

ATTITUDES OF IRĀNIAN HIGH SCHOOL GRADUATES TOWARDS VOCATIONAL TRAINING AND INDUSTRIAL WORK

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It is a commonly held belief among those with experience in Asian developing countries that the educated youth of these countries shun manual occupations as career choices and the vocational training that prepares them for such work. A similar view is held for Irānian youth.¹ Various reasons are given for such disinclination, but primarily the low prestige associated with manual work and the relatively lower earnings than in alternative clerical work.² However, such views have seldom, if ever, been tested by surveys in these countries, and are thus mainly impressionistic.

In order to ascertain more scientifically the attitudes of Irānian educated youth on this subject - of such critical importance for the successful industrialization of a developing country - a survey was carried out in 1967 by the Institute of Educational Research and Studies of the National Teachers' Training College based on a questionnaire drawn up by the present writer. The 2,017 candidates for admission to the National Teachers' Training College in that year were given the questionnaire to complete, along with their entrance examination forms. Since about 90 per cent of male, and 80 per cent of female, high school graduates in Irān seek entry to university-level institutions upon graduation,³ it was felt that the views of candidates for entrance to such institutions would be representative of those of all Irānian high school graduates.

*I am indebted to Miss Lilā Dehqāni, who administered the survey referred to in this article and tabulated the results.

The questionnaire was designed to draw out the relationship between candidates' attitudes towards vocational training and industrial work and two key socio-economic characteristics of their families, *viz.* the level of family income and the level of education completed by the father. Specific questions were asked about the work preferences of the candidates and their willingness to accept factory work if their examination were failed and they were obliged to take up employment. An attempt was made to determine to what extent candidates would have preferred to have attended vocational training institutions rather than academic secondary school, and what were the reasons for preferring one type of education over the other. In addition, certain other information about the candidates was sought, such as their present employment situation, date of graduation from secondary school, number of times standing for university entrance examinations, and intentions to re-take university entrance examinations if this one is failed.

Characteristics of the candidates

Of the 2,017 high school graduates taking the entry examination of the National Teachers' Training College in 1967, 1,522 were males and 495 females. One-fifth of the candidates came from families whose father's education was equal or higher than that of the candidates. The education of the fathers of the female candidates was markedly higher than that for the male aspirants: 35 per cent of their fathers had completed secondary school, as compared to only 15 per cent of the fathers of the male candidates. (See Table 1).

Over 80 per cent of the candidates were from families whose monthly incomes were reported as 20,000 rials (\$267) or less, and almost 30 per cent had family incomes of 5,000 rials (\$67) or less. (See Table 2). When it is considered that a Ministry of Labour study indicated that the minimum income required for an unskilled worker, his wife, and two children in 1965 in Tehran was 8,050 rials a month (or 264.5 rials a day),⁴ we can conclude that the family financial situation of most of the candidates, whose families averaged over six members each,⁵ and few of whom were headed by unskilled fathers with their much lower family income needs, was

certainly not favourable.

Table 1: Distribution of candidates by level of education of father and son (percentages)

Sex of candidate	Level of education of father						All levels
	None	Tradi- tional	Primary school	Secondary 7-11 yrs	Secondary 12 years	University	
Males	8.8	13.2	48.0	15.5	8.5	6.0	100.0
Females	1.4	6.1	31.8	25.6	18.6	16.5	100.0
Both	6.9	11.4	43.8	18.1	11.1	8.7	100.0

Table 2: Distribution of candidates by level of monthly family income

Monthly income of family (in rials)	Number of candidates' families	% of candidates' families
5,000 or less	569	28.7
5,000 to 20,000	1,098	55.4
20,000 to 30,000	222	11.2
30,000 and over	93	4.7
Not reported	35	-
Total	2,017	100.0 ^a

a. Percentage based on total of responding candidates only.

Over 38 per cent of male, and 13 per cent of female, candidates were employed at the time of taking the entrance examination. There was little variation in rate of employment as between the four major family income classifications. Manual industrial work was the main employment of males, occupying one of three working, while for females, half were in teaching. (See Tables 3 and 4).

Table 3: Employment status of male candidates by family income (percentages)

Employment status	Income of family (rials/month)				All families
	5,000 or less	5,000 to 20,000	20,000 to 30,000	30,000 & over	
EMPLOYED	34.9	40.1	42.3	40.0	38.4
(clerical/administrative work)	(5.4)	(7.4)	(5.4)	(0.0)	(6.4)
(teaching)	(9.3)	(8.2)	(13.5)	(9.1)	(9.1)
(manual industrial work)	(10.9)	(15.4)	(18.0)	(18.2)	(14.1)
(other occupations incl. part-time)	(9.3)	(9.1)	(5.4)	(12.7)	(8.8)
Not employed ^a	65.1	59.9	57.7	60.0	61.6
Total ^b	100.0	100.0	100.0	100.0	100.0

a. Includes those attending vocational training school (107 persons) and those unemployed and seeking work.

b. Excludes persons not reporting an activity (30 of 1,522).

A significant proportion of those taking the examination - 42.8 per cent - were not fresh graduates of a secondary school, but had received their diplomas as far back as seven years earlier. Barely one-half of male candidates had graduated in 1346 - the year of the examination - although seven out of 10 of the female aspirants graduated in that year. Table 5 shows the distribution of candidates by the year of their graduation from secondary school.

As is suggested by the data of Table 5, a considerable number of candidates were not taking a university examination for the first time. In fact, as indicated by Tables 6 and 7 below, the National Teachers' Training College was for

only 30.0 per cent of males, and for only 21.3 per cent of females, their first university entrance examination.⁶

Table 4: Employment status of female candidates by family income (percentages)

Employment status	Income of family (rials/month)				All families
	5,000 or less	5,000 to 20,000	20,000 to 30,000	30,000 & over	
EMPLOYED	14.5	15.0	5.6	10.5	12.9
(clerical/administrative work)	(0.0)	(1.4)	(0.0)	(2.6)	(1.2)
(teaching)	(10.9)	(7.5)	(2.8)	(2.6)	(6.5)
(manual industrial work)	(0.0)	(2.5)	(1.9)	(2.6)	(2.3)
(other occupations incl. part-time)	(3.6)	(3.6)	(0.9)	(2.6)	(2.9)
Not employed ^a	85.5	85.0	94.4	89.5	87.1
Total ^b	100.0	100.0	100.0	100.0	100.0

a. Includes those unemployed and seeking work.

b. Excludes persons not reporting an activity (6 of 495)

Table 5: Distribution of candidates by year of secondary school graduation (percentages)

Year of graduation	Males	Females	Both Sexes
1346	52.7	69.7	57.2
1345	15.3	20.7	16.7
1344	13.2	5.1	11.1
1343	8.6	1.8	6.9
1342	4.6	2.0	3.9
1341	2.2	0.6	1.8
1340	1.5	0.0	1.1
1339 and before	1.9	0.0	1.4
Total ^a	100.0	100.0	100.0

a. Excludes persons not reporting a year (132 of 1,522 males and 3 of 495 females)

The other candidates had failed at least one other entrance examination, in 6.7 per cent of the cases four times or more. For males, the average number of times a university examination had been taken was 2.37, and for females, 2.30. The average number of times candidates took entrance examinations did not vary significantly with the level of income of family, ranging only from 2.09 to 2.42 times by income groups for males and 2.24 to 2.38 times for females. Thus poverty does not appear to have had a restraining effect on number of times candidates sat for university entrance examinations.

Table 6: Distribution of male candidates by monthly family income and number of university entrance exams failed (percentages)

No. of times university entrance exam failed	Income of family (rials/month)				All families
	5,000 or less	5,000 to 20,000	20,000 to 30,000	30,000 & over	
First exam ever taken	29.3	30.6	26.3	35.3	30.0
Once	34.5	32.6	43.8	41.2	34.3
Twice	22.6	19.7	13.8	11.8	20.0
Three times	7.8	8.7	6.3	8.8	8.2
Four times	3.2	3.9	6.3	0.0	3.7
Five times	1.4	2.1	2.5	0.0	1.8
Six times	0.0	0.8	0.0	2.9	0.5
Seven times	0.3	0.2	1.3	0.0	0.3
Eight times	0.9	1.5	0.0	0.0	1.1
Total ^a	100.0	100.0	100.0	100.0	100.0
Avg. no. of times taking univ. exams	2.32	2.42	2.36	2.09	2.37

a. Excludes persons not reporting number of times university entrance exams failed (529 of 1,522).

Intentions of candidates if teachers' training examination failed

In the event they failed this examination, 73.5 per cent

of the male, and 86.1 per cent of the female, candidates stated that they intended to sit for a university examination again. This determination to try again to gain entry to a university did not vary significantly with the level of income of the candidate's family, as indicated in Table 8 below.

Table 7: Distribution of female candidates by monthly family income and number of times university entrance exam failed (percentages)

No. of times university entrance exam failed	Income of family (rials/month)				All families
	5,000 or less	5,000 to 20,000	20,000 to 30,000	30,000 & over	
First exam ever taken	28.9	21.4	15.9	25.9	21.3
Once	47.4	44.1	52.3	48.1	46.7
Twice	7.9	25.9	21.6	14.8	22.0
Three times	5.3	5.0	8.0	0.0	5.2
Four times	7.9	1.8	0.0	7.4	2.4
Five times	2.6	0.5	1.1	0.0	1.0
Six times	0.0	0.5	1.1	0.0	0.5
Seven times	0.0	0.5	0.0	0.0	0.3
Eight times	0.0	0.5	0.0	3.7	0.5
Total ^a	100.0	100.0	100.0	100.0	100.0
Avg. no. of times taking univ. exams	2.24	2.30	2.32	2.37	2.30

a. Excludes persons not reporting number of times university entrance exams failed (114 of 495).

Work preferences if examination failed

Candidates were asked to indicate the type of work they would prefer if they should fail their examination and be obliged to seek employment. They were given five choices of work, plus the opportunity to indicate any other preference if such choices were inadequate. The percentage distribution of candidates by work preferences and family income are shown separately for males and females in Tables 9 and 10 below.

Table 8: Intentions of candidates to take university entrance examination again if exam failed by family income (percentages of total respondents)^a

Sex of candidate	Income of family (rials/month)				All families
	5,000 or less	5,000 to 20,000	20,000 to 30,000	30,000 & over	
Males	71.7	74.9	76.1	71.7	73.5
Females	83.6	85.0	89.6	83.8	86.1
Both	72.9	77.5	82.8	76.7	76.6

a. 3.4 per cent of male, and 2.6 per cent of female, candidates did not respond to this question.

Table 9: Work preferences of male candidates if exam failed and obliged to seek employment (percentages)

Type of work preferred	Income of family (rials/month)				All families
	5,000 or less	5,000 to 20,000	20,000 to 30,000	30,000 & over	
Administrative	17.3	12.6	26.6	8.3	15.3
Clerical	5.2	3.3	3.2	4.2	4.0
Teaching	48.2	39.6	33.0	45.8	42.1
Machinery operation in Industry	20.4	31.8	28.7	25.0	27.3
Manual industrial work	3.1	6.4	4.3	8.3	5.2
Other ^a	5.8	6.3	4.3	8.3	6.1
Total ^b	100.0	100.0	100.0	100.0	100.0

a. Includes national military service.

b. Excludes those not indicating some preference (16.1 per cent of total candidates).

Table 10: Work preferences of female candidates if exam failed and obliged to seek employment (percentages)

Type of work preferred	Income of family (rials/month)				
	5,000 or less	5,000 to 20,000	20,000 to 30,000	30,000 & over	All families
Administrative	16.7	14.9	13.2	5.9	14.0
Clerical	1.9	5.1	9.9	8.8	5.9
Teaching	68.5	72.8	69.2	67.6	71.3
Machinery operation in industry	1.9	3.4	2.2	0.0	2.6
Manual work in industry	1.9	1.3	0.0	5.9	1.4
Other	9.3	2.6	5.5	11.8	4.8
Total ^a	100.0	100.0	100.0	100.0	100.0

a. Excludes those not indicating some preference (14.9 per cent of total candidates).

It is clear from Tables 9 and 10 that teaching is the preferred occupation of both males and females, which is not surprising in view of the fact that the candidates are seeking to gain entry to a teachers' training institution. The fact that the percentage of those preferring teaching careers is not higher than indicated here - particularly in the case of males - may be due largely to the fact that if the candidates fail to gain entry to the College, they would not be qualified to teach in secondary schools, with its higher prestige and earnings than in primary school teaching. Furthermore, many of the candidates undoubtedly had no real commitment to secondary school teaching as a career, but rather took the examination only as a consequence of failing to gain entry at another higher educational institution, particularly the general university, where they could prepare for a high-level manpower position other than in teaching, such as in the civil service.

As Table 9 indicates a surprising 32.5 per cent of male candidates indicated a preference for manual work in industry, including with machinery. Even given the fact that 14.1 per cent were already employed in such work (Table 3) and

assuming that they preferred such work, it appears that a considerable number of other candidates - over 18 per cent of the total number of candidates - would also seek manual work in industry if obliged to take up employment.

The level of family income does not appear to be a significant factor shaping work preferences on the part of the candidates, as Tables 9 and 10 show. Indeed, the lowest share of males preferring manual work is from the lowest income families where we might expect the highest incidence of preference for manual work to be found.

Willingness to accept factory work if exam failed

Male candidates⁷ were also asked if they would be willing to accept employment as machinery operators in a factory if they should fail their exams. Here we assume that a firm job offer is made to the candidate.

Of those 1,203 male candidates who responded to this question (or 79.0 per cent of total male candidates), 687 (or 57.1 per cent) indicated that they would be willing to accept such factory work. Since only 27.3 per cent actually preferred factory work if their examinations were failed and they should have to seek work (Table 9), it appears that a considerable additional number of males who do not prefer such work would nevertheless be willing to accept it if offered.

There was no great variation in the responses according to level of income of the family or education of the father of the candidate. For those whose families earned 5,000 rials a month or less, 59.9 per cent were willing to accept factory employment, while for the 5,000-20,000 rial income group of families, 57.2 per cent were favourable, and 52.3 and 52.2 per cent for the family income groups 20,000-30,000 rials and 30,000 rials and over, respectively. Favourable responses by level of education of father ranged only from 59.1 per cent for those candidates with fathers of 7-11 years of education to 49.2 per cent for those with university education, except for the group 1-3 years of education, 71.7 per cent of whom were willing to accept factory

employment.

Belated preference for vocational training

Male candidates were asked to indicate if they would have been happier if they had attended a vocational training school instead of an academic secondary school. Excluding 107 who were attending such vocational training schools at the time of the examination and 264 who did not respond to the question (or 17.3 per cent of the male candidates), 46.0 per cent (or 529) replied that they indeed would have preferred to have followed a vocational training course instead. Of candidates from the poorest families (income under 5,000 ri-als month), 51.1 per cent regretted their academic education, while such regrets among the other income classes ranged only narrowly between 41.8 and 43.9 per cent. Such positive responses were somewhat correlated with father's education: 53.7 per cent of those whose fathers had no, or less than 4 years, education would have preferred to have attended a vocational training school, as compared to 43.6 per cent of those with fathers with 4-6 years education and 39.2 per cent of those with fathers with some secondary school education or higher.

Those male candidates who indicated a desire to have followed a vocational rather than an academic education were asked to give a main reason for this preference. The most frequent explanation was that they "would have been able to find a job much easier" (35.2 per cent), followed by "would have a better aptitude for manual work" (26.3 per cent), "such training needed for the industrialization of the country" (23.0 per cent), and "would have a knowledge of manual work" (14.5 per cent).

For those male candidates who did not regret their academic choice of education (or 54.0 per cent of the total responding), main reasons given in most instances were related to the low status of vocational education and the work for which it prepares students. Thus 39.7 per cent reported "family disapproval", 9.1 per cent "low prestige", and 2.8 per cent "disinclination to associate with common worker", as

compared to 21.2 per cent stating "no inclination towards manual work", 1.1 per cent "physical handicap", and 26.1 per cent marking "other reasons". While reasons for not regretting choice of academic education did not vary significantly according to income group of family, they did vary somewhat according to level of father's education. Thus for those candidates with fathers of no, or only "traditional" education, 41.4 per cent gave reasons related to low status for not regretting choice of education, as against 54.7 per cent giving status-type reasons whose fathers had modern education.

Conclusions

Based on the written responses of high school graduates standing for examination for entry to the National Teachers' Training College, aversion to manual work and the vocational training which prepares for it was not as strong as might have been expected. Although virtually three out of four male candidates intended to repeat an examination for university entrance if they failed this exam, and thus were implicitly intending to qualify for a non-manual job for which such education prepares, one out of three would actually prefer manual work (including with machinery) in industry if they should be obliged to seek work at the time of their Teachers' Training College examination. Furthermore, 57 per cent were prepared to accept such factory work if they should fail their examinations. Similarly, 46 per cent indicated that they would have preferred vocational training to their academic secondary school education, and thus were prepared to take up the manual work such training implies. Favourable inclination towards manual work was not inversely correlated with either family income or level of education of father of the candidates, as we might have expected. However, such an inverse correlation did exist to some extent as regards attitude towards vocational vs. academic secondary education.

The findings of this survey might well be taken with some skepticism, however. In the first place, the candidates represented only a very small percentage of high school graduates standing for university entrance; the 733 male candidates who were 1346 (1967/68) year graduates of high school

comprised only 3.0 per cent of the total number of male high school graduates in that year (or 24,264), while girl candidates graduating in 1346 were only 3.5 per cent of the total number of graduates (or 343 of 9,768) of that year.⁸ One could also argue that these candidates were not typical of high school graduates, since they were not a sample of all candidates for entrance to universities, but rather were a special group (ostensibly) opting for a teaching career.⁹ Perhaps most significantly, it is not clear how seriously candidates took the questionnaire. With no incentive or responsibility to answer the questions carefully and correctly, some candidates undoubtedly regarded the questionnaire as a nuisance and answered hurriedly or in a whimsical manner.¹⁰ A more scientific evaluation of attitudes of high school graduates towards manual work and vocational training must await a survey based on a scientific sample and administered orally by trained interviewers.

Notes

1. See, for instance Norman Jacobs, *The Sociology of Development: Iran as a Case Study* (New York: Frederick A. Praeger, 1966), pp. 169-170, and William H. Bartsch, "The Industrial Labour Force of Iran: Problems of Recruitment, Training, and Productivity", *The Middle East Journal*, Vol. 25, No.1, Winter 1971.
2. *Ibid.* See also William H. Bartsch, "Labour Supply and Employment Creation in the Urban Areas of Iran, 1956 - 1966", Unpublished Ph.D. dissertation, University of London, February 1970, Table 45, p.167.
3. These percentages were found in a 1964 inquiry. See Ministry of Education, General Department of Studies and Programs, Department of Research and Evaluation, *Research Regarding the Educational and Occupational Desires of Youth* (in Farsi), Tehran: Xordad 1345 [May / June 1966] Table 5, p.10.
4. See Akbar Bigdeli, "Investigation of the Wage and Salary Situation of the Economically-Active Population of Iran" (in Farsi), in Ministry of Labour and Social Affairs, General Department of Manpower Studies and Statistics, *Investigations of Manpower Problems* (in Farsi)

Vol. 2 (Tehrān: 1344 [1965/66]), pp.1,409-1,411.

5. Of 1,991 candidates responding to the question on size of family, total family members were 12,218, or an average 6.14 persons per family, with no particular variation as between different income categories of families.
6. The much lower percentages of those taking a university examination for the first time than of those receiving their diplomas in 1346 is explained by the fact that for a good number of the candidates graduating in 1346-435 of the males and 262 of the females - the National Teachers' Training College examination was not their first examination following graduation. In any year, high school graduates usually sit for more than one university examinations and that of the Teachers' College is the last one given before the commencement of the new academic year.
7. Female candidates are excluded here, since factory work cannot be considered an important source of employment for them, and only 2.6 per cent preferred such work, as indicated in Table 10.
8. See Ministry of Education, Bureau of Statistics, *Educational Statistics in Irān* (Tehrān:1969), Table 20, p.65 for number of graduates in 1346 (1967/68). The figure for girls used here excludes graduates in home economics, who generally cannot stand for university entrance examinations.
9. Of course, many had no such commitment to teaching, but were rather trying to get into any university-level institution.
10. For instance, some female candidates indicated that they would commit suicide if they failed the entrance exam.