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van der Pligt, J.; Eiser, J.R.; Spears, R.

DOI

[10.1207/s15324834basp0701_1](https://doi.org/10.1207/s15324834basp0701_1)

Publication date

1986

Published in

Basic and Applied Social Psychology

[Link to publication](#)

Citation for published version (APA):

van der Pligt, J., Eiser, J. R., & Spears, R. (1986). Construction of a nuclear power station in one's locality: attitudes and salience. *Basic and Applied Social Psychology*, 7(1), 1-15. https://doi.org/10.1207/s15324834basp0701_1

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KOPIE PERIODIEK EGB

(14)
05-04-2005

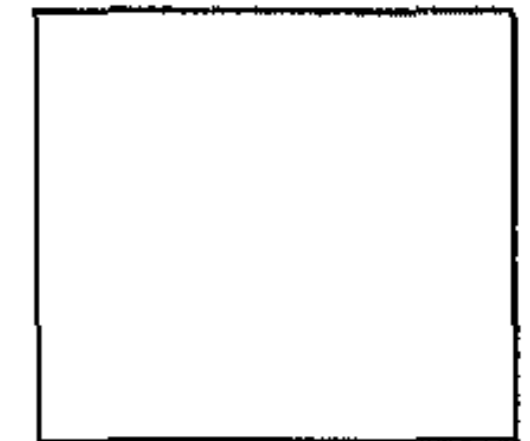
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Datum plaatsen : 04-04-2005 20:25
Aanvrager : 0004/9998
Aanvraagident :
Aanvragerident : 0004/9999
Eindgebruiker : 041631433

Telefoonnummer : 050-3635057
Cooperatiecode : R

Leverwijze : Elektronisch
Fax :
Ftp :
E-Mail : m.s.van.delden@rug.nl
Ariel :

Plaatscode : 830923705 ; CBa 1633 ; ; 1985 V6 - 2004 V26

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05-04-2005

Datum indienen : 04-04-2005 20:25 9560-1 UvA Keur
Datum plaatsen : 04-04-2005 20:25 UB Groningen
Aanvrager : 0004/9998 Broerstraat 4
Aanvraagident : 9700 AN Groningen
Aanvragerident : 0004/9999
Eindgebruiker : 041631433 tav

Aantal



PPN Titel : 830923705
Titel : Basic and applied social psychology
Auteur :
Deel/Supplem. :
Corporatie : Externe database:
Jaar/Editie : 1980 Extern nummer :
Uitgave : Hillsdale, N.J. Lawrence Erlbaum
Serie/Sectie :
Pag-ISSN/ISBN : 0197-3533

Plaatscode : 830923705 ; CBa 1633 ; ; 1985 V6 - 2004 V26

Jaar : 1986-00-00
Volume : 7
Aflevering : 1
Eindgebruiker : 041631433 Aanvraagident. :
Auteur : J. van der Pligt, J.R. Eiser, R. SpUVA KEUR (UB GRONINGEN)
Artikel : Construction of a nuclear power station in one`s locality: atti
Bladzijden : 1-15
Bron :
Opmerking : arno ID 114963

Construction of a Nuclear Power Station in One's Locality: Attitudes and Salience

Joop van der Pligt
Free University, Amsterdam

J. Richard Eiser and Russell Spears
University of Exeter

This study examined the attitudes toward the building of a nuclear power station in one's locality. In a survey of 290 residents of three small rural communities that were shortlisted as possible locations for a new nuclear power station, results showed a large majority opposed to the building of the power station. Attitudinal differences were not only related to differential evaluations of potential benefits and costs but also to differences in perceived importance of the various consequences. Results showed that the perception of the long-term risks are most differentially perceived by the attitude groups. Psychological risks were found to be the best predictor of individual attitudes. These findings are discussed in terms of the relations between attitudes, expectations of potential costs and benefits, and perceived importance or salience of these outcomes. Finally, implications of these findings for proposed large-scale projects of this kind, and for our understanding of public attitudes toward these developments, are discussed.

Until the mid-1970s, the place of nuclear energy as a major source of electrical power seemed assured in Britain, as elsewhere. As recently as 1976, the U.S. nuclear industry's Atomic Industrial Forum stated that the nuclear question "has been taken to the Village Square . . . and has been approved by the American voter" (Carter, 1976, p. 812). Subsequent years, however, have shown an increasing opposition to nuclear energy, as reflected in the growth of the environmental movement, the increasing length of public inquiries into the building of nuclear power stations, and various local and national referenda in the United States and Europe.

The realization that "the public" will play a more important role in policy decisions concerning nuclear energy was accompanied by a substantial number of social psychological studies attempting to improve our understanding of public attitudes toward nuclear energy. Most of the work in this area is based on the expectancy-value model of attitude formation proposed by Fishbein and his colleagues (Fishbein, 1963; Fishbein & Hunter, 1964); this model analyzes attitudes in relation to the anticipated consequences accompanying the attitude object. Results of these studies show that individual attitudes are based on perceptions of various potential negative and positive aspects of nuclear energy (e.g., Otway & Fishbein, 1976; Sundstrom, Lounsbury, DeVault, & Peele, 1981; Sundstrom, Lounsbury, Schuller, Fowler, & Mattingly, 1977).

A further conclusion of this research is that separate dimensions of the issue of nuclear energy appear differentially salient for different attitude groups. Otway, Maurer, and Thomas (1978) reported the results of a factor analysis on 39 belief statements about nuclear energy. Results yielded four factors designated as Psychological Risk, Economic and Technical Benefits, Socio-political Risk, and Environmental and Physical Risk. Subgroups of the 50 most pronuclear and 50 most antinuclear respondents were then compared to determine the contribution of each of the four factors to respondents' overall attitudes. For the pronuclear group, the Economic and Technical Benefits factor made the most important contribution, whereas for the antinuclear group, the risk factors were more important.

Woo and Castore (1980) also found that nuclear proponents attached greater value to the potential benefits of nuclear energy, whereas the nuclear opponents were more concerned with potential health and safety issues. Results obtained by Eiser and van der Pligt (1979) and van der Pligt, van der Linden, and Ester (1982) provide further support for the view that individuals with opposing attitudes tend to see different aspects of nuclear energy as salient, and hence, will disagree not only over the likelihood of the various consequences but also over their importance. In other words, each group has its own reasons for holding a particular attitude; the proponents stress the importance of economic benefits, whereas the opponents attach greater value to environmental and public health issues. An important finding of these studies was that the overall attitude of respondents was more closely related to ratings of subjectively important aspects than to their ratings of subjectively less important aspects. Thus, a consideration of both the perception of the various consequences and the subjective importance or salience provides a more complete picture than could be obtained from a consideration of either factor alone.

These studies (Eiser & van der Pligt, 1979; van der Pligt et al., 1982) suggest that the attitudinal differences apparent in controversies of this kind require a conception of attitudes that takes account of the fact that different aspects of the issue will be salient to the different attitude groups, and that such

differences in salience may be at least as clear-cut and informative as differences in the likelihood and evaluation of the various potential consequences. As argued elsewhere (van der Pligt & Eiser, 1984), this finding that separate dimensions of the issue appear differently salient (both subjectively and in their contributions to the prediction of overall attitude) for the different attitude groups has important practical implications for theories of attitude and our understanding of *why* people hold different attitudes toward nuclear energy.

Most of the above studies focus on public attitudes toward nuclear energy in general. The work of Sundstrom and his colleagues (e.g., Hughey, Lounsbury, Sundstrom, & Mattingly, 1983; Sundstrom et al., 1977) focuses on public attitudes toward the construction of a nuclear power plant in one's locality. Their findings showed the importance of expected economic benefits and the possible health and environmental risks of the construction and operation of a nuclear power plant in one's locality. Our study also attempts to investigate the relationships between people's attitudes toward the building of a nuclear power station in their locality, their specific beliefs about the local consequences, and their perception of the importance of these consequences.

A substantial body of research suggests that there is a high degree of opposition to local construction of nuclear power plants (e.g., Rankin, Melber, Overcast, & Nealey, 1981) and that local attitudes are based on more specific beliefs about potential costs and benefits than on attitudes toward the general issue of building more nuclear power stations (e.g., Hughey, Sundstrom, & Lounsbury, 1985; Woo & Castore, 1980).

The purpose of our study can be summarized as follows:

1. To compare public attitudes toward building a nuclear power station locally to attitudes toward nuclear energy in general.
2. To investigate the role of the various potential costs and benefits for the locality with respect to the overall acceptability of nuclear developments.
3. To test the notion that not only perceived likelihood of the various potential consequences but also the importance or salience of these consequences plays an important role in public acceptance of this technology.

METHOD

Subjects

It is necessary to provide further information concerning the historical context in which this study was conducted. In February 1981, the Central Electricity Generating Board (CEGB) announced the names of five sites to be

considered as possible locations for a new nuclear power station in southwest England. In February 1982, the CEGB ruled out two of these five sites on geological grounds. Our study took place in June 1982 in the three remaining locations (Bugle/Luxulyan in Cornwall and Herbury and Winfrith in Dorset). The CEGB made its final announcement on August 25, 1982: Instead of any of these last three sites, "the next station for which planning application will be made" would be a third station adjacent to two existing reactors at Hinkley Point in Somerset. Winfrith, where there is an atomic energy research establishment, was shortlisted as a possible site for the next generation of nuclear power plants.

A random sample ($N = 450$) was drawn from the electoral register for the three communities that were close to the three possible locations for a new nuclear power station in southwest England. Of this sample, 24 respondents had moved from the area, and 300 persons agreed to participate in the study (a response rate of 70%). All respondents received a questionnaire by mail. Two weeks later, the nonrespondents received a reminder and a copy of the questionnaire. Ten respondents who returned questionnaires without their name and address were excluded from the analyses. The average age of respondents was 47.5 years: Twenty-four percent were 30 years old or younger; nearly 46% were between 30 and 60 years of age; and the remaining 30% were older than 60 years of age. The latter percentage is not surprising in the light of the fact that two of the three communities are located in relatively popular retirement areas (30% of our sample were retired). Our sample contained 51% males. On average, the respondents had lived 22.9 years in the area and 63% were homeowners.

Questionnaire

The questionnaire was closed-ended and was preceded by a short introduction explaining the CEGB announcement concerning the possible sites for the next nuclear power station in the southwest of England. First, subjects' attitudes toward building more nuclear power stations in the United Kingdom, the southwest of England, and their locality were assessed in terms of seven categories ranging from *very strongly opposed* to *very strongly in favor*. Intermediate categories were *strongly opposed*, *opposed*, *neither for nor against*, *in favor*, and *strongly in favor*.

Similar questions were asked concerning various other industrial developments in their locality. Respondents were then presented a list of eight general beliefs about nuclear energy (e.g., "Nuclear energy is the only practical source of energy for the future," "Britain should abandon all plans to build any more nuclear power stations"). These beliefs were rated on a 7-point scale ranging from *very strongly disagree* to *very strongly agree*. Intermediate categories were *strongly disagree*, *disagree*, *no opinion*, *agree*, and *strongly*

agree. Respondents were asked to indicate their involvement with the issue, how much they cared "whether a new nuclear power station is built in your neighborhood." Responses were on 4-point scales ranging from *not at all* to *very much*. Intermediate categories were *a little* and *quite a lot*. Subjects were also asked to indicate whether they had attended any public meetings on the issue.

Next, subjects were presented a list of 15 immediate consequences of the construction and operation of a new nuclear power station in their neighborhood and were asked to indicate how each of these would change life in the neighborhood for the better or for the worse. Responses were given on a 9-point scale ranging from *very much for the worse* (1) to *very much for the better* (9). Only the endpoints of the scale and the midpoint (*neither better nor worse*) were labeled. After completing this section, subjects were asked to select the 5 consequences they thought to be the most important. Subjects were then presented with a list of 15 longer term consequences of the construction and operation of a new nuclear power station. Responses were indicated on a 9-point scale, and subjects were again asked to select the 5 consequences they thought most important. Finally, subjects were asked to indicate how much importance a public inquiry should attach to five general aspects of nuclear energy. These aspects were local environmental impact, political implications of a nuclear energy policy, economic arguments, the risks of accidents and pollution, and, finally, feasibility of other energy technology. Answers were indicated on a 7-point scale ranging from *no importance at all* (1) to *extreme importance* (7). Subjects were asked to indicate their answer by ringing a number from 1 to 7; only the endpoints of the scale were labeled.

RESULTS

In the analyses, we first investigate the distribution of attitude scores toward various industrial developments, including nuclear developments, in one's neighborhood. The remaining analyses focus on the effects of attitude toward the construction of a nuclear power station in the locality on the perceived consequences and their importance. Finally, analyses concerning the relationship between perceived importance and attitudinal differences, along with the potential contribution of perceived importance to our understanding of differing attitudes, are presented.

Attitudes

Participants were generally opposed to the construction of a nuclear power station in their neighborhood. As shown in Table 1, approximately 75% of the subjects indicated a negative attitude toward the proposed development,

TABLE 1
Frequency Distribution of the Attitude Scores

Attitude Toward . . .	Percentage in Each Attitude Category						
	1 ^a	2	3	4 ^b	5	6	7 ^c
More nuclear power stations in the UK	28.9	6.6	16.7	26.5	16.4	1.4	3.5
New nuclear power station in locality	57.8	5.5	11.8	14.5	8.7	0.0	1.7
New nuclear power station in the southwest	34.3	6.6	17.6	26.0	12.8	1.7	1.0
Coal-fired power station in locality	37.5	8.1	17.9	23.5	10.5	0.7	1.8
Any industrial development taking up the same area in locality	38.0	6.7	17.6	21.5	12.0	2.5	1.8
Windmills for generating electricity taking up the same area in locality	21.8	4.2	11.6	22.9	27.8	1.8	9.9
Chemicals factory taking up the same area in locality	58.9	8.7	22.6	7.0	2.4	0.0	0.3

^aVery strongly opposed.

^bNeutral.

^cVery strongly in favor.

15% were neutral and 10% were in favor. Table 1 also shows the distribution of the attitude scores concerning various industrial developments in one's neighborhood.

Results further show that the most unfavorable reactions are to the building of a nuclear power station and the building of a chemicals factory in the locality. The most favorable reaction was toward the building of windmills. We next computed an attitude index score based on the eight general statements concerning nuclear energy. This scale proved reliable and consistent as indicated by a Cronbach's alpha of 0.85 ($p < .001$). This composite score showed a normal distribution of attitudes with a marginally antinuclear mean score of 28.0 (possible range from 8 to 56). This composite score correlated .80 with subjects' attitude toward building more nuclear power stations in the United Kingdom, .74 with attitudes toward building a nuclear power station in the southwest of England, and only .60 with attitudes toward the building of a nuclear power station in the locality. These findings show that attitudes toward a new nuclear power station in the locality are different from and more extreme than attitudes toward nuclear energy in general.

To investigate people's perception of the various potential costs and benefits of a nuclear power station, we presented subjects with two sets of 15 potential consequences. Table 2 shows the mean ratings by the pro, neutral and anti subjects of the 15 (mainly immediate) effects of the building and construction of a nuclear power station in the locality. Subjects were split into three attitude groups on the basis of their answer to the question whether they

TABLE 2
 Perception of Various Effects (Mainly Immediate) of a Nuclear Power Station and Perceived Importance As a Function of Own Attitude

	Mean Score ^a				Importance ^b				F-Linear
	Pro Attitude (n = 30)	Neutral Attitude (n = 41)	Anti Attitude (n = 209)	F Linear	Pro Attitude (n = 30)	Neutral Attitude (n = 42)	Anti Attitude (n = 217)		
Excavation for pipelines	4.7	3.4	1.8	119.74***	20	26	19	0.31	
Construction traffic	3.9	2.8	1.4	105.11***	27	36	37	0.99	
Road building	6.6	4.8	2.3	125.60***	67	33	20	31.14***	
Conversion of land from agricultural use	4.6	2.8	1.5	179.07***	27	45	58	11.86***	
Noise of construction	4.0	3.5	1.8	95.22***	13	12	15	0.14	
Workers coming into the area	7.0	5.0	2.3	153.09***	53	29	18	18.66***	
Noise of station in operation	4.8	4.3	2.6	69.39***	7	12	12	0.68	
General appearance of the power station	4.8	3.0	1.4	190.47***	40	52	54	1.86	
Area of land fenced off	5.2	3.0	1.5	223.91***	27	26	29	0.15	
Steam from station when operating	4.7	3.7	1.9	133.60***	10	14	25	4.91*	
Increased security and policing	6.4	5.1	2.7	116.62***	20	19	7	8.57**	
Warming of sea water	6.2	5.0	2.8	94.23***	13	7	13	0.14	
Transportation of nuclear waste	4.1	2.9	1.5	108.91***	57	45	55	0.14	
Overhead power cables/pylons	4.1	2.5	1.6	89.35***	23	36	36	1.54	
Overall height of buildings	4.2	2.9	1.4	163.28***	40	33	42	0.43	

^a Possible range of scores from *very much for the worse* (1) to *very much for the better* (9).

^b The scores represent the percentage of subjects selecting each factor among the five most important. The columns do not add up to 500 because of the inclusion of subjects who chose fewer than five aspects.

* $p < .05$. ** $p < .005$. *** $p < .001$.

were opposed to or in favor of the building of a nuclear power station in their locality (see Table 1). All items show highly significant differences between the three attitude groups, all in a direction predictable from a simple consistency notion (e.g., Rosenberg, 1956).

We next conducted a discriminant analysis to find out which aspects most distinguished the three attitude groups. The results of the stepwise solution (with Rao's V used as a stepwise criterion) revealed that the two most important aspects were "area of land fenced off" and "conversion of land from agricultural use." The value of Rao's V associated with the first aspect is 222.6, and the second aspect added 74.9 to this value (both significant at the .001 level). The next most important aspect was "workers coming into the area" (change in V : 28.7, $p < .001$). Three more aspects added significantly to the discriminant function: "general appearance of buildings" (change in V : 17.3, $p < .001$); "increased security and policing" (change in V : 15.5, $p < .001$); and "noise of construction" (change in V : 11.6, $p < .005$).

Table 2 also shows which aspects were chosen as being among the five most important by the three attitude groups. The results show four aspects that were rated very differently as a function of own attitude. Of the pro subjects, 67% regarded road building an important aspect, whereas only 20% of the anti subjects selected this aspect among the five most important. A similar difference was obtained concerning the prospect of workers coming into the area (53% of the pros and 18% of the antis). In contrast, the antis attached greater importance to the possible conversion of land from agricultural use than did the pros (58% vs. 27%). Surprisingly, the pro subjects attached more importance to "increased security and policing" than the antis. Inspection of the mean scores reveals that the former group also sees this change as an improvement to life in the locality. Discriminant analysis confirmed the above differences and pointed at the three aspects that were associated with the highest F values (see Table 2).

Finally, we looked at the perceived importance of the various aspects irrespective of own attitude. Results show that the aspect most frequently selected among the five most important was the transportation of nuclear waste; this aspect was selected by 54% of the respondents and was seen as important by all three attitude groups. Fifty-three percent of the sample selected "conversion of land from agricultural use" and "general appearance of the power station" among the most important. There was a considerable difference of opinion between the attitude groups concerning "conversion of land," as shown in Table 2. All groups, irrespective of own attitude, were concerned with the general appearance of the power station.

Table 3 shows the mean ratings by the three attitude groups of the 15 (mainly long-term) effects of the building and construction of a nuclear power station in their neighborhood. All aspects show highly significant differences between the three attitude groups. Again, we conducted a discrimi-

TABLE 3
Perception of Various Effects (Mainly Long Term) of a Nuclear Power Station and Perceived Importance As a Function of Own Attitude

	Mean Score ^a				Importance ^b			
	Pro Attitude (n = 30)	Neutral Attitude (n = 40)	Anti Attitude (n = 209)	F Linear	Pro Attitude (n = 30)	Neutral Attitude (n = 41)	Anti Attitude (n = 217)	F Linear
Employment opportunities	8.3	7.6	6.0	69.85***	73	57	15	85.60***
Tidiness of the village	5.2	4.5	2.9	59.36***	7	14	15	1.12
Standard of local recreational facilities	6.7	6.1	4.2	68.85***	30	14	4	29.90***
Social life in the neighborhood	6.9	5.7	3.9	80.81***	30	7	11	5.13*
Wild life	4.7	2.6	1.5	148.20***	40	57	67	9.17**
Marine environment	5.1	3.6	2.3	73.05***	13	17	38	12.38***
Farming industry	4.6	3.0	1.9	108.56***	17	45	56	16.95***
Security of local electricity supplies	6.6	6.3	5.1	27.20***	16	28	3	21.29***
Health of local inhabitants	5.0	4.4	2.6	81.07***	20	29	48	12.21***
Landscape	4.3	2.6	1.3	161.53***	23	50	66	23.32***
Holiday trade	4.9	4.3	2.5	75.46***	27	14	19	0.25
Business investment	6.7	6.0	4.2	50.06***	27	28	11	9.86**
Your personal peace of mind	5.4	4.3	1.7	290.79***	27	17	47	11.99***
Standard of local transport and social services	6.8	6.3	4.9	33.52***	40	17	5	40.28***
Standard of shopping facilities	6.6	5.8	4.9	31.24***	20	14	4	13.70***

^aPossible range of scores from *very much for the worse* (1) to *very much for the better* (9).

^bThe scores represent the percentage of subjects selecting each factor among the five most important. The columns do not add up to 500 because of the inclusion of subjects who chose fewer than five aspects.

* $p < .05$. ** $p < .005$. *** $p < .001$.

nant analysis to find out which aspects most distinguished the three attitude groups. The results of the stepwise solution revealed one item which had considerable predictive power in separating the three attitude groups. The "my personal peace of mind" aspect resulted in a Rao's V of 279.1 ($p < .001$). Further significant contributions were made by "landscape" (change in V : 79.4, $p < .001$), "wild life" (change in V : 25.6, $p < .001$), "social life in the neighborhood" (change in V : 11.1, $p < .005$), "standard of local transport and social services" (change in V : 6.7, $p < .05$), and "employment opportunities" (change in V : 7.0, $p < .05$). The first aspect corresponds with what Otway et al. (1978) called "psychological risk," whereas the next two aspects are related to what these authors termed "environmental and physical risk."

Table 3 also shows which aspects were chosen among the five most important by the three attitude groups. The results show more, and more marked, differences than those obtained in the first series of consequences. The most striking difference concerns the possible effects on employment opportunities: Seventy-three percent of the pros selected this aspect among the most important, whereas only 15% of the antis considered this aspect as important. Overall, differences in perceived importance show that the antis attach greater importance to the risk factors, whereas the pros stressed the importance of potential economic benefits.

Finally, we conducted a stepwise multiple regression analysis with participants' attitude toward building a nuclear power station in their neighborhood as a dependent variable and their ratings on all 30 possible consequences as independent variables. Results are summarized in Table 4.

The most striking finding is the predictive power of the "personal peace of mind" aspect. This aspect correlated .79 with attitude, and, as can be seen in Table 4, the contribution of the next three most predictive aspects is relatively minimal.

Attitudes and Salience

In this section we take a closer look at the possible contribution of perceived importance or salience to the understanding of attitudes. Inspection of Ta-

TABLE 4
Multiple Regression Analysis of Attitudes Toward Building a Nuclear Power Station

<i>Predictor Variable</i>	<i>Simple r</i>	<i>Multiple r</i>	<i>Multiple r²</i>	<i>Change in Multiple r²</i>
Personal peace of mind	.79	.79	.63	.63
Area of land fenced off	.66	.83	.69	.06
Increased security and policing	.59	.84	.71	.02
Employment opportunities	.45	.85	.73	.01

TABLE 5
Perceived Importance As a Function of Own Attitude

<i>Aspect</i>	<i>Attitude</i>			<i>F Linear</i>
	<i>Pro</i> (<i>n</i> = 30)	<i>Neutral</i> (<i>n</i> = 40)	<i>Anti</i> (<i>n</i> = 211)	
Local environmental impact	5.2	5.6	6.5	29.21*
Political implications of a nuclear power station	3.3	3.6	3.3	0.93
Economic arguments	5.0	4.9	4.6	1.50
Risks of a nuclear accident and pollution	5.8	6.0	6.3	3.31
Feasibility of other energy technology	4.6	5.3	5.8	12.58*

Note. Possible range of scores from *no importance of all* (1) to *extreme importance* (7).

**p* < .001.

bles 2 and 3 clearly shows that inclusion of both the perception of the various potential consequences of a nuclear power station *and* the perceived importance attached to each of these consequences provides a more complete picture of the attitudinal structure of people's opposition to and support for the building of a nuclear power station in their neighborhood.

Results shown in Table 3 suggest that the antinuclear respondents see the risks as most important, whereas the pros stress the importance of possible economic benefits. We also asked respondents to indicate how much importance should be attached to the various aspects if there were a public inquiry into the building of a nuclear power station in their neighborhood. Results are summarized in Table 5.

These findings show less clear-cut differences than those obtained by respondents' selection of the most important aspects. All aspects are seen as relatively important, with the exception of "political implications," which all groups saw as relatively unimportant. The clearest attitudinal differences concerned "local environmental impact," which was seen as significantly more important by the antis. Finally, the three attitude groups showed marked differences in the importance attached to feasibility of other energy technology. The antis rated this as a very important aspect, but the pros thought it to be only of marginal relevance.

Finally, we looked at the strength of the relation between the various composite scores and the single scale attitude measure. To do this we simply added the scores on the individual aspects of each of the two sets of 15 aspects. We further computed a composite score only for those items in each set of 15 that subjects individually selected among the 5 most important. Next, a similar score was calculated on the remaining (less important) aspects. Table 6 presents a summary of the correlations between the various composite

TABLE 6
Relations Between Single-Scale Attitude Measure and Various Composite Scores

<i>Composite Score</i>	<i>Mean Score</i>	<i>Correlation With Attitude^a</i>
15 immediate consequences ^b	33.8	.64
5 most important items ^c	7.8	.60
10 less important items ^d	25.9	.57
15 long-term consequences ^b	54.3	.65
5 most important items ^c	11.2	.69
10 less important items ^c	43.1	.45

Note. A high score reflects a more favorable attitude.

^aAttitude toward local nuclear power station, possible range from *very strongly opposed* (1) to *very strongly in favor* (7).

^bPossible range from 15 to 135.

^cPossible range from 5 to 45.

^dPossible range from 10 to 90.

scores and subjects' attitude toward building a nuclear power station in their neighborhood.

These results show that the strength of the relation between attitude and composite scores is not significantly reduced if one limits oneself to the individually selected 5 most important consequences as compared to all 15 aspects. Results concerning the immediate consequences show very similar correlations between attitude and the three composite scores. Composite scores on the basis of the more long term consequences show markedly different correlations with attitude. The highest correlation was obtained for the composite score based on the 5 important consequences (.69); the composite score based on the 10 less important consequences yielded a correlation of only .45. The latter correlation is significantly lower than .69, $t(276) = 4.36$, $p < .001$. It is worth noting that the attitude groups showed more marked differences in perceived importance of the various long-term consequences than in the importance of the immediate effects (see Tables 2 and 3). For this reason, one would expect the correlational differences to be more marked for the composite scores based on the long-term consequences. It should also be noted, however, that even if the correlations based on the 5 most important consequences are not significantly higher than those based on the complete set of 15, the former provide a much simpler account of the structure of the attitudes of the various groups.

DISCUSSION

The results of our study point to a number of important issues that need to be included in attempts to understand public attitudes toward the building of a nuclear power station in their locality.

First, our findings indicate that public attitudes toward building a nuclear power station in the neighborhood are more extreme and more anti than toward building more nuclear power stations elsewhere. Furthermore, public attitudes toward building more nuclear power stations (whether in the neighborhood or elsewhere in the southwest or in the United Kingdom in general) are more extreme and more anti than toward nuclear energy in general. The latter conclusion is based on the comparison between the respondents' index score based on eight general statements about nuclear energy and the various single scale measures concerning attitudes toward building more nuclear power stations in the locality, the southwest United Kingdom, and the United Kingdom in general. Our findings are in accordance with those obtained by Rankin et al. (1981), but show much higher levels of opposition than a number of other studies conducted in the United States (e.g., Hughey et al., 1983; Sundstrom et al., 1981; Woo & Castore, 1980). All in all, our findings suggest that attitudes toward nuclear energy in general are not necessarily anti, but that the public has serious doubts about the feasibility of this technology and prefers to postpone further expansion of the industry, especially when the expansion takes place near one's community. This interpretation is supported by the impressive predictive power of the "peace of mind" aspect and the fact that irrespective of attitude, respondents regard the issue of nuclear waste transportation as one of the most important.

Second, our results indicate that the understanding of the positions of the pro, anti, and neutral attitude groups is enhanced if two types of information are included—the beliefs concerning the possible consequences and the importance or salience of the various consequences. Scores based on individually selected, important consequences proved as good a predictor of attitude as scores based on the whole set of consequences presented to the respondents. The added advantage of this procedure is that it allows the researcher to identify the important aspects underlying the attitudes of the various groups and discard the less relevant responses that play a minor roll in the decision process. As argued elsewhere (van der Pligt & Eiser, 1984), it is unrealistic and potentially misleading to expect respondents to make decisions along the lines of models that assume a computational capacity that simply exceeds human ability.

Investigation of the importance attached to the various possible consequences by the different attitude groups revealed that the groups showed only a handful of marked differences concerning the immediate consequences. The primary features that distinguished the three attitude groups concerned "road building" (seen as more important and more favorable by the pros), "conversion of land from agricultural use" (seen as more important and more unfavorable by the antis), and "workers coming into the area" (seen as more important and more favorable by the pros). It further emerged that, although the groups differed somewhat in their evaluation of the conse-

quences of transportation of nuclear waste, all groups thought this issue to be important.

Results concerning the long-term consequences yielded more clear-cut differences between the various attitude groups. This also resulted in more clear-cut differences between the correlations of the various composite scores and respondents' attitude toward the building of a nuclear power station in the locality. Overall, the pro respondents stressed the importance of economic benefits, whereas the antis stressed the risk factors (both environmental and psychological risks). A closer inspection of these differences underlines the importance of including both beliefs and salience in one's conception of attitude. Even though the attitude groups, for example, showed relatively minor differences in their evaluation of the effects of potential employment opportunities in the locality, a majority of the pros found this aspect important, but only a small minority of the antis regarded this aspect as important. One could argue, however, that the perceived importance of these dimensions reflects what people have been asked, and not necessarily what or how people think. However, the items included in our questionnaire were based on extensive interviews in the various communities. These open-ended interviews with representatives of the communities were carried out before the questionnaire was designed and played a major role in the development of the questionnaire. Moreover, other research in which respondents volunteered advantages and disadvantages of nuclear power plants (e.g., Nealey, Melber, & Rankin, 1983) underlines the importance of the factors discussed in this article.

In summary, there seems to be relatively minor disagreement among the various attitude groups concerning short-term disruptions of life in the neighborhood. The major differences between the groups concern the less tangible, more long-term nature of the potential negative outcomes. Our findings suggest that the perception of the psychological risks are the prime determinant of attitude as indicated by the predictive power of the "peace of mind" aspect. It seems, therefore, that different perceptions of these long-term costs (both in terms of evaluation and importance) play a crucial role in attitude formation.

ACKNOWLEDGMENTS

This research is part of a larger scale longitudinal project on attitudes toward nuclear energy in the southwest of England and was conducted while the first author was at Exeter University. The project is supported by Economic and Social Research Council Grant DOO 250009 to the second author.

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