the world rather than objective reality. Perceptions of the political and social environment are Psychology of Terrorism filtered through beliefs and attitudes that reflect experiences and memories.' Advertising, political campaigns, and other persuasive media messages are all built on the premise that behaviour follows attitude, and attitude can be influenced by the right message delivered in the right way. Social Marketing could prevent aggressive, terrorist behaviour through attitude change.

RESEARCH OBJECTIVES

We have based our study within various neighbourhood of Casablanca from a wealthy neighbourhood (Anfa) to poorer neighbourhood (Darb al Sultan, Sidi Moumen, Darb Rallef, Hay al Farah, Bachkou, Bernousi), from which originated the perpetrators of the 2005 terrorist attacks. Individuals living in these neighbourhoods will have an attitude and subsequent behavioural intention based on their specific interpretation of these difficult social realities. We focus on Casablanca, Morocco's largest city and home of 10 percent of its population, because it was the site of the most significant terrorist act in recent Moroccan history. Also, terrorism in Morocco exists in all localities but at different concentrations. The two 'hotpoints' are Casablanca and Tetouan.

An alternative approach would include the city of Tetouan, another locus of terrorism in Morocco, but there has been plenty of work conducted on Tetouan by Scott Atran and others. Consequently, we are helping fill a gap in the literature by focusing on Casablanca. Respondents were asked to rate their view of world events, socio-economics issues, and consequently how they intend to react to these. As a result of individual interpretation, various attitudes are formed, leading to specific behavioural intention. We can define 3 potential behavioural intentions: Doing Nothing, Peaceful Protest, and Armed Resistance state (*Resistance*) as perceived solely by those committing or condoning



acts of violence). The intention-to-act or change in behaviour corresponds to 3 possible changes of states or transitions:

- Transition 1: Shifting from *Doing Nothing state* to the *Protesting Peacefully state*.
- Transition 2: Shifting from *Protesting Peacefully state* to the *Armed Resistance state*.
- Transition 3: Shifting from *Doing Nothing state* to the *Armed Resistance state*.

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We propose to investigate 2 main attitude builders as potentially responsible for a change in behavioural intention: media exposure and world events/social issues:

- Are media channels (through which a specific perception of the political and social environment is formed) linked to the intention-to-act? If so, which of the channels are the main contributors? We define media as all the external communication channels through which information is brought to a person: TV, Newspapers, Internet, Family, Friends, and Religious authorities. Media channels are broadly defined as a 'Marketplace for Ideas.'
- World events or social issues are the beacons by which one forms an internal (cognitive) map of one's environment, from which an interpretation of reality is formed. Are these responsible for a change of state? If so which events and issues? We have listed the following factors: world events, perceived poverty (this includes price of food, clothing, transport, housing, etc.), access to education (is access to education perceived as fair and open), faith in government, and hope of employment.

We also propose to investigate potential links between personal factors and change of behavioural intention states:

- Is there a link between intention-to-act and personal factors? If so, what are the most salient personal factors responsible for a change of state: past experience (age), education, income or household size?

RESEARCH QUESTIONS

Based on the research objectives as previously stated the following research hypotheses are proposed, for the first transition we have:

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- Transition 1: Intention-to-act from the state of *Doing Nothing* to the state of Intention to *Protest Peacefully*.

HYPOTHESIS 1 *Marketplaces for Ideas have a positive and significant relationship on this intention to shift from the state of Doing Nothing to the state of Protesting Peacefully.*

HYPOTHESIS 2 *Current Problems Factors have a positive and significant relationship on this intention to shift from the state of Doing Nothing to the state of Protesting Peacefully.*

HYPOTHESIS 3 *Personal factors have a positive and significant relationship on this intention to shift from the state of Doing Nothing to the state of Protesting Peacefully.*

These research hypotheses are then repeated for the remaining transition:

- Transition 2: from the state of intention to *Protest Peacefully* to the state of *Armed Resistance intention*.
- Transition 3: from the state of *Doing Nothing* to the state of *Armed Resistance intention*.

Marketplace for Ideas Factors

The main influences have been identified as: TV, religious authority (i. e. an Imam), the Internet, newspapers, friends, and family.

Television Influence. TV is an important source of violence propagation. People tend to identify themselves with a character who is looking to change the world, which substantially increases the likelihood that the character's aggressive behaviour will be modelled (Huesmann, Lagerstetz, and Eron 1984). Based on their survey results, Suriastini et al. (2005) concluded that the vast majority of respondents who harbour a wish to carry out violent behaviour also reported watching television coverage the day after the bombing. Further, the amount of television watched also influences, as Wright and Huston (1983) have proved



that aggressive behaviour is related to the total amount of television watched, and is not limited only to the amount of violence watched.

Influence of Religion. Bruce Hoffman (2006) suggests that the perpetrators of the attacks often rely on religious motivations as a justification for their violent acts. John W. Morehead (2001) claims: 'As we will see, the shift toward terrorism motivated by religious considerations is one of the reasons for terrorism's increasing deadliness.' Terrorist attacks resulting in numerous deaths are executed in direct response to religious extremism. Yet according to Robert Pape (2005), religion is only an incidental factor. In this respect, he states 'there is little connection between suicide terrorism and Islamic Fundamentalism or any one of the world's religions.' Likewise (and significantly), Michael A. Sheehan (2000) has argued that religious motivations are often used as transparent strategies or tactics in an attempt to hide any political goals and allow for a silent opposition. [229]

Internet Influence. Within the context of 'Cyber Terrorism,' Lachow and Richardson (2007) claim that 'it is evident that terrorist groups are extremely effective in using the Internet to further their missions.' In this vein, he adds 'these groups use the Internet to create a brand image, market themselves, recruit followers.... Furthermore, these groups have become experts at using the Internet to manipulate both public opinion and media coverage.' Terrorists tend to use the Internet in order to attract some civilians; when these civilians become 'insiders' a certain level of commitment is to be maintained to preserve continuous interactions. Only by relying on the Internet, can terrorists create intense interactions with the so-called 'insiders.'

Newspaper Influence. The influence of a newspaper's content on people increases the societal influence (Meyer 2004). Local newspapers provide a brief and efficiently presented 'heads-up' about the dangers and opportunities that each new day presents (Lasswell 1984). The press not only transmits news, but also criticizes the government, and deals with political, social and religious issues, which impact citizens' states of conduct and their ability to act; however with a negative and steady rate of influence (Meyer 2004).

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Influence of Friends. This variable aims at measuring the impact of friends on changing the intention-to-act. Research has demonstrated that delinquent behaviour is primarily committed in groups (Warr 2002); further, Piquero, Tibbetts, and Blakenship (2005) confirm that the more time spent with friends, the more adolescents adopt aggressive behaviour patterns and tend to act in a socially destructive manner.

Family Influence. According to Durmaz, Sevinic, and Yayla (2007), the research they conducted depicted a negative relationship between the terrorists and their 'uneducated' parents. Moreover, they suggest that the presence of some consultants in schools is highly recommended, as they would help young people gain self-awareness and an awareness of social issues through discussing terrorist violence – this may prove especially useful for youngsters who cannot openly speak with their parents about such issues. Sometimes, less educated parents fail to instil peaceful values and ideas in their children, or even do not encourage any conversation about such topics.

Current Problems Factors

The following current problems are the external factors that increase an individual's intention to take action. We summarize them as follows: world events, perceived poverty, access to education, low hope of employment, and low trust in the government.

World Events. This factor relates to one's degree of concern toward the world events. For Pridemore, Chamlin and Trahan (2007), there is substantial evidence that catastrophic and most serious world events, including terrorist attacks, lead to increased levels of violent or negative action, especially in communities in close proximity to such incidents. Individuals tend to identify with the crises and adopt a serious intention of taking action. The nature of the consequences following social encounters determines which moral values to adopt and which to avoid. Positive consequences motivate the individual to adopt the value expressed in the social encounter. Negative consequences inhibit the adoption of expressed values (Thomas 1997).

Perceived Poverty. This factor measures the degree of concern toward the perception of poverty made increasingly visible by such factors as the



increase in food prices, transportation and housing costs, and in the cost of living in general. For Abadie (2005), the relationship between poverty and terrorist action is not one of direct and clear causality, given that relatively few individuals living in indecent conditions (or even simply perceiving wide-spread poverty) move towards terrorism. Likewise, Krueger and Laitin (2003) and Piazza (2006) find no evidence suggesting that perceived poverty may generate terrorism.

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Access to Education. This factor measures the degree to which people are concerned about the low access to education issue in their country. Some experts claimed that lack of access to education engenders terrorism and remains a significant cause of support for involvement in terrorist activities (Krueger 2007). The possibility for access to education, jobs, health care, and more equal rights provides individuals in vulnerable areas with a real future, giving them a strong reason to protest peacefully. Krueger further argued that it is widely recognized that growing concern for the lack of access to education is what breeds extremist attitudes and what causes people to turn to terrorism.

Hope of Employment. In terms of low hope of employment, Walter Laqueur (2004) convincingly addresses the issue of unemployment as a catalyst for an environment flourishing with different populist and (extremist) religious sects. As people develop high concerns towards the unemployment issue, they feel increasingly excluded from the mainstream society, and they are likely to protest either peacefully or violently, in order to voice their suffering from social marginalization.

Trust in the Government. The degree to which individuals admit to low faith in government concern seems to be an important driver for the intention towards violent action. T. P. Thornton (1964) advanced the claim that terror is the weapon which those individuals who have lost faith in their government use as mean for a political agitation. Also, when governments are not credible, conditions are favourable for the appearance of terrorism (Abadie 2005). Mostly trust in government is linked to issues such as corruption and, although the country tries to address the problem, Morocco remains hampered by corruption. In fact, corruption seems to have worsened over the past decade. For example, based on Transparency International's *Corruption Perception Index*

2009, Morocco went from a modest rating of 4.7 in year 2000 to a worse rating of 3.2 in 2006. Further, the country's overall position in comparison with all countries slipped from 79th place in 2006 to 80th place in 2008.

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Personal Factors

It has been proven that personal characteristics play an important role in drawing the terrorist profile and triggering one's individual intention-to-act. Thus, they are grouped under the following characteristics: (1) level of education, (2) age, (3) income, (4) household size and we add to this combination of factors another characteristic related to personal distinctiveness, which is (5) the individual region of origin. Intentionally, the gender factor was excluded from our study, because according to Dialmy (2005) all the suicidal terrorists of Casablanca events were males; they were young and mature men, with old men and women missing from the terrorists' ranking.

Level of Education. According to Durmaz, Sevinic and Yayla (2007) education is the most effective factor in the formation of attitude, and in fact the effect of education on attitude is as strong as the parents' political and religious beliefs. The impact of education on attitudes increases with the level of education, so that the higher the educational level of a person, the higher the probability that he is influenced by what he has been taught, indeed new generations have a higher education level than their parents. Further, Jefferson and Pryor (1999), while examining the determinants of the existence of hate groups across states in the US, proved that the population of adults with a high school diploma or higher had a statistically significant, positive connection with the probability of joining a hate group. For Krueger and Malečková (2003), the truth remains that the terrorist or militant acts are more likely to be organized by well-educated people, rather than those less fortunate. Better-educated people would be tempted to resort to violence, as they have more potential to enact more complex stratagems. Thus it appears that it is not ignorance that tends to trigger terrorism, but knowledge.

Age. The age of an individual seems to be a key driver in changing citizen's behaviour to act in a given behavioural pattern. As an example,



Dialmy (2005) concluded that the suicide bombers in Casablanca were all young people. Also, the recruitment of future suicide ‘martyrs’ is done among young people chosen carefully in their neighbourhood mosques. However, Sharp (2005) disagrees, suggesting that age has no significant impact on an individual’s changing behaviour.

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Income Level. Many researchers have tackled an individual’s income level as a control factor. According to James Piazza (2006), if citizens are deprived of the right or means to fulfil their basic human needs and denied any possibility to benefit from reasonable economic opportunities, or are directly affected by socioeconomic disparities, soon they will feel hopeless and exasperated and may perceive violence as the ideal way to express their grievances and afflictions. This argument suggests that there may be a correlation between the income level and terrorist attacks. However, Piazza (2006) argues contrariwise that there is no strong evidence that credibly supports the idea that those underdeveloped countries with high rates of unemployment and high levels of income inequality experience higher levels of terrorism. Further, Krueger and Malečková’s (2003) findings seem to stand against the first argument as well, as they claim that it is indeed not always the case that the perpetrators of the attacks are more likely to be poor, or have low incomes, or experience higher rates of unemployment. Finally, Abadie (2005) agrees that income is not significantly associated with terrorism intention.

Household Size. The number of members living together in the same house is an important factor to analyze in order to understand the transition behaviour of someone intending to act. Suriastini et al. (2005) stated that living in a household with few members appeared to afford some protection from terrorist ideology. These household members tend to have their head of family relatively well-educated and successful at fulfilling their needs, therefore they live in better life conditions and tend to avoid violence and to express their ideas peacefully.

INSTRUMENTATION AND DATA ACQUISITION AND ANALYSIS

Data for this research were collected via a survey administered to Casablanca’s citizens. Professionals from the Casablanca-based re-

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search firm 'BJ Consult' collected the information face-to-face from 500 correspondents living in the following neighbourhoods of Casablanca: Darb al Sultan, Sidi Moumen, Darb Rallef, Hay al Farah, Bachkou, Bernousi and Anfa. Most of them are low-standing neighbourhoods, with the exception of Anfa. The survey consists of 25 questions including demographic questions. The questions aim at defining the origins/causes for changing to the (undesirable) state of armed resistance (i. e. terrorist behaviour) by addressing the different possible triggering factors stated before. The majority of the questions were formulated on the basis of a 5-point Likert scale. The units of analysis of this study are young people of 15–45 years old, who live in Casablanca. This unit of analysis was based on random sampling. Our sample does not consider people living in high standing neighbourhoods of these cities, but still some small portions of these areas have been surveyed. The sample is composed of 500 elements, corresponding to a convenient sample including all education levels and different aged- groups. We have used logistic regression to uncover if a correlation exists between behaviour intention and the factors stated above, as well as to rank the relative importance of independents and to assess interaction effects. The methodology used here is similar to the methodology followed by Pan (2004).

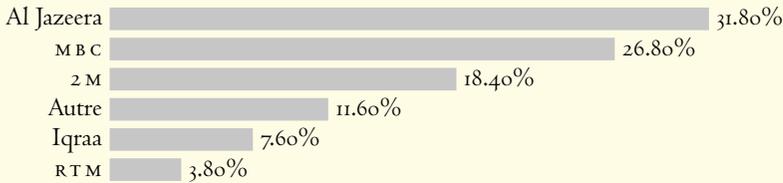
RESEARCH RESULTS

Descriptive Statistics for Marketplace for Ideas Factors

TV Influence. Concerning the views of respondents about the level of influence the TV (as a mass media) has on their perceptions, only 3% asserted that TV had no influence, while 62% of respondents believed that TV is very influential.

Regarding the frequency of exposure to TV, about 6% declared watching TV for less than one hour per day, 28% tend to watch TV for 3 to 4 hours per day, and nearly 20% declared watching TV for more than four hours per day. The most popular television channel among the surveyed sample turns out to be Al-Jazeera at a proportion of 31%. The LBC channel ranks second with nearly 27%. While the Moroccan national channel RTM is the least watched, accounting for a proportion of less than 4%, the other Moroccan channel 2M concentrates about





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FIGURE 1 Most watched TV channel by respondents

18% of the sample's responses. The respondents who declared their preference for other TV channels represented slightly more than 11%. Among the TV channels that the latter category reported to watch, we can mention such French channels as M6 and TFI. The results are summarised in figure 1.

With respect to the respondents' opinion of the credibility of the channels they declared watching the most, the results reveal that 13% believe their favourite channel is not credible at all, while 20% believe that it is very credible.

Religious Authority. This section consisted of two questions. The first investigated how frequently the respondents sought the advice of an Imam, and the results revealed that more than 40% never sought the advice of an Imam, while only about 6% did so often. The second question inquired about the knowledge of participants regarding Salafi principles. According to the survey, 23% of the respondents declared having no knowledge of Salafism, 45% had very little knowledge, and only about 7% declared being very knowledgeable about Salafi principles.

Internet and Newspaper Influence. A proportion of 23% reported not having ever read from the Internet, and 22% said that they read very often from the Internet. Concerning newspapers, 24% of the respondents reported not reading newspapers while 18% reported reading newspapers very often.

Influence of Family and Friends. When asked about the level of influence that family has on shaping their opinions, more than 42% of the surveyed sample asserted that their family does not influence their opinions in any way, while only 12% admitted that it is very influential. Concerning the influence of friends, 50% believed of those surveyed

stated that friends have no influence at all, while 5% believed they are very influential.

Descriptive Statistics for Current Problems Factors

[236] *Reaction to World Events.* With respect to the respondents' feeling of indignation towards current world events in general, 9% stated that they did not feel any resentment, and 50% expressed very high indignation. Of this 50%, 90% declared that the humanitarian crisis in Gaza affected them the most, while the invasion of Iraq ranked second with only 7%.

Concern Towards other Societal Problems. The socio-economic issue of perceived poverty produced the highest level of respondents' indignation (77%). Both issues of access to education and the generalized low trust in the government are second in terms of respondents' indignation level with 58%. Low employment hope follows, as 55% of the respondents declared being very concerned with this issue.

Descriptive Statistics for Personal Factors

Level of Education. Concerning the education level of respondents, 43% of the respondents declared holding a high school diploma. Only 22% held a bachelor degree, while less than 1% held a doctorate degree.

Age. Concerning the age pattern of the sample, 40% of the respondents fall within the age cohort of 21 to 30 years old, while less than 4% are more than 51 years old.

Income Level. With respect to monthly income, 32% fall within the income bracket of 3001 to 5000 MAD, 15% earn between 1501–3000 MAD, and 10% earn between 5001–7000 MAD.

Household Size. Concerning household size, the majority (73%) of the respondents declared living in a household that comprises 3 to 5 members, and 17% live in a household of more than 6 members.

Intention-to-Act – The Perspective of Bringing up Change

Given the choice to act towards the alleviation of the socio-economic problems mentioned earlier, 59% of the respondents declared their willingness to do nothing (figure 2). Further, 36% chose the option



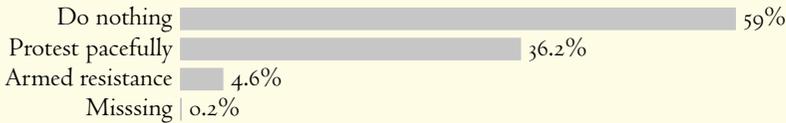


FIGURE 2 Respondents' voiced intention towards the alleviation of the socio-economic and world events issues

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of Protesting Peacefully and less than 5% chose Armed Resistance; and indeed 5% is a large number, given the implications of this type of resistance. Of course, answering positively to this question does not equate to being a potential terrorist, any more than the person choosing passive resistance. We note that it is important to identify the factors that will trigger a change of state from a state of No Action to a state of Passive Resistance or Armed Resistance.

Reasons Preventing People from Intention to Armed Resistance

Further, when asked about the reason preventing people from acting for change, 58% of the respondents identified the fear from authorities as their main obstacle. Lack of conviction and lack of trust in the existing resistance groups are the factors that produced only an approximate 2% of the total responses.

ANALYTICAL RESULTS

Note that since we used standardize logistic regression analysis, all the coefficients for each equation are in the same standardized units, so these coefficient can be compared to assess the relative strength of each of the predictors. Verifying normality assumption and multicollinearity is indeed the first step before analysing the logistic regression coefficients. For the 3 models the correlation matrices show no important correlation between the variables.

Regression Model 1 Based on the Market Place for Idea Factors

Significance of the Model. The model for PI is statistically significant since the p value is < 0.05 ($\text{prob} > \chi^2 = 0.000$), and we are 95% confident that at least one of the independent variables contributes to the prediction of the intention to shift from the behaviour of Doing Nothing to Protesting Peacefully.

TABLE 1 Regression model 1 based on the Market Place for Idea Factors

	<i>b</i>	<i>z</i>	<i>P</i> > <i>z</i>	%
P 1 (<i>Doing Nothing to Protesting Peacefully</i> ; number of observations: 477, prob. > χ^2 : 0.000)				
TV influence	-0,25669	-2,288	0,022	-22,6
Religious authority	-0,31440	-3,492	0	-27,0
Internet	-0,01688	-0,199	0,842	-1,7
Newspapers	0,54533	6,063	0	72,5
Friends' influence	0,17928	1,525	0,127	19,6
Family influence	0,13763	1,332	0,183	14,8
P 2 (<i>Protesting Peacefully to Armed Resistance</i> ; number of observations: 319, prob. > χ^2 : 0.006)				
TV influence	-0,05961	-0,233	0,816	-5,8
Religious authority	-0,19885	-1,124	0,261	-18
Internet	0,02523	0,132	0,895	2,6
Newspapers	0,23134	1,153	0,249	26,0
Friends' influence	0,54686	2,272	0,023	72,8
Family influence	0,11464	0,478	0,633	12,1
P 3 (<i>Doing Nothing to Armed Resistance</i> ; number of observations: 204, prob. > χ^2 : 0.0814)				
TV influence	0,07045	0,288	0,774	7,3
Religious authority	-0,05222	-0,296	0,767	-5,1
Internet	0,02464	0,126	0,9	2,5
Newspapers	-0,04805	-0,243	0,808	-4,7
Friends' influence	0,53608	2,436	0,015	70,9
Family influence	0,12638	0,613	0,54	13,5

NOTES *b* = raw coefficient, *z* = *z*-score for test of *b* = 0, *P* > |*z*| = *p*-value for *z*-test, % = percent change in odds for unit increase in *x*.

Transition 1. TV Influence, Religious Authority and Newspapers. Since for these 3 variables the *p* value is < 0.05, there is a significant relationship between TV influence, religious authority, newspapers and the intention to shift from the state of Doing Nothing to Protesting Peacefully. One unit increase in standard deviation in the TV influence rate decreases the intention to shift from the passive state of Doing Nothing to Protesting Peacefully by 22.6%, holding other variables constant. Similarly, holding the other variable constant as the influence of an Imam on the individual's opinion increases the intention-to-act (peacefully) decreases by 27.0%. Regarding newspapers, we find a positive correlation,



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hence, as newspaper influence increases, the intention to shift from the state of Doing Nothing to the state of Protesting Peacefully increases by 72.5%

Internet and Friends and Family Influence. Since the p value is > 0.05 , there is no relationship between the influence of Internet or family and friends on the individual's opinion and their intention to shift from state of Doing Nothing to Protesting Peacefully. With 95% confidence, we conclude that there is insufficient evidence of any relationship between the intention to shift to Protesting Peacefully and the influence of internet and friends and family on individuals.

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Transitions 2 and 3. The model for p_2 is statistically significant since the p value is < 0.05 ($\text{prob} > \chi^2 = 0.000$), however the model for p_3 shows a p value such that: $0.05 < \chi^2 < 0.1$. We have chosen a critical value of 0.05 to determine if the model is statistically significant; however, in the case of p_3 , the number of observations are $1/3$ lower than in the case of model p_2 and nearly $1/2$ than the number of observations in the case of p_1 . Thus this increase in p -value is to be expected. Hence we can assume that, since the p value for p_3 remains smaller than 0.1, the model for p_3 remains statistically significant.

For these two equations p value was found > 0.05 for the following variables: τv , Religion, Internet, Newspapers, and Family; hence we conclude that they are not significant in the intention to shift from one state to the other.

For both equations, we found that Influence of Friends has a p value of < 0.05 , and hence it is the only factor contributing positively to a change of state. This means that friends have a positive influence on shifting from a state of No Action or Peaceful Resistance and also from shifting to a state of Peaceful Resistance to Armed Resistance. We found a 72.8% and 70.9% percent change in odds for unit increase in friends' influence for p_2 and p_3 , respectively; i. e. a 72.8% increase in the intention to shift from the state of Protesting Peacefully to the intention to engage in Armed Resistance, and a 70.9% increase in the intention to shift from the state of Doing Nothing to the willingness to engage in Armed Resistance for a unit increase in friends' influence (all the other factors being held constant).

TABLE 2 Regression model 2 based on the Current Problems Factor

	<i>b</i>	<i>z</i>	<i>P</i> > <i>z</i>	%
<i>P</i> 1 (<i>Doing Nothing to Protesting Peacefully</i> ; number of observations: 477, prob. > χ^2 : 0.000)				
World events	0,56241	5,16	0	75,5
Perceived poverty	0,28921	1,84	0,066	33,5
Access to education	-0,55076	-4,053	0	-42,3
Employment hope	-0,37434	-2,995	0,003	-31,2
Trust in government	0,12075	1,056	0,291	12,8
<i>P</i> 2 (<i>Protesting Peacefully to Armed Resistance</i> ; number of observations: 319, prob. > χ^2 : 0.0602)				
World events	0,24899	1,167	0,243	28,3
Perceived poverty	-0,02275	-0,064	0,949	-2,2
Access to education	-0,25102	-0,961	0,337	-22,2
Employment hope	-0,27868	-1,231	0,218	-24,3
Trust in government	0,77105	2,093	0,036	116,2
<i>P</i> 3 (<i>Doing Nothing to Armed Resistance</i> ; number of observations: 204, prob. > χ^2 : 0.1189)				
World events	-0,29708	-1,377	0,169	-25,7
Perceived poverty	-0,21508	-0,667	0,505	-19,4
Access to Education	0,25705	0,934	0,35	29,3
Employment hope	0,09945	0,345	0,73	10,5
Trust in government	0,68373	1,701	0,089	98,1

NOTES *b* = raw coefficient, *z* = *z*-score for test of *b* = 0, *P* > |*z*| = *p*-value for *z*-test, % = percent change in odds for unit increase in *x*.

Regression Model 2 Based on the Current Problems Factor

Significance of the Model. The three equations are statistically significant since the *p* value is < 0.05 (prob. > χ^2 = 0.000), and we are 95% confident that at least one of the independent variables contributes to the prediction of the intention to shift from one state to another.

Transition 1. Factor with positive contributions: World Events. Hence the more that people are concerned with world events, the more likely they are to engage in peaceful protest. One unit increase in standard deviation in the degree of indignation towards world events increases the intention to shift from the state of Doing Nothing to Protesting Peacefully by 75.5%, holding other variables constant.

Factors with a negative contribution are Access to Education and Employment: the less people are concerned about Access to Education

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and Employment, the more likely they are to change state. Holding constant all other variables, an increase of standard deviation of the degree of concern towards the access to education problem decreases the probability of moving from the state of Doing Nothing to Protesting Peacefully by 42.3%. Similarly the probability of moving from the state of Doing Nothing to Protesting Peacefully decreases by 31.2% for one unit and increases the degree of indignation towards this problem of employment.

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Transitions 2 and 3. Here, p_2 shows a p -value of 0.0602: $0.05 < \chi^2 < 0.1$. This is linked to the reduced number of observation, and since p -value is < 0.1 we assume that the model for p_2 is statistically significant.

Regarding World Events, Perceived Poverty, Access to Education, and Low Employment hopes, we do not have enough statistical evidence to claim that there is a significant correlation with the individual's decision to shift from Doing Nothing to Armed Resistance, since the associated p -value is greater than 0.05.

Low Trust in Government: a unit increase of standard deviation of the low level of trust in the government increases the probability of shifting from Protesting Peacefully to Armed Resistance by 116.2%.

Transition 3. In this case the p -value for the overall model is > 0.1 , the model is considered not statistically significant. However, given the low number of observations leading to an increased p -value (0.1189) that is close to the border value of 0.1 and the similarity in finding with p_2 , we maintain that low Trust in Government is a major contributing factor, even if we have lower statistical evidence.

Regression Model 3 Based on Personal Characteristics

Significance of the Model. The overall model for the 3 Transitions is statistically significant, since for each Transition the p value is < 0.05 ($\text{prob.} > \chi^2 = 0.000$), and thus we are 95% confident that at least one of the independent variables contributes to the prediction of the intention to shift from one state to another. Also, from the correlation matrices we do not observe an important correlation between these variables.

Transition 1. Both education and income have a significant and positive contribution. For every unit increase in the standard deviation of the

TABLE 3 Regression model 3 based on Personal Characteristics

	<i>b</i>	<i>z</i>	<i>P</i> > <i>z</i>	%
<i>p</i> 1 (<i>Doing Nothing to Protesting Peacefully</i> ; number of observations: 477, prob. > χ^2 : 0.000)				
Household size	-0,26894	-1,294	0,196	-23,6
Income	0,42592	6,598	0	53,1
Age	0,15262	1,537	0,124	16,5
Education level	0,20392	1,99	0,047	22,6
<i>p</i> 2 (<i>Protesting Peacefully to Armed Resistance</i> ; number of observations: 319, prob. > χ^2 : 0.033)				
Household size	0,92131	2,065	0,039	151,3
Income	0,1222	0,854	0,393	13,0
Age	0,10137	0,442	0,658	10,7
Education level	0,91473	2,954	0,003	149,6
<i>p</i> 3 (<i>Doing Nothing to Armed Resistance</i> ; number of observations: 204, prob. > χ^2 : 0.045)				
Household size	0,99228	2,196	0,028	169,7
Income	-0,30376	-1,807	0,071	-26,2
Age	-0,06783	-0,304	0,761	-6,6
Education level	0,48157	2,026	0,043	61,9

NOTES *b* = raw coefficient, *z* = *z*-score for test of *b* = 0, *P* > |*z*| = *p*-value for *z*-test, % = percent change in odds for unit increase in *x*.

income, the probability of shifting from Doing Nothing to Protesting Peacefully increases by 22.6%. Regarding education, a unit increase in education level, increases the probability of shifting from Doing Nothing to Protesting Peacefully by 53.1%.

Transition 2. Both education and household size have a significant positive contribution. A one-unit increase in the level of education increases citizens' intention to shift from the state of Protesting Peacefully to the State of Armed Resistance by 149.6%; and a one-unit increase in household size increases the probability of shifting from Protesting Peacefully to Armed Resistance by 151.3%; holding constant the effect of other variables.

Transition 3. Income has a negative contribution. As income increases, citizens' tendency to shift from Protesting Peacefully to Armed Resistance decreases by 26.2%.

Regarding education and household size, the coefficients are pos-



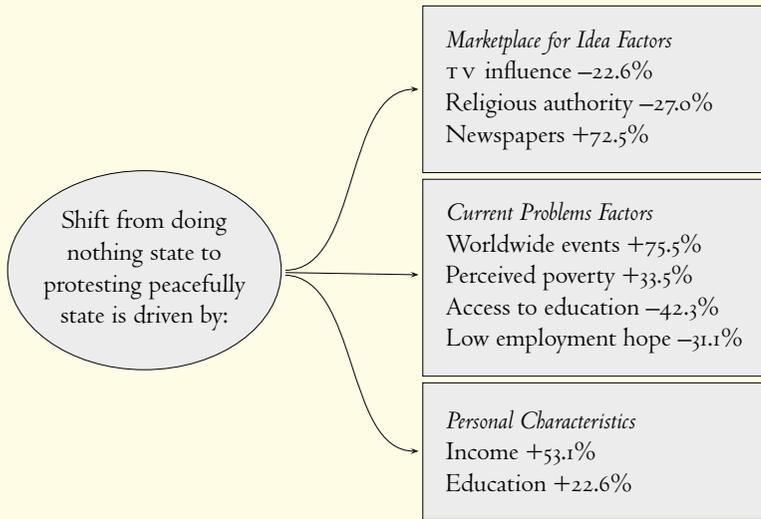


FIGURE 3 Results for Transition 1

itives: the higher the level of education and the larger the number of family members, the higher the intention to engage in Armed Resistance, by 169.7% and by 61.9% respectively.

RESULTS SUMMARY AND DISCUSSION

Results for Transition 1 have been summarized in figure 3. In this diagram the significant triggering factors have been represented. Regarding the Marketplace for Ideas factor, it is clear that TV and the Imam both have a sedating effect. Regarding the negative correlation with the Imam’s influence, it is worth noting that since the terrorist attack of 2005, all Imams have become civil servants of the Ministry of Religious Affairs, and their sermons need to be approved prior to being delivered. Further, the Ministry requires all new Imams to receive university-level education at national seminaries, including mandatory courses in religious studies, foreign languages, humanities, and even basic computer skills. Likewise, for more experienced Imams, graduate and doctoral studies and professional development are now also encouraged by the Ministry. In terms of the media, newspapers seem to have a clear positive correlation with the intention-to-act peacefully;

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this could be explained by the Elaboration Likelihood Model (ELM) of persuasion (Petty and Cacioppo 1986) on attitude change. Central to this model is the ‘elaboration continuum,’ which ranges from low elaboration (low thought) to high elaboration (high thought). The ELM distinguishes between two routes to persuasion: (1) the central route and (2) the peripheral route. The central route leads to high elaboration and lasting attitude change, while the peripheral route is less emphatic and of lesser duration. Reading a newspaper requires a higher elaboration than watching news on TV, hence newspapers lead to a deeper understanding, and subsequently a stronger conviction that something needs to be done, thus encouraging a change of state from Doing Nothing to Protesting Peacefully.

World Events (Gaza was most often mentioned) and perceived poverty are the two main positive trigger factors. However, Access to Education and Low Employment hopes have negative correlation factors. This means that the less a person is concerned about access to education or employment, the more this person is likely to get involved in some sort of peaceful protest. One can assume that indeed there is a level of indignation towards world events such as Gaza, but people looking for a job or education are more willing to focus on their personal goals rather than trying to solve external issues. This result seems to be in line with the finding for the personal factors which indicate that the group most likely to switch from the state of Doing Nothing to the state of Peaceful Action is the more educated and the better paid part of the sample. Such groups that reach a certain level of financial and social security are more likely to devote time to social or political issues.

Results for Transitions 2 and 3: from ‘Protesting Peacefully to Armed Resistance’ and from ‘Doing Nothing to Armed Resistance’ have been summarized in figure 4. In this diagram the significant triggering factors have been represented. Friends’ Influence seems to be a major factor toward a shift from Doing Nothing or Acting Peacefully toward Armed Resistance. For both cases Armed Resistance is the direct result of a loss of trust in the government. At last, regarding the personal factors, those most educated with a large household size seem to be more prone to declare their intention to Armed Resistance.



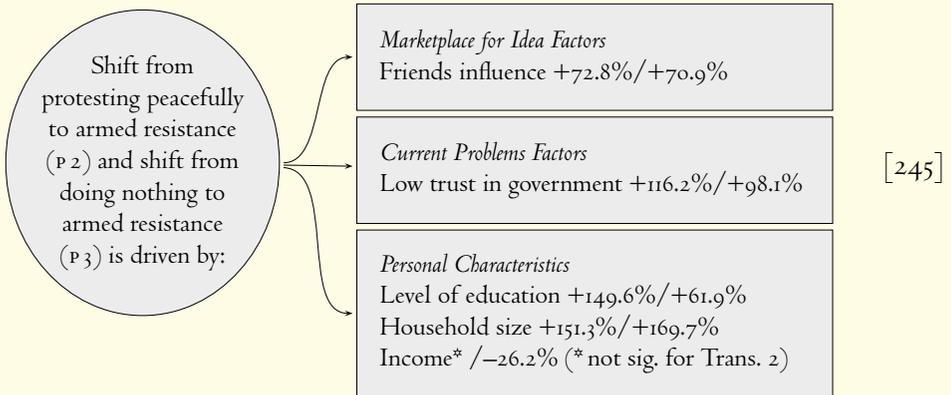


FIGURE 4 Results for ‘Protesting Peacefully to Armed Resistance’ (Transition 2) and from ‘Doing Nothing to Armed Resistance’ (Transition 3)

Lower income is only a trigger factor in the Transition 3 scenario, from Doing Nothing to Armed Resistance.

POLICY RECOMMENDATIONS

The analysis of the collected data shows that having a larger family, a relatively high level of education and lower levels of income seems to predictive of support for violent action. People also tend to be more influenced by friends rather than the TV and other agents of formal socialization, such as Imams. They also demonstrate a perceivable distrust of the government. From both a policy and a social marketing perspective, this study suggests several policy recommendations that ought to be pursued.

Short Term Actions:

- In the short term, it is important to increase the level of police presence in order to alert those thinking of violent action to the possible consequences of their actions.

Long Term Actions:

- *Anti-Corruption Initiative:* Low trust in the government has been assessed as being a major trigger factor for both transitions leading to armed resistance. The combination of increased FDI and

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perceived corruption by the public has increased the awareness of inequality in the Moroccan society and the subsequent low trust in government. If trust in the government is to be restored, it is essential for the government to increase its effort in tackling corruption at all levels as well as curbing the perceived sense of impunity in the case of corruption, by (e. g.) publicly promoting the judicial system toward a zero tolerance regime, handing down large fines and extended prison sentences for corruption cases.

- *Monitoring of Youth Networks:* This research also suggests that the state needs to keep an eye on networks of youth and how those networks form. Of course, this presents us with a dilemma: increased monitoring of society means a narrower band for civil liberties. To some extent, this has already taken place with Law 03.03, which allows for nearly instant warrants for wiretapping and a 12-day administrative detention period. The Moroccan record of pursuing and disbanding cells and networks since the 16 May 2003 attacks suggests that the law is working and there is no need for further narrowing of the level of enlarging the scope of civil liberties. Nevertheless, Morocco remains a freer place than it has been at any period of time. Like all societies facing organized violence, Morocco has had to balance public safety and human life against suspects' civil rights.
- *Enhance Journalistic Capacity:* The findings concerning the press and journalism suggest that the press has not acted in a manner that reduces the threat of increasing the propensity towards terrorism. While it is not possible to secure total objectivity in journalistic reporting about events that entangle people emotionally, it is nevertheless important to improve the quality of journalism in Morocco in terms of both newspapers and the electronic media. Educational programs to improve the capacity of journalists already in service as well as new programs dealing with prospective journalists need to be considered.
- *Training of Imams:* This study demonstrates the impact that religious leadership has in maintaining people in a passive state; however, this suggests that with proper training and opportu-



nities for professional development, the imams could act as a powerful force against violence and fundamentalist political dissidence. We note, with satisfaction, that the Moroccan state has already begun a serious overhaul of the religious education for imams and murshidats (female religious specialists), requiring them to obtain a degree in religious studies from a state university. Further, the curriculum now includes classes in foreign languages and computers, as well as courses in the arts and humanities, in order to produce a more 'grounded' clergy. This study suggests that the new curriculum could be fortified with further courses that will better help the clergy to address some of the factors which are triggers for violence (addressed in this paper), such as international studies and media-related courses. Likewise, imams and murshidats might benefit from training in counselling, in order to assist members of their congregations who are targeted by members of terrorist or extremist groups. It is critical that the clergy be encouraged to pursue training in communicating the dangers of these groups (especially online groups) to the parents at the mosques, so that they in turn are able to better help protect the youth.

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CONCLUDING REMARKS

This study has concerned the public opinion of urban Moroccans in an effort to identify the trigger factors that influence the resort to violence. Further, this paper has analysed the data from these opinions, and provided critical interpretation based on the analysis itself. It is evident from this study that, along with global challenges, Moroccans are concerned about such domestic issues as perceived endemic corruption and low levels of social justice. Hence the government may choose to act in this direction by curbing the perceived sense of impunity in the case of corruption, by (e.g.) publicly promoting the judicial system handing down extended prison sentences for large-scale corruption cases. As another triggering factor is the influence of friends and subsequently network formation, then the government may wish to focus its attention on the networks of Moroccan youth (both real world and virtual), in the hope of preventing violent actors from targeting

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or adversely affecting young people at this critical stage in their development. The problem of political violence cannot be solved through one or two mechanisms alone in Morocco. There is a need for a sophisticated and multifaceted approach to deal with the rise of violent ideologies in the country, and this means that at least conceptually, the state's response is appropriate, although its eventual effectiveness will have to be tested over the next two or three decades.

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