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DEMOGRAPHIC AND PSYCHOSOCIAL CHARACTERISTICS OF MEN IN THE UNIT--ETC(U)
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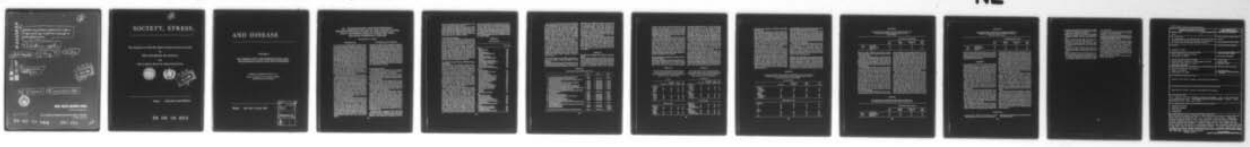

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THE PRODUCTIVE AND REPRODUCTIVE AGE— MALE/FEMALE ROLES AND RELATIONSHIPS

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26. DEMOGRAPHIC AND PSYCHOSOCIAL CHARACTERISTICS OF MEN IN THE UNITED STATES NAVY AS PREDICTORS OF THOSE MEN WHO DEVELOP VENEREAL DISEASE

RICHARD H. RAHE

INTRODUCTION

A chief value of the epidemiological method in medicine is the possibility of identifying susceptible individuals to the development of particular disease entities. In this book, for example, Dr. Tottie has mentioned several identifying characteristics of persons in Sweden currently reporting to medical authorities with gonorrhea. Statistically speaking, these persons tend to be in their second and third decades of life, often they are emigrants to urban centres, they seem to be without close attachments to friends or family, and they tend to have had recent troubles with authority (school, police, etc.). These demographic and psychosocial characteristics of persons reporting to medical attention with gonorrhea are in marked contrast to such characteristics of persons reporting to medical centres with diseases such as tuberculosis. Thus, by exploring more fully, the demographic and psychosocial characteristics of persons contracting venereal disease, the better are the eventual chances of being able to identify subjects at 'high risk' to develop this disease.

Venereal disease, the most common venereal disease of today being gonorrhea, represents one of the few diseases of man that he 'brings on himself'. He does so in his sexual relations with members of the opposite sex. In the case of males, the chances of development of venereal disease can be minimized by using a condom during sexual intercourse when the health of the partner is in doubt. Failure to do so may result from lack of education in this method of prevention of the disease, or unwillingness on the part of the individual to follow this health-protective procedure. Hence, demographic and psychosocial characteristics of persons with this disease might well include subjects' level of education as well as their past behaviour in regard to non-compliance with various regulations.

In dealing with young men in the United States Navy (U.S.N.), the following demographic and psychososical factors were selected to attempt to differentiate subjects who developed venereal disease over a six-month follow-up period: age, race, occupation, education, documented recent troubles with authorities, job satisfaction, subjects' recent life-changes information, and subjects' perception of their current body symptoms. It was hoped that such dimensions of our subjects might help to assess, among other possibilities, whether it was chiefly their lack of formal education or their rebellion against authority which lead to their contracting the disease.

MATERIALS AND METHODS

Subjects were 4507 U.S.N. enlisted men aboard six large ships during 6 to 8-month cruises in the Mediterranean Sea and in the western Pacific Ocean. Approximately 7 per cent of the subjects were Negro. Extremely small numbers of American Indians and Filipinos were on board, and because of their few numbers were excluded from the following analyses. The average age of subjects was 22 years. Average education was 12 years, or high-school graduation. Fuller descriptions of the men aboard the six ships, as well as other data regarding the missions of the ships, the men's jobs, and their complete illness histories while at sea has been previously reported (Rahe *et al.* 1970*a*, *b*; Gunderson *et al.* 1970; Rubin *et al.* 1976).

Demographic dimensions

Age. Subjects were grouped into four categories: men 17–20 years old; men 21–22 years old; men 23–25 years old; and subjects 26 or more years old.

Marital status. Subjects were grouped as to whether they were single (never married) or currently married. Divorced and widowed subjects were excluded due to their small numbers.

Education. Subjects were grouped into four categories: those men with only a grade school education (8 years of schooling); those with 1–3 years of high-school education (9–11 years of school); subjects who completed high school (12 years of school); and those men who had taken post-high-school formal education (13 or more years of schooling).

Occupation. The various occupational divisions aboard ship were classified into 'blue-collar' and 'white-collar' jobs, with the cooks and the cooks' helpers treated as a third group. Blue-collar jobs aboard ship included working on the decks, with the ship's gunnery, and in the engine rooms. White-collar jobs included personnel jobs, supply corps, medical and dental technicians, electronics specialists, and radio-men. Cooks' helpers were men who were trained to work elsewhere aboard ship but due to their lack of opportunity or aptitude for their chosen work, or sometimes due to administrative error, they were assigned to this rather unglamorous duty.

Disciplinary actions. Subjects' recent troubles with authority leading to disciplinary actions was scored (from 0 to 3 or more) encompassing the 2 years before follow-up. This information was gathered from the

men's own reports of their past disciplinary actions rather than questioning their superiors.

Race. Preliminary analyses of the data indicated that Negro sailors in our sample were slightly older (mean age of 23 years) and that they reported nearly twice the number of illness, per 1000 men per day, as did Caucasians. Thus, in the analyses to follow, Negro and Caucasian sailors were treated separately.

Psychosocial measurements

Job satisfaction. Estimations of subjects' job satisfaction was achieved through the summation of their responses to three questions regarding their work. The first question asked: 'How satisfied are you with your present job?' Subjects could answer: very much (4 points), satisfied (3 points), slightly dissatisfied (2 points), or very dissatisfied (1 point). Secondly, 'Do your present duties employ your abilities in the best possible way?' This question could be answered: very much (3 points), partly (2 points), or not at all (1 point). Thirdly, 'Are you often bored?' This question was answered either 'yes' (1 point) or 'no' (2 points). The higher a subject's total score for these three questions the higher was his adjudged job satisfaction.

The Schedule of Recent Experience (SRE) life-changes questionnaire

This questionnaire was originally intended systematically to document recently experienced life events, over the few years prior to the onset of tuberculosis (Hawkins *et al.* 1957). The design of the SRE has always been such as to include a broad spectrum of subjects' recent life-changes, including personal, social, occupational, and family areas of life adjustment.

For many years no allowances were made for the relative degrees of life change inherent in the various life-change events included in the SRE. A life change such as death of a spouse was counted the same as life change such as a residential move. In 1964, a scaling experiment for the various degrees of life-change inherent in the various SRE life-change events was carried out (Holmes and Rahe 1967).

The 42 life-change questions contained in the SRE were scaled according to the proportionate scaling method of Stevens (1966). A group of nearly 400 subjects, of both sexes, and of differing ages, race, religion, education, social class, marital status, and generation Americans were selected. They were instructed that one of the life-change events, marriage, had been arbitrarily assigned a life-change unit (LCU) value of 500. The subjects then were instructed to assign LCU values for all of the remaining life-change events in the SRE, using marriage as their module. These other LCU values were each to be in proportion with the 500 LCU arbitrarily assigned to marriage. For example, when a subject evaluated a life-change event, such as change in residence, he was to ask himself: 'Is a change in residence more, or less, or perhaps equal to the amount and duration of life change and readjustment inherent in marriage?' If he decided it was more, he was to indicate how much more by choosing a proportionately larger LCU value than the 500 assigned to marriage. If he decided it was less, he was to indicate how much less by choosing a proportionately smaller number than 500. If he decided it was equal, he was to assign 500 LCU. This process was repeated for each of the remaining life-change events in the SRE questionnaire (Rahe 1969*a*).

TABLE 26.1

Life-change events

	LCU values
Family	
Death of spouse	1000
Divorce	730
Marital separation	650
Death of close family member	630
Marriage	500
Marital reconciliation	450
Major change in health of family	440
Pregnancy	400
Addition of new family member	390
Major change in arguments with wife	350
Son or daughter leaving home	290
In-law troubles	290
Wife starting or ending work	260
Major change in family get-togethers	150
Personal	
Detention in jail	630
Major personal injury or illness	530
Sexual difficulties	390
Death of a close friend	370
Outstanding personal achievement	280
Start or end of formal schooling	260
Major change in living conditions	250
Major revision of personal habits	240
Changing to a new school	200
Change in residence	200
Major change in recreation	190
Major change in church activities	190
Major change in sleeping habits	160
Major change in eating habits	150
Vacation	130
Christmas	120
Minor violations of the law	110
Work	
Being fired from work	470
Retirement from work	450
Major business adjustment	390
Changing to different line of work	360
Major change in work responsibilities	290
Trouble with boss	230
Major change in working conditions	200
Financial	
Major change in financial state	380
Mortgage or loan over $10 000	310
Mortgage foreclosure	300
Mortgage or loan less than $10 000	170

Since this original scaling experiment, life-changes scaling studies have been performed in other locations in the United States and in several other countries. Results from all of these life-changes scaling experiments have been strikingly similar (Rahe 1969*b*). Most divergent results have been found between a small sample of Mexican-Americans versus white, middle-class Americans, and between a sample of Swedish subjects living in Stockholm versus comparable Seattlites (Kameroff *et al.* 1968; Rahe *et al.* 1971). Table 26.1 presents the list of 42 life-change events and their originally determined (Seattle) LCU values.

The practical results of these LCU weightings has been that subjects' recent life-changes information can now be given quantitative estimates in terms of the average degree or intensity of change inherent in the life-change events. In order to give incidence rates, and to find the most appropriate time interval for illness prediction, the arbitrary time intervals over which subjects' life-changes (LCU) have been summed have varied from 2 years, 1 year, 6 months, 3 months, 1 week, to 1 day.

The Health Opinion Survey (HOS) questionnaire: a measure of subjects' current perceptions of body symptoms

The Health Opinion Survey (HOS) questionnaire was originally devised by McMillan as a shortened version of the Cornell Medical Index/Health Questionnaire (McMillan 1957). McMillan's HOS is compared of 20 brief questions dealing with subjects' perception of their psychophysiology — for example. 'Do your hands ever tremble enough to bother you?' Questions are scored on a 1- to 3-point scale. The total HOS score ranges from 20 to 60 and the higher a subject's score, the greater is his current perceptions of his body symptoms. Table 26.2 presents the list of HOS questions along with their scoring format.

It has been previously shown that Navy subjects with high intensities of recent life-changes plus high concern over their body symptoms report high near-future illness rates. Conversely, subjects scoring low on both questionnaires were seen to report relatively few near-future illnesses (Gunderson *et al.* 1972; Rahe *et al.* 1972). Whether or not these relationships would hold for a single illness (e.g. gonorrhea) was a focus of this investigation.

RESULTS

Men with venereal disease, other illnesses, or no illness reports

No cases of active syphilis were reported by any of the men. In approximately half of the cases of suspected venereal infection laboratory confirmation of infection by Neisserian Diplococci was obtained. The other half of subjects with suspected venereal disease received a diagnosis of non-specific urethritis. For comparison

TABLE 26.2

Health Opinion Survey (HOS) questionnaire

	3 points	2 points	1 point
1. Do you have any physical or health problems at present?	( ) Yes		( ) No
2. Do your hands ever tremble enough to bother you?	( ) Often	( ) Sometimes	( ) Never
3. Are you ever troubled by your hands or feet sweating so that they feel damp and clammy?	( ) Often	( ) Sometimes	( ) Never
4. Have you ever been bothered by your heart beating hard?	( ) Often	( ) Sometimes	( ) Never
5. Do you tend to feel tired in the mornings?	( ) Often	( ) Sometimes	( ) Never
6. Do you have any trouble getting to sleep and staying asleep?	( ) Often	( ) Sometimes	( ) Never
7. How often are you bothered by having an upset stomach?	( ) Often	( ) Sometimes	( ) Never
8. Are you ever bothered by nightmares (dreams which frighten you)?	( ) Often	( ) Sometimes	( ) Never
9. Have you ever been troubled by 'cold sweats"?	( ) Often	( ) Sometimes	( ) Never
10. Do you feel that you are bothered by all kinds of ailments in different parts of your body?	( ) Often	( ) Sometimes	( ) Never
11. Do you smoke?	( ) Yes		( ) No
12. Do you ever have loss of appetite?	( ) Often	( ) Sometimes	( ) Never
13. Has any ill health affected the amount of work you do?	( ) Often	( ) Sometimes	( ) Never
14. Do you ever feel weak all over?	( ) Often	( ) Sometimes	( ) Never
15. Do you ever have spells of dizziness?	( ) Often	( ) Sometimes	( ) Never
16. Do you tend to lose weight when you worry?	( ) Often	( ) Sometimes	( ) Never
17. Have you ever been bothered by shortness of breath when you were not exerting yourself?	( ) Often	( ) Sometimes	( ) Never
18. For the most part, do you feel healthy enough to carry out the things that you would like to do?	( ) Often	( ) Sometimes	( ) Never
19. Do you feel in good spirits?	( ) Never	( ) Sometimes	( ) Most of the time
20. Do you sometimes wonder if anything is worthwhile any more?	( ) Often	( ) Sometimes	( ) Never

purposes, men who reported illnesses other than venereal disease during the cruise formed a second subgroup. A third subgroup of men were all those remaining men aboard ship who reported no illnesses throughout the follow-up cruise period. These last two subgroups of men were referred to as the 'other illness' and the 'no illness' subgroups.

Out of 4197 Caucasian sailors, 297 (7 per cent) developed confirmed gonorrheal infections; 304 (7 per cent) subjects were diagnosed as having non-specific urethritis; 2407 (58 per cent) subjects reported an illness other than confirmed or suspected venereal disease; and 1189 subjects made no illness reports throughout the cruise. For 310 Negro sailors, 79 were diagnosed as having contracted gonorrhea; 36 subjects were diagnosed with non-specific urethritis; 131 subjects reported an illness other than cofirmed or suspected venereal disease; and 64 subjects reported no illnesses throughout the cruise period.

Age and marital status as predictors of subjects contracting venereal disease

Percentage distributions of Caucasian and Negro subjects for age and marital status, according to the four subgroupings defined above, are presented in Table 26.3. It was seen that Caucasians who developed gonorrhea tended to be young — with a relatively high percentage of subjects 17–20 years of age. Caucasians with non-specific urethritis also showed a similarly young age distribution except for a higher percentage of subjects over 26 years of age than seen for the gonorrhea subgroup. If the age distributions for Caucasians with no illness reports is compared to the age distribution data for Caucasians with gonorrhea, a 2×4 chi-square analysis was found to show these age distributions significantly different at the 0·01 level.

Percentage distributions for age for the four subgroups of Negroes showed no concentration of young subjects in the venereal disease or suspected venereal disease subgroups (Table 26.3). A relatively low percentage of Negro subjects over 26 years of age was seen in the gonorrhea subgroup, however.

Perhaps due to the Caucasian subjects' younger mean age compared to Negro sailors, an overall higher percentage of Caucasians were of single marital status than were Negro subjects. For Caucasians, the highest proportions of single subjects were seen in the gonorrhea and non-specific urethritis subgroups. A 2×2 chi-square analysis of single to married percentages for Caucasians with gonorrhea to Caucasians with no illness reports was statistically significant at the 0·01 level. No similar trend was seen for Negro subjects (Table 26.3).

TABLE 26.3

Percentage distribution of age and marital status for persons contracting gonorrhea and non-specific urethritis compared to those men reporting other illness and those men with no-illness reports

(a) *Age*

	Gonorrhea	Non-specific urethritis	Other illnesses	No illness
Caucasians				
17–20 y	55	48	47	40
21–22 y	33	34	30	31
23–25 y	7	12	11	12
26+ y	5	6	12	17
Negroes				
17–20 y	36	34	42	40
21–22 y	36	31	25	27
23–25 y	22	17	9	11
26+ y	7	17	25	27

(b) *Marital status*

Caucasians				
Single	78	77	69	63
Married	22	23	31	37
Negroes				
Single	62	69	63	59
Married	38	31	31	41

TABLE 26.4

Percentage distribution of years of schooling and occupation for persons who contracted gonorrhea and non-specific urethritis compared to those with other illness and those with no reported illness

(a) *Education*

	Gonorrhea	Non-specific urethritis	Other illnesses	No illness
Caucasians				
8 years	5	7	4	4
9–11 years	32	26	29	29
12 years	55	60	57	57
13+ years	8	7	9	9
Negroes				
8 years	0	6	6	3
9–11 years	34	24	36	38
12 years	61	59	52	57
13+ years	5	12	6	2

(b) *Occupation*

Caucasians				
Blue collar	71	74	66	55
White collar	19	19	25	37
Cooks and helpers	10	7	10	9
Negroes				
Blue collar	61	69	57	54
White collar	29	19	31	27
Cooks and helpers	10	12	13	19

Education and occupation as predictors of subjects' contracting VD

The percentage distribution of subjects based upon their education and occupation is shown in Table 26.4. There were no concentrations of either Caucasian or Negro subjects with confirmed or suspected venereal disease in the lower educational categories. A similar analysis was performed for subjects' intelligence test results (standard intelligence test taken by the men upon their entrance into the U.S.N.) and again no evidence was seen for the gonorrhea or non-specific urethritis subgroups to have lower intelligence test scores than sailors in the other two subgroups.

For both Caucasians and Negroes, men with confirmed or suspected venereal disease tended to perform blue-collar jobs aboard ship, compared to subjects in the other illness and no illness subgroups. For example, 37 per cent of Caucasian subjects in the no illness subgroup had white-collar jobs compared to 19 per cent in both the gonorrhea and non-specific urethritis subgroups. A 2 × 2 chi-square analysis of white collar to non-white collar workers for gonorrhea plus non-specific urethritis subjects compared to the no illness subgroup showed this difference to be significant at the 0·01 level. Occupational data for Negroes showed similar but weaker trends to what was seen for Caucasian sailors (Table 26.4).

Job satisfaction and recent disciplinary action as predictors of subjects contracting veneral disease

The percentage distributions of subjects according to their job satisfaction scores and according to their numbers of recent disciplinary actions is presented in Table 26.5. For both Caucasians and Negro subjects, only a slight trend was seen for subjects with gonorrhea and non-specific urethritis to have registered lower job satisfaction scores compared to men in the other illness and the no illness subgroups.

Caucasians with gonorrhea tended to have had more recent disciplinary actions than members of the other three subgroups. A 2 × 4 chi-square analysis of the percentage distribution of gonorrhea subjects compared to no illness subjects for recent number of disciplinary actions showed these differences to be significant at the 0·01 level. No such trend was seen for Negro subjects (see Table 26.5).

Subjects' recent life-changes and perceptions of body symptoms as predictors of venereal disease contractants

Previous work with other U.S.N. subjects had shown that the combination of subjects' recent life-changes information (SRE questionnaire) with their perceptions of their current body symptoms (HOS questionnaire) predicted their near-future illnesses better than did either questionnaire separately (Gunderson *et al.* 1972:

TABLE 26.5

Percentage distribution of job satisfaction and disciplinary actions for persons who contracted gonorrhea and non-specific urethritis compared to those with other illness and those with no reported illness

(a) *Job satisfaction*

	Gonorrhea	Non-specific urethritis	Other illness	No illness
Caucasians				
3–4 (low)	21	17	22	17
5–7 (medium)	54	56	52	50
8–9 (high)	25	27	26	33
Negroes				
3–4 (low)	15	17	23	19
5–7 (medium)	57	63	48	49
8–9 (high)	28	20	29	32

(b) *Disciplinary actions*

Caucasians				
0	63	68	67	70
1	16	17	17	17
2	8	8	8	6
3+	13	7	8	7
Negroes				
0	62	69	64	57
1	19	17	18	24
2	6	14	9	10
3+	12	0	9	12

TABLE 26.6

Percentage distribution differences for life-changes and HOS scores for Caucasians with other illnesses versus those with no reported illnesses

		Life-changes magnitude (deciles)			
		Low (1–3)	Medium (4,5)	Medium–high (6,7)	High (8–10)
HOS scores	Low (20–25)	−4	1	−1	−1
	Medium (26–30)	−2	−1	0	+1
	High (31+)	0	+1	+1	+5

Rahe *et al.* 1972). Therefore, for the data to follow, subjects' responses to both psychosocial questionnaires was handled jointly.

Caucasian and Negro sailors' recent life-changes scores, along with their HOS questionnaire scores, are presented in the following tables as percentage *differences* between two subgroups. In other words, the percentage distributions of scores of one subgroup are subtracted from the percentage distribution of scores of another subgroup.

In Table 26.6 the distributions for the life-changes scores and the HOS scores for the Caucasian subgroup with no illness reports were subtracted from the percentage distributions for the life-changes and HOS scores for Caucasians with other illnesses. Thus, the numbers in the Table illustrate the percentage differences between the other-illness subgroup and the no-illness subgroup for each cell in the Table. These results bear out the findings of previous studies in that the other-illness subgroup showed between 1 per cent and 4 per cent few subjects in the low ranges of scores for both questionnaires than did the no-illness subgroup. Conversely, the other-illness subgroup had between 1 per cent and 5 per cent more subjects in the cells depicting high scores for both questionnaires than did the no-illness subgroup.

When the percentage distributions for recent life-changes and HOS scores for Caucasians with gonorrhea were compared to the percentage distribution of scores for the no illness subgroup (Table 26.7). Caucasians with gonorrhea had between 2 per cent more and 4 per cent fewer subjects in the low-scoring cells for both questionnaires than did the no-illness subgroup. The gonorrhea subgroup also showed between 1 per cent fewer to 5 per cent more subjects scoring in the high cells for both questionnaires than what was seen for subjects who reported no illnesses. Although these results were in the predicted direction, the HOS questionnaire appeared to be a stronger predictor of Caucasian subjects who developed gonorrhea than did their recent life-changes questionnaire results.

When the results of the SRE and HOS questionnaires were examined for Negro subjects, divergent results from those hypothesized were seen. The Negro gonorrhea subgroup's percentage distribution of scores was compared to the percentage distribution of scores for the Negro other illness plus the Negro no-illness subgroups. (Because of the small number in the no-illness group, both comparison groups were combined.) Negroes with gonorrhea had between 2 per cent fewer to 5 per cent more subjects in the low-scoring cells for recent life-changes and HOS score than did the combined group of Negro subjects with other-illness and with no-illness reports, as well as between 5 per cent fewer to 10 per cent more subjects scoring in the high life changes and HOS categories than did the combined

TABLE 26.7

Percentage distribution differences for life-changes and HOS scores for Caucasians with gonorrhea versus those with no reported illness

		Life-changes magnitude (deciles)			
		Low (1–3)	Medium (4,5)	Medium–high (6,7)	High (8–10)
HOS scores	Low (20–25)	−4	−2	−1	−2
	Medium (26–30)	−1	+2	+1	+3
	High (31+)	+3	+1	+5	−1

TABLE 26.8

Percentage distribution differences for life-changes and HOS scores for Negroes with gonorrhea versus those with other illnesses plus those with no-illness reports

		Life-changes magnitude (deciles)			
		Low (1–3)	Medium (4–5)	Medium–high (6, 7)	High (8–10)
HOS scores	Low (20–25)	+2	−2	+1	−4
	Medium (26–30)	+2	+5	−4	+10
	High (31+)	+1	−6	−5	+2

comparison group (see Table 26.8). Here, in contrast to what was seen for Caucasian subjects, the recent life-changes questionnaire appeared to be a better predictor of Negro subjects who went on to develop gonorrhea than did the HOS questionnaire.

COMMENT

This prospective study of U.S.N. men who developed venereal disease over a 6- to 8-month cruise period utilized both demographic and psychosocial characteristics of the men which had been of value in previous illness prediction studies. The utility of these predictors in determining subjects at high risk to develop venereal disease was assessed. Results suggested that the predictors studied were only modestly successful in determining subjects contracting venereal disease — and better in the case of Caucasian than for Negro sailors.

The greater percentage of Negro sailors contracting venereal disease, compared to Caucasian men, is difficult to explain. One would have to know more about the sexual exposures of the men. For example, Negroes may have been exposed to sexual partners different (and perhaps more diseased) from those of Caucasian men.

Caucasian men who contracted confirmed or suspected venereal disease were generally young, single, employed in blue-collar positions aboard ship, and tended to have had recent disciplinary actions. They also registered slightly elevated recent life-changes as well as elevated concern about body symptoms. There appeared to be no single predictor, or combination of predictors, which strongly identified subjects who contracted venereal disease.

For Negro sailors, only two of the predictors were of value. Occupational analyses showed a disproportionate number of Negro sailors showed increased numbers of subjects developing venereal disease who worked in blue-collar versus white-collar positions, and a trend was seen for Negro subjects with elevated recent life-changes to go on to develop venereal disease.

The fact that subjects' education, and intelligence test scores, did not identify those who developed gonorrhea casts doubt upon lack of (general) education as a cause of persons contracting venereal disease. All men aboard ship were exposed to periodic written and spoken warnings regarding venereal disease, and how to avoid it, before their on-shore leave periods throughout the cruise. Despite these specific educational programmes the brighter and/or more educated sailors fared no better with this disease than did his less intellectually or educationally endowed shipmate.

The lack of strongly positive results for the demographic and psychosocial predictors used in this study suggests that new predictors should be explored. Perhaps other indicators of subjects' impulsivity or measures of subjects' inability to delay gratification would be stronger correlates of their contracting venereal disease. Defiance of authority, as measured by the men's recent disciplinary actions, was a significant predictor for Caucasian subjects who contracted venereal disease; other measurements of subjects' anti-authority feelings and actions may also be valid predictors.

In keeping with the theme of this book, a final word might be directed toward the possibility of exploring dimensions of these men's relationships with women as possible predictors of men likely to develop venereal disease. It might be postulated that men who see women in a servile role of low social importance are more likely to choose sexual partners indiscriminately, with little concern over possible venereal disease. On the other hand, it may be the case that subjects who see women as having a positive and important social role may exert care to avoid his, or her, infection by Neisserian organisms.

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A prospective study of 4,507 U.S. Navy enlisted men aboard 6 large ships for those men who developed VD over a 6- to 8-month cruise period. Predictors studied included subjects' age, race, education, marital status, occupation, recent disciplinary actions, job satisfaction, recent life changes, and an anxiety symptom questionnaire. Results suggested that these predictors were only moderately successful in determining subjects who ultimately contracted VD --and then, only in the case of Caucasian sailors. Caucasian subjects with VD tended to be young, single, employed in blue collar positions aboard ship, and

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to have had recent disciplinary actions. They also registered slightly elevated recent life changes as well as anxiety symptoms. For Negro subjects, only occupation (blue collar positions) and their recent life changes (elevated) were of value as possible predictors.