How Does Education Affect Mental Well-Being and Job Satisfaction?

Jonathan Gardner and Andrew Oswald
Economics Department
Warwick University

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The broad answer is that high levels of education seem, later in life, to contribute to lower levels of mental stress.

In other words, psychological health is improved by education. This may be because educated people have more choices -- they have greater control over their lives and better security.

A few caveats, however, are noted below. Perhaps the most important of these is that the job satisfaction of highly educated people is surprisingly low. We conjecture that this is because such people have (infeasibly) high aspirations. Life satisfaction is apparently also lowered in some cases by greater education – probably for the same reason of unsustainable expectations.

1.   Education and GHQ mental distress

Definitions:
- People who are better off (less stressed) have lower GHQ stress scores
- Thus GHQ is negatively related to well-being

Findings:
- Average stress scores are lower among individuals with more education.
- As we move successively from: no qualification, to O-levels or equiv, to A-levels or equiv, to FE qualification (HND, HNC, etc) we observe successively lower stress levels.
- Yet individuals with degrees are <u>more</u> stressed than individuals with intermediate qualifications (A-level or FE qualification).

- Hence, there is a rough U-shaped relationship between education and stress: stress declines with education until degree level, whereupon it increases a bit.
- Part of the beneficial effect of education upon stress might be attributed to greater economic status of the educated (more likely to be employed, rather than unemployed or out of the labour force, and likely to have higher incomes).
- Nevertheless, even for people with similar incomes and economic status, education is associated with lower stress levels.
- Interestingly, the same patterns of results are found for both men and women, the retired, and those aged less than 60.
- The beneficial effect of education upon mental stress is greater for women than for men
- The effect of education upon stress is relatively large for the retired and those out of the labour force. For the employed and the unemployed, there is a more limited relationship between education and stress.

2. Education and overall life satisfaction

Definitions:

- People who are more satisfied have greater Life Satisfaction scores
- Life satisfaction is positively related to well-being

Findings:

- Surprisingly, average life satisfaction scores are, in general, lower for more educated individuals (the exception are those with FE qualifications).
- The highest level of life satisfaction is among those with no qualifications.
- Lowest level life satisfaction – those with a degree qualification.
- There is no clear relationship between education and life satisfaction for those with intermediate educational qualifications.
- Education does have, indirect beneficial effects upon life satisfaction as a result of greater economic status (they are more likely to be employed, rather than unemployed or out of the labour force, and liable to have higher incomes).
- Nevertheless, for people with similar incomes and economic status, education is associated with lower life satisfaction.

- The same patterns of results are found for both men and women, the retired, and those aged less than 60.
- The (negative) effect of education upon life satisfaction is greater for men than for women
- The (negative) effect of education upon life satisfaction is greatest for the unemployed and the employed. For the retired, education and life satisfaction are only weakly related. For those out of the labour force, education has a *positive* correlation with life satisfaction.

3.   Education and overall job satisfaction

Definitions:
- People who enjoy their jobs more have greater reported job satisfaction levels
- Job satisfaction is positively related to well-being

Findings:
- Average job satisfaction scores decline with education.
- Highest level of job satisfaction: no qualification.
- Lowest level of job satisfaction: degree qualification.
- Education does have indirect beneficial effects upon job satisfaction because of greater pay. Education is also associated with greater hours of work, which reduce satisfaction.
- For people with similar pay and hours, satisfaction falls (monotonically) with education.
- The same patterns of results are found for both men and women, and when we examine those in full-time work alone.

Section A: Mental Distress in the BHPS (1991-2000)

GHQ Mental Well-Being
In the spirit favoured by psychologists, it amalgamates answers to the following list of twelve questions, each one of which is, itself, scored on a four-point scale from 0 to 3:

Have you recently:
1. Been able to concentrate on whatever you are doing?
2. Lost much sleep over worry?
3. Felt that you are playing a useful part in things?
4. Felt capable of making decisions about things?
5. Felt constantly under strain?
6. Felt you could not overcome your difficulties?
7. Been able to enjoy your normal day-to-day activities?
8. Been able to face up to your problems?
9. Been feeling unhappy and depressed?
10. Been losing confidence in yourself?
11. Been thinking of yourself as a worthless person?
12. Been feeling reasonably happy all things considered?

We then form a summary measure of *mental well-being* by taking the sum of the responses to the twelve questions, coded so that the response with the lowest well-being value scores 3 and that with the highest well-being value scores 0. This approach is sometimes called a Likert scale and is scored out of 36.

This measure of stress, or lack of well-being, thus runs from a worst possible outcome of 36 (all twelve responses indicating very poor psychological health) to a minimum of 0 (no responses indicating poor psychological health). In general, medical opinion is that healthy individuals will score typically around 10-13 on the test. Numbers near 36 are rare and indicate depression in a formal clinical sense.

Mean GHQ Scores by Education

	ALL	*MALE*	*FEMALE*
None	11.63 (5.44)	10.79 (5.08)	12.23 (5.61)
O-levels	10.94 (5.19)	10.08 (4.82)	11.59 (5.36)
A-Levels	10.73 (5.20)	10.20 (4.94)	11.39 (5.43)
HND, HNC	10.65 (5.20)	10.09 (4.89)	11.24 (5.43)
Degree	10.91 (5.25)	10.43 (5.01)	11.46 (5.47)
Total	11.12 (5.30)	10.37 (4.96)	11.77 (5.49)

- Standard deviations are in parentheses

TABLE 1
Education and Stress (BHPS)

Dependent Variable: GHQ Mental Stress Score

Regressor	(1)	(2)	(3)
O-Level or equiv	-0.386	-0.452	-0.634
	(3.96)	(4.66)	(6.40)
A-Level or equiv	-0.455	-0.537	-0.712
	(4.10)	(4.86)	(6.30)
HND, HNC or equiv	-0.555	-0.682	-0.946
	(3.57)	(4.41)	(6.03)
Degree	-0.326	-0.496	-0.778
	(2.54)	(3.91)	(6.05)
Ln(Household Income)	-0.334		
	(7.80)		
Unemployed	1.942	2.118	
	(13.99)	(15.43)	
Retired	0.157	0.297	
	(1.23)	(2.33)	
Out of the Labour Force	1.514	1.664	
	(15.42)	(16.96)	
Age	0.400	0.502	0.178
	(3.90)	(4.93)	(1.75)
$Age^2/10$	-0.048	-0.081	0.010
	(1.37)	(2.35)	(0.28)
$Age^3/1000$	-0.022	0.023	-0.086
	(0.45)	(0.47)	(1.77)
$Age^4/100000$	0.041	0.020	0.067
	(1.69)	(0.85)	(2.79)
Female	1.456	1.505	1.613
	(14.45)	(14.90)	(15.86)
Married	-0.111	-0.204	-0.311
	(1.09)	(2.00)	(2.99)
Female*Married	-0.572	-0.637	-0.522
	(4.36)	(4.85)	(3.92)
Non-white	0.337	0.381	0.615
	(1.73)	(1.97)	(3.13)
Number of individuals	14121	14121	14121
Number of observations	85592	85592	85592
R^2	0.05	0.05	0.03

1. The education coefficients are with respect to the omitted category, no formal qualification. The coefficients upon unemployed, retired and out of labour force are relative to employed individuals.
2. T-ratios are in parentheses and standard errors are robust to arbitrary heteroscedasticity and the repeat sampling of individuals over time.
3. All regressions also include controls for region, and time period.
4. All columns are estimated by OLS.

TABLE 2
Education and Stress (BHPS)
By Gender

Dependent Variable: GHQ Mental Stress Score

Regressor	MALE (1)	MALE (2)	MALE (3)	FEMALE (4)	FEMALE (5)	FEMALE (6)
O-Level or equiv	-0.168	-0.213	-0.486	-0.575	-0.647	-0.786
	(1.22)	(1.55)	(3.44)	(4.23)	(4.76)	(5.70)
A-Level or equiv	-0.255	-0.304	-0.463	-0.724	-0.831	-0.997
	(1.71)	(2.05)	(3.01)	(4.42)	(5.08)	(6.00)
HND, HNC or equiv	-0.309	-0.383	-0.688	-0.801	-0.962	-1.188
	(1.47)	(1.83)	(3.19)	(3.53)	(4.28)	(5.24)
Degree	-0.003	-0.106	-0.427	-0.711	-0.921	-1.170
	(0.02)	(0.63)	(2.46)	(3.73)	(4.86)	(6.10)
Ln(Household Income)	-0.205			-0.408		
	(3.42)			(6.80)		
Unemployed	2.053	2.176		2.107	2.279	
	(11.81)	(12.74)		(9.14)	(9.87)	
Retired	0.170	0.250		-0.026	0.150	
	(0.89)	(1.32)		(0.15)	(0.89)	
Out of the Labour Force	2.693	2.812		1.045	1.210	
	(13.34)	(14.03)		(9.46)	(10.95)	
Number of individuals	6753	6753	6753	7368	7368	7368
Number of observations	39584	39584	39584	46008	46008	46008
R^2	0.05	0.05	0.02	0.03	0.03	0.02

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3. All regressions also include controls for age, gender, marital status, race, region, and time period (see Table 1).
4. All columns are estimated by OLS.

TABLE 3
Education and Stress (BHPS)
By Age

Dependent Variable: GHQ Mental Stress Score

Regressor	RETIRED 60 PLUS (1)	RETIRED 60 PLUS (2)	16 TO 59 (3)	16 TO 59 (4)	16 TO 59 (5)
O-Level or equiv	-0.369	-0.369	-0.370	-0.436	-0.686
	(1.50)	(1.50)	(3.37)	(3.98)	(6.11)
A-Level or equiv	-0.593	-0.593	-0.442	-0.526	-0.762
	(1.71)	(1.71)	(3.62)	(4.31)	(6.09)
HND, HNC or equiv	-1.079	-1.079	-0.398	-0.526	-0.877
	(3.27)	(3.27)	(2.22)	(2.95)	(4.82)
Degree	-0.588	-0.588	-0.279	-0.450	-0.801
	(1.38)	(1.38)	(1.99)	(3.25)	(5.67)
Ln(Household Income)	-0.433	-0.433	-0.344		
	(3.78)	(3.78)	(7.37)		
Unemployed			2.026	2.210	
			(14.28)	(15.77)	
Retired			-0.356	-0.232	
			(1.32)	(0.87)	
Out of the Labour Force			1.522	1.685	
			(14.33)	(15.86)	
Number of individuals	2790	2790	11636	11636	11636
Number of observations	14605	14605	66263	66263	66263
R^2	0.04	0.04	0.06	0.06	0.04

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4. All columns are estimated by OLS.

TABLE 4
Education and Stress (BHPS)
By Economic Status

Dependent Variable: GHQ Mental Stress Score

Regressor	EMPLOYED		UNEMPLOYED		RETIRED		OUT OF LF	
	16 TO 59	16 TO 59	16 TO 59	16 TO 59	16 TO 59	16 TO 59	16 TO 59	16 TO 59
	(1)	(2)	(3)	(4)	(5)	(3)	(4)	(5)
O-Level or equiv	-0.084	-0.147	-0.014	0.014	-0.984	-1.054	-1.058	-1.125
	(0.76)	(1.32)	(0.04)	(0.04)	(1.76)	(1.85)	(3.92)	(4.17)
A-Level or equiv	-0.061	-0.162	0.014	0.053	1.147	1.067	-1.514	-1.560
	(0.49)	(1.29)	(0.03)	(0.13)	(1.13)	(1.06)	(4.99)	(5.15)
HND, HNC or equiv	-0.041	-0.180	0.903	0.955	-0.498	-0.644	-1.732	-1.825
	(0.23)	(1.00)	(1.23)	(1.31)	(0.59)	(0.75)	(3.11)	(3.28)
Degree	0.222	0.046	-0.219	-0.172	-1.519	-1.669	-2.347	-2.545
	(1.53)	(0.32)	(0.42)	(0.34)	(2.45)	(2.76)	(6.75)	(7.32)
Ln(Household Income)	-0.379		0.084		-0.419		-0.349	
	(6.48)		(0.52)		(1.33)		(4.60)	
Number of individuals	9252	9252	1977	1977	457	457	4581	4581
Number of observations	48621	48621	3363	3363	986	986	13293	13293
R^2	0.03	0.03	0.04	0.04	0.14	0.13	0.09	0.09

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Section B: Overall Life Satisfaction in the BHPS (1996-2000)

Overall Life Satisfaction Scores

Respondents (from 1996 onwards) are asked to rate their level of satisfaction with respect to eight aspects of their life:

1. health
2. income
3. housing
4. spouse or partner
5. employment
6. social life
7. amount of leisure time
8. the use of leisure time

Each of these categories is assigned a rank between 1 and 7, 1 representing 'not satisfied at all', 7 indicating 'completely satisfied' and the numbers from 2 to 6 corresponding to intermediate levels of satisfaction.

Finally, and subsequent to these eight questions, a question was asked:
> *"Using the same scale, how dissatisfied or satisfied are you with your life overall"*

Mean Life Satisfaction Scores by Education

	ALL	*MALE*	*FEMALE*
None	5.32 (1.48)	5.35 (1.43)	5.29 (1.52)
O-levels	5.21 (1.23)	5.22 (1.20)	5.20 (1.24)
A-Levels	5.22 (1.14)	5.21 (1.11)	5.23 (1.16)
HND, HNC	5.30 (1.12)	5.29 (1.12)	5.31 (1.12)
Degree	5.15 (1.13)	5.15 (1.09)	5.14 (1.16)
Total	5.24 (1.28)	5.25 (1.24)	5.24 (1.32)

▪ Standard deviations are in parentheses

TABLE 1
Education and Overall Life Satisfaction (BHPS)
Dependent Variable: Overall Life Satisfaction Score

Regressor	(1)	(2)	(3)
O-Level or equiv	-0.067	-0.044	-0.018
	(2.57)	(1.70)	(0.67)
A-Level or equiv	-0.058	-0.030	-0.003
	(2.06)	(1.08)	(0.11)
HND, HNC or equiv	-0.056	-0.015	0.026
	(1.55)	(0.41)	(0.72)
Degree	-0.122	-0.065	-0.023
	(3.98)	(2.16)	(0.76)
Ln(Household Income)	0.114		
	(9.65)		
Unemployed	-0.358	-0.419	
	(8.91)	(10.50)	
Retired	0.078	0.032	
	(1.94)	(0.81)	
Out of the Labour Force	-0.206	-0.254	
	(8.55)	(10.67)	
Age	0.004	-0.029	0.038
	(0.13)	(1.05)	(1.44)
$Age^2/10$	-0.023	-0.012	-0.033
	(2.43)	(1.33)	(3.67)
$Age^3/1000$	0.055	0.040	0.067
	(4.09)	(3.07)	(5.32)
$Age^4/100000$	-0.034	-0.027	-0.039
	(5.09)	(4.16)	(6.30)
Female	-0.028	-0.044	-0.062
	(1.14)	(1.77)	(2.50)
Married	0.174	0.204	0.218
	(6.62)	(7.84)	(8.30)
Female*Married	0.129	0.150	0.136
	(3.87)	(4.50)	(4.08)
Non-white	-0.183	-0.201	-0.235
	(3.89)	(4.29)	(4.98)
Number of individuals	10563	10563	10563
Number of observations	42075	42075	42075
Log-L	-65448.4	-65550.8	-65782.1
Pseudo R^2	0.071	0.066	0.055

1. The education coefficients are with respect to the omitted category, no formal qualification. The coefficients upon unemployed, retired and out of labour force are relative to employed individuals.
2. T-ratios are in parentheses and standard errors are robust to arbitrary heteroscedasticity and the repeat sampling of individuals over time.
3. All regressions also include controls for region, and time period.
4. All columns are estimated by the Ordered Probit technique. Positive coefficients denote greater satisfaction. The Pseudo R^2 is calculated using the method of McKelvey and Zavoina (1975).

TABLE 2
Education and Overall Life Satisfaction (BHPS)
By Gender

Dependent Variable: Overall Life Satisfaction Score

Regressor	MALE (1)	MALE (2)	MALE (3)	FEMALE (4)	FEMALE (5)	FEMALE (6)
O-Level or equiv	-0.122	-0.101	-0.053	-0.028	-0.006	0.011
	(3.05)	(2.54)	(1.32)	(0.81)	(0.18)	(0.33)
A-Level or equiv	-0.099	-0.076	-0.048	-0.017	0.014	0.035
	(2.43)	(1.87)	(1.17)	(0.43)	(0.35)	(0.90)
HND, HNC or equiv	-0.097	-0.060	-0.006	-0.021	0.023	0.053
	(1.81)	(1.14)	(0.10)	(0.43)	(0.46)	(1.08)
Degree	-0.177	-0.127	-0.071	-0.071	-0.011	0.021
	(3.99)	(2.93)	(1.62)	(1.65)	(0.26)	(0.48)
Ln(Household Income)	0.099			0.119		
	(5.37)			(7.78)		
Unemployed	-0.399	-0.463		-0.356	-0.404	
	(7.01)	(8.19)		(6.55)	(7.33)	
Retired	0.030	-0.009		0.126	0.078	
	(0.48)	(0.15)		(2.43)	(1.52)	
Out of the Labour Force	-0.444	-0.499		-0.111	-0.156	
	(9.25)	(10.54)		(4.11)	(5.83)	
Number of individuals	4962	4962	4962	5601	5601	5601
Number of observations	19424	19424	19424	22651	22651	22651
Log-L	-29444.8	-29477.8	-29686.7	-35847.2	-35910.9	-35989.1
Pseudo R^2	0.077	0.074	0.052	0.072	0.067	0.060

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3. All regressions also include controls for age, gender, marital status, race, region, and time period (see Table 1).
4. All columns are estimated by the Ordered Probit technique. Positive coefficients denote greater satisfaction. The Pseudo R2 is calculated using the method of McKelvey and Zavoina (1975).

TABLE 3
Education and Overall Life Satisfaction (BHPS)
By Age

Dependent Variable: Overall Life Satisfaction Score

Regressor	RETIRED 60 PLUS (1)	RETIRED 60 PLUS (2)	16 TO 59 (3)	16 TO 59 (4)	16 TO 59 (5)
O-Level or equiv	-0.169	-0.154	-0.027	-0.002	0.038
	(2.94)	(2.72)	(0.88)	(0.08)	(1.24)
A-Level or equiv	0.044	0.063	-0.029	0.002	0.042
	(0.46)	(0.67)	(0.88)	(0.06)	(1.30)
HND, HNC or equiv	-0.100	-0.073	-0.025	0.021	0.077
	(1.37)	(1.02)	(0.57)	(0.49)	(1.79)
Degree	-0.218	-0.177	-0.087	-0.024	0.032
	(2.69)	(2.23)	(2.41)	(0.68)	(0.91)
Ln(Household Income)	0.069		0.127		
	(2.26)		(9.70)		
Unemployed			-0.383	-0.451	
			(9.04)	(10.71)	
Retired			0.173	0.127	
			(2.36)	(1.74)	
Out of the Labour Force			-0.199	-0.256	
			(7.54)	(9.79)	
Number of individuals	2038	2038	8531	8531	8531
Number of observations	7419	7419	32644	32644	32644
Log-L	-11565.9	-11571.0	-50139.6	-50243.2	-50462.3
Pseudo R^2	0.035	0.033	0.052	0.045	0.031

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3. All regressions also include controls for age, gender, marital status, race, region, and time period (see Table 1).
4. All columns are estimated by the Ordered Probit technique. Positive coefficients denote greater satisfaction. The Pseudo R2 is calculated using the method of McKelvey and Zavoina (1975).

TABLE 4
Education and Overall Life Satisfaction (BHPS)
By Economic Status

Dependent Variable: Overall Life Satisfaction Score

Regressor	EMPLOYED		UNEMPLOYED		RETIRED		OUT OF LF	
	16 TO 59	16 TO 59	16 TO 59	16 TO 59	16 TO 59	16 TO 59	16 TO 59	16 TO 59
	(1)	(2)	(3)	(4)	(5)	(3)	(4)	(5)
O-Level or equiv	-0.093	-0.064	-0.137	-0.119	0.163	0.181	0.090	0.104
	(2.56)	(1.77)	(1.51)	(1.33)	(1.04)	(1.16)	(1.50)	(1.73)
A-Level or equiv	-0.122	-0.079	-0.093	-0.068	-0.021	-0.022	0.150	0.157
	(3.18)	(2.07)	(0.93)	(0.68)	(0.09)	(0.10)	(2.31)	(2.42)
HND, HNC or equiv	-0.139	-0.080	-0.141	-0.117	0.565	0.595	0.225	0.240
	(2.85)	(1.65)	(0.66)	(0.55)	(2.54)	(2.76)	(1.94)	(2.07)
Degree	-0.192	-0.117	-0.310	-0.283	-0.004	0.015	0.261	0.309
	(4.59)	(2.84)	(2.36)	(2.20)	(0.02)	(0.09)	(3.15)	(3.77)
Ln(Household Income)	0.156		0.047		0.103		0.094	
	(9.07)		(1.08)		(1.07)		(5.01)	
Number of individuals	6770	6770	886	886	284	284	2806	2806
Number of observations	24470	24470	1230	1230	543	543	6401	6401
Log-L	-36003.7	-36089.2	-2179.9	-2180.8	-824.4	-825.6	-10656.7	-10676.6
Pseudo R^2	0.036	0.028	0.061	0.059	0.175	0.171	0.088	0.082

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4. All columns are estimated by the Ordered Probit technique. Positive coefficients denote greater satisfaction. The Pseudo R2 is calculated using the method of McKelvey and Zavoina (1975).

Section C: Overall Job Satisfaction in the BHPS (1991-2000)

Overall Job Satisfaction Scores

Working respondents are asked to rate their level of satisfaction with respect to seven aspects of their employment:

1. promotion prospects
2. total pay
3. relations with supervisor
4. job security
5. ability to work on own initiative
6. the actual work itself
7. the hours of work

Each of these categories is assigned a rank between 1 and 7, 1 representing 'not satisfied at all', 7 indicating 'completely satisfied' and the numbers from 2 to 6 corresponding to intermediate levels of satisfaction.

Finally, and subsequent to these eight questions, a question was asked:
"All things considered, how satisfied or dissatisfied are you with your present job overall using the same 1-7 scale?"

Note 1:
In wave one the categories 1, 4 and 7 are given the descriptions outlined, whilst 2, 3, 5 and 6 are left unlabeled. From wave two onwards all values were given a label, with the descriptors 'mostly' and 'somewhat' added. The question itself was a constant. This discrepancy is treated as noise.

Note 2:
Questions 1, 3 and 5 were discontinued in 1998. There may then be some discontinuity between the series from 1991 to 1997, and the series from 1998 to 2000. This is not here analysed.

Mean Life Satisfaction Scores by Education

	ALL	*MALE*	*FEMALE*
None	5.50 (1.45)	5.26 (1.50)	5.70 (1.37)
O-levels	5.41 (1.35)	5.20 (1.41)	5.58 (1.27)
A-Levels	5.27 (1.32)	5.15 (1.33)	5.43 (1.30)
HND, HNC	5.31 (1.30)	5.23 (1.32)	5.41 (1.26)
Degree	5.19 (1.31)	5.17 (1.30)	5.21 (1.32)
Total	**5.36 (1.36)**	**5.20 (1.38)**	**5.52 (1.31)**

- Standard deviations are in parentheses

TABLE 1
Education and Overall Job Satisfaction (BHPS)

Dependent Variable: Overall Job Satisfaction Score

Regressor	ALL (1)	ALL (2)	ALL (3)	FULL-TIME (4)
O-Level or equiv	-0.104	-0.080	-0.086	-0.096
	(3.54)	(2.77)	(2.95)	(2.79)
A-Level or equiv	-0.211	-0.174	-0.185	-0.191
	(6.50)	(5.49)	(5.81)	(5.20)
HND, HNC or equiv	-0.228	-0.169	-0.188	-0.201
	(5.39)	(4.09)	(4.56)	(4.25)
Degree	-0.319	-0.242	-0.262	-0.304
	(8.56)	(6.90)	(7.47)	(7.18)
Ln(Pay)	0.134			0.222
	(6.14)			(8.69)
Ln(Hours)	-0.383	-0.232		-0.021
	(11.11)	(9.12)		(0.29)
Age	-0.482	-0.443	-0.513	-0.638
	(4.94)	(4.56)	(5.31)	(5.88)
$Age^2/10$	0.192	0.181	0.212	0.251
	(4.55)	(4.30)	(5.07)	(5.31)
$Age^3/1000$	-0.335	-0.320	-0.379	-0.431
	(4.31)	(4.13)	(4.91)	(4.94)
$Age^4/100000$	0.216	0.208	0.248	0.274
	(4.18)	(4.04)	(4.83)	(4.70)
Female	0.084	0.068	0.098	0.094
	(3.11)	(2.51)	(3.67)	(3.31)
Married	0.013	0.032	0.022	0.005
	(0.49)	(1.18)	(0.83)	(0.20)
Female*Married	0.152	0.130	0.185	0.156
	(4.33)	(3.73)	(5.39)	(4.10)
Non-white	-0.149	-0.160	-0.159	-0.137
	(3.06)	(3.29)	(3.25)	(2.55)
Number of individuals	8432	8432	8432	7233
Number of observations	41236	41236	41236	33209
Log-L	-62686.4	-62731.7	-62828.9	-51342.5
Pseudo R^2	0.068	0.066	0.061	0.046

1. The education coefficients are with respect to the omitted category, no formal qualification.
2. T-ratios are in parentheses and standard errors are robust to arbitrary heteroscedasticity and the repeat sampling of individuals over time.
3. All regressions also include controls for two-digit industry, region, and time period.
4. All columns are estimated by the Ordered Probit technique. Positive coefficients denote greater satisfaction. The Pseudo R^2 is calculated using the method of McKelvey and Zavoina (1975).

NOTE: Estimation sample are those individuals who are aged 16 to 59 and in employment at the survey date.

TABLE 2
Education and Overall Job Satisfaction (BHPS)
By Gender

Dependent Variable: Overall Job Satisfaction Score

Regressor	MALE (1)	MALE (2)	MALE (3)	FEMALE (4)	FEMALE (5)	FEMALE (6)
O-Level or equiv	-0.156	-0.094	-0.094	-0.071	-0.069	-0.083
	(3.59)	(2.19)	(2.17)	(1.79)	(1.75)	(2.10)
A-Level or equiv	-0.237	-0.154	-0.156	-0.178	-0.174	-0.204
	(5.18)	(3.45)	(3.49)	(3.86)	(3.85)	(4.52)
HND, HNC or equiv	-0.210	-0.084	-0.084	-0.261	-0.254	-0.303
	(3.51)	(1.42)	(1.41)	(4.42)	(4.50)	(5.38)
Degree	-0.307	-0.137	-0.139	-0.352	-0.343	-0.399
	(5.83)	(2.75)	(2.80)	(6.65)	(6.93)	(8.08)
Ln(Pay)	0.314			0.014		
	(10.07)			(0.45)		
Ln(Hours)	-0.094	0.161		-0.290	-0.273	
	(1.44)	(2.64)		(6.48)	(9.61)	
Number of individuals	4162	4162	4162	4270	4270	4270
Number of observations	20351	20351	20351	20885	20885	20885
Log-L	-31979.6	-32103.0	-32110.2	-30417.0	-30417.2	-30523.8
Pseudo R^2	0.044	0.031	0.030	0.081	0.081	0.070

1. The education coefficients are with respect to the omitted category, no formal qualification.
2. T-ratios are in parentheses and standard errors are robust to arbitrary heteroscedasticity and the repeat sampling of individuals over time.
3. All regressions also include controls for age, gender, marital status, race, two-digit industry region, and time period (see Table 1).
4. All columns are estimated by the Ordered Probit technique. Positive coefficients denote greater satisfaction. The Pseudo R^2 is calculated using the method of McKelvey and Zavoina (1975).

NOTE: Estimation sample are those individuals who are aged 16 to 59 and in employment at the survey date.