

ATTITUDE TOWARDS NUCLEAR TESTS IN PAKISTAN[#]

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Attitudes regarding the nuclear detonation by Pakistan was examined in 250 subjects who differed with regard to education, sex, age, and political affiliation. The Results indicate that there were no differences between the subjects as regards their education and age but there was significant difference on attitude towards nuclear tests of different politically affiliated groups and between men and women.

On May 11, 1998, India took lead in the subcontinent by conducting a nuclear test in the Rajasthan Desert in North Western India. Two days later India announced that it had conducted two further tests and spokesman of their Government claimed that India needs nuclear weapons to prevent 'Military Adventuressome' by neighbouring Pakistan. On May 28, a little more than a fortnight, the then Prime Minister of Pakistan, Nawaz Sharif proudly announced that his country had conducted five nuclear tests of its own and 'settled score' with India (TV address to the Nation, 1998). Two days later on May 30, Pakistan further announced a test of two nuclear warheads.

The nuclear weapons technology and various other related issues have been a topic of serious concern and debate ever since the Hiroshima bombing in 1942. It is a vital social issue all over the

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world. Besides sparking controversy, it presents enormous challenges to social psychologists to determine why different individuals take on various positions on the issue. When other countries of the world are moving towards 'disarmament' and are working on peaceful solutions of all major problems under the UN charter, the neighboring countries (India and Pakistan) are at loggerheads, since their independence from the colonial rules of British. They are in a wild and frenzied race to surpass each other in the accumulation of deadly arsenals ignoring a vital fact that in today's world economic stability plays a pivotal role in the sovereignty and integrity of a country. While they have a living example of erstwhile USSR who would never stop spending money on the development of new deadly arsenal at the cost of human resource development. Ironically, both the countries are passing through one of their severest forms of economic crises. While ignoring all these damaging issues, the nuclear explosions were celebrated throughout, in both the countries with sweets distributed and a lot of coverage was given to it in the government controlled media.

A research conducted by Fisk, Flischhoff, and Milburn (1983) explored the contents and consequences of cognitive conception of nuclear war from the street man. This resulted in following categories: concrete images of charred bodies, abstract images which consisted of death rates, etc., their availability on memory, and the emotional content such as fear attached to these images. Further more, the findings of this research more or less divided people into two groups. The first group of people operate mechanically, processing information in regular and predictable ways, whereas the second group could be best described as in a manner consistent with their feelings. Obviously, like any other social issue people could not be so broadly placed in black and white group.

In another research, Vleeming (1984) examined the factors affecting attitude towards nuclear power in the Netherlands by using 72 subjects who differed with regard to nativity of Netherlands, gender, distances from a nuclear power plant, and differences between subjects who lived close to plant and who were more critical and more aggressively pursuing an antinuclear campaign than those who lived further away. The study also revealed that women were more concerned at the idea of a nuclear war break as compared to men, who judged it more on a theoretical level.

After 3 wars in the last 50 years and with deep-seated religious differences, Indians and Pakistanis are extremely proud, competitive and nationalistic in their dealings with one another. Matching India in

the weapons' race is seen not only as vital to national security but as a point of honour and national duty. However, Pakistan found itself in a difficult situation in this case. She struggled to decide whether to defy world opinion and respond to India's nuclear with tests of its own. The leadership faced two unsavory and politically dangerous choices: forgo testing and cope with India's nuclear threats and perceived black mail, or explode a nuclear device and suffer economic sanctions that could force the country into default. There was widespread demand in Pakistan at the street level, in the newspapers and by the opposition, for the nation to test its own nuclear weapon. But at the same time, there was increasing fear that the economic sanctions that could follow testing would be devastating for this impoverished country of 135 million people. Numerous financial and other analysts said that sanctions likely would force Pakistan to default on its international debt payments, probably triggering higher prices, currency devaluation, and political unrest, while Pakistan military officials said they are concerned about the national security implication of defaulting (Anderson & Khan, 1998).

After the unclear detonation, different opinions emerged. For instance, Khan and Moore (1998) observed, Muslims are happy all over the world that Pakistan has the capability”.

The present study was, therefore, designed to study the attitude of different groups residing in Pakistan towards nuclear test keeping in view social cultural milieu of Pakistani society where men are expected to be more militant and aggressive as compared to women. It was also a hunch of the authors that uneducated class would be more susceptible to solving problems, of this nature, through aggression and would be inclined to use hostile means. In our society, there is a clear division between the political parties, one who would like to resolve all issues with India through peaceful negotiations, which may include parties such as Pakistan Peoples Party (PPP) and Awami National Party (ANP) headed by Benazir Bhutto and Wali Khan, respectively. Whereas, on the other hand, there are parties who would always prefer to adapt military means to soviet conflicts with India and these parties may include Pakistan Muslim League and Jamat Islami headed by Nawaz Sharif and Qazi Hussain Ahmad, respectively. Then the authors also are of the opinion that younger group being emotional and who has the tendency to get quick results may also be in favour of nuclear tests as compared to an experienced group who may be more rational in their approach. Specifically, the following hypotheses were formulated:

1. Subjects who have less education (i.e., less than 10 years of education) or no formal education would favour nuclear tests as compared to the highly educated (i.e., more than 10 years of formal education).
2. Men subjects would favour the nuclear test as compared to the women.
3. Conservatives (PML & JI) would favour the nuclear tests as compared to the Liberals (PPP & ANP).
4. Young generation would favour the nuclear test as compared to older generation.
5. People who are aware of the present economic conditions of Pakistan, are unlikely to favour the nuclear test.

METHOD

Sample

The questionnaires were administered to a sample of 250 inhabitants of North West Frontier Province of Pakistan (mean age of both men and women = 30.6 years) in January 1999 to determine the subjects' attitude towards nuclear detonation. The sample comprised 153 educated and 97 uneducated, 120 were men and 130 were women. The sample consisted of volunteers among which fulfilled the following criterions namely:

1. Education (highly educated and less educated/no formal education)
2. Gender (men, women)
3. Political affiliation (four political parties were selected, keeping in view their inclinations. Pakistan People's Party (PPP) and Awami National Party (ANP) were grouped together as liberal parties while Pakistan Muslim League (PML) and Jamat Islami (JI) as conservatives.

Instrument

A questionnaire with 5-point response levels was developed in Urdu language to measure the attitude of Pakistani people towards a nuclear test conducted by Pakistan and India. A group of five post

graduate psychology students were initially requested to formulate a questionnaire keeping in view the designs and topics used by Ester, Van der Linden, and Van der Plicht (1982); Gardner, Tieman, Gould, DeLauca, Doob, & Stowijk, (1982), which are as follows: (a) the present economic conditions and its effects on the institutions, (b) the subject's attitude towards the existence of nuclear detonation, (c) their attitudes toward the use of nuclear power for peaceful purposes, (d) their attitude toward the problems connected with the use of nuclear test (i.e., regarding the investment in monetary terms, human resources, and radioactivity), (e) their estimates of the risk of the use of this technology, (f) their confidence in the authorities and the security measure, and (g) their perception of the influence of the economic sanctions imposed on the country by the Americans and its allies. This exercise resulted in 35 questions, from which after intensive discussion with the authors, only 20 items were retained that were relevant to the topic under study and contained no ambiguity. As a third step, a pilot study was conducted in order to further refine the items of the questionnaire (See Annexure).

Procedure

The questionnaire was administered individually. The subjects were told that the researchers were going to measure the responses of general population towards the nuclear detonation and in this regard they would be given a questionnaire. They were given following instructions: The questionnaire contains 20 questions each with a 5 response level, ranging from strongly agree (5) to strongly disagree (1). You are required to read each question carefully and then encircle the response level, which best describes your opinion regarding a single item. Remember each item is to be answered by choosing the category strongly agree, agree, can not say, disagree, and strongly disagree. The subjects also gave information regarding age, sex, education, and political affiliation. All those items, which were measuring negative attitudes towards nuclear test, were scored in opposite direction.

RESULTS

Each subject provided data on 20 dependent variables and *t*-tests were carried out on age (younger age group i.e. from 18 to 26 and older group i.e., 27 to 60), education (formal education of more than

10 years vs. formal education less than 10 years or no education), sex (male vs. female) and political affiliation (liberals vs. conservatives). Table 1 signifies the means and standard deviations for 20 items of the total sample. It shows that the majority of the mean scores are clustered around below the mid point of a 5-point scale. There is no item which has crossed the midpoint (whether favourable or unfavourable).

Table 1

Mean and Standard Deviations for the 20 Items

No. of Items	<i>M</i>	<i>SD</i>
1.	2.87	.97
2.	2.76	.87
3.	2.68	.77
4.	2.66	.57
5.	2.75	.76
6.	2.67	.75
7	2.67	.73
8	2.64	.71
9	2.73	.77
10	2.68	.74
11	2.73	.77
12	2.68	.74
13	2.68	.75
14	2.77	.79
15	2.72	.80
16	2.77	.76
17	2.77	.77
18	2.64	.74
19	2.69	.75
20	2.62	.74
Total	54.07	4.43

Table 2, 3, 4 and 5 show *t*-tests for educational, gender, political, and the age groups.

Table 2

t-Test for Two Educational Groups

Education	<i>N</i>	<i>M</i>	<i>S.D</i>	<i>F</i>	<i>p</i>
Less/no formal education	153	53.5359	4.2720	.054	.817
High education	97	54.9072	4.5577		

Table 3

t-Test for Male and Female

Gender	<i>N</i>	<i>M</i>	<i>S.D</i>	<i>F</i>	<i>p</i>
Men	120	53.0083	5.1261	4.563	.034
Women	130	55.0462	3.4028		

Table 4

t-Test for the Two Political Groups

Political groups	<i>N</i>	<i>M</i>	<i>S.D</i>	<i>F</i>	<i>p</i>
Conservatives	84	53.9405	4.9146	4.594	.034
Liberals	48	53.6042	3.3437		

Table 5

t-Test for Two Age Groups

Age	<i>N</i>	<i>M</i>	<i>S.D</i>	<i>F</i>	<i>p</i>
18-25	134	53.9478	4.2485	1.046	.307
26-60	116	54.2069	4.6392		

Table 2 and 5 show a non-significant mean difference between the two groups in their opinion towards the nuclear test i.e., the age and the educational status. Table 3 and 4 represent a significant difference between the male and female and, two political groups (i.e., conservative & liberals) as regards their opinion towards nuclear test.

Table 6

Correlational Matrix for the 20-Items Questionnaire (N = 250)

1	.092																			
2		-.115																		
3			-.070																	
4				-.023																
5					.097															
6						.042														
7							.055													
8								.014												
9									-.004											
10										-.007										
11											-.079									
12												-.068								
13													.084							
14														.069						
15															.028					
16																.063				
17																	.054			
18																		.014		
19																			.014	
20																				.036
																				.023
																				-.017
																				-.018
																				-.112
																				-.009
																				-.028
																				-.053
																				-.132
																				-.255
																				.074
																				-.015
																				-.009
																				-.018
																				-.044
																				-.026
																				-.079
																				.055
																				.184
																				.069
																				.086
																				-.026
																				.036
																				.005
																				.066
																				.103
																				-.053
																				-.095

* $p < .05$

Table 6 shows a non-significant but negative correlation of item 1 (Pakistan today is facing the worst economic conditions since its inception), item 3 (Pakistan should have conducted the nuclear test), item 4 (instead of nuclear test Pakistan should use the nuclear technology for peaceful purposes) with item 5 (instead of nuclear blast we should do something for the welfare of the people), item 9 (After conducting nuclear test our problems have further aggravated), item 10 (World should be cleansed from radioactive material), item 11 (Instead of Nuclear test, we should have accepted the conditions of America), item 12 (we should make South Asia a home of peace), item 14 (After the nuclear test we feel safe), item 16 (instead of nuclear test we should spend money on education), item 20 (If India would not have, Pakistan should have conducted the nuclear test) whereas non-significant positive correlation with item 2 (Our institutions, in comparison have become outdated), item 6 (the problem of world should be resolved through mutual consultations), item 7 (we should conduct further nuclear tests), item 8 (In war we should use the nuclear bomb), item 13 (Pakistan prestige has been raised after the nuclear test), item 15 (instead of nuclear tests we should alleviate poverty from our country), item 17 (Do you think that our atomic plant is in the safe hands?), item 18 (Are you aware of the dangerous effects of Nuclear test), and item 19 (We should resolve our problems with India through consultations), while item 2 has non-significant inverse correlations with 3, 4, 6, 7, 10, 11, 17, 19, 20 and non-significant correlations are for item 5, 8, 9, 12, 13, 14, 15, 16, 18.

DISCUSSION

The present study deals with a sensitive issue of the nuclear arms race within the South Asia-concerning India and Pakistan; and the attitude of people towards nuclear weapons as deterrents against foreign interventions. The results of the study show that the majority of the people seem to have an indifferent opinion regarding nuclear arms application- as they on the five point scale remain below the neutral range on all the items (Table 1). This may highlight an important and pertinent factor that despite all sorts of rhetoric and tall claims, people were, still uncertain about their future and the risk involved in such adventures. Perhaps they, also, were skeptical about the viability of the economics and the financial constraints looming over the entire country, which would be further escalated in case of further nuclear tests since common man is, and has been experiencing the effects of US-led sanctions imposed upon him. Though Muslims

and people of this world are considered to be fundamentalists and conservatives but these results show quite the opposite. The range of the scores obtained might be due to the perceived threat from India, otherwise chances are that the sample might have come up with a clear stand on the issue and completely rejected the idea of nuclear detonation. The sample is well aware of the economic and social deprivation, which they are experiencing. They know that such adventerism will bring further miseries and problems.

The results do not favour hypotheses no. 2. According to this hypothesis, male subjects would favour the nuclear tests as compared to the female and the results have shown a significant difference in respect of gender attitude but it is in the opposite direction as the mean value of the female subjects are higher than the male, which suggests that female subjects favour nuclear detonation as compared to males (Table 3). This may be due to their strong loyalties towards their nation, on one hand, and hatred towards India on the other. The only hypothesis which has been approved is that Conservative politicians would favour nuclear tests as compared to the Liberals (Table 4). This is because the Conservatives never adopted the approach of reconciliation and it is always at the forefront in inculcating an attitude of militancy and antagonism.

As regards our hypothesis 1 and 4, none of these have been confirmed (Tables 2 & 5). The authors think that the more one gets education the more he becomes rational and analytical in his approach and is less susceptible to sway with the emotions of the crowd, rather he has his own independent thinking and approach. The younger generation is more emotional and take decisions in a haste without going deep into it and realizing its pros and cons- because of lack of experience or exposure perhaps or for that matter since the older generation gives more time to the news and the day to day happenings in the world through either print or electronic media- with a critical view of the situation around them. It is the contention of the authors, that in lieu of this difference perhaps the younger generation would prefer to have nuclear device tested, instead of realizing its long-term repercussions.

The non-confirmity of the hypotheses could be that Pakistan is faced with a dilemma of following the nuclear blast in May, 1998- the sanctions imposed have clearly exposed the nations' excessive dependence on foreign assistance and private monetary flows. The vicious circle of poverty has further weekend the burdened economic conditions. A number of IMF conditionalities can have important consequences on poverty. Additional 1.5 percents of population are

likely to fall below poverty line in IMF programme scenario (William, Farooqi, Anis, & Khan, 1999). The picture of the development and improvement in the overall scenario of the infrastructure seems to be so gloomy, with rising food prices and low-income, coupled with negligible health services, which would exacerbate the problem of over 40 percent malnourished children in the present day and would almost adversely affect another 400,000 children in the matrimonial status-not to mention the status of women, with diminishing labour and income prospects in the market for them (Khan & Moore, 1999).

Coming back to the results of the present work the correlational matrix (Table 6), highlights an interesting point, as according to our hypothesis 5 i.e., people who are aware of the present economic conditions of Pakistan, are unlikely to favour the nuclear test, item 1(Pakistan today is facing the worst economic conditions since its inception) and item 2(Compared to other nations of the World, our institutions are faced with an ever low standard of development) are expected to correlate inversely with items 3 to 20, which asks for the favour of the nuclear detonation. It was hypothesized that if subjects agreed with the statement 1 and 2 which represent the economic deteriorating conditions then there would be less probability that they would favour the nuclear test. The results suggest that there is no significant positive or inverse correlation with any items. This non-commitment on the part of the sample suggests that the sample is confused and uncertain about the future occurrence. They are ambivalent in their approach as they were expecting many questions to be answered, whereas, the government in a haste imposed ban on the withdrawal of foreign currency adding fuel to the confusion. Besides, this confusion was exacerbated because of the conflicting message and an insufficient information regarding the nuclear weapons by the Pakistani Government.

While keeping in mind these issues the trend of the response pattern of the sample does not seem to be surprising. It clearly spells out the sensitivity of the minds of the people who are very much aware of the conditions and would, therefore, prefer to have bilateral talks in peaceful conditions rather than use of force through nuclear weapons.

Thus, the present research was an attempt to know the trend among the people of Pakistan pertaining to the use of the nuclear technology to solve issues with world and in particular with India. A similar research could be carried out on a larger scale or perhaps a cross-cultural research would be more helpful to have an idea on a

global level and to find the extent of awareness regarding the nuclear detonation and its ability as a defensive measure.

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Annexure

**QUESTIONNAIRE TO MEASURE ATTITUDE
TOWARDS NUCLEAR TEST
CONDUCTED BY INDIA AND PAKISTAN**

1. Pakistan today is facing the worst economic conditions since its inception.
2. Our institutions, on comparison to the world, have become outdated.
3. Pakistan should have conducted the nuclear test.
4. Instead of Nuclear test, Pakistan should use the nuclear technology for peaceful purposes.
5. Instead of Nuclear test Pakistan should do something for the welfare of the people.
6. The Problem of world should be resolved through mutual consultation.
7. We should conduct further nuclear test.
8. In War we should use the Nuclear bomb.
9. After conducting the nuclear test our problems have further aggravated.
10. World should be cleansed from radioactive material.
11. Instead of nuclear test, we should have accepted the conditions of America.
12. We should make South Asia a home of peace.
13. Pakistan prestige has been risen after the nuclear test.
14. After the nuclear test we feel safe.
15. Instead of nuclear test we should alleviate poverty from our country.
16. Instead of nuclear tests we should spend money on education.
17. Do you think that our atomic plant is in safe hands?
18. Are you aware of the dangerous effects of Nuclear Test?
19. We should resolve our problems with India through consultations.
20. If India would not have, Pakistan should have conducted the nuclear test.

Received: *June 19, 2000.*

Revision Received: *September 21, 2001.*