Personality, Lifetime Earnings, and Retirement Wealth

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Introduction

There is increasing interest among economists in how "non-cognitive" traits affect economic behavior and outcomes. This is motivated in part by evidence from adolescence and young adulthood that schooling has effects on economic outcomes that go beyond its impact on IQ or other measures of cognitive abilities, and which appear to be mediated by other measurable traits (Heckman, Stixrud, and Uzua, 2006). An important open question is whether these traits and their effects have a durable impact on economic success over a lifetime. Given the wide observed variation in retirement wealth conditional on lifetime earnings (Venti and Wise, 1998), we might also want to know whether similar non-cognitive traits influence wealth accumulation. Given the scarcity of true longitudinal data linking early life cognitive and non-cognitive traits to well-measured lifetime outcomes (though see Judge, et al., 1999), we explore these questions by looking for associations between lifetime outcomes and psychological measures taken later in life. Clearly, this sort of observation on its own cannot establish a causal influence from personality to economic success. However, given the evidence on causal connections early in life, the presence of an association late in life would tend to support the view that personality has a durable impact on economic success and that human capital investments in noncognitive skills have real value (Cunha and Heckman, 2007).

The term "non-cognitive" is broad and encompasses a range of measures including concepts like selfesteem that have a worrisome degree of dependence on the outcomes we seek to study. We focus on personality traits that are relatively stable patterns of thinking, feeling, and acting. In psychology, personality is generally considered to be comprised of five broad families of traits: extroversion, agreeableness, openness, conscientiousness, and neuroticism (or its converse, emotional stability). Of the five families of traits in the Big Five taxonomy of personality, conscientiousness is the best predictor of health outcomes (Friedman et al., 1993; Hampson, et al., 2007; Roberts et al., 2007), academic outcomes (Poropat, 2009), and divorce (Roberts et al., 2007). Conscientiousness refers to a family of personality traits including industriousness, dependability, and organization. Emotional stability has also been found to be related to better outcomes. Personality as measured by the Big Five is not immutable but within-person correlations tend to be about as high over fairly long periods of observation as are cognitive abilities (Roberts and DelVecchio, 2000). There is also evidence for heritability of personality traits (Krueger and Johnson, 2008), though as yet no consistent findings on specific genetic determinants (Terracciano, et. al., 2010).

The Health and Retirement Study (HRS) presents an unparalleled opportunity to study the association of personality with lifetime economic success. The linkage of HRS survey data with administrative data from the Social Security Administration allows us to look at well-measured lifetime earnings rather than self-reported outcomes in a single year or short period. The wealth data in HRS allow us to look at retirement savings conditional on lifetime earnings. Together, these measures represent the most essential aspects of lifetime economic success. The HRS also measures cognitive abilities and educational attainment, allowing us to control for these and other determinants of economic success. The HRS began collecting data on personality in 2006 as part of a self-administered questionnaire on psychosocial characteristics. Half the sample was given the questionnaire in 2006 and the other half in 2008.

Hypotheses

We began with three research questions based on previous findings in the literature and our theoretical expectations about links between personality traits, labor market valuations, and economic behavior.

- 1. Controlling for cognitive ability and other things, do more conscientious and emotionally stable adults have higher lifetime earnings, and is this due to higher annual earnings, longer worklives, or both?
- 2. Do more conscientious adults save a higher proportion of their earnings for retirement, and does conscientiousness of both partners in a couple matter?
- 3. Do conscientiousness and emotional stability interact such that the effects of conscientiousness are greater among less emotionally stable adults?

Data and Methods

Our sample derives from the 2006 and 2008 waves of HRS. To be included, a respondent had to complete the self-administered questionnaire with personality measures in either 2006 or 2008, and to be included in the linked Social Security administrative records.

Personality was measured using a 26-item questionnaire developed for the Midlife Development Inventory (Lachman & Bertrand, 2001). HRS participants used a 4-point rating scale to endorse 26 adjectives corresponding to Big Five personality traits of conscientiousness, emotional stability, agreeableness, extraversion, and openness to experience (Clarke, et al, 2008). A total of 14,500 respondents completed the questionnaires.

Lifetime earnings come from the linked Social Security records available for 20,777 respondents (10,731 of whom survived to 2006 and provided a personality questionnaire). To construct lifetime earnings we began with the AIME calculated for each individual in the linked records. AIME adjusts nominal earnings in past years to constant dollars in the year the individual turned 60 using SSA's wage index. We then further adjusted all AIME values to constant 2006 dollars using the CPI and multiplied by (12x35=420) to get lifetime total earnings. Note that this is lifetime Social Security earnings, not total earnings. Earnings above the Social Security taxable maximum are not included, and only the 35 highest earning years are included.

At some later time we hope to have good estimates of earnings not included in reported Social Security earnings to re-evaluate our findings. There are two primary reasons to be concerned about using lifetime SS earnings. One is that earnings above the taxable maximum are not counted. This truncates somewhat the highly skewed distribution of earnings and is not a major concern if the focus is on low earnings as a problem for retirement security. The taxable maximum has risen over time relative to median earnings so a larger percentage of total earnings of younger cohorts will be counted. We use statistical controls for cohort and birth year to capture this effect. The second concern is that earnings from work in sectors not covered by Social Security is not counted. This is potentially a more serious concern as some persons may appear to be low lifetime earners because of years spent in uncovered sectors. We attempted to address this by limiting the analysis to respondents whose self-reported lifetime years of work were more than five or more than ten years longer than shown on the

administrative record. This did not substantively change our results of interest and we do not show those results here.

Wealth in the HRS is measured at the level of the household, which means that for couples we cannot assign wealth to any one individual and the appropriate unit of analysis is the household. We therefore analyze couples separately from single-person households and are able to examine effects of both personalities in the couple. We use aggregate financial wealth measured in 2006 or 2008 as our measure of wealth and model savings in two ways: with log wealth as the dependent variable and lifetime earnings as a control variable in the regression, and with the ratio of wealth to earnings as the dependent variable.

In all regression analyses we controlled for birth year, sex, ethnicity, HRS entry cohort, years of education, and four cognitive measures: episodic memory (sum of immediate and delayed word recall), mental status (backward counting task), numeracy, and vocabulary. Ideally, we would like to have cognition measures at the same age on everyone. We took the first observation in the panel on each of these cognitive measures to minimize the impact of age-related decline.

Results

Lifetime Earnings. Table 1 shows the central findings on lifetime earnings. We find that more conscientious and emotionally stable (less neurotic) adults have higher lifetime earnings. The dependent variable is in logs and the personality variables are standardized z-scores. Thus, the coefficient of .09 on conscientiousness indicates that a one standard deviation increase in conscientiousness is associated with a 9% increase in lifetime earnings. A one standard deviation increase in emotional stability is associated with a 5% increase in lifetime earnings. The other three "big 5" factors did not show significant relationships to lifetime earnings.

These findings on non-cognitive skills can be compared with the estimated effects of cognitive abilities. Memory is the most sensitive to age-related decline and that may explain why it has limited apparent effect in these models—for the older cohorts our first memory test was at 70 or older. However, vocabulary ability is often considered to be "crystallized" intelligence and to decline very little with age and it has no association with earnings. The cognitive abilities most related to processing speed (mental status, based on backward counting tasks) and numerical abilities (numeracy based on three word problems) showed the strongest relationship to earnings. Each of those two measures had effect sizes comparable to that of conscientiousness.

It is important to note that these effects of cognitive and non-cognitive skills are net of the effects of education in this model. One year of education raises lifetime earnings by about 5%. The other control variables in the model show expected effects. Women and Hispanics have lower lifetime earnings. Interestingly, with controls for education, cognitive and non-cognitive skills there is no black-white differential in lifetime Social Security earnings.

Tables 2 and 3 repeat this model separately on the two components of lifetime earnings: average annual earnings, and years of work. Overall, the average annual earnings is the more important determinant of lifetime earnings and is better explained by the covariates in the model. Years of work and average earnings are positively correlated and typically most covariates affect both in the same direction and

relative orders of magnitude. One standard deviation of conscientiousness raises average earnings by \$1500 (about 5% of the mean of \$30,000), which is slightly lower than the effect of numeric ability. Greater emotional stability raises annual earnings by about \$700, which is less than the effect of mental status. Women earned \$20,000 per year less than men over their lifetimes, which is about half the average earnings of men. Turning to years of work, women worked six years less than men, further contributing to lower lifetime earnings. Conscientiousness was associated with an increase of .36 years of work, just over 1% of the average of 28 years. Emotional stability and the cognitive abilities also raised years of work, and also by proportionally less than their influence on average earnings.

We find, then, that personality measures account for nearly as much variation in lifetime earnings and its components as do cognitive measures. In models that exclude education the effect estimates for the cognition variables increase while the personality measures are largely unchanged. This reflects a stronger correlation of education with the numeric ability and processing speed variables than it has with personality.

Interaction effects. The one interaction model we present here is in Table 4, testing whether conscientiousness and emotional stability compensate for one another. We find that they do, one standard deviation increase above the mean in emotional stability decreases the impact of conscientiousness on lifetime earnings from 9% to 6% whereas a one standard deviation decrease in emotional stability below the mean raises the impact of conscientiousness from 9% to 12%.

Retirement Savings An important issue for retirement security is savings out of lifetime earnings. We focus here on married couples because most people retire as part of a married couple and because there is some interest in how the personalities and abilities of spouses contribute to their joint savings. We estimate two models to test these effects. The first uses the log of financial wealth as the dependent variable and includes the log of combined lifetime earnings of husband and wife as a right-hand side variable. The second takes the log of the ratio of financial wealth to combined lifetime earnings as the dependent variable (in effect forcing the coefficient on log earnings to be one). Generally speaking, the effects of personality and cognitive variables are similar in the two models.

In Table 5 we see that the conscientiousness of husbands and wives have essentially equal effects on wealth, with one standard deviation raising wealth by 14%. That effect is the same as the effect of husband's numeric ability, which is the largest of the cognition measures. Wife's conscientiousness is a much more significant influence on couple wealth than any other characteristic of the wife except her education. In contrast to the findings for lifetime earnings, neuroticism is not closely linked to wealth accumulation, but agreeableness of both husband and wife tend to lower wealth. One of the components of agreeableness is "softhearted" and perhaps this characteristic works against savings or high-return investing. The coefficient on log earnings is only .41, consistent with other work that wealth accumulation is not simply a one-to-one relationship with earnings. We can also examine retirement wealth by looking at the ratio of wealth to earnings in Table 6. Generally speaking, the same pattern of relationships is found as in Table 4.

Assortative mating The simple linear models used here do not examine interaction effects such as might arise with assortative mating. Personality characteristics do not have exceptionally strong correlations across spouses. Conscientiousness is correlated at .15 and neuroticism at .07. Openness has the

strongest correlation at .24. Cognitive abilities have slightly stronger correlations (numeracy and mental status both at .26, and memory at .25). Education is much more strongly correlated at .6.

Discussion

Our findings are consistent with previous findings looking at younger people: the personality traits of conscientiousness and emotional stability are related to economic success independently of education and cognitive ability. We note a serious limitation of our analysis is the timing of personality assessment. Personality traits in the HRS were measured largely after the production of the measured economic outcomes. There is thus reason to worry about reverse causality. Individuals who observe that they have not earned, worked, or saved as much as others may be influenced by such observations to believe or report that they are less hard working and responsible, for instance, than they really are. However, the fact that similar associations have been found in prospective studies of children and young adults, and that personality measures appear to be persistent over a lifetime, suggest that at least some of the association may be real.

Should these preliminary and tentative findings be confirmed with prospective, longitudinal studies in the future, there are practical implications. Interventions to increase conscientiousness or at least behaviors, habits, and skills characteristic of conscientious individuals may be beneficial. Recognizing deficits in conscientiousness and emotional stability as risk factors for poor economic outcomes may help target other sorts of interventions. Recent findings from behavioral economics suggest that the ability to defeat hyperbolic discounting, e.g., overcome the tendency to put off the start of a savings plan, or to avoid over-reaction to short-term signals may be important to long-term success at retirement saving. Conscientiousness may be another way of measuring that ability.

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Source	SS	df	MS		Number of obs F(18, 10712)	
Model Residual	5192.34787 14021.4244		8.46377 0894552		Prob > F R-squared Adj R-squared	= 0.0000 = 0.2702
Total	19213.7723	10730 1.7	9065911		Root MSE	= 1.1441
loglifeearn	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
Birth year	.0051958	.0022519	2.31	0.021	.0007818	.0096099
Female	-1.150476	.0251929	-45.67	0.000	-1.199859	-1.101093
Hispanic	354105	.0458927	-7.72	0.000	4440632	2641468
Black	0434894	.0367294	-1.18	0.236	1154859	.0285072
CODA	.097793	.0553008	1.77	0.077	0106067	.2061928
HRS	.2049369	.0528106	3.88	0.000	.1014183	.3084556
War Baby	.3049548	.0717734	4.25	0.000	.1642655	.445644
Early Boomer	.2757536	.0820896	3.36	0.001	.1148427	.4366646
Years of Ed	.047972	.0047526	10.09	0.000	.0386561	.0572879
Memory	.0331273	.0144999	2.28	0.022	.0047047	.061549
Mental status	.0881126	.0144723	6.09	0.000	.0597441	.116481
Numeracy	.0829685	.0137166	6.05	0.000	.0560814	.1098556
Vocabulary	.0100306	.0137913	0.73	0.467	0170029	.0370641
Agreeableness	0024257	.0146612	-0.17	0.869	0311643	.0263129
Extroversion	0268077	.0151834	-1.77	0.077	0565701	.0029546
Neuroticism	0516954	.0119523	-4.33	0.000	0751241	0282666
Conscientious	.0903806	.0136922	6.60	0.000	.0635413	.1172199
Openness	0129573	.014729	-0.88	0.379	0418288	.0159143
Intercept	4.173803	4.32077	0.97	0.334	-4.295707	12.64331

TABLE 1. Determinants of Lifetime Social Security Earnings (in logs)

Notes: The dependent variable is the logarithm of total Social Security earnings from the linked administrative record. The cognition variables (memory through vocabulary) and personality variables (agreeableness through openness) were all transformed to standardized z-scores so effect sizes represent the effect of a one standard deviation change in the level of those variables.

Source	SS	df	MS		Number of obs F(18, 10712)	= 10731 = 385.34
Model Residual	1.6220e+12 2.5050e+12)111e+10 33848345		Prob > F R-squared Adj R-squared	$= 0.0000 \\ = 0.3930$
Total	4.1270e+12	10730 38	34621598		Root MSE	= 15292
avgearn	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
Birth year	-41.99934	30.09862	-1.40	0.163	-100.9982	16.99954
Female	-20083.73	336.7316	-59.64	0.000	-20743.78	-19423.67
Hispanic	-3489.425	613.4088	-5.69	0.000	-4691.82	-2287.031
Black	-1491.524	490.9313	-3.04	0.002	-2453.841	-529.2079
CODA	-2027.889	739.1583	-2.74	0.006	-3476.777	-579.0019
HRS	-1321.241	705.875	-1.87	0.061	-2704.887	62.40522
War Baby	1056.489	959.3346	1.10	0.271	-823.985	2936.962
Early Boomer	262.998	1097.223	0.24	0.811	-1887.762	2413.758
Years of Ed	1059.593	63.52354	16.68	0.000	935.0749	1184.111
Memory	373.1204	193.8082	1.93	0.054	-6.779583	753.0203
Mental status	1047.022	193.4392	5.41	0.000	667.8455	1426.199
Numeracy	1822.879	183.3385	9.94	0.000	1463.502	2182.257
Vocabulary	693.3905	184.3367	3.76	0.000	332.0564	1054.725
Agreeableness	-344.8348	195.9632	-1.76	0.078	-728.9589	39.2894
Extroversion	-799.0713	202.9442	-3.94	0.000	-1196.88	-401.263
Neuroticism	-697.8328	159.7566	-4.37	0.000	-1010.985	-384.6802
Conscientious	1536.403	183.0125	8.40	0.000	1177.665	1895.142
Openness	-4.730365	196.8699	-0.02	0.981	-390.6319	381.1711
Intercept	130375.5	57752.06	2.26	0.024	17170.79	243580.3

TABLE 2. Determinants of Average Annual Social Security Earnings (in \$2006)

Source	SS	df	MS		Number of obs F(18, 10712)	= 10731 = 154.90
Model Residual	205236.881 788521.011	-	402.049 6109981		Prob > F R-squared Adj R-squared	= 0.0000 = 0.2065
Total	993757.893	10730 92.	6149015		Root MSE	= 8.5797
capylb	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
Birth year	.2190224	.0168869	12.97	0.000	.1859209	.252124
Female	-6.456966	.1889244	-34.18	0.000	-6.827292	-6.086639
Hispanic	-3.392064	.3441551	-9.86	0.000	-4.066671	-2.717456
Black	.0947599	.2754387	0.34	0.731	445151	.6346707
CODA	1.836634	.4147073	4.43	0.000	1.023731	2.649537
HRS	3.029637	.3960336	7.65	0.000	2.253337	3.805936
War Baby	3.004431	.5382379	5.58	0.000	1.949385	4.059477
Early Boomer	2.645412	.6156005	4.30	0.000	1.438721	3.852103
Years of Ed	.1253388	.0356401	3.52	0.000	.0554776	.1952
Memory	.1520867	.1087367	1.40	0.162	0610574	.3652309
Mental status	.4339663	.1085297	4.00	0.000	.221228	.6467047
Numeracy	.3315898	.1028627	3.22	0.001	.1299599	.5332197
Vocabulary	1751131	.1034227	-1.69	0.090	3778409	.0276147
Agreeableness	0215865	.1099458	-0.20	0.844	2371007	.1939277
Extroversion	.1291691	.1138625	1.13	0.257	0940226	.3523607
Neuroticism	2555529	.089632	-2.85	0.004	4312482	0798576
Conscientious	.3643869	.1026798	3.55	0.000	.1631154	.5656583
Openness	1671233	.1104545	-1.51	0.130	3836347	.049388
Intercept +	-390.1695	32.40199	-12.04	0.000	-453.6834	-326.6556

TABLE 3. Determinants of Years with Social Security Earnings

Source	SS	df	MS		Number of obs F(19, 10711)	
Model Residual	5200.96642 14012.8058		3.735075 30826308		F(19,10711) Prob > F R-squared Adj R-squared	= 0.0000 = 0.2707
Total	19213.7723	10730 1.	79065911		Root MSE	= 1.1438
loglifeearn	Coef.	Std. Err	. t	₽> t	[95% Conf.	Interval]
Birth year	.0052949	.0022516	2.35	0.019	.0008814	.0097085
Female	-1.150394	.0251863	-45.68	0.000	-1.199764	-1.101024
Hispanic	3568577	.0458933	-7.78	0.000	446817	2668984
Black	0454883	.0367281	-1.24	0.216	1174822	.0265057
CODA	.0998574	.0552922	1.81	0.071	0085256	.2082403
HRS	.207074	.0528034	3.92	0.000	.1035695	.3105785
War Baby	.3050447	.0717547	4.25	0.000	.1643921	.4456973
Early Boomer	.2760857	.0820683	3.36	0.001	.1152165	.4369549
Years of Ed	.0479114	.0047514	10.08	0.000	.0385978	.057225
Memory	.0322969	.0144998	2.23	0.026	.0038747	.0607191
Mental status	.0869713	.0144754	6.01	0.000	.0585969	.1153457
Numeracy	.0826698	.0137135	6.03	0.000	.0557887	.1095509
Vocabulary	.0092836	.0137908	0.67	0.501	0177489	.0363161
Agreeableness	0018239	.0146592	-0.12	0.901	0305587	.0269108
Extroversion	0277634	.0151841	-1.83	0.068	057527	.0020001
Neuroticism	0513467	.01195	-4.30	0.000	0747709	0279225
Conscientious	.0864142	.0137756	6.27	0.000	.0594114	.113417
Openness	0106153	.0147534	-0.72	0.472	0395347	.0183041
CXN	.0271748	.0105876	2.57	0.010	.0064212	.0479284
Intercept	3.988822	4.320245	0.92	0.356	-4.479659	12.4573

TABLE 4. Test of Interaction Effects of Conscientiousness and Neuroticism

Source	SS	df	MS		Number of obs F(31, 2911)	
Model	2877.69617	31 92.8	289086		Prob > F	= 0.0000
Residual	5381.99913	2911 1.84	884889		R-squared	= 0.3484
+					Adj R-squared	
Total	8259.69529	2942 2.8	075103		Root MSE	= 1.3597
logwlth	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
M Birth year	0222554	.0062354	-3.57	0.000	0344816	0100291
F Birth year	0219361	.0052288	-4.20	0.000	0321886	0116835
M Yrs of Ed	.078965	.0114186	6.92	0.000	.0565757	.1013544
F Yrs of Ed	.0792289	.0129619	6.11	0.000	.0538135	.1046443
M Hispanic	1523346	.1831715	-0.83	0.406	5114936	.2068243
M Black	9994283	.2599213	-3.85	0.000	-1.509077	4897799
F Hispanic	0048588	.1800458	-0.03	0.978	3578889	.3481713
F Black	.2333524	.2632706	0.89	0.375	2828631	.7495678
CODA	0224381	.1472678	-0.15	0.879	3111978	.2663216
HRS	.2097803	.1453885	1.44	0.149	0752944	.494855
War Baby	.4316667	.1910285	2.26	0.024	.0571019	.8062315
Early Boomer	010184	.2239768	-0.05	0.964	4493531	.4289851
M Memory	.0259523	.0292758	0.89	0.375	0314511	.0833556
F Memory	.0431381	.0291101	1.48	0.138	0139404	.1002166
M Mental stat	.0650549	.030854	2.11	0.035	.004557	.1255528
F Mental stat	.0893812	.0308603	2.90	0.004	.028871	.1498913
M Numeracy	.1430477	.0314014	4.56	0.000	.0814764	.2046189
F Numeracy	.0409656	.0302346	1.35	0.176	0183177	.1002489
M Vocabulary	0008345	.0306799	-0.03	0.978	0609911	.059322
M Vocabulary	.0959712	.0296893	3.23	0.001	.037757	.1541855
M Agreeable	1048647	.0335139	-3.13	0.002	170578	0391513
F Agreeable	083246	.0319437	-2.61	0.009	1458805	0206114
M Extrovert	.0003341	.0355338	0.01	0.992	0693398	.070008
F Extrovert	.0852344	.0331303	2.57	0.010	.0202733	.1501956
M Neurotic	0397125	.0280117	-1.42	0.156	0946372	.0152123
F Neurotic	0132398	.0277783	-0.48	0.634	067707	.0412273
M Conscient	.1482636	.0314658	4.71	0.000	.0865661	.2099612
F Conscient	.1497793	.0308034	4.86	0.000	.0893807	.210178
M Openness	0065854	.0348203	-0.19	0.850	0748604	.0616896
F Openness	0358617	.0325901	-1.10	0.271	0997637	.0280403
Log Life Earn	.4151281	.0405899	10.23	0.000	.3355403	.4947158
Intercept	89.89936	11.69065	7.69	0.000	66.97658	112.8221

TABLE 5. Determinants of Wealth (in logs), Married Couples Only

TABLE 6. Determinants of Log Ratio of Wealth to Lifetime Social Security Earnings, Married Couples

Source	SS	df	MS		Number of obs F(30, 2891)	= 2922 = 24.43
Model Residual	1392.9165 5493.92844		305499 035574		Prob > F R-squared Adj R-squared	= 0.0000 = 0.2023
Total	6886.84494	2921 2.35	770111		Root MSE	= 1.3785
lograt	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
M Birth year F Birth year M Yrs of Ed F Yrs of Ed M Hispanic M Black F Hispanic F Black CODA HRS War Baby Early Boomer M Memory F Memory F Memory M Mental stat F Mental stat F Mental stat F Numeracy F Numeracy M Vocabulary M Vocabulary M Vocabulary M Agreeable F Agreeable F Agreeable M Extrovert F Extrovert M Neurotic F Neurotic	$\begin{array}{c}0236723\\0210238\\ .0623526\\ .0670068\\ .0503145\\7030698\\ .1640538\\ .0926252\\2264086\\0442976\\ .1143555\\2650153\\ .0121206\\ .0324176\\ .0290862\\ .0627204\\ .131621\\ .0052243\\0051175\\ .0703174\\1122329\\1145767\\ .0274599\\ .095314\\059423\\0150061\\ \end{array}$.0063382 .0053361 .0116056 .0132473 .1874498 .2770656 .1845324 .279784 .1496116 .1477366 .1941758 .2279834 .0297842 .0296051 .0316201 .0316201 .0316201 .0316201 .0312049 .0306717 .0312049 .0302876 .0340756 .0325399 .0360996 .0337114 .0285089 .0282812	-3.73 -3.94 5.37 5.06 0.27 -2.54 0.89 0.33 -1.51 -0.30 0.59 -1.16 0.41 1.09 0.92 1.99 4.12 0.17 -0.16 2.32 -3.29 -3.52 0.76 2.83 -2.08 -0.53	0.000 0.000 0.000 0.788 0.011 0.374 0.741 0.130 0.764 0.556 0.245 0.684 0.274 0.358 0.046 0.000 0.865 0.870 0.020 0.001 0.000 0.447 0.005 0.037 0.596	$\begin{array}{c}0361002 \\0314867 \\ .0395966 \\ .0410317 \\3172343 \\ -1.246336 \\1977746 \\4559711 \\5197647 \\3339773 \\2663814 \\7120417 \\0462799 \\0256317 \\032914 \\ .0009844 \\ .0690328 \\0549164 \\0663036 \\ .0109299 \\1790478 \\1783805 \\0433237 \\ .0292131 \\1153229 \\0704594 \end{array}$	0112444 0105608 .0851086 .0929819 .4178633 1598038 .5258822 .6412214 .0669476 .2453821 .4950925 .1820111 .0705211 .0904669 .0910863 .1244564 .1942092 .065365 .0560685 .1297049 045418 050773 .0982435 .1614148 0035231 .0404472
M Conscient F Conscient M Openness F Openness Intercept	.1217312 .1166399 0000785 0262735 83.07545	.0319909 .0313155 .0355538 .03321 11.91189	3.81 3.72 -0.00 -0.79 6.97	0.000 0.000 0.998 0.429 0.000	.059004 .055237 0697918 0913912 59.7188	.1844583 .1780428 .0696348 .0388442 106.4321