

## **The Protestant work ethic and attitudes towards unemployment**

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The literature on personal correlates of Protestant work ethic beliefs and the relationship between these beliefs and various aspects of paid work is briefly reviewed. A study is described which examines the relationship between Protestant work ethic beliefs and attitudes to unemployment. Subjects rated the importance of various explanations for unemployment in Britain, as well as their agreement with statements about social security (welfare) payments to the unemployed. As predicted, people who strongly endorsed the Protestant work ethic stressed negative individualistic explanations for unemployment and were, by and large, more against welfare payments than those who did not strongly endorse those beliefs. The results are discussed in terms of the psychology of lay economic explanations, and some implications for social change are noted.

Social scientists from several backgrounds have been interested in the Protestant Work Ethic (PWE), some seeing it as a dimension of personality (Mirels & Garrett, 1971), others as an orientation to one's work (Beit-Hallahmi, 1979), and some as a cause of psychopathology (Albee, 1977). A number of self-report scales have been devised to measure the extent to which a person accepts the PWE. These include the pro-Protestant Ethic Scale (Blood, 1969), the Survey of Work Values (Wollack *et al.*, 1971), and the Protestant Work Ethic Scale (Mirels & Garrett, 1971). These measures have been critically evaluated and shown to intercorrelate moderately well (Waters *et al.*, 1975). Unless otherwise stated all studies reviewed below have used the Mirels & Garrett scale. They fall roughly into two categories: personality and other demographic correlates of the PWE; and the relationship between PWE and various aspects of paid employment.

In the first category, Mirels & Garrett (1971) found that belief in the PWE correlated significantly positively with measures of sex guilt, morality–conscience guilt, and scores on the California F Scale, but negatively with external locus-of-control beliefs. MacDonald (1971) found that subjects who endorsed beliefs in social responsibility (viewing the source of injustice as residing in people rather than in societal institutions) also endorsed the PWE. MacDonald (1972) later found that high PWE scorers tended to blame people, rather than 'the system' for their difficulties. He also found positive correlations between PWE scores and church attendance, locus of control, authoritarianism and attitudes to the poor. High PWE scorers differed from low PWE scorers in that they valued ambition and self-control but devalued broadmindedness, imagination, equality, pleasure and a comfortable and exciting life. Rim (1977), using the Blood (1969) scale, set out to determine whether men and women job applicants high or low on PWE values, as well as on other personality measures, differed in their ordered preference for different work functions. He found men who scored high on the PWE scale were more intelligent, less extraverted and neurotic than men scoring low on the PWE scale, but that the opposite was true of women. Finally Beit-Hallahmi (1979) found PWE scores significantly related to religious self-identification

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(Protestant and Catholics scored higher than Jews and Agnostics), ethnic backgrounds (white Anglo-Americans scored higher than blacks or Mexicans), political self-identification (Conservatives scored higher than Liberals or Leftists), but not to socio-economic status. He concluded that the PWE is not clearly related either to achievement motivation or to work attitudes.

Studies in the second group have looked at the relationship between the PWE and paid employment. Blood (1969), using his own scale, found that the more workers agreed with the ideals of the PWE the more they were satisfied with their paid work and life in general. Merrens & Garrett (1975) suggested that, as the PWE holds that hard and steady work is worthy, and unwillingness to work is seen as a symptom of absence of grace or as sinful, high PWE scorers would perform better on tasks designed to provide low motivation and interest levels. As predicted, they found high PWE scorers spent significantly more time participating in a boring repetitive task than did low PWE scorers. Ganster (1981), however, failed to replicate this result. He concluded that Merrens & Garrett's task was not representative of real jobs, and that their experiment may have induced apprehension evaluation and hence biased the results.

Stone (1975, 1976) looked at job scope, job satisfaction, and the PWE as measured by the Wollack *et al.* (1971) scale. He found a positive relationship between job scope and job satisfaction, but neither the PWE nor any of its subscales appeared to moderate this relationship.

Greenberg (1977) found that high PWE scorers' performances improved and low PWE scorers' performances declined when given negative performance evaluation. He also found that, when told a co-worker was superior to them at a task which brought them unearned rewards, high PWE scorers performed at a high level and felt neutral about the task, whereas low PWE scorers performed poorly but liked the task. Greenberg (1978) found that belief in the PWE, as measured by the Blood (1969) scale, among train commuters correlated positively with the relative frequency of working compared to not working while commuting, perception of commuting as an extension of work rather than leisure, and a preference for working rather than commuting. More recently Greenberg (1979) has shown that endorsing the PWE is related to perceived fairness in using various equity inputs. In one experiment, PWE scorers were shown to distribute money to hypothetical workers in proportion to their total productivity by taking into account both the quantity and duration of work, while low PWE scorers paid only according to duration ignoring quantity. It was also found that high PWE scorers believe it fairer to base reward on performance when differences were attributed to internal rather than external causes, while the reverse was found for low PWE scorers.

From the above review it is apparent that most research on the PWE has concerned the relationships of PWE beliefs to work, values, habits, or satisfaction. Little or no work has looked at the relationship between PWE beliefs and beliefs about unemployment. MacDonald (1972) demonstrated that, being more apt to believe that hard work pays off, high PWE believers hold that if one is poor it is probably one's own fault. Individualistic or blame-the-poor explanations for poverty are thus more likely to be endorsed by high PWE believers (Feagin, 1972; Feather, 1974; Furnham, 1982a). Furnham (1982a,b,c) has argued that explanations for poverty, wealth and unemployment, as well as beliefs about social security and the importance of work, form a coherent whole; and that three different belief systems can be distinguished. These are: *individualistic* beliefs which place responsibility for economic success or failure on the behaviour of individuals; *societal* beliefs which place responsibility on external societal or economic forces; and *fatalistic* beliefs which place responsibility on chance, luck or fate. It is likely that high PWE scorers would believe in individualistic explanations for unemployment, suggesting that people are unemployed due to laziness, lack of effort, unwillingness to take on certain jobs or move to places of work, etc. (Furnham, 1982a). High PWE scorers are also likely to believe that social

security (welfare) recipients who are unemployed should be working, as welfare only encourages idleness. They should also be opposed to social security benefits in general (Furnham, 1982c). This study set out to examine these issues, studying relationships amongst PWE beliefs, explanations for unemployment, and attitudes towards social security.

#### METHOD

One hundred and nine subjects took part, 69 males and 40 females. They were all working adults, of British origin and from lower-middle and middle-class backgrounds. All were employed in full-time jobs, including teaching, nursing, engineering and local government. Unlike many previous studies none of the subjects were undergraduate students. They were recruited personally and by advertisement.

Each person was given a booklet with three principal sections, as follows:

1. *The Protestant Work Ethic Scale* (Mirels & Garrett, 1971). This is a 19-item inventory, with responses on a seven-point agree-disagree scale. Of the 19 items, 16 are in the direction of high PWE and three in the direction of low PWE. Examples are: 'Most people who don't succeed in life are just plain lazy', 'Life would have very little meaning if we never had to suffer', and 'I feel uneasy when there is little work for me to do'.

2. *Explanations for Unemployment* (Furnham, 1982b). This is a 20-item inventory, with responses on a seven-point important-unimportant scale (see Table 1). Of the 20 items, seven contain individualistic explanations, nine societal, and four fatalistic, though these were randomized in the questionnaire.

3. *Attitudes to Social Security Scale*. This is a 17-item inventory, with a seven-point agree-disagree response scale (see Table 2). Of the 17 items, nine were drawn from Kallen & Miller (1971) and the remainder from Furnham (1982c).

Information was also obtained on the subject's age, sex, occupation (classified by the Registrar General's scheme), voting pattern (the party that they had voted for in the past and anticipate voting for in the future), and education (completed secondary school, some post-school education, or university education).

Most subjects completed the questionnaire in their place of work, while others were tested on further education courses or in their home. Responses were anonymous and the task took between 15 and 25 minutes. Subjects were debriefed immediately on completing the questionnaire, which provided considerable interest.

#### RESULTS

##### *Demographic variables*

Several one-way ANOVAs were calculated on demographic variables and PWE scores. There were no significant differences in respect of sex, age, occupational status, or vote, but there was a highly significant difference in terms of education ( $F=8.68$ ,  $P<0.001$ ). Subjects with only secondary education had a mean PWE score of 56.92, those with some tertiary (college) education a PWE score of 54.54, and those who had been to university a PWE score of 51.20. Thus the more educated a person the less he or she endorses the PWE.

##### *Explanations for unemployment*

Firstly, a one-way ANOVA was computed between those scoring low ( $PWE < 45$ ,  $n=40$ ), intermediate ( $PWE$  between 45 and 55,  $n=27$ ), and high ( $PWE > 55$ ,  $n=42$ ) on the PWE for each explanation for unemployment. These divisions were chosen by using one standard deviation above or below the mean PWE score.

Table 1 shows the means and  $F$  values for the three PWE groups over the 20 explanations, 10 of which show significant differences. By and large the results confirm the first

Table 1. Means and F values for the explanations for unemployment offered by the three PWE belief groups, and factor loadings after varimax rotation

Explanations	Low PWE	Middle PWE	High PWE	F value	Factor 1	Factor 2	Factor 3
<i>Individualistic</i>							
1 Unemployed people can earn more money on social security.	5.17	4.28	4.22	3.59*	0.78	0.11	-0.09
4 Lack of effort and laziness among unemployed people.	5.00	4.29	3.85	4.18**	0.81	0.10	0.05
7 Unemployed people don't try hard enough to get jobs.	5.05	4.03	3.80	5.09**	0.68	0.16	0.03
9 Lack of intelligence or ability among the unemployed.	5.00	5.07	4.57	1.02	0.15	1.13	-0.42
10 Unemployed people are too fussy and proud to accept some jobs.	5.42	3.85	3.78	3.78*	0.60	0.41	-0.18
12 Poor education and qualifications among unemployed people.	4.05	3.44	3.52	1.51	0.06	0.25	0.09
13 Unwillingness of unemployed to move to places of work.	3.72	3.62	3.00	3.43*	0.55	0.45	0.14
<i>Societal</i>							
2 The policies and strategies of the present government.	2.20	2.74	2.69	1.23	0.09	0.07	0.02
5 The policies and strategies of previous British governments.	2.52	2.66	2.67	0.13	0.00	0.10	0.36
11 Inefficient and less competitive industries that go bankrupt.	3.05	3.00	2.95	0.05	0.00	0.15	0.75
14 Inability of unemployed people to adapt to new conditions.	4.10	3.88	3.26	2.75	0.24	0.69	0.09
15 An influx of immigrants have taken up all available jobs.	5.47	5.44	4.11	7.29***	0.74	0.03	-0.13
16 Trade unions have priced their members out of a job.	3.73	3.18	2.83	2.98*	0.13	0.82	0.14
17 Overmanning in industry which has occurred for too long.	3.27	2.77	2.54	2.54*	0.00	0.81	0.24
18 Incompetent industrial management with poor planning.	2.65	2.70	2.69	0.02	-0.08	0.24	0.18
20 Weak trade unions that do not fight to keep jobs.	5.25	5.51	5.21	0.35	0.14	-0.31	0.05
<i>Fatalistic</i>							
3 Sickness and physical handicap among unemployed people.	5.37	5.88	4.83	3.68*	0.15	-0.18	-0.00
6 Just bad luck.	5.77	5.87	5.02	2.96*	0.21	0.03	0.27
8 Worldwide recession and inflation.	1.85	2.11	1.59	1.71	-0.06	0.13	0.67
19 The introduction of widespread automation.	3.60	3.70	3.16	1.12	0.17	-0.31	0.68
			Eigenvalue:		4.62	2.89	1.94
			Variance (%):		23.1	14.5	9.7

\* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

Note. These numbers represent the mean on the following scale: important 1 2 3 4 5 6 7 unimportant.

hypothesis (that high PWE scorers emphasize individualistic explanations), though it should be pointed out that all PWE groups tended to find societal explanations most important. Five of the individualistic explanations showed significant differences, all in the predicted direction. The only *a priori* classified individualistic explanation not to reach significance ('Poor education and qualifications among unemployed people') is perhaps better viewed as a fatalistic explanation, as people do not always have control over their own educational attainments.

Three of the nine societal explanations reached significance, all in the same direction. The largest difference concerned the belief that immigrants have taken local jobs, which the high PWE scorers found much more important than low PWE scorers, perhaps reflecting previous findings on the relationship between the PWE and the *F* scale (Mirels & Garrett, 1971; MacDonald, 1972). The other two significant explanations referred to trade union activities which insisted on high wages or overmanning practices.

Surprisingly, two of the fatalistic explanations reached significance, and both were found to be more important by high PWE scorers than low scorers. This is not in accordance with previous findings, which suggest that the PWE position is positively associated with the inclination to avow responsibility for personally relevant outcomes (Mirels & Garrett, 1971; Waters *et al.*, 1973). Yet it should be pointed out that these significant fatalistic explanations were overall viewed as unimportant; the differences merely reflected the degree of unimportance.

This examination of individual items is likely to increase the chances of making Type II errors. Hence a factor analysis (with varimax rotation) was performed and ANOVAs run on the resulting factor scores. This also provided an opportunity to test the validity of the *a priori* classification.

The right-hand columns of Table 1 show the factor analytic results, which are similar to previous analyses of this sort (Furnham, 1982*b*). In all, three main factors emerged (with an eigenvalue above 1.00), together accounting for 47.3 per cent of the total variance. They fit fairly well the *a priori* classification, although the second factor is rather mixed. The first factor, which accounted for nearly a quarter of the variance, contained five individualistic items and one societal. The second, which accounted for nearly 15 per cent of the variance, contained three highly loading societal explanations and two moderately loading individualistic explanations. The third factor, which accounted for nearly one-tenth of the variance, contained two fatalistic explanations and one societal item.

Three one-way ANOVAs were then calculated on the factor scores of each subject on each factor, the subjects being organized into three groups according to their PWE scores. Between-group differences in terms of the first ( $F=4.48$ ,  $P<0.01$ ) and second factor ( $F=2.84$ ,  $P<0.05$ ) were significant, but not in respect of the third ( $F=1.73$ , n.s.). In both significant factors the high PWE scorers scored more highly than the low PWE scorers, with moderate scorers almost intermediate. This is no doubt due to the individualistic items included in the second factor and the fact that high PWE scorers tended to support the societal explanations that loaded on this factor. Therefore, although the results are quite clear for the first factor, the second factor failed to confirm the prediction. However, as expected, there was no significant difference on the fatalistic factor.

#### *Attitudes to social security*

Firstly, a one-way ANOVA was computed between those scoring low (PWE < 45,  $n=40$ ), intermediate (PWE between 45 and 55,  $n=27$ ) and high (PWE > 55,  $n=42$ ) on the PWE for each attitude statement concerning social security payments to the unemployed.

Table 2 shows the means and *F* values for the three PWE groups over the 17 attitude statements, nine of which show significant differences in the predicted direction. On seven of the nine significant analyses high PWE scorers agreed more than low PWE scorers, the

Table 2. Means and F values for the attitude statements concerning social security by the three PWE belief groups, and factor loadings after varimax rotation

Statements	Low PWE	Middle PWE	High PWE	F value	Factor 1	Factor 2	Factor 3
1. There are too many people receiving social security who should be working.	4.00	3.90	2.52	6.40***	0.68	-0.06	-0.27
2. Many people getting social security are not honest about their needs.	4.17	3.77	3.00	3.78*	0.61	-0.24	-0.39
3. Many women getting social security are having illegitimate babies to increase their allowances.	6.35	6.18	5.61	2.65*	0.72	-0.16	0.13
4. Generally, we are spending too little money on social security.	3.80	4.59	4.80	3.42*	-0.15	0.17	0.78
5. Most of the people on social security who can work try to find jobs so that they can support themselves.	2.87	3.07	3.21	0.48	-0.18	0.72	0.25
6. One of the main troubles with social security is that it doesn't give people enough money to get along.	3.97	4.14	4.73	2.03	-0.13	0.33	0.75
7. A lot of people are moving to this country from other countries just to get the social security here.	5.22	4.48	4.00	3.77*	0.55	-0.20	-0.34
8. Many of the people on social security have very little talent, ability or intelligence.	6.40	4.96	4.72	11.54***	0.02	-0.15	-0.17
9. People are often ashamed of being on social security.	2.57	2.44	2.26	0.43	-0.18	0.75	-0.04
10. Many people in this country who are entitled to social security are too proud to claim it.	3.62	3.07	3.50	0.82	-0.04	0.27	0.08
11. A country's compassion and humanitarianism can be judged by its social security payments.	4.02	3.37	4.21	1.46	-0.24	0.42	0.44
12. Nobody can possibly enjoy living on social security for a long time.	3.32	3.22	3.07	0.18	-0.18	0.72	0.11
13. There would be fewer people on social security if there were more jobs.	2.22	2.33	2.23	0.04	-0.20	0.74	0.18
14. There is no reason why a person who is able to work should receive social security.	5.57	5.66	5.04	1.37	0.47	-0.22	-0.03
15. Social security is a right not a privilege.	2.51	2.60	3.64	4.29**	0.28	-0.07	0.65
16. Too many people on social security spend their money on drinking.	4.42	4.45	3.55	2.59	0.69	-0.17	-0.32
17. Having a social security system only encourages idleness.	3.97	3.07	2.41	6.15**	0.73	-0.24	-0.34
			Eigenvalue:		5.97	1.63	1.23
			Variance (%):		35.2	9.62	7.32

\* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$ .

Note. These numbers represent the mean on the following scale: agree 1 2 3 4 5 6 7 disagree.

intermediate group scoring between the two. Those seven items mainly concerned the idleness and dishonesty of unemployed social security recipients. On the other hand, both of the items with significant differences in the opposite direction, with high PWE scorers disagreeing more than low PWE scorers, reflected positive attitudes to social security benefits.

A factor analysis (with varimax rotation) was next performed and ANOVAs run on the resulting factor scores. Table 2 also shows the factor analytic results, which are very similar to those reported by Furnham (1982a). Three factors emerged with an eigenvalue of above 1.00. The first factor, which accounts for over a third of the total variance, appears to concern beliefs that unemployed social security recipients are *dishonest* about their needs or do various immoral things to acquire welfare benefits. The second factor, which accounts for nearly 10 per cent of the variance, concerns the loss of *self-esteem* associated with being on social security. Finally the third factor, which accounts for 7.3 per cent of the variance, concerns the *difficulty* experienced by unemployed people in living on the relatively small social security payments.

Three one-way ANOVAs were then calculated on the three factor scores of each subject, with the subjects organized into the three PWE groups. Two of the three were significant, the first ( $F=4.42$ ,  $P<0.01$ ) and the third ( $F=2.51$ ,  $P<0.05$ ), but the second was not ( $F=1.23$ , n.s.). On the first factor high PWE scorers had higher values than low PWE scorers, but the reverse was true for the third factor. Thus the hypothesis concerning the PWE and social security was confirmed, namely that low PWE scorers would tend to be in favour of social security (welfare) and sympathetic to people on it, while high PWE scorers would not.

#### DISCUSSION

As predicted, these results demonstrate that people who endorse the PWE tend to blame the unemployed for their predicament and to believe that unemployed people on social security are dishonest about their needs. This confirms MacDonald's (1971) finding that PWE believers were proponents of the ethics of social responsibility which tend to blame people rather than 'the system' for the source of their difficulty. It also confirms other findings which suggest that the PWE is part of a general conservative attitude pattern (Mirels & Garrett, 1971; MacDonald, 1972; Beit-Hallahmi, 1979; Joe *et al.*, 1981; Furnham, 1982c). The results are also in accordance with studies of lay beliefs about poverty, wealth, unemployment, taxation, social security, etc., which suggest that there are coherent lay 'theories' about such matters (Feagin, 1972; Feather, 1974; Forgas *et al.*, 1982; Furnham, 1982a,b,c). Thus a high PWE scorer is likely to explain poverty in terms of idleness and poor money management; wealth in terms of hard work, honesty and saving; unemployment in terms of laziness and lack of effort; and he or she is likely to be opposed to both taxation and social security. Nearly all the present results confirmed the above view, the only exception being two fatalistic explanations for unemployment which, contrary to expectation, high PWE scorers endorsed more than low scorers. Research into locus of control and the PWE (Mirels & Garrett, 1971; Waters *et al.*, 1975) would lead one to expect a significant association between them, yet MacDonald (1972) has found this to be true only for males.

These results have implications for strategies of social change and in helping the unemployed (Feather, 1974; Furnham, 1982b). Mirels & Garrett (1971) have pointed out that those endorsing the PWE appear to resist social changes, and are fairly rigid and conservative in their views. Blood (1969) has described how some attempts to assimilate hard-core unemployed people into the industrial workforce have attempted to resocialize them, by instilling PWE ideals. Yet, as has been suggested in studies concerned with alleviating poverty, the success or failure of change strategies depends on the extent to which change agents take into consideration the beliefs of those helping and those being

helped. Thus, as Kelvin (1980) has argued, PWE believers shift the attribution of responsibility for being unemployed from an internal personal level to an external societal level, because 'our culture is in a period of profound transition during which its most basic assumptions of several centuries are being modified to the point of losing their validity, and alternatives have yet to emerge' (p.310). Similarly, there are large fluctuations in mass unemployment, though high structural unemployment appears probable for years to come. Thus the relationship between PWE beliefs and attitudes to unemployment might change as a function of the number of people who endorse the PWE and the number of people unemployed at any one time.

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#### REFERENCES

- ALBEE, G. (1977). The Protestant ethic, sex, and psychopathology. *American Psychologist*, **32**, 150-161.
- BEIT-HALLAHMI, B. (1979). Personal and social components of the Protestant ethic. *Journal of Social Psychology*, **109**, 263-267.
- BLOOD, M. (1969). Work values and job satisfaction. *Journal of Applied Psychology*, **53**, 456-459.
- FEAGIN, J. (1972). Poverty: We still believe that God helps them who help themselves. *Psychology Today*, **6**, 101-129.
- FEATHER, M. (1974). Explanations of poverty in Australian and American samples: The person, society and fate? *Australian Journal of Psychology*, **26**, 109-126.
- FORGAS, J., MORRIS, S. & FURNHAM, A. (1982). Lay explanations of wealth: Attributions for economic success. *Journal of Applied Social Psychology* (in press).
- FURNHAM, A. (1982a). Why are the poor always with us? Explanations for poverty in Britain. *British Journal of Social Psychology*, in press.
- FURNHAM, A. (1982b). Explanations for unemployment in Britain. *European Journal of Social Psychology* (in press).
- FURNHAM, A. (1982c). Attitudes towards the unemployed receiving social security. *Human Relations*, in press.
- GANSTER, D. (1981). Protestant ethic and performance: A re-examination. *Psychological Reports*, **48**, 335-338.
- GREENBERG, J. (1977). The Protestant work ethic and reactions to negative performance evaluations on a laboratory task. *Journal of Applied Psychology*, **62**, 682-690.
- GREENBERG, J. (1978). Equity, equality and the Protestant ethic: Allocating rewards following fair and unfair competition. *Journal of Experimental Social Psychology*, **14**, 217-226.
- GREENBERG, J. (1979). Protestant ethic endorsement and the fairness of equity inputs. *Journal of Research in Personality*, **13**, 81-90.
- JOE, V., JONES, R. & MILLER, P. (1981). Value pattern of a Conservative. *Personality and Individual Differences*, **2**, 25-29.
- KALLEN, D. & MILLER, D. (1971). Public attitudes towards welfare. *Social Work*, **16**, 83-90.
- KELVIN, P. (1980). Social psychology 2001: Social psychological bases and implications of unemployment. In R. Gilmour & S. Duck (eds), *The Development of Social Psychology*. London: Academic Press.
- MACDONALD, A. (1971). Correlates of the ethics of personal conscience and the ethics of social responsibility. *Journal of Consulting and Clinical Psychology*, **37**, 443.
- MACDONALD, A. (1972). More on the Protestant ethic. *Journal of Consulting and Clinical Psychology*, **39**, 116-122.
- MERRENS, M. & GARRETT, J. (1975). The Protestant Ethic Scale as a predictor of repetitive work performance. *Journal of Applied Psychology*, **60**, 125-127.
- MIRELS, H. & GARRETT, J. (1971). Protestant ethic as a personality variable. *Journal of Consulting and Clinical Psychology*, **36**, 40-44.



- RIM, Y. (1977). Significance of work and personality. *Journal of Occupational Psychology*, **50**, 135-138.
- STONE, E. (1975). Job scope, job satisfaction, and the Protestant Ethic: A study of enlisted men in the US Navy. *Journal of Vocational Behavior*, **7**, 215-224.
- STONE, E. (1976). The moderating effect of work-related values on the job scope-job satisfaction relationship. *Organizational Behavior and Human Performance*, **15**, 147-167.
- WATERS, L., BATHIS, N. & WATERS, C. (1975). Protestant ethic attitudes among college students. *Educational and Psychological Measurement*, **35**, 447-450.
- WOLLACK, S., GOODALE, J., WIJTING, & SMITH, P. (1971). Development of the Survey of Work Values. *Journal of Applied Psychology*, **55**, 331-338.

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