

A QUANTITATIVE CROSS-CULTURAL STUDY
OF JOB SATISFACTION IN THE UNITED STATES,
ITALY AND PUERTO RICO

Thesis for the Degree of Ph. D.
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Hector Puig Arvelo

1959

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By

Héctor Puig Arvelo

A THESIS

Submitted to the School for Advanced Graduate
Studies of Michigan State University
in partial fulfillment of the
requirements for the degree of

DOCTOR OF PHILOSOPHY

Department of Psychology

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The author is also indebted to Howard E. Trier, whose research was basic in the preparation of the thesis.

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Dedication

A mi Madre

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Approved

A handwritten signature in dark ink, appearing to read "Henry Clay Smith", is written over a horizontal line. Below the line, there are several large, sweeping, and somewhat abstract strokes that extend downwards and outwards, possibly representing a stylized signature or a set of initials.

ABSTRACT

The study was designed to check the results obtained by Trier in testing eight hypotheses regarding job satisfaction among Michigan industrial workers with the results obtained with Italian and Puerto Rican industrial workers. The Italian and Spanish translations of Trier's questionnaire were administered to 196 Italians and to 398 Puerto Ricans. The primary method of analysis consisted of matching pairs of workers on all but one pertinent variable and computing the differences in satisfaction due to the variable. The variables included occupational status, income, company, age, sex, education, and father's occupational status. Questions on a Likert type scale were also used to measure the worker's conception of how his family, friends, and neighbors perceive his job.

The perceived status scores of the professional class were found to be the highest in the two countries studied (United States and Puerto Rico). In Puerto Rico, as well as the United States, the professional group perceptual scores differ significantly from the clerical and skilled classes. In Puerto Rico, however, the professional group did not differ significantly in their

perceived status scores from the semi-skilled and unskilled groups, as it occurred in the States. The correlations between satisfaction scores and the perceived status scores were .89 for the United States and .56 for Puerto Rico.

The results indicated that those of higher occupational status were significantly more satisfied in all three countries. Also, the American, Italian and Puerto Rican workers receiving higher wages were significantly more satisfied than those receiving lower wages.

As Trier had found in the United States, the average satisfaction from company to company in Puerto Rico scored significantly different even when the workers compared in different companies were equated for status, income and age. Three equated Italian companies, however, did not show significant differences.

Older workers were significantly more satisfied than younger workers in the United States and the direction of the results in Italy and Puerto Rico was consistent though not significant. The assumptions that women workers would be more satisfied, that workers at a higher occupational status would be more satisfied, and that those with less education would be more satisfied received only inconsistent and insignificant support. In Puerto Rico, rural and urban employees did not differ significantly in satisfaction, nor did early and late emancipated

employees.

The study illustrated the two major advantages of the cross-cultural method. First, the data from Puerto Rico and Italy extended the range of job satisfaction available for study; that is, the Puerto Rican results extended the range upward, the Italian results, downward. Second, the results showed that some findings in the United States have cross-cultural validity (for example, status, wages and company) and some do not (sex and age).

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INTRODUCTION

Our major purpose was to compare the determinants of job satisfaction found among United States workers by Trier (79) with the determinants of job satisfaction among Italian and Puerto Rican workers. As Whiting (85) has recently pointed out, cross-cultural studies have two general values: (1) they ensure that one's findings relate to human behavior in general rather than to a single culture; (2) they increase the range of variation of the variables studied. The cross-cultural method had its start with E. B. Tylor (81) in 1889 who used it in Great Britain to investigate cultural evolution. In the last fifteen years the cross-cultural method has not only become more popular but has changed in its theoretical orientation toward general behavior issues. A very recent example of this trend is R. B. Cattell's analysis of personality questionnaires administered in Italy, France and the United States that is to be published in the near future (7). The present study seems to be the first quantitative application of the method to the study of job satisfaction.

Hypotheses

In 1954, Trier (79) completed a study of job satisfaction among workers in Michigan. His major results were as follows:

- 1 - The higher a worker's occupational status, the greater his job satisfaction.
- 2 - The more favorable a worker perceived the attitudes of his family and friends to be toward his job, the greater his job satisfaction.
- 3 - Workers in different companies doing similar work at similar pay differed markedly in their satisfaction.
- 4 - Older workers were more satisfied than younger workers.
- 5 - Female workers were more satisfied than males.
- 6 - Workers receiving higher wages were more satisfied.
- 7 - Workers at a higher occupational status than their fathers were slightly more satisfied than workers who were not at a higher status than their fathers.
- 8 - Workers with higher education were slightly more satisfied than workers with less education on the same job.

The present study was designed to check these results among Puerto Rican workers. It was hypothesized

that the results would be the same. It was further hypothesized that similar results would be found among Italian workers from the analysis of data collected by Smith in Italy in 1955-56.* Throughout the present report the hypotheses are referred to by the numbers given above. In addition, two hypotheses (9 and 10), having reference only to Puerto Rican workers, were tested.

History of the Problem

Previous studies of job satisfaction have been organized under the hypotheses to which they are most directly related. Trier's results, because they are discussed in more detail later, are not included.

1. Occupational Status and Job Satisfaction

One frequent finding in the studies of job satisfaction has been that the higher the level of the occupation, the higher the morale. These studies covered a wide range of occupations from unskilled laborers through professional and managerial positions. The first findings go back to Hoppock (27) in 1935 and Super (76) in 1939.

* Henry Smith visited Italy in 1955-56 on a Fulbright Grant and administered job satisfaction questionnaires in three Italian companies.

Although Super was not able to include unskilled workers in his study, he concurred with Hoppock in finding that professional men and managers were more satisfied than the lower occupational groups. In Hoppock, professional and managerial personnel were the most satisfied, then sub-professional and supervisory personnel, and next white collars and skilled workers, followed by semi-skilled and unskilled workers. In Super's study, 80% of professional and managerial people were satisfied with their jobs, whereas only 52% of skilled and semi-skilled workers were satisfied.

Subsequent research has also supported the relation of job satisfaction to social status. Center's study (2) reports 25% of the unskilled workers but not one of the businessmen in his large national sample to be dissatisfied with their jobs. In a survey conducted by Elmo Roper for Fortune magazine (70), the answers to questions on the sustained interest of their jobs showed that professional people were most interested, salaried workers next, and factory workers least interested. Katz (42), in his study with employees of a large insurance firm, found that even when pay, age, and length of service are held constant, professional and semi-professional workers were more satisfied with their jobs than skilled workers. Mann (46), in a study of 8,000

non-supervisory employees, found that more highly skilled workers were higher in their overall satisfaction. Ash (2) noted the lowest morale in a steel plant among production and maintenance workers, higher in office and clerical workers, higher yet in supervisors, and highest among sales personnel.

Kelly (43) has shown indirectly the degree of satisfaction of unskilled workers. In his study only 8% of a group of coal miners stated that they would return to mining if they were 16 years old. Only 2 per cent of a group of textile workers said they would not prefer another job, in a Fortune survey (19). Thirty-nine per cent of factory workers said they would not choose the same occupation if they were to start over. In another Fortune survey (18), 16% of a group of clerks and manual workers said they would not enter their present occupations again if they had an opportunity in one with a higher status.

More recent studies (6, 23) have added support to the hypothesis in favor of greater satisfaction in higher status positions. In Cantoni's study (6) workers were found to improve both in personal adjustment and satisfaction as they gained in job status. Grivest (23) found that head nurses as a group were more satisfied than nurses in lower positions. Mann's (47) dissertation

also supported hypothesis 1. His most satisfied occupational groups were the service occupations of doctors and ministers.

Two studies done in 1958, however, are inconsistent with these conclusions. In one study (40) only those professional groups that received intellectual stimulation in their work were highly satisfied. In the other study (65) only those with high status among other professional people were highly satisfied.

2. Perception of Primary Group Attitudes and Satisfaction

Warner's (84) large scale investigation of a small New England city used social association as a basis for describing the class structure of the city as the people in the city themselves perceive it. Here, as in a number of other community studies (14, 15), the attitudes people had towards their jobs were often found to be part of the commonly held value system of the class rather than entirely an individual matter.

Bullock (5) suggested the way in which the social status of a job exerts its influence on the workers' attitudes. He measured the satisfaction of three different groups of employees and to all three he administered a questionnaire of 105 items concerned with social

factors which were assumed to be related to job satisfaction. When Bullock divided the three groups of employees into satisfied and dissatisfied and studied their answers to the 105 items, he found as the most discriminating ones the following: Did the members of your family think this was a good job? Did your neighbors where you lived think your labor was a good one? Is this organization generally considered a good one to work for?

Dyer (16) interviewed the families of 87 workers, and administered a job satisfaction questionnaire to the workers themselves. He reported that on the average the less satisfied worker perceived his family as being more frequently dissatisfied with his job than the family of the satisfied worker.

3. Company and Job Satisfaction

Worthy (87) wrote about the effect on employee attitudes of several aspects of company's organizational structure and philosophy. His observations emerged from his experiences with Sears, Roebuck and Company. He indicated that morale seemed to decrease with the increasing size of the physical plant or organization. He added that the fewer the horizontal levels the better. This not only allowed for more freedom of interaction among

employees and managers but also required some independent decisions of all executives. Sears attempted to protect the advantages of a small organization through administrative decentralization, which appeared to help in developing in the employees a feeling of responsibility for the tasks assigned. The results were judged as positive. Likewise, some General Motors Corporation results indicated the importance of company-wide policies in regard to satisfaction with a variety of specific factors in the essays submitted by employees in a "My Job" contest sponsored by the Corporation (17).

4. Age Differences and Job Satisfaction

Increase in morale with increasing age was noted by Hoppock (27, 35) in one of the earliest studies of job satisfaction among teachers, as well as in his classical study of job satisfaction in the town of New Hope, Pennsylvania. Super (77) tested a group with a wider range of occupations. He reported that the job satisfaction of nearly 300 men who were members of various hobby or avocational groups was substantial in the group aged 20 to 24; that men in the 25-34 year period became dissatisfied with their jobs; then in the 35-44 year period satisfaction ran high again. It decreased slightly between 45-54.

Benge and Copell (3), in a survey of workers in a confectionary plant, found that those under 20 had high morale, that the lowest level of morale occurred in those between 20 and 29, and that after 30, morale went up with increasing age.

In studies like those of Ash (2), Mann (46), Miller (51), Stagner (73), and Inlow (37), which included blue collar workers as well as college students, job attitudes of workers in the middle age groups were measured. The results showed a regular increase in morale with increasing age. More recent studies have been consistent with these findings. Robinson (68), in 1956, found older reading specialists (median age of 47) to be more satisfied than specialists with a median age of 37. Meltzer, in 1958, (50) comparing the attitude of workers in different age groups: below 30, 21-45, 46-60, and 61 years over, found the two oldest groups to be more satisfied. Increasing seniority and security feelings, broadening of interests, and a general rise in adjustment and satisfaction with life have variously been suggested as possible explanations for these findings.

Although fewer in number, there are some studies which do not fit the pattern. Stott (77) and Kornhauser and Sharp (45) found no support for the hypothesis

of increasing morale with age, but they dealt with very restricted age ranges (18-21 in one case). Shriver (71), in her study with airplane pilots, found that morale dropped with increasing age. Handyside, in 1956, (26) found that satisfaction was related positively but not significantly to age. Two studies in which no relation between age and job satisfaction were found are those of Habbe (24) and Quayle (64). Habbe compared insurance agents over and under 40. Quayle compared stenographers (19-31).

5. Sex Differences in Job Satisfaction

The studies comparing men and women in job satisfaction do not lead to any single conclusion. The idea, however, prevails that women, having greater difficulty in achieving occupational status, are more satisfied than men at the same level when they do achieve such status. In most cases, the studies made a rough overall comparison between men and women workers to whom a job attitude questionnaire had been administered. Habbe (24) and Stockford and Kunze (72) reported that women liked their jobs more than men did theirs. On the other hand, Cole (12) presented data showing women to be more critical of their jobs and of the managements of the companies than men. Peck (54) described women school

teachers as more poorly adjusted than men to their jobs. But a more recent study with teachers (53) showed women school teachers to be higher in satisfaction than men.

6. Differences in Wages and Job Satisfaction

The University of Michigan Survey Research Center (78) has concluded, on the basis of studies with many different kinds of workers, that the amount of money earned was itself less important in determining the worker's morale than his thinking that his pay rate was fair or unfair. There was some evidence, however, that income as such affected job attitudes. Centers and Cantlil (9) reported that the degree to which people were satisfied with their incomes went up as income went up. Troxell (80), using the interview method with 705 male workers in various occupational groups, concluded that those with higher incomes were more satisfied.

7. Occupational Mobility and Job Satisfaction

Whyte (86), in his study of the restaurant industry, and Gardner (21), in his work, Human Relations in Industry, both stated that persons who come from professional or business families often have severe difficulties in adjusting to jobs such as those of waitress

or factory worker because of the emphasis in such families on upward social mobility. Warner (84) suggested that if a worker's occupational status surpassed that of his father, he would be more satisfied. Dyer (16), in his comparison of high and low satisfied workers and families, reported that the children of the less satisfied workers were not proud of their fathers' jobs.

8. Education and Job Satisfaction

Although some studies reported lower morale among more educated workers, results were inconsistent. Centers and Cantril (9) found a drop in the workers' liking for his job with increased education (for that part of their national sample earning over \$60.00 per week). They did not find such a trend for workers earning less than \$60.00 per week. Mann (46) reported a similar tendency for "blue collar" workers with high education to have low job satisfaction. Mossin's results showed this to hold true for a group of female sales clerks (52). However, in dealing with home economics teachers, a study sponsored by the American Vocational Association (1) reported increased morale with education. Kessler (44), in a study of disabled veteran trainees, found similar results.

Other studies have failed to show any differences in job satisfaction among workers differing in amount of education. Ash (2) noted this result in a large sample of steel company employees. Quayle (64) obtained similar results with a group of stenographers. Kornhauser and Sharp (45) did not find any difference in job satisfaction with a population of factory girls. Fryer (20), investigating a group of men with varied occupations coming to an employment agency for help in finding jobs, also failed to show any differences in job satisfaction among workers differing in education.

Troxell (80) stated, from his interviews with workers, that those with more schooling were more satisfied. However, no control for variables such as money, status, etc., was reported.

9. Urban-rural Differences

Until recent years there has been little industry in Puerto Rico. When manufacturing started, it was concentrated in and around the capital (56). Most workers in rural communities have had only one position in manufacturing. Previously most of them had been employed in agriculture. Workers from the Metropolitan Area have had more industrial job opportunities. It was hypothesized that the rural employee who is having

his first industrial experience sees his work as a better way of earning a living and will thus be more enthusiastic about work than the experienced urban worker.

10. Emancipation in Puerto Rico

This hypothesis is based on the assumption that the failure of many employees is due to their relation with their parents. Late emancipation from parents and over-protection can be considered as the foundations for failing in certain demanding, challenging and responsible jobs. The hypothesis tested here is that individuals who are emancipated early have more positive attitudes toward "difficult" jobs (requiring more than average responsibilities) than those of late or no emancipation.

METHOD

An anonymous questionnaire was administered to 398 Puerto Rican employees of ten industrial firms established in different parts of Puerto Rico. The questionnaire used was the Spanish translation of the one used by Trier in 1954 with two hundred forty American employees and by Smith in an Italian translation to measure the satisfaction of 196 Italians in Milan, Italy (Apps. A, B, C).

Employees

Table I shows the employees in the samples from the U.S., Italy and Puerto Rico in terms of occupational status, mean age, mean income*, median education and number of males and females. The United States data are reproduced from Trier (79), p. 7. The Italian data collected by Smith were analyzed here and throughout the study by the present author. The wages of the Italians have been converted from lire to their dollar equivalents at the time of the present study (one dollar = 625 lire).

*The median was employed with the Italian data.

Sample data
only

Table I

EMPLOYEES USED IN THE UNITED STATES, ITALY AND PUERTO

RICO

Country	Occupational Status	Mean Age	Mean Income	Median Education	Male	Female	Employees Total
United States (Trier, 1954)	Managers	38.3	\$7,545	11.7	32	1	33
	Clericals	32.5	4,333	11.6	14	19	33
	Skilled	39.5	4,250	10.0	47	1	48
	Semi-skilled	38.2	4,095	10.1	71	21	92
	Unskilled	37.1	4,085	9.9	32	2	34
Total		37.1	\$4,856	10.6	196	44	240
Italy (Smith, 1955-1956)	Managers	(none in data collected)					
	Clericals	34.1	\$888	6.0	9	6	15
	Skilled	37.7	1,100	8.0	18	13	31
	Semi-skilled	34.5	635	6.0	28	109	137
	Unskilled	25.5	480	5.0	7	6	13
Total		32.9	\$775	6.2	62	134	196
Puerto Rico (1957)	Managers	33.0	\$3,542	13.5	20	4	24
	Clericals	30.4	2,370	12.5	22	19	41
	Skilled	29.5	2,006	10.0	106	34	140
	Semi-skilled	28.0	1,786	10.0	73	28	101
	Unskilled	30.6	1,323	8.3	76	16	92
Total		30.3	\$2,205	10.9	297	101	398

Table II
 ITALIAN AND PUERTO RICAN EMPLOYEES BY AGE AND ANNUAL
 INCOME

	Annual Income	Age			Total
		30 and under	30-40	40 and over	
Italy	\$480 or less	10	27	10	47
	\$481-950	2	81	37	120
	\$951-1440	0	14	10	24
	\$1441-1920	0	0	5	5
Total		12	122	52	196
Puerto Rico	\$1000-2000	36	197	30	263
	\$2001-3000	5	91	9	105
	\$3001-4000	1	13	4	18
	\$4001 +	0	7	5	12
Total		42	308	48	398

Table III

ITALIAN AND PUERTO RICAN EMPLOYEES BY EDUCATION AND BY
THEIR OCCUPATIONAL STATUS IN RELATION TO THAT OF THEIR
FATHERS'

Country	Years of Education	Father's Occupational Status in Relation to that of Employee			
		Below	Same	Above	Total
Italy	0-5	21	103	24	148
	6-10	14	13	14	41
	over 10	1	0	6	7
	Total	36	116	44	196
Puerto Rico	0-8	62	86	31	179
	9-12	46	64	24	134
	over 12	19	33	33	85
	Total	127	183	88	398

It is evident that the Puerto Rican and Italian employees had considerably lower incomes than the American workers.

Table II shows the same Italian and Puerto Rican employees analyzed by age and annual income. It is apparent that the Puerto Rican employees were somewhat younger and had considerably higher incomes than the Italian subjects. Table III compares the education and the occupational status of Italian and Puerto Rican employees in relation to the status of their fathers'. It may be seen that the Puerto Rican employees had considerably more education than the Italian subjects.

Companies

Table IV again shows the United States, Italy and Puerto Rico employees, this time by their occupational status and company. The companies are identified by initials that are used to identify them in the remainder of the study.

The six American companies were a motor (UA), machine (UB), milk (UC), wood (UD), furniture (UE), and screw manufacturing company (UF). All six were small industrial plants located in midwestern Michigan. The three Italian companies were: a textile plant (IA) and two large ice cream and candy manufacturing companies

Table IV
AMERICAN, ITALIAN AND PUERTO RICAN EMPLOYEES BY OCCUPA-
TIONAL STATUS AND COMPANY

Country	Company	Mgrs.	Cler.	Sk.	Semi-Sk.	Unsk.	Total
United States	UA	4	8	8	18	3	41
	UB	16	8	16	26	6	72
	UC	4	6	3	23	10	47
	UD	5	3	15	23	5	51
	UE	3	8	2	0	0	13
	UF	1	0	3	2	10	16
	Total	33	33	48	92	34	240
Italy	IA		4	10	37	8	59
	IB		4	13	47	2	66
	IC		7	8	53	3	73
	Total		15	31	137	13	196
Puerto Rico	PA	4	8	17	9	4	42
	PB	3	4	11	12	3	33
	PC	2	1	29	10	3	45
	PD	3	5	11	4	9	32
	PE	2	8	10	14	3	37
	PF	3	0	2	7	21	33
	PG	1	3	20	2	5	31
	PH	1	3	27	6	3	40
	PI	1	2	5	5	36	49
	PJ	4	7	8	32	5	56
	Total	24	41	140	101	92	398

(IB and IC). The three were located in Milan, the most industrialized area of Italy.

The ten Puerto Rican companies were: a shoe (PA), metal (PB), electric devices (PC), textiles (PD), plastics (PE), circuit breakers (PF), grinding wheels (PG), carpets (PH), furniture (PI), and field-coil assemblies company (PJ). Two of these factories were located in each of five parts of the country, north, south, east, west and center.

The factories from the northern part were the PA and PB. PA produces boy's, girl's and women's shoes. Sixty per cent of its personnel is female. The wages paid average about 55 to 63¢ per hour. PB produces aluminum extrusions to be used in "Miami windows" and doors. The wages compare favorably with the average in Puerto Rico and are above the minimum. The company is not unionized.

The factories from the southern part were the PC and the PD. PC produces molded tubular capacitors of various sizes used largely for electronic devices on radios, televisions, refrigerators, and automobiles. Wages paid are minimum wages or above. The workers are not unionized. PD produces cotton and linen cloth that are mostly processed in the island. Wages paid are those required by law. However, the wages set by the government

are below the national standard. This is true for all of these kinds of factories hiring primarily females. The dependency relationship of this factory with the main branch in the United States weakens and delays local management action on many issues. Workers are unionized to a local independent union.

The factories located more toward the east are the PE and the PF. PE produces plastic dinnerware. Employees receive a \$1.00 to a \$1.10 per hour, with no exception made for sex. Workers are not unionized. PF, a subsidiary branch of the home plant in the States, produces circuit breakers. Wages paid are above the minimum required by law. Local management operates almost independently from the home office with respect to most decisions. The workers are not unionized.

The factories from the west were the PG and the PH. PG produces silicon carbide and aluminum oxide abrasives used for the construction of grinding wheels for the automobile industry. Wages paid (\$1.00 to \$2.00) are above average for this type of community. Workers use protective masks while at work. Workers are not unionized. PH is a heavy mechanized industry which produces woolen and jute yarn for the manufacturing of carpets. Wages paid are the minimum. The company is unionized.

The industries from the center of Puerto Rico were the PI and the PJ. PJ produces field coil assemblies and armatures used frequently for power tools (drills), power saws and spray guns. Wages (more than \$1.00) are higher than any other employment in the neighborhood.

The Job Satisfaction Questionnaires

The job satisfaction questionnaire used in the U.S. study and described by Trier (1954) is shown in Appendix A. The abbreviated and translated form used in Italy is shown in Appendix B. The complete and translated form used in the Puerto Rican study is shown in Appendix C.

The Nature of the Questionnaires

The American, Puerto Rican and Italian forms of the questionnaires included a Likert type scale whose items aimed to serve as the measuring instrument for job satisfaction. This scale was constructed by Robert Bullock in 1952 and is an adaptation of Hoppock's satisfaction scale. A shortened form of this scale consisting of five of the 10 items in the original scale was used in Italy (App. B), while the complete form was used in U.S. (App. A) and Puerto Rico (App. C).

With the exception of the Italian form, the other questionnaires included a section consisting of five multiple choice questions concerning the worker's conceptions of how his family, friends and neighbors perceived his occupational status.

The questionnaires used in the three countries contained personal background information questions about the workers such as their age, marriage age, sex, income, etc. The Puerto Rican questionnaire included further questions concerning the nature of the subjects' work (ease or difficulty) and about the workers' attitude toward the difficulty level of the work.

Scoring of the Questionnaire

In scoring the American and Puerto Rican forms, total satisfaction scores were computed for each case by adding scores for questions one to ten; the minimum score was 10, the maximum 50. The total score of the employee's conceptions of how his primary group perceives his job was computed through adding scores for questions eleven to fifteen. In scoring the Italian form, total satisfaction scores were computed for each case by adding the score for the five questions (shortened form of the original scale) presented. Since the maximum score was 25 and the minimum 5, each score was multiplied by two

for comparison purposes.

Equivalence of the English and Spanish Forms of the Questionnaire

A comparison of scores on the Spanish questionnaire with scores on the English questionnaire was made by using 16 Puerto Rican bi-lingual students who were doing graduate work at Michigan State University during the spring term of 1958. The English form of the questionnaire and the Spanish form were given to the students with a two week period between administrations. The correlation between the scores of the two forms was .98. }
It may be concluded, therefore, that the two forms gave identical scores.

Reliabilities of the Questionnaires

The test-retest coefficient of reliability of the English form calculated at Ohio State University was .94. Successive split-half reliabilities of .93, .94 and .90 have also been obtained there. In Cheek's and Jones' theses the reliabilities found were .79 and .81. The reliability of the Spanish form corrected by the Spearman-Brown Prophecy formula was .87, and that for the Italian form was .67.

Validity of the English Form

The validity of the English form was originally obtained through comparison of its content with the judgments of a panel of experts at Ohio State University and reported as high (79). In 1954, Cheek (11) and Jones (41) were concerned with appraising the validity of the scale against other measures of satisfaction (e.g., S.R.A. inventory). Cheek found the scale's validity to be .31 and Jones found it to be .43.

Administration of the Questionnaire

Related Materials

The Spanish form of the questionnaire was accompanied by a covering letter. It explained the study, emphasized the omission of the subject's name, added the idea of significance and value that the subject's cooperation was to have, and stated the support of the University of Puerto Rico to the study (See Appendix D).

In two small factories, all of the employees were called together and given the questionnaire. In the other companies one or more departments completed the questionnaire. In all cases, the employees completed the questionnaire in a group meeting (generally held

in the last 10 or 15 minutes of working time, but in one case after working time). At these meetings the subjects were informed about the study. The questionnaire was given to each subject and the cover letter was read. The importance, seriousness and confidential nature of the study were emphasized. In one factory (PL) the subjects completed the questionnaires in the presence of the author. In the others, employees completed them at home and returned them the next day.

Method of Analyzing the Data

A general procedure followed in testing each of the hypotheses with the Italian and Puerto Rico samples was to attempt to equate the groups compared on all variables except the one being tested. For example, in dealing with the differences in satisfaction between males and females, an attempt was made to keep them evenly represented for the social status classes, as well as among the age, income and education distributions. The procedure sometimes drastically reduced the number of matched pairs.

The "t" test was used to determine the significance of the differences for seven of the ten hypotheses. For the other three hypotheses those dealing with the effect of social status, the relation between status and

job's perception, and the effect of companies' policies, an analysis of variance was employed. The Tukey D Test was then applied to locate significant differences. For example, in the case of the differences between the status groups an analysis of variance gave an $F = 3.42$ which proved to be significant at the 5% level. The Tukey D test showed a $D = .95$ which suggested that the differences among those status groups which surpassed .95 were significant. Such differences were found between managers and clericals, managers and skilled, management and unskilled, clericals and semi-skilled, semi-skilled and unskilled.

RESULTS

The method of testing the hypotheses in Italy and Puerto Rico was the same as that employed to test these hypotheses with the sample from the United States in 1954. The results of Trier's U.S. study are included for comparison purposes.

Hypothesis 1: The higher the employee's occupational status, the more job satisfaction

In testing the hypothesis in Italy and Puerto Rico, the average satisfaction score for each of the social statuses represented in each of the two countries was obtained. The unequated scores and the statistical analysis of the data are included in Apps. E and F. Although there are minor differences, the analysis of variance clearly suggests a trend toward greater satisfaction for higher status groups in Italy and Puerto Rico. The results are consistent with those obtained by Trier when he analyzed the American job satisfaction scores in 1954. In Trier's investigation, sex and age were held constant in testing the hypothesis of status in view of the fact that he found age and sex to influence

significantly the job satisfaction of the American employees. Since the author wanted the Italian and Puerto Rican results to be comparable to those obtained in the Trier study, the same procedure was followed (Table V).

The Italian and Puerto Rican samples were separated into the following three groups: the indifferent or dissatisfied, the mildly satisfied, the highly satisfied. The division followed Trier's method: 34.9 below, "dissatisfied"; from 35-42.9, "mildly satisfied"; and 43 and over, "highly satisfied".

The United States data

The analysis of the data in status in the United States showed the difference between the professional class and the semi-skilled class, and professional class and unskilled classes to be significant at the 1% level.

The Italian data

In Italy the clerical class was matched with the skilled, semi-skilled and unskilled classes respectively. In each comparison the difference exceeded the level required for significance ($D = 3.54$). When all possible comparisons were made between the skilled, semi-skilled and unskilled classes, omitting the clerical

Table V

AVERAGE SATISFACTION SCORES AND STATUS

(All males with varying statuses matched for age)

Country	Occ. St.	N	Percentages			Aver. Total Satisfaction
			Ind. or Dissat.	Mildly Sat.	Highly Sat.	
United States	1	27	11.1	40.7	48.2	41.5
	2	13	7.7	61.5	30.8	41.1
	3	38	15.8	65.8	18.4	39.0
	4	63	28.4	47.8	23.9	38.1
	5	25	26.9	57.7	15.4	36.8
Italy	1	-	-	-	-	-
	2	9	33.3	66.7	0	36.4
	3	18	27.8	61.0	11.1	35.5
	4	25	40.0	52.0	8.0	35.8
	5	5	60.0	40.0	0	24.8
Puerto Rico	1	20	0	35.0	65.0	43.4
	2	20	35.0	25.0	45.0	39.6
	3	82	7.4	59.7	32.9	41.9
	4	51	9.8	23.5	66.7	42.8
	5	43	32.5	37.2	30.3	39.3

group, no significant differences were found. Despite the lack of differences within these three classes, the results suggest the general trend that the higher the status, the higher the job satisfaction.

The Puerto Rican data

In Puerto Rico differences among equated status groups did not follow the same order as in the United States and Italy. The analysis of variance was significant. The D test (1.37) showed that managers, skilled and semi-skilled were significantly more satisfied than the unskilled class. The professional class differed significantly from the clerical, skilled and unskilled classes. However, semi-skilled and skilled classes were significantly more satisfied than the clerical class.

Hypothesis 2: The more favorable the attitude the worker feels that his family and friends have toward his job, the greater will be his satisfaction

This hypothesis was tested through computing coefficients of correlation between satisfaction scores and the perceived status scores. The correlations were .89 for the United States and .56 for Puerto Rico.

Information concerning the perceived status scores was not available for Italian data.

Since the actual occupational status appeared to be an important variable in job satisfaction, it was important to check if the perceived status effects in job satisfaction were or were not confounded by the occupational status effects. Thus, the average perceived status score for each occupational status was computed and the significance of the differences was tested.

Table VI gives the average perceived status scores for each social status in United States and Puerto Rico. In the United States, the Tukey D test showed that the difference between the perceived scores among the occupational status groups corresponded to the differences found in satisfaction among the status groups.

The difference between the professional group and the unskilled and semi-skilled groups was reported as significant at the 1% level. Between the professional group and the skilled group the significance was found to be borderline (10% level). In Puerto Rico, the D test obtained showed ($D = 56$) that the professional class and the clerical and the skilled class differed significantly in their perceived scores. However, the professional group did not differ significantly in their perceived status scores from the semi-skilled and the unskilled

Table VI
 PERCEIVED STATUS SCORES FOR OCCUPATIONAL CLASS IN THE
 UNITED STATES AND PUERTO RICO

Country	Occupational Status	N	Perception of others' opinions
United States	1	33	21.5
	2	33	21.3
	3	43	20.6
	4	92	19.1
	5	34	19.9
Puerto Rico	1	24	21.8
	2	41	19.9
	3	140	21.2
	4	101	21.7
	5	92	21.3

groups. As in the case of the social status analysis (Table V), the clerical group ranked low in average perceived status score and the semi-skilled group surpassed the clerical group significantly. The unskilled group surpassed the clerical group significantly, too. In Puerto Rico, as in the United States, the perceived and occupational status scores were highly correlated. This might suggest a combined effect of occupational status and the perceived primary group opinion of one's job on job satisfaction.

Hypothesis 3: Workers in different companies doing similar work and receiving similar pay differ in their satisfaction

Testing the differences between companies requires companies with sufficiently large samples so that enough subjects would be left after matching the companies on relevant variables. When the hypothesis was tested in the United States (79), only three companies out of six were used. In Italy it was possible to use all the three companies in the sample. In Puerto Rico five companies out of a total of ten were used.

Table VII shows an analysis of the companies used from each of the countries with their average satisfaction scores. Trier found for the United States data that companies UA and UB were significantly different

Table VII
 JOB SATISFACTION BY COMPANY IN THE UNITED STATES, ITALY
 AND PUERTO RICO

	Company	N	Median Age	Average Dollar Income	Average Satisfaction
United States	UD	45	40.7	3,482	41.7
	UC	45	36.9	5,600	40.2
	UB	45	39.7	4,922	37.3
Italy	IA	53	32.0	742	34.2
	IB	53	41.1	729	32.9
	IC	53	36.1	702	33.7
Puerto Rico	PC	24	27.5	2,467	41.6
	PF	24	28.8	2,757	43.5
	PD	24	32.5	2,012	38.9
	PH	23	29.2	1,690	42.6
	PG	23	31.5	2,483	41.9

from company UC. In Italy the companies used were not significantly different from each other.

In Puerto Rico, the analysis of variance was significant and the Tukey D test was used. A "D" equal to 1.96 suggested that four of the five companies were significantly more satisfied than the PD, although not significantly different from each other. Company P had the highest average satisfaction score of all the companies compared.

The differences between job satisfaction in the companies in Italy and Puerto Rico were not consistent with either income or age (Table VII). Therefore, the hypothesis emerges that differences between the companies themselves were related to job satisfaction. Available information suggested that there were differences in company policies and management procedures in the companies compared in the United States and Puerto Rico. The importance in satisfaction of these aspects concerning company related variables will be further discussed.

Hypothesis 4: The older the workers, the higher the job satisfaction

The hypothesis was tested among Italians and Puerto Ricans by dividing the population into one group

of 40 years and older and one of 30 years and younger. This was the method employed by Trier when he tested the hypothesis among Americans (79). All factors were controlled in matching the two groups in each country. After matching, in the United States the average income reported of those over 40 was \$4,697, and of those under 30 was \$3,946. The average education reported for the over 40 group was 10.6 years and of the under 30 group 11.4 years. In Italy the average income of those over 40 was \$708, and of those under 30 exactly the same. Both the over 40 group and the under 30 group were people with elementary education. Of the 45 matched pairs in Puerto Rico, 41 were males and 4 females. Each group compared had the same status distribution as the other. The average income of those over 40 was \$2,368, and of those under 30 \$2,068. The average education of the over 40 group was 9.1 years and of the under 30 group 8.9 years.

Table VIII indicates the average satisfaction scores and the nature of the significance of the difference.

In the United States the older workers were found to be significantly more satisfied than the younger workers. The significant differences in satisfaction obtained between the age groups in the States is considered

Table VIII

THE DIFFERENCE BETWEEN THOSE OVER 40 AND THOSE UNDER 30
IN UNITED STATES, ITALY AND PUERTO RICO

	N	Over 40	Under 30	Diff.	"t"	Significance
United States	60	41.9	38.3	+3.6	3.56	1% level of confidence
Italy	39	35.8	34.4	+1.39	.99	Not signif.
Puerto Rico	45	42.2	41.6	+ .55	.54	Not signif.

to be confounded by differential incomes among them.

The statement will be explained later. While the differences between young and old workers in Italy and Puerto Rico were in the same direction, the differences were not significant.

Hypothesis 5: The closer the status of women approximates that of men, the higher will be their satisfaction compared to that of men

This hypothesis was tested in the three countries by first attempting to match male subjects to female subjects on all variables. In the United States

study, the average age reported of the females was 33.4 years, while that of the males was 34.3 years. The average income of the females was \$2,981, while that of the males was \$4,255. In Italy the 40 matched pairs, with an equal status distribution, had an average age of 38.2 years for the females, and an average age of 39.0 for the males. The average income of the females was \$754 and that of the males was \$754. In Puerto Rico the 87 matched pairs, with an equal status and education distribution, had an average age for the females of 33.1 and an average age for the males of 36.6. The average income for the females was \$1,790 and for the males was \$2,025. Table IX indicates the average satisfaction scores of each group in each country and the nature of the significance of the difference.

Table IX
SEX DIFFERENCES IN JOB SATISFACTION

	N	Females	Males	Diff.	t Test	Significance
United States	43	41.8	38.8	+3.0	2.69	2% level of confidence
Italy	40	33.9	34.6	-0.6	.40	Not signif.
Puerto Rico	87	42.8	41.3	+1.5	1.82	Not signif.

The United States figures indicated the female group was significantly more satisfied than the male group. In the samples studied from Italy and Puerto Rico the results showed no significant difference among the sex groups. In the case of Puerto Rico, however, the trend supports the hypothesis. This was not the case in the Italian sample. The retention of American and Puerto Rican findings on the hypothesis are not clear since there is a possibility of selective factors in matching which will be discussed further.

Hypothesis 6: The higher the employees' wages, the greater the job satisfaction

This hypothesis was tested by dividing the N of each country into two groups: those receiving high salaries and those receiving low salaries. Employees were again matched as fully as possible in all variables. In the United States, those over \$4,000 were matched to those under. In Puerto Rico those over \$2,000 were matched to those under. In Italy those earning over \$960 were matched to those earning less than \$960.

In the United States the average income of those over \$4,000 was \$5,662, while that of those below was \$3,000. The age of those above was 35.7 years and

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of those below 33.5 years. In Italy 22 matched pairs which provide an equated status, sex, age and education distributions had an average income of \$1,128.96 for the high-salaried group and an average income of \$480.00 for the lower salaried group. The average age of the high salaried group was 40.0 and of the low salaried group, 38.7 years. In Puerto Rico 88 matched pairs, 30 females and 58 males in each group presented same status, age and education distributions. The average income of those with high salaries was \$2,900 and of those with low, \$1,720. The age of those higher in income was 31 years and of those lower in income was 28 years.

Table X indicates average satisfaction scores for both groups and the significance of the differences.

Table X

DIFFERENCE IN JOB SATISFACTION BETWEEN EMPLOYEES WITH
HIGH AND THOSE WITH LOW SALARIES

	N	<u>Satisfaction Score</u>			"t"	Significance
		High Sal.	Low Sal.	Diff.		
United States	53	40.2	37.9	+2.3	2.53	2% level of confidence
Italy	22	36.4	29.5	+6.9	3.72	5% level of confidence
Puerto Rico	88	42.4	40.5	+1.9	2.29	1% level of confidence

The difference between high and low wage groups was significant in all three countries. Cross-culturally, it appears that the relation between money and job satisfaction is the most firmly established of all relations studied.

Hypothesis 7: Workers who surpass the occupational status of their fathers are more satisfied

The hypothesis was tested through matching those above their fathers' occupational status with those the same as their fathers' occupational status or below this level. The Italian and Puerto Rican groups were again matched as closely as possible on all variables. This had also been done with the U.S. data. In the United States the average age reported for those above their fathers' level was 35.8 years and that of those below was 34.2 years. The average income of those above their fathers' occupational status was \$4,524 per year and those below \$4,513 per year. In Italy the average age for those above their fathers' level was 36.4 years, while that of those below was 34.0 years. The average income of those above their fathers' occupational status was \$754 and of those below \$818 per year. In Puerto Rico the average age for those above their fathers' level was 27.7 and that of those below was 26.4. The average

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income of those above their fathers' occupational status was \$2,100 and of those below \$1,940.

Table XI indicates average satisfaction scores for both groups in the United States, Italy and Puerto Rico. There was no significant difference between any of the groups tested and the direction of differences was inconsistent. The hypothesis, therefore, is not supported.

Table XI
THE DIFFERENCE IN JOB SATISFACTION BETWEEN THOSE ABOVE
FATHERS' STATUS AND THOSE NOT ABOVE FATHERS' STATUS

	N (matched pairs)	Above Fathers'	Same or Below Fathers'	Diff.	"t"	Signif.
United States	37	40.5	38.5	+2.00	1.75	Not sig.
Italy	30	33.7	34.7	-1.00	.63	Not sig.
Puerto Rico	36	41.4	41.5	- .11	.09	Not sig.

Hypothesis 8: The higher the education of the worker,
the greater the satisfaction

This hypothesis was tested in the United States by dividing the population into a group with high school

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education or above, and one with eighth grade education and below. The same two types of groups were obtained in Italy and Puerto Rico. In Italy, however, the groups were composed of those subjects with elementary education or below and those with educational levels beyond the elementary.

The groups compared in the three countries were equated for occupational level, pay, sex, company, and father's occupational status. In the United States the reported average age of those with higher education was 38.9 years, and of those with the lower education, 41.0 years. The income of those higher educated was \$4,395 and of those with less education \$4,383. In Italy the average age of those with higher education was 25.3 years, and of those with lower education 26.4 years. The income of those higher educated was \$758, and of those with lower education \$710. In Puerto Rico the average age of those with higher education was 26.8, and of those with lower education 29.8. The income of those higher educated was \$2,106, and of those with less education \$1,651.50. Results of the analysis are given in Table XII.

The differences between the two groups in all three countries were not significant, and their direction was inconsistent. The hypothesis, therefore, is not

supported. Education appears to have no relation to job satisfaction in the present samples.

Table XII
DIFFERENCE IN JOB SATISFACTION BETWEEN EMPLOYEES WITH
LOW AND HIGH EDUCATION

	N (matched pairs)	Lower Educ.	Higher Educ.	Diff.	"t"	Signif.
United States	61	39.4	39.9	-.50		Not sig.
Italy	40	34.8	34.3	+.52	.88	Not sig.
Puerto Rico	130	42.6	42.2	+.52	.36	Not sig.

Hypothesis 9: Rural workers are more satisfied than
urban workers

The hypothesis was tested by comparing factories located in the central agricultural part of the island (PI and PJ) with those of the metropolitan area (PE and PF). The results obtained are presented in Table XVIII. Sex and income (\$2,000 or below) were kept constant.

The t test for paired comparisons employed showed that the differences were not statistically

significant. The hypothesis, therefore, was not supported (Table XIII).

Table XIII
RURAL AND URBAN JOB SATISFACTION SCORES

Employees	N	Average Job Satisfaction	Diff.	t test	Significant Difference
Rural	57	41.52	1.62	.72	Not signif.
Urban	57	43.14			

Hypothesis 10: Workers who have achieved emancipation early are more satisfied than those who have achieved it much later

The hypothesis was tested by selecting a certain age to serve as an arbitrary line for division of subjects into two groups. The emancipation age selected was 25. Thus, subjects emancipated before 25 were considered as having emancipated themselves early and those who emancipated after 25 years were considered as having emancipated themselves late. The questionnaire used for the study in Puerto Rico contains a question about the nature (difficulty or ease) of the work of the subjects (item 16). The two groups mentioned above (matched in terms of the nature of their work and in other variables)

were compared as to their average satisfaction scores.
(See Table XIV).

The results do not support the hypothesis;
the difference is insignificant and the direction is
opposite to that predicted.

Table XIV

JOB SATISFACTION OF EARLY AND LATE EMANCIPATED PUERTO
RICAN WORKERS EMPLOYED IN DIFFICULT JOBS

N	Early Emancipa- tion Job Satisfaction	Late Emancipa- tion Job Satisfaction	Diff.	t test	Sig. Diff.
34 pairs	41.61	41.91	-.30	.12	Not sig.

DISCUSSION

Table XV summarizes the results of the hypotheses tested in the United States, Italy and Puerto Rico and of other studies relevant to the hypotheses.

Only differences in status and wages were significantly related to job satisfaction in all these countries. The result is supported by the results of 11 other studies in the case of status and 4 others in the case of wages. The perceptual hypothesis also was significantly supported in the two countries, where it was studied and was consistent with the results of 4 other studies.

The company hypothesis was significantly supported in the United States and Puerto Rico and the direction of results in Italy was consistent. The age hypothesis was significantly supported in the United States, the direction of results was consistent in Italy and Puerto Rico and 12 of 20 other studies supported the hypothesis. The sex, mobility and educational hypotheses received only inconsistent support.

The Discrepancy among Clerical Workers

The status results in Italy and Puerto Rico

Table XV

SUMMARY OF EVIDENCE ON THE HYPOTHESES

Hypotheses	Present Study			Other Studies		
	United States	Italy	Puerto Rico	N	Number Supporting Hypothesis	Number not Supporting Hypoth.
1. Status (Table V)	4.7*	4.5*	2.8*	11	(27,69,70,76,8,42,46,2,6,23,47)	--
2. Perception (Table VI)	2.4*	--	1.9*	4	(84,14,15,5)	--
3. Company (Table VII)	4.4*	1.3	4.6*	2	(87,17)	--
4. Age (Table VIII)	3.6*	+1.4	+ .6	12	(27,73,77,51,36,3,37,46,2,4,68,50)	7 (20,45,64,74,24,71,26)
5. Sex (Table IX)	2.7	- .7	+1.6	4	(4,24,72,5)	2 (54,12)
6. Wages (Table X)	2.3*	+6.9*	+1.9*	4	(24,72,10,53)	--
7. Social mobility (Table XI)	+2.0	-1.0	- .1	4	(86,21,84,16)	--
8. Education (Table XII)	- .5	+ .5	+ .5	2	(52,46)	7 (9,45,64,1,2,44,80)

*Difference significant and in direction predicted

+Difference insignificant but in direction predicted

-Difference insignificant and not in direction predicted

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were generally consistent with those obtained by Trier (79) and with other studies. The differences among the status groups, however, did not follow the same order in all countries. In the United States the clerical workers were shown to be significantly more satisfied than the skilled and semi-skilled workers. In Italy and Puerto Rico they were not. In Italy the clerical workers were not more satisfied than the skilled or semi-skilled workers. In Puerto Rico, when the status groups were equated for age and sex, the clerical workers were shown to be significantly less satisfied than the skilled and semi-skilled workers. The findings concurred with Super's results (76). He found the commercial category to have a smaller percentage of satisfied people than the skilled and semi-skilled workers.

The relatively low scores obtained for the Italian and Puerto Rican clerical workers appears to be related to economic circumstances in these countries. The clericals in Puerto Rico were apprehensive at the time that the study was conducted because the applicability of the law regarding minimum salary was under discussion and the law favored skilled and unskilled workers who were earning less than \$1.00 an hour. In Italy, where money ranks first among the factors creating differences in satisfaction, the clerical workers were receiving lower

salaries than the skilled workers. An equally likely explanation regarding both countries concerns the relationship between academic preparation and the expected socio-economic rewards. Clerical workers might feel that they should receive more than the lower echelons.

An Explanation of the Higher Satisfaction of Puerto
Ricans

The Puerto Ricans' higher percentages in the highly and mildly satisfied categories is related to four aspects of this country's development, which appears to enhance industrial jobs regardless of status. A review of references on the economic development of Puerto Rico (55, 56, 57, 58, 59, 60, 61, 62, 63), suggests that:

(a) the unemployment and underemployment situation in the island gives relatively high status to anyone who is employed.

(b) factory jobs provide a new, challenging and prosperous work atmosphere which is attractive to workers.

(c) salaries in manufacturing concerns are much higher than those paid in other kinds of work.

(d) industrial employment provides more job security than that provided by the seasonal sugar and

coffee work opportunities. These factors apply with less force in Italy and with considerably less force in the United States.

The Importance of the Socio-Perceptual Factor

The opinions of family, friends and neighbors influence the worker's satisfaction not only in the United States but also in Puerto Rico. The agreement of these results to Warner's (84), Bullock's (5), Davis' and Gardner's (14) and Trier's (79) lend confirmation to Warner's ideas. He has stated that the attitudes which people have toward their jobs were not entirely an individual matter. Encouragement ought to be given to research which would study job satisfaction in relation to social factors.

The Company Factor

The results of the present study give strong support to the idea that company and management procedures are an important variable in job satisfaction. In Puerto Rico only one of the five compared companies, PD (with the lowest satisfaction), had irregular shifts, lacked some kind of bonus or incentive system and did not show evidence of workers' participation in company issues.

Trier reported that the least satisfied of the American companies (UB) offered the workers neither a union nor any representation on policy committees. There appeared to be no major differences among Italian companies, which might suggest that there are more similarities with respect to management policies than among the American and Puerto Rican companies. In any case, the results indicate that companies which make an intelligent effort to remove sources of dissatisfaction are very likely to have these efforts rewarded. From a research point of view, it would be extremely desirable to study the differences and determinants of the differences more intensely and in a much larger sample of companies.

The Age Factor

The fourth hypothesis was concerned with the relationship between age and satisfaction. In the United States study where the hypothesis was supported, adequate matching for income was not possible. In Puerto Rico and Italy where the hypothesis was not supported, adequate matching for income was possible. It would be desirable to control these factors to assess their possible influences. There is a further possibility that age and income interact to produce effects in satisfaction exceeding their separate influence. The evidence preceding

this study is not conclusive as to whether morale increases with age. This is suggested by some studies (27, 73, 77, 51, 36, 3, 37, 46) but not by others (20, 45, 64, 74, 24, 71, 26). Future research should compare age groups in similar economic circumstances to see if income or security accounts for the difference.

The Sex Factor

In reference to the fifth hypothesis, the U. S. figures indicated significantly higher job satisfaction scores for the females than for the males. However, the interpretation of these differences is not unequivocal. There are possible effects from the process of matching on income. In order to equate the two sexes on income a selective factor probably operated to admit lower income males who would be expected on the basis of other evidence to have lower job satisfaction.

In Puerto Rico the females also exceed males in job satisfaction but the difference was not significant. Here, once again, income may have operated to produce differences but perhaps in different direction than for the U.S., since the average income for females approaches that of the average per capita income.

In Italy, where there was closer matching for age and income, the differences in job satisfaction scores

for the two sexes is small, not significant, and in the opposite direction from the previously discussed differences for the U.S. and Puerto Rico. This appears to strengthen the importance of wages as a variable in job satisfaction.

A frequent explanation of the sex differences in the States is that women have surpassed men in job satisfaction because they have been in less actual need of work and can quit more readily than men can (79). Another likely explanation of the sex differences is that women are less motivated to seek positions because they realize that they have little opportunity to achieve this goal. However, to apply adequately these interpretations to the findings of this study, it is necessary to get better matching in each country by bringing in groups which are of the same relative income, avoiding matching which would either bring females up to males or males down to females.

The Relative Importance of Wages

The sixth hypothesis (6) which stated that those receiving higher wages would be more satisfied than those receiving low wages has been cross-culturally supported. The Americans, Italians and Puerto Ricans receiving higher salaries are more satisfied than those

receiving low salaries. However, the rank of income as an important variable in satisfaction decreased proportionately from the most economically troubled country to the least economically troubled. In Italy wages created the highest significant differences in satisfaction (T-XV). In Puerto Rico income ranks third in creating satisfaction differences (Table XV). In the U.S., however, wages rank 5th among the variables creating differences in job satisfaction. In Italy money was a much more important variable in creating satisfaction differences than any other variable (including status) in all three countries. The application of the principle of the hierarchy of needs would explain the findings in terms of the immediacy of the money need in Italy as compared to that existing in Puerto Rico and the United States (48, 49). Hence, the common generalization that money is the most important determinant of job satisfaction should be modified. The comparison of samples from even more countries with varied economic standards can provide grounds for sounder conclusions.

Comments on Unsupported Hypotheses

The seventh hypothesis (#7) which posited that workers who surpassed the occupational status of their fathers would be more satisfied than those who did not

surpass them was not supported in either the American, Italian or Puerto Rican sample. The results are in disagreement with Warner's findings (84) and Whyte's (86) and Gardner's (21) observations. The growing tendency or emphasis on individual achievement which operates in the family as well as elsewhere may account for these results.

The last hypothesis (#8) which related education and satisfaction was not supported in the present study. The research evidence had been inconclusive as to whether workers with less education are more satisfied than those with higher education (9, 45, 64, 1, 2, 44, 80, 52, 46). The present study is more in agreement with those studies which have not shown differences between educational groups on job satisfaction (2, 64, 45). The explanation given by Trier to his United States results was that a selection factor such as income or age may have entered to account for the differences. In the Italian and Puerto Rican study the results could have been clouded by other variables which surpassed education in importance as determinants of job satisfaction in these countries.

The two hypotheses (#9 and #10) locally tested in Puerto Rico, concerning differences in satisfaction between rural and urban employees and between early and

late emancipated employees, were not supported. However, again other confounded variables could account for these results. Because of the relative newness of the two hypotheses in the field, research to test them with other samples may be called for.

Advantages and Limitations of the Method of Matching

Investigations carried out in the field often use the method of matching as a way of dealing with samples which have not been randomly selected. In the present study of job satisfaction, the method of matching permitted us to isolate differences on one particular variable while holding constant the effects of the other variables studied. In dealing with the variables tested in each of the hypotheses on job satisfaction, the variables which were controlled were those shown by other studies to be related to job satisfaction. For example, some studies (Table XV) have indicated that age was related to job satisfaction. Therefore, age was one of the variables used in matching when testing the differences in job satisfaction between the groups on each of the other variables (e.g., sex, status, company, income, social mobility, and education). Conversely, sex was used as one of the controlled variables when studying differences in job satisfaction

between age groups. Again, similar relationships were used for testing each of the hypotheses. The advantage of matching the age groups on the other variables considered as positively related to job satisfaction (e.g., sex, status, income, education, etc.) was to reduce the possible confounding effects which could be produced by these variables in which the age groups were matched. That is to say, that if differences in satisfaction between the age groups were found, the matching made it more likely that the differences could be attributed to the age factor rather than to the effects of either sex, status, income, or education. On the other hand, if there had not been matching, differences apparently due to age might really reflect an income difference because older workers also tend to earn more.

The advantage of the matching method should not obscure the limitations of the procedure. There are also several objections to the use of the method. First, any interaction or combined effects of the variable being tested and the matching variables is lost or obscured. For example, age as a factor in job satisfaction might interact with income to produce some joint effects in satisfaction which would exceed their separate influence. Because by matching only one factor is considered at a time, any such joint effects cannot be detected. Second,

you run the risk of introducing a bias in some unknown and thus some controlled variable which might also be related to the variable being tested. That is, factors not studied in this investigation related to job satisfaction and to any of the variables being tested might enter and introduce bias effects. Of two men matched with the same income, one younger and one older, the young man has been more successful (as evidenced by his attaining the given income level earlier). We cannot be sure that the observed difference is not attributable to degree of occupational success rather than to age. Third, the act of matching generally reduces the sample size resulting in a loss of reliability and also a possible bias in the sampling so that we may come to have an artificial sample which fails adequately to represent the real life situation under study. A further objection to the method of matching is that the variables for which the compared groups are equated might not have the same meaning for each of the groups. For example, in matching sex groups for age and income in testing for differences in job satisfaction, a definite age or a definite income might not be perceived in the same way by both males and females. That is, at the same salary level women are more likely to be more satisfied with their income than are men.

Even though there was the risk of incurring

any or all of the possible disadvantages mentioned above, matching was considered to allow for a sharper test of the hypotheses than could be achieved by unmatched groups in which the variables would be confounded and which would also run the risk of being biased or unrepresentative to some unknown degree.

The Cross-Cultural Method

The present study amply illustrates the two major advantages of the cross-cultural method mentioned by Whiting (85). For example, the data from Puerto Rico and Italy greatly extend the range of job satisfaction available for study; the Puerto Rican results extend the range upward, the Italian results, downward. Further, the results show that some findings in the United States have cross-cultural validity (for example, status, wage, and company) and some do not (sex and age). Thus, even the relatively crude and superficial application of the cross-cultural method employed in the present study has provided enlightening results which could not have been obtained by restricting the study to the United States. Refinements and extensions of the method in the future should give even more valuable information.

More specifically, certain hypotheses seem to be directly suggested for further testing by cross-cultural methods.

(a) The lower the satisfaction of biological needs, other things being equal, the closer the relation between wages and satisfaction.

(b) The more adequate the satisfaction of biological needs, the more influential will become the occupational status factor.

(c) The lower the general status of women and the more voluntary their entrance in the labor force is, the greater their satisfaction will be compared to men on similar jobs.

(d) Job satisfaction increases with age because of the decreasing desire for upward mobility.

SUMMARY

In 1954 Trier (79) tested eight hypotheses regarding job satisfaction with Michigan industrial workers. The present study checked Trier's results with those obtained for Italian workers with the analysis of data collected by Smith in Italy in 1955-1956 and with those obtained for Puerto Rican workers with the data collected by the author in 1957-1958. The Italian and Spanish translations of the English questionnaire used by Trier were administered to 196 Italians and to 398 Puerto Ricans.

Only differences in status and wages were significantly related to job satisfaction in all three countries. The perceptual hypothesis which stated that those workers who thought their families and friends perceived their occupation as relatively high were more satisfied than those who did not was significantly supported in the two countries where it was studied (United States and Puerto Rico).

The company hypothesis which stated there were differences in satisfaction among companies doing similar work and receiving similar pay was significantly supported in the United States and Puerto Rico, and the direction of the results in Italy was consistent. The results give

support to the idea that company and management procedures are an important variable in satisfaction.

The age hypothesis which stated that older workers were more satisfied than younger workers was significantly supported in the United States and the direction of the results was consistent in Italy and Puerto Rico. The hypotheses which stated higher satisfaction for: females than for males; for workers who surpassed the occupational status of their fathers than for those who did not; and for those with less education than for those with higher education; received only inconsistent support. Two hypotheses were locally tested in Puerto Rico, concerning differences in satisfaction between rural and urban employees and early and late home emancipated employees. Neither was supported.

The study illustrates the two advantages of the cross-cultural method mentioned by W. M. Whiting (85). The data from Puerto Rico and Italy extend the range of job satisfaction available for study; the Puerto Rican results extend the range upward, the Italian results downward. Further, the results show that some findings in the United States have cross-cultural validity (for example, status, wages and company) and some do not (sex and age).

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APPENDICES

APPENDIX A

The following statements will help you to describe how you feel about your job. Think about your experience while working on this job and check those statements which most accurately and honestly tell how you feel about it.

1. Place a check mark in front of the statement which best tells how good a job you have.
 - ☐ A. The job is an excellent one, very much above the average.
 - ☐ B. The job is a fairly good one.
 - ☐ C. The job is only average.
 - ☐ D. The job is not as good as average in this kind of work.
 - ☐ E. The job is a very poor one, very much below the average.
2. Place a check mark in front of the statement which best describes your feelings about your job.
 - ☐ A. I am very satisfied and happy on this job.
 - ☐ B. I am fairly well satisfied on this job.
 - ☐ C. I am neither satisfied nor dissatisfied--it is just average.
 - ☐ D. I am a little dissatisfied on this job.
 - ☐ E. I am very dissatisfied and unhappy on this job.
3. Check one of the following statements to show how much of the time you are satisfied with your job.
 - ☐ A. Most of the time.
 - ☐ B. A good deal of the time.
 - ☐ C. About half of the time.
 - ☐ D. Occasionally.
 - ☐ E. Seldom.
4. Place a check mark in front of the statement which best tells what kind of an organization it is to work for.
 - ☐ A. It is an excellent organization to work for--one of the best organizations I know of.
 - ☐ B. It is a good organization to work for but not one of the best.
 - ☐ C. It is only an average organization to work for. Many others are just as good.
 - ☐ D. It is below average as an organization to work for. Many others are better.
 - ☐ E. It is probably one of the poorest organizations to work for that I know.
5. Place a check mark in front of the statement which best tells how your feelings compare with those of other people you know.
 - ☐ A. I dislike my job much more than most people dislike theirs.
 - ☐ B. I dislike my job more than most people dislike theirs.
 - ☐ C. I like my job about as well as most people like theirs.

- ☐ D. I like my job better than most people like theirs.
- ☐ E. I like my job much better than most people like theirs.
6. Place a check mark in front of the statement which best tells how you feel about the work you do on your job.
- ☐ A. The work I do is very unpleasant. I dislike it.
- ☐ B. The work I do is not pleasant.
- ☐ C. The work is just about average. I don't have any feeling about whether it is pleasant or not.
- ☐ D. The work is pleasant and enjoyable.
- ☐ E. The work is very enjoyable. I very much like to do the work called for on this job.
7. Check one of the following which best describes any general conditions which affect your work or comfort on this job.
- ☐ A. General working conditions are very bad.
- ☐ B. General working conditions are poor--not so good as the average for this kind of job.
- ☐ C. General working conditions are about average, neither good nor bad.
- ☐ D. In general, working conditions are good, better than average.
- ☐ E. General working conditions are very good, much better than average for this kind of job.
8. Check one of the following statements which best tells how you feel about changing your job.
- ☐ A. I would quit this job at once if I had anything else to do.
- ☐ B. I would take almost any other job in which I could earn as much as I am earning here.
- ☐ C. This job is as good as the average and I would just as soon have it as any other job but would change jobs if I could make more money.
- ☐ D. I am not eager to change jobs but would do so if I could make more money.
- ☐ E. I do not want to change jobs even for more money because this is a good one.
9. Suppose you had a very good friend who is looking for a job in your line of work and you know of a vacancy in this organization which your friend is well qualified to fill. Would you:
- ☐ A. Recommend this job as a good one to apply for?
- ☐ B. Recommend this job but caution your friend about its shortcomings?
- ☐ C. Tell your friend about the vacancy but not anything else, then let him decide whether to apply or not?
- ☐ D. Tell your friend about the vacancy but suggest that he or she look for other vacancies elsewhere before applying?
- ☐ E. Try to discourage your friend from applying by telling the bad things about the job?

10. On the line below, place a check mark to show how well satisfied you are with this job. You may place your mark anywhere on the line either above one of the statements or between them.

Completely More dissat- About More satisfied Completely
dissatisfied isfied than half than dissatis- satisfied
satisfied and half fied

11. Most of my friends think I have an excellent job.
☐ A. Strongly agree.
☐ B. Agree.
☐ C. Neither agree nor disagree--not sure.
☐ D. Disagree.
☐ E. Strongly disagree.
12. This organization is generally considered a good one to work for.
☐ A. Strongly agree.
☐ B. Agree.
☐ C. Neither agree nor disagree--not sure.
☐ D. Disagree.
☐ E. Strongly disagree.
13. My family thinks I have a very good job.
☐ A. Strongly agree.
☐ B. Agree.
☐ C. Neither agree nor disagree--not sure.
☐ D. Disagree.
☐ E. Strongly disagree.
14. Most of my neighbors think my job is a very good one.
☐ A. Strongly agree.
☐ B. Agree.
☐ C. Neither agree nor disagree--not sure.
☐ D. Disagree.
☐ E. Strongly disagree.
15. The presence of this organization in our community is a very good thing.
☐ A. Strongly agree.
☐ B. Agree.
☐ C. Neither agree nor disagree--not sure.
☐ D. Disagree.
☐ E. Strongly disagree.

Personal Background Information

The following information is necessary for purposes of cross tabulation and analysis of data obtained on these forms. Please check the items as accurately as you possibly can.

1. Check the highest level of education which you have completed.
 - ☐ A. Fourth grade or under.
 - ☐ B. Eighth grade.
 - ☐ C. Business school or technical school.
 - ☐ D. Junior college.
 - ☐ E. College with A.B. or comparable.
 - ☐ F. Masters degree.
 - ☐ G. Ph.D. degree.
 - ☐ H. High school.
2. Check one of the following to indicate the age group in which you belong.
 - ☐ A. 20 years of age or younger.
 - ☐ B. 20 to 30.
 - ☐ C. 30 to 40.
 - ☐ D. 40 to 50.
 - ☐ E. 50 to 60.
 - ☐ F. Over 60.
3. Sex
 - ☐ A. Male.
 - ☐ B. Female.
4. Please estimate your average income.
 - ☐ A. Less than \$2,000.
 - ☐ B. \$2,000 to \$4,000.
 - ☐ C. \$4,000 to \$6,000.
 - ☐ D. \$6,000 to \$8,000.
 - ☐ E. \$8,000 to \$12,000.
 - ☐ F. Over \$12,000.
5. What is your official occupational title? _____

6. Name the department in which you work (such as: accounting, central inspection, assembly, etc.). _____

7. Name the company for which you work. _____

8. Please tell what kind of work you do in your department.

9. What was your father's occupation? _____

APPENDIX B

Ottobre, 1955

Si prega di non scrivere il proprio nome su questo foglio. Le seguenti spiegazioni l'aiuteranno a descrivere come lei si sente riguardo al suo lavoro. Controlli queste dichiarazioni che descrivono le sue sensazioni.

1. Metta un segno (x) davanti alla dichiarazione che meglio indica come lei si sente riguardo al lavoro preferito.
 - ☐ A. Il lavoro é eccellente molto al di sopra della media.
 - ☐ B. Il lavoro é piuttosto buono.
 - ☐ C. Il lavoro é di bontá media.
 - ☐ D. Il lavoro non é cosí buono come la media di simili lavori.
 - ☐ E. Il lavoro é pessimo, molto al di sotto della media.
2. Metta un segno (x) davanti alla dichiarazione che meglio descrive le sue opinioni riguardo al lavoro.
 - ☐ A. Io sono molto soddisfatto e felice di questo lavoro.
 - ☐ B. Io sono abbastanza soddisfatto di questo lavoro.
 - ☐ C. Io non sono né soddisfatto né scontento di questo lavoro é un lavoro di valore medio.
 - ☐ D. Io sono poco soddisfatto del lavoro.
 - ☐ E. Io sono molto insoddisfatto e scontento di questo lavoro.
3. Controlli le seguenti dichiarazioni per mostrare per quanto tempo é soddisfatto del suo lavoro.
 - ☐ A. La maggior parte del tempo.
 - ☐ B. Una buona quantità del tempo.
 - ☐ C. Circa metà tempo.
 - ☐ D. Talvolta.
 - ☐ E. Raramente.
4. Metta un segno (x) davanti alla dichiarazione che meglio specifica quali sono le sue opinioni in confronto a quelle degli altri.
 - ☐ A. Mi dispiace il mio lavoro molto piú che non dispiaccia agli altri.
 - ☐ B. Mi dispiace piú il mio lavoro che non dispiaccia agli altri.
 - ☐ C. Mi piace il mio lavoro come agli altri.
 - ☐ D. Mi piace il mio lavoro meglio che agli altri.
 - ☐ E. Mi piace il mio lavoro molto piú che agli altri.

5. Faccia un segno davanti ad una delle seguenti dichiarazioni riguardo la sua opinione sul cambio del lavoro.
- ☐ A. Lascerei immediatamente questo lavoro se avessi qualcosaltro da fare.
 - ☐ B. Prenderei qualsiasi altro lavoro nel quale potessi guadagnare quanto guadagno qui.
 - ☐ C. Questo lavoro é buono in generale e lo farei come qualunque altro ma cambierei se potessi guadagnare di piú.
 - ☐ D. Non desidero cambiare lavoro ma lo farei per un maggiore compenso.
 - ☐ E. Non voglio cambiare lavoro nemmeno per un maggior compenso, perché questo é un buon lavoro.

Si prega di controllare le verie parti il piú accuratamente possibile.

- | | |
|--|--|
| 1. Sesso | 3. Quanti anni ha? |
| ☐ A. Maschile | ☐ A. 20 o meno? |
| ☐ B. Femminile. | ☐ B. Da 20 a 40 |
| | ☐ C. Da 40 in poi? |
| 2. Quanti anni di scuola? | 4. Quale é la vostra paga per un anno? |
| ☐ A. Da 0 a 5 | ☐ A. Da 0 a mezzo milione di lire |
| ☐ B. Da 5 a 10 | ☐ B. Da mezzo a due milioni |
| ☐ C. Da 10 in poi | ☐ C. Oltre i due milioni? |
| 5. Quale é la sua occupazione? _____ | |
| 6. Quale é l'occupazione di suo padre? _____ | |

APPENDIX C

Universidad de Puerto Rico
COLEGIO DE AGRICULTURA Y ARTES MECANICAS
Mayaguez, Puerto Rico

C U E S T I O N A R I O

Este cuestionario pretende averiguar algunos datos sobre la satisfacción que siente el obrero puertorriqueño en el trabajo. En el llenarlo usted estará cooperando con una bonita investigación.

PARTE I.

1. Marque con una (x) la línea de abajo que mejor identifique "cuan bueno es su trabajo."

- ☐ A. El trabajo es excelente, mucho mejor que el "promedio de ellos." (trabajos).
- ☐ B. El trabajo es bastante bueno.
- ☐ C. El trabajo es del promedio. (regular)
- ☐ D. El trabajo no es tan bueno como el "promedio" en esta clase de trabajo.
- ☐ E. El trabajo es uno muy pobre, "muy por debajo del promedio."

2. Marque con una (x) la línea que mejor describe el grado de satisfacción que usted deriva de su trabajo.

- ☐ A. Estoy muy satisfecho y contento en este trabajo.
- ☐ B. Estoy bastante satisfecho con este trabajo.
- ☐ C. No estoy ni satisfecho ni insatisfecho. Así...así.
- ☐ D. Estoy un poco insatisfecho con este trabajo.
- ☐ E. Estoy muy insatisfecho y disgustado con este trabajo.

3. Marque con una (x) la línea que señala la parte del tiempo en su trabajo que usted está satisfecho con éste.

- ☐ A. Casi todo el tiempo.
- ☐ B. Una gran parte del tiempo.
- ☐ C. Aproximadamente la mitad del tiempo.
- ☐ D. Ocasionalmente. De cuando en cuando.
- ☐ E. Raras veces.

4. Señale con una (x) la línea que mejor describe la clase de organización en y para la que usted trabaja.

- ☐ A. Es una excelente organización para trabajar en ella. Es una de las mejores que conozco.
- ☐ B. Es una buena organización en donde trabajar, pero no es una de las mejores.
- ☐ C. Es una organización "promedio". Muchas otras son tan buenas como ella.

- ☐ D. Es una organización a considerarse inferior al promedio para trabajar en ella. Muchas otras son mejores que ella.
- ☐ E. Es probablemente una de las más (malas) organizaciones donde trabajar de las que conozco.

5. Marque con una (x) la línea que mejor exprese como su opinión y sentir comparan con otras personas.

- ☐ A. Me disgusta mi trabajo, mucho más que a lo que a otras personas le disgusta el suyo.
- ☐ B. Me disgusta mi trabajo más que a lo que a otras personas le disgusta el suyo.
- ☐ C. Me gusta mi trabajo tanto como a muchas personas gusta el suyo.
- ☐ D. Gusto de mi trabajo más que lo que otros gustan del suyo.
- ☐ E. Me gusta mi trabajo mucho más que lo que a la mayoría de la gente gusta el suyo.

6. Marque con una (x) la línea que mejor exprese su sentir ante el tipo de trabajo que usted hace en su actual empleo.

- ☐ A. El trabajo que hago es muy desagradable. No me gusta.
- ☐ B. El trabajo que hago no es agradable.
- ☐ C. El trabajo que hago es del "promedio". No tengo una posición.
- ☐ D. El trabajo es agradable y placentero.
- ☐ E. El trabajo es muy agradable. Me gusta mucho lo que hay que hacer en él.

7. Marque con una (x) la línea que mejor describe su opinión ante las condiciones que existen en su actual trabajo.

- ☐ A. Las condiciones generales de trabajo son muy malas.
- ☐ B. Las condiciones de trabajo son pobres. No son tan buenas como las que existen en el promedio de estos trabajos.
- ☐ C. Las condiciones generales de trabajo pueden considerarse como "del promedio". Puede decirse no son ni buenas ni malas.
- ☐ D. En general, las condiciones de trabajo son buenas. Mejor que el promedio.
- ☐ E. Las condiciones generales de trabajo son muy buenas; mucho mejor que las del "promedio."

8. Marque con una (x) la alternativa que mejor describa como usted se sentiría ante el cambiar de trabajo.

- ☐ A. Yo dejaría este trabajo inmediatamente si tuviese la oportunidad de trabajar en alguna otra cosa.
- ☐ B. Yo cogería "casi" cualesquier otro trabajo si yo pudiese ganar en él tanto dinero como el que gano en mi actual empleo.

- ☐ C. Este trabajo es tan bueno "como el promedio" y le prefiero a otro; no obstante le cambiaría si pudiese encontrar donde ganar más dinero.
- ☐ D. No estoy "ansioso" ni deseoso por cambiar de trabajo, pero...lo haría si pudiese ganar más dinero.
- ☐ E. Yo no cambiaría de trabajo aun existiendo otros con mejor "paga" porque mi actual trabajo es bueno.

9. Si un amigo estuviese buscando empleo y hubiese oportunidad donde yo trabajo.

- ☐ A. Yo le recomendaría a mi amigo como buena esa oportunidad.
- ☐ B. Yo le hablaría a mi amigo sobre esta oportunidad pero informándole sobre las ventajas e inconvenientes del trabajo.
- ☐ C. Yo le informaría a mi amigo sobre la oportunidad y nada más.
- ☐ D. Yo le informaría a mi amigo sobre la oportunidad, pero le diría que buscarse en otros sitios primero.
- ☐ E. Yo trataría de desalentar a mi amigo para que no solicitase.

10. En la línea que se presenta marque con una (x) donde usted cree que va.

 Completamente más insatis- ni satis- más satis- completamente
 insatisfecho fecho que fecho ni fecho que satisfecho
 satisfecho insatisfecho insatisfecho

11. Muchos de mis amigos (la mayoría) opinan que tengo un trabajo excelente.

- ☐ A. Estoy muy de acuerdo con que así opinan.
- ☐ B. Estoy de acuerdo
- ☐ C. No estoy muy seguro
- ☐ D. No estoy de acuerdo
- ☐ E. Estoy muy en desacuerdo, pues creo no opinan así.

12. Esta organización es generalmente considerada como muy buena para trabajar.

- ☐ A. Estoy muy de acuerdo con que así es considerada.
- ☐ B. Estoy de acuerdo.
- ☐ C. No estoy muy seguro de ello.
- ☐ D. No estoy de acuerdo. No se considera así.
- ☐ E. Estoy muy en desacuerdo. No se considera así.

13. Mi familia cree tengo un buen trabajo.

- ☐ A. Estoy muy de acuerdo con que así lo cree mi familia.
- ☐ B. Estoy de acuerdo.
- ☐ C. No estoy muy seguro.
- ☐ D. No estoy de acuerdo.
- ☐ E. Estoy muy en desacuerdo.

14. La mayoría de mis vecinos creen mi trabajo es muy bueno.

- ☐ A. Estoy muy de acuerdo con que opinan así.
- ☐ B. Estoy de acuerdo.
- ☐ C. No estoy seguro de ello.
- ☐ D. No estoy de acuerdo. Ellos no creen así.
- ☐ E. Estoy muy en desacuerdo. Ellos no creen así.

15. El que esté esta fábrica u organización en esta comunidad es algo bueno.

- ☐ A. Estoy muy de acuerdo con que así es.
- ☐ B. Estoy de acuerdo.
- ☐ C. No estoy seguro.
- ☐ D. No estoy de acuerdo.
- ☐ E. Estoy muy en desacuerdo.

16. Mi trabajo es:

- ☐ A. Fuerte
- ☐ B. Exige responsabilidad
- ☐ C. Ni exige mucha responsabilidad, ni es muy fuerte
- ☐ D. Es un trabajo cómodo
- ☐ E. Es un trabajo suave y no exige gran responsabilidad

17.

- ☐ A. A mí me interesa trabajar en cosas que requieran mucha responsabilidad y esfuerzo.
- ☐ B. A mí me gusta trabajar en cosas que requieran bastante responsabilidad y esfuerzo.
- ☐ C. A mí me interesa trabajar en cosas que requieran alguna responsabilidad y esfuerzo.
- ☐ D. A mí me interesa trabajar en cosas que requieran poca responsabilidad y esfuerzo.
- ☐ E. A mí me interesa trabajar en cosas que no requieran responsabilidad.

PARTE II.

INFORMACION PERSONAL QUE NECESITAMOS PARA EL ESTUDIO

1. Marque el grado o nivel de educación a que usted haya llegado. Sino fuese exacto marque el más a que usted se acercó.

- ☐ A. segundo grado
- ☐ B. cuarto grado
- ☐ C. octavo grado
- ☐ D. cuarto año
- ☐ E. Escuela de comercio
- ☐ F. Colegio (incompleto)
- ☐ G. Colegio (completo)
- ☐ H. Master
- ☐ I. Ph.D.

2. Marque la edad que corresponde a usted

- ☐ A. 20 años o menos
- ☐ B. 20 a 30 años
- ☐ C. 30 a 40 años
- ☐ D. 40 a 50 años
- ☐ E. 50 a 60 años
- ☐ F. sobre 60 años

3. Sexo

- ☐ A. Varón
- ☐ B. Mujer

4. Cuando usted se independizó de sus padres?...salió de su hogar?

- ☐ A. 10 a 15 años de edad
- ☐ B. 15 a 20 años
- ☐ C. de 20 a 25 años
- ☐ D. mayor de 25 años
- ☐ E. aun no me he independizado.

5. Usted se casó

- ☐ A. antes de los 20 años
- ☐ B. de 20 a 25 años
- ☐ C. 25 a 30 años
- ☐ D. después de los 30
- ☐ E. no me he casado

6. ¿Estuvo usted mucho tiempo viviendo con sus padres?
¿Sí o No?____ ¿Cuántos años más o menos?_____

7. ¿Cuál fue la ocupación de su papá? _____
8. ¿Cómo se le llama al trabajo que usted hace? _____
9. ¿Cómo se le llama al departamento donde usted trabaja?

10. ¿Usted cobra semanal, quincenal ó mensual? _____
¿Qué cantidad? _____

APPENDIX D

UNIVERSIDAD DE PUERTO RICO

Río Piedras, Puerto Rico
2 de marzo de 1959.

Estimade compañoero:

Estamos interesados en conocer más sobre todo aquello que se relacione con el sentirse satisfecho en el trabajo. Otros países se han preocupado por esto. Nosotros los puertorriqueños también lo hacemos.

En el poder hacer uso de la opinión suya agradecemos llene el cuestionario pegado a esta carta. Usted no tiene que escribir su nombre cuando termine. Su cuestionario será unido al de otros puertorriqueños que cooperan en este estudio.

Para poder hacer comentarios justos, confiamos poder recibir cuestionarios que hayan sido llenados con seriedad y sinceridad.

Esperando recibir de usted su bondadosa cooperación, le expresamos el agradecimiento de la Universidad.

Cordialmente suyo,

HECTOR PUIG
Director Investigación

:rc

Appendix E

PERCENTAGE OF DISSATISFIED AND SATISFIED EMPLOYEES IN
EACH OCCUPATIONAL STATUS WITH THE AVERAGE SATISFACTION
AT EACH STATUS IN UNITED STATES, ITALY AND PUERTO RICO

Country	Occ. St.	N	Ind. or Dissat.	Mildly Sat.	Highly Sat.	Aver. Total Satisfaction
United States	Mg.	33	9.1	39.4	51.5	42.7
	Cl.	33	6.0	48.5	45.5	42.9
	Sk.	48	12.5	52.1	35.4	40.6
	SSk.	92	23.9	51.1	25.0	38.8
	Unsk.	34	29.4	44.1	20.5	38.0
Italy	Mg.	-	-	-	-	-
	Cl.	15	46.7	53.3	0	36.0
	Sk.	31	29.2	61.2	9.6	36.1
	SSk.	137	47.4	44.6	8.0	35.6
	Unsk.	13	38.5	46.2	15.3	31.5
Puerto Rico	Mg.	24	0	39.2	70.8	43.7
	Cl.	41	24.4	31.7	43.9	41.0
	Sk.	140	8.5	53.6	57.9	41.7
	SSk.	101	5.9	35.7	58.4	42.5
	Unsk.	92	23.9	43.5	32.6	40.9

Appendix F

SIGNIFICANT DIFFERENCES AMONG THE SATISFACTION SCORES OF
OCCUPATIONAL STATUS GROUPS IN ITALY AND IN PUERTO RICO AS
SHOWN BY THE TUKEY D TEST

Tukey D	Occupational Status	Average Satisfac- tion Score	Differences		
Puerto Rico			$\bar{x}$ -39.35	$\bar{x}$ -39.65	$\bar{x}$ -41.91
1.37	Managers	43.45	4.10	3.80	1.54
	Semi-skilled	42.86	3.51	3.21	
	Skilled	41.91	2.56	2.26	
	Clericals	39.65			
	Unskilled	39.35			
Italy			$\bar{x}$ -31.54	$\bar{x}$ -35.65	$\bar{x}$ -36.00
1.69	Skilled	36.06	4.52		
	Clericals	36.00	4.46		
	Semi-skilled	35.65	4.11		
	Unskilled	31.54			

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