Initial Analysis of Workplace Satisfaction Survey Data

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Introduction

This exploratory analysis investigates relationships amoung variables of data from a workplace satisfaction survey.

Data

The data come from a survey created by Tyler Rice on Surveymonkey.com. There were 381 eligible respondants. An eligible respondant is defined as a person that currently has a job and a smartphone. Approximately 40 questions were asked. 18 questions had responses with the options "Strongly Agree", "Agree", "Neither Agree nor Disagree", "Disagree", and "Strongly Disagree". To explore these variables I recoded the levels from 1 to 5 with "Strongly Disagree" = 1 to "Strongly Agree" = 5. 6 variables had responses "Always", "Sometimes", "Rarely", or "Never". These were recoded from 1 to 4 with Never = 1 to Always = 4. Also, there were a few variables that asked for number of hours per day with responses like "0-1 hours", "1-2 hours" etc. These variables were rounded down.

Methods

Three methods were used to analyse these data:

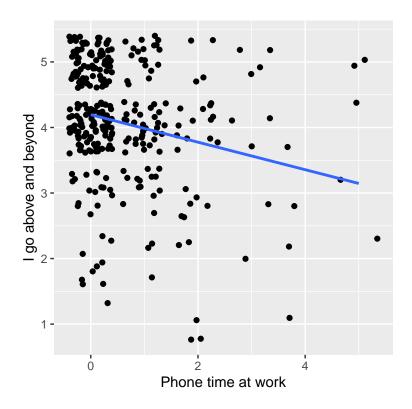
- 1) All pairwise simple linear regression models were made using all created quantitative variables.
- 2) Anova models and t-tests were made to look at changes in created quantitative variables by company size and gender.
- 3) Summary statistics and difference in proportions tests were run for specific levels of pairwise relationships for select variables.

Results

1)

Table 1 in the appendix show all the pairwise relationships with slope estimates significantly different from 0 at the 0.05 level. Table 2 in the appendix show all the pairwise relationships with slope estimates significantly different from 0 at the $\frac{.05}{355} = .00014$ level. There are 355 pairwise regression models so this is the significance level using the Bonferroni correction for multiple comparison starting with the significance level .05. For the relationships with slope estimate p-values lower than .00014 it is reasonable to conclude the two variables have an association with each other. For example, stress level and bad sleep have a significant relationship with each other. For the relationships with p-values closer to .05 we cannot be as confident in having evidence of a relationship. Because we are doing so many comparisons, we are bound to have a few models with p-values lower than .05 simply due to inherent randomness of our sample.

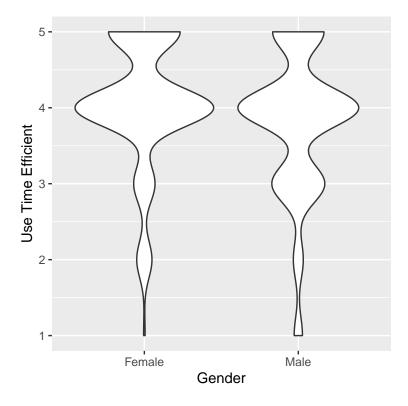
For an understanding of these relationships I have included an example of how to interpret the results from Table 1 and Table 2. The relationship between 'Phone time at work' and 'I go above and beyond what is expected from me at work' has a significant relationship with each other. On average, as phone time at work increases, respondants say they go above and beyond less. The below plot shows the strength of this relationship.



2)

In addition I created ANOVA models for each quantitative variable where company size was the only predictor. The result of these ANOVA models showed that only average loneliness (p-value = .039) and bad sleep (p-value = .01) differed by company size. All other variables did not have a significantly different mean by company size category at the .05 significance level. Again due to multiple comparisons these associations may only be due to randomness.

The result of the t-tests for gender showed only four variables with differing means by gender at the .05 significance level. These variables were "I think my coworkers are happier", "I use time efficient", "I'm efficient compared to peers", and "feel constant need to look at phone". A violin plot of the distributions by each gender and using time efficient is included to understand one example of what this difference looks like.



3)

For 6 relationships I created difference in proportions tests to further understand relationships between specific variables. First consider the variables 'I find it difficult to stay concentrated on tasks for sustained amount of time' and 'I feel a constant need to look at my phone'. I created a categorical variable for each of these variables where 'Agree' and 'Strongly Agree' are considered yes and the other three levels are considered no. For those that feel a constant need to look at their phone, they find it difficult to concentrate 18.8% more. This is a statistically significant difference with a p-value of 0.003452.

The same data manipulation was done to the variables 'I have depressive tendencies' and 'how much do you feel your phone is distracting'. For those that feel a constant need to look at phone, 3.4% more respondants say they have depressive tendencies (p-value = .81). This is not a very large difference and from this test we can say we do not have evidence there is a true difference in the proportion of people that have depressive tendencies and feel that they have a constant need to look at their phone.

Now consider the variables 'I find it difficult to stay concentrated on tasks for sustained amount of time' and 'On a scale of 1 - 5 please rate your level of stress'. The same data manipulation was done to 'I find it difficult to stay concentrated on tasks for sustained amount of time'. For 'On a scale of 1 - 5 please rate your level of stress' I consider all values 3 through 5 as stressed and values 1 or 2 as not stressed. For those that are stressed, 21.7% more people find it difficult to stay concentrated (p-value = .001).

Now consider the variables 'I suffer from poor sleep' and 'On average, how many cumulative hours per day do you spend on your mobile device'. For those that agreed or strongly agreed that they suffer from poor sleep are considered to suffer from poor sleep and those that spend more than 3 hours per day on their mobile device are considered to use their phone a lot. For those that spend a lot of time on their mobile device per day, 8.7% more suffer from poor sleep (p-value = .1420). We do not have enough evidence to conclude those that spend a lot of time on their mobile device suffer from poor sleep more.

Now consider the variables 'I feel a constant need to look at my phone' and 'On a scale of 1 - 5 please rate your level of stress'. The same data manipulation is done as described before. Given a respondent feels they have a constant need to look at their phone, 8.3% more have high stress (p-value = .198). We do not have enough evidence to conclude that that have a constant need to look at their phone also have higher stress.

Now consider the variables 'On average, how many cumulative hours per day do you spend on your mobile device' and 'On a scale of 1 - 5 please rate your level of stress'. The same data manipulation is done as described before. For those that use their phone a lot (3+hours per day), .6% more have high stress (p-value ≈ 1). We do not have any evidence in a difference of these proportions.

Conclusions

Throughout this data there are some clear relationships amoung many variables. Because the variables used were originally categorical variables it should be noted that precise interpretations for regression models do not have a clear interpretation, presenting a drawback of this method. This initial analysis gives inspiration and direction for which relationships should and should not be studied further.

Appendix

Table 1: Significant relationships at the 0.05 level

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Y	X	intercept	slope	p_value	n
Org_satisfaction	Better_org	1.0064	0.7369	0.0000	330
Org_satisfaction	still_engaged	5.0326	-0.3742	0.0000	331
Org_satisfaction	professional_path_sat	1.7432	0.5964	0.0000	332
Org_satisfaction	Depressed_while_at_work	5.1828	-0.5181	0.0000	331
Org_satisfaction	searching_new_employment	5.0972	-0.4223	0.0000	330
Org_satisfaction	personal_satisfaction	1.6078	0.6441	0.0000	331
Org_satisfaction	go_above	2.8164	0.2608	0.0000	319
Org_satisfaction	use_time_efficient	3.0777	0.2016	0.0022	320
Org_satisfaction	fatigued	4.3953	-0.1968	0.0097	318
Org_satisfaction	lonely	4.4676	-0.2600	0.0000	310
Org_satisfaction	difficult_to_concentrate	4.2170	-0.1343	0.0084	319
Org_satisfaction	positive_feedback	2.6474	0.3053	0.0000	320
Org_satisfaction	motivated	1.5993	0.5652	0.0000	320
Org_satisfaction	other_better_lives	4.4250	-0.1821	0.0008	314
Org_satisfaction	depressive_tendencies	4.4683	-0.2456	0.0000	303
Org_satisfaction	bad_sleep	4.5046	-0.2233	0.0008	308
Org_satisfaction	phone_better_life	3.3431	0.1715	0.0065	312
Org_satisfaction	stress_level	4.4373	-0.2491	0.0013	295
Better_org	still_engaged	4.6288	-0.2370	0.0000	329
Better_org	professional_path_sat	2.4296	0.4095	0.0000	330
Better_org	Depressed_while_at_work	4.7338	-0.3343	0.0000	329
Better_org	searching_new_employment	4.6608	-0.2654	0.0000	328
Better_org	personal_satisfaction	2.2872	0.4568	0.0000	329
Better_org	go_above	3.1156	0.1907	0.0018	317
Better_org	use_time_efficient	3.3765	0.1297	0.0436	318
Better_org	positive_feedback	2.7323	0.2878	0.0000	318
Better_org	motivated	2.2750	0.4008	0.0000	318
Better_org	phone_better_life	3.3784	0.1603	0.0099	310
Better_org	consciously_no_phone	3.6968	0.0671	0.0291	310
still_engaged	professional_path_sat	4.4408	-0.3796	0.0000	331
still_engaged	Depressed_while_at_work	1.9955	0.4312	0.0000	330
still_engaged	searching_new_employment	2.1917	0.3083	0.0000	329
still_engaged	personal_satisfaction	4.4277	-0.3817	0.0000	330
still_engaged	go_above	3.6273	-0.1352	0.0434	318

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<u>Y</u>	X	intercept	slope	p_value	n
$still_engaged$	lonely	2.7212	0.1536	0.0251	309
$still_engaged$	$difficult_to_concentrate$	2.5405	0.2105	0.0001	318
still_engaged	$efficiency_compared_to_peers$	2.6878	0.1811	0.0039	318
$still_engaged$	positive_feedback	3.8851	-0.2011	0.0017	319
$still_engaged$	motivated	4.8216	-0.4335	0.0000	319
$still_engaged$	other_better_lives	2.4329	0.2149	0.0002	313
still_engaged	depressive_tendencies	2.6745	0.1580	0.0148	302
$still_engaged$	mobile_per_day	3.2842	-0.1066	0.0233	312
professional_path_sat	coworkers_happier	4.2216	-0.2378	0.0003	332
$professional_path_sat$	Depressed_while_at_work	4.9985	-0.5621	0.0000	331
$professional_path_sat$	$searching_new_employment$	4.7063	-0.3906	0.0000	330
professional_path_sat	personal_satisfaction	1.1322	0.6943	0.0000	331
$professional_path_sat$	go_above	2.0095	0.3856	0.0000	319
$professional_path_sat$	use_time_efficient	2.0224	0.3943	0.0000	320
$professional_path_sat$	fatigued	4.0799	-0.1914	0.0192	318
$professional_path_sat$	lonely	4.2506	-0.3039	0.0000	310
$professional_path_sat$	difficult_to_concentrate	4.0314	-0.1777	0.0012	319
$professional_path_sat$	efficiency_compared_to_peers	4.1006	-0.2452	0.0001	319
$professional_path_sat$	positive_feedback	2.5703	0.2507	0.0001	320
professional_path_sat	motivated	1.2351	0.5821	0.0000	320
professional_path_sat	other_better_lives	4.3994	-0.2774	0.0000	314
professional_path_sat	depressive_tendencies	4.2816	-0.2964	0.0000	303
professional_path_sat	bad_sleep	4.1610	-0.2113	0.0040	308
professional_path_sat	phone_better_life	3.1427	0.1380	0.0458	312
professional_path_sat	house_income_midpoint	3.3751	0.0000	0.0388	273
coworkers_happier	Depressed_while_at_work	2.0458	0.2554	0.0000	331
coworkers_happier	searching_new_employment	2.0679	0.2137	0.0000	330
coworkers_happier	personal_satisfaction	3.3831	-0.1961	0.0001	331
coworkers_happier	go_above	3.3342	-0.1624	0.0037	319
coworkers_happier	use_time_efficient	3.3036	-0.1593	0.0066	320
coworkers_happier	fatigued	2.3091	0.1351	0.0457	318
coworkers_happier	lonely	2.1603	0.2308	0.0000	310
coworkers_happier	difficult_to_concentrate	2.4195	0.0982	0.0297	319
coworkers_happier	efficiency_compared_to_peers	2.1203	0.2572	0.0000	319
coworkers_happier	motivated	3.1031	-0.1062	0.0464	320
coworkers_happier	other_better_lives	2.0579	0.2066	0.0000	314
coworkers_happier	depressive_tendencies	2.0707	0.2472	0.0000	303
coworkers_happier	house_income_midpoint	2.8755	0.0000	0.0345	273
Depressed_while_at_work	searching_new_employment	1.1661	0.4703	0.0000	329
Depressed_while_at_work	personal_satisfaction	4.8013	-0.6469	0.0000	330
Depressed_while_at_work	go_above	4.2687	-0.4268	0.0000	318
Depressed_while_at_work	use_time_efficient	3.8125	-0.3238	0.0000	319
Depressed_while_at_work	fatigued	1.0909	0.5424	0.0000	317
Depressed_while_at_work	lonely	1.2110	0.5905	0.0000	309
Depressed_while_at_work	difficult_to_concentrate	1.5957	0.3646	0.0000	318
Depressed_while_at_work	efficiency_compared_to_peers	1.7164	0.3815	0.0000	318
Depressed_while_at_work	positive_feedback	3.7531	-0.3032	0.0000	319
Depressed_while_at_work	motivated	4.9284	-0.5949	0.0000	319
${\tt Depressed_while_at_work}$	other_better_lives	1.0924	0.4844	0.0000	313
Depressed_while_at_work	depressive_tendencies	1.0987	0.6111	0.0000	302
Depressed_while_at_work	bad_sleep	1.5319	0.3632	0.0000	307
$Depressed_while_at_work$	$phone_at_work_time$	2.4203	0.1635	0.0108	311

Y	X	intercept	slope	p_value	n
					n
Depressed_while_at_work	stress_level	1.2046	0.5841	0.0000	294
Depressed_while_at_work	mobile_per_day	2.3321	0.0999	0.0449	312
Depressed_while_at_work	house_income_midpoint	2.7924	0.0000	0.0238	272
searching_new_employment	personal_satisfaction	4.8552	-0.5568	0.0000	329
searching_new_employment	go_above	3.5907	-0.1752	0.0306	317
searching_new_employment	fatigued	2.3308	0.2075	0.0331	316
searching_new_employment	lonely	2.1097	0.3427	0.0000	308
searching_new_employment	difficult_to_concentrate	2.2495	0.2450	0.0002	317
searching_new_employment	efficiency_compared_to_peers	2.3626	0.2385	0.0017	318
searching_new_employment	positive_feedback	3.6208	-0.1846	0.0193	318
searching_new_employment	motivated	4.4598	-0.3937	0.0000	318
searching_new_employment	other_better_lives	1.9768	0.3016	0.0000	312
searching_new_employment	depressive_tendencies	2.0338	0.3556	0.0000	301
searching_new_employment	stress_level	2.2310	0.2782	0.0064	294
searching_new_employment	house_income_midpoint	3.2172	0.0000	0.0172	272
personal_satisfaction	go_above	1.8457	0.4145	0.0000	318
personal_satisfaction	use_time_efficient	2.1539	0.3493	0.0000	319
personal_satisfaction	fatigued	4.1741	-0.2437	0.0011	317
personal_satisfaction	lonely	4.0410	-0.2239	0.0004	309
personal_satisfaction	difficult_to_concentrate	4.0543	-0.2045	0.0000	318
personal_satisfaction	efficiency_compared_to_peers	3.8933	-0.1705	0.0037	318
personal_satisfaction	positive_feedback	2.9288	0.1500	0.0127	319
personal_satisfaction	motivated	1.1776	0.5843	0.0000	319
personal_satisfaction	other_better_lives	4.1517	-0.2050	0.0001	313
personal_satisfaction	depressive_tendencies	4.0393	-0.2122	0.0004	302
personal_satisfaction	social_media_makes_lonely	3.1518	0.1450	0.0194	312
personal_satisfaction	phone_better_life	3.1402	0.1261	0.0442	311
personal_satisfaction	phone_at_work_time	3.6060	-0.1202	0.0327	311
personal_satisfaction	house_income_midpoint	3.3224	0.0000	0.0322	273
go_above	use_time_efficient	1.5090	0.6472	0.0000	319
go_above	fatigued	4.8679	-0.3043	0.0000	317
go_above	lonely	4.4533	-0.1715	0.0026	309
go_above	difficult_to_concentrate	4.7527	-0.2688	0.0000	318
go_above	efficiency_compared_to_peers	4.9134	-0.3979	0.0000	318
go_above	positive_feedback	2.9913	0.2656	0.0000	319
go_above	motivated	2.1809	0.4671	0.0000	319
go_above	depressive_tendencies	4.5526	-0.2045	0.0001	302
go_above	phone_at_work_time	4.1953	-0.2099	0.0000	311
go_above	mobile_per_day	4.2250	-0.0792	0.0416	312
go_above	consciously_no_phone	3.8618	0.0733	0.0082	311
use_time_efficient	fatigued	4.5060	-0.2124	0.0009	318
use_time_efficient	lonely	4.2147	-0.1207	0.0275	310
use_time_efficient	difficult_to_concentrate	4.6612	-0.2793	0.0000	319
use_time_efficient	$efficiency_compared_to_peers$	4.7022	-0.3546	0.0000	319
use_time_efficient	positive_feedback	3.2594	0.1698	0.0009	320
use_time_efficient	motivated	2.5491	0.3460	0.0000	320
use_time_efficient	other_better_lives	4.2167	-0.0925	0.0480	314
use_time_efficient	depressive_tendencies	4.3374	-0.1675	0.0012	303
use_time_efficient	$is_phone_distracting$	4.2072	-0.1099	0.0234	290
use_time_efficient	phone_at_work_time	4.0292	-0.1494	0.0019	312
use_time_efficient	consciously_no_phone	3.7395	0.0711	0.0076	312
fatigued	lonely	2.0141	0.2980	0.0000	308

Y	X	intercept	slope	p_value	n
fatigued	difficult_to_concentrate	2.0546	0.2401	0.0000	317
fatigued	$efficiency_compared_to_peers$	2.1782	0.2308	0.0000	317
fatigued	positive_feedback	3.0329	-0.0887	0.0481	318
fatigued	motivated	3.3930	-0.1781	0.0000	318
fatigued	other_better_lives	1.9779	0.2354	0.0000	312
fatigued	depressive_tendencies	1.9515	0.3127	0.0000	301
fatigued	bad_sleep	1.6031	0.3913	0.0000	306
fatigued	social_media_makes_lonely	2.4287	0.0945	0.0415	311
fatigued	feel_constant_need_to_look_at_phone	2.2648	0.1513	0.0000	307
fatigued	is_phone_distracting	2.3811	0.1255	0.0028	288
fatigued	stress_level	1.9556	0.3257	0.0000	293
fatigued	mobile_per_day	2.4592	0.1110	0.0005	311
lonely	difficult_to_concentrate	1.4708	0.2937	0.0000	309
lonely	efficiency_compared_to_peers	1.6041	0.2900	0.0000	309
lonely	motivated	2.8808	-0.1614	0.0025	310
lonely	other_better_lives	1.0374	0.4020	0.0000	309
lonely	depressive_tendencies	0.9013	0.5688	0.0000	300
lonely	bad_sleep	1.1540	0.3952	0.0000	304
lonely	social_media_makes_lonely	1.8149	0.1566	0.0047	309
lonely	feel_constant_need_to_look_at_phone	1.8693	0.1303	0.0038	305
lonely	is_phone_distracting	1.9236	0.1313	0.0097	286
lonely	stress level	1.3355	0.4009	0.0000	290
lonely	mobile_per_day	2.0133	0.1095	0.0048	309
lonely	consciously_no_phone	2.4098	-0.0640	0.0209	308
lonely	house_income_midpoint	2.5683	0.0000	0.0009	269
difficult_to_concentrate	efficiency_compared_to_peers	1.3364	0.5739	0.0000	318
difficult_to_concentrate	motivated	4.1393	-0.3908	0.0000	319
difficult_to_concentrate	other_better_lives	1.7074	0.2919	0.0000	313
difficult_to_concentrate	depressive_tendencies	1.4817	0.4530	0.0000	302
difficult_to_concentrate	bad_sleep	1.4287	0.4950 0.4156	0.0000	302
difficult_to_concentrate	social_media_makes_lonely	2.1668	0.4136	0.0263	312
difficult_to_concentrate	feel_constant_need_to_look_at_phone	1.8327	0.1680 0.2687	0.0000	308
difficult_to_concentrate	is_phone_distracting	1.7271	0.3623	0.0000	290
difficult_to_concentrate	phone_at_work_time	2.4743	0.3520 0.1520	0.0161	311
difficult_to_concentrate	stress level	1.8103	0.1326	0.0001	$\frac{311}{295}$
difficult_to_concentrate	mobile_per_day	2.3088	0.3340 0.1344	0.0053	312
difficult to concentrate	consciously_no_phone	3.0361	-0.1616	0.0000	311
efficiency_compared_to_peers	positive_feedback	3.0831	-0.2306	0.0001	319
efficiency compared to peers	motivated	3.2886	-0.2818	0.0001	319
efficiency_compared_to_peers	other_better_lives	1.3277	0.2797	0.0000	313
efficiency_compared_to_peers	depressive_tendencies	1.3265	0.3503	0.0000	302
efficiency_compared_to_peers	bad_sleep	1.5203 1.5092	0.3303 0.2336	0.0000	302
efficiency_compared_to_peers	feel_constant_need_to_look_at_phone	1.8901	0.2330 0.1022	0.0002 0.0349	308
efficiency_compared_to_peers	is_phone_distracting	1.7204	0.1022 0.1805	0.0349 0.0010	289
efficiency compared to peers	phone at work time	2.0758	0.1303 0.1197	0.0010 0.0249	311
efficiency_compared_to_peers efficiency_compared_to_peers	stress_level	1.6850	0.1197 0.1859	0.0249 0.0098	$\frac{311}{295}$
efficiency_compared_to_peers efficiency_compared_to_peers		1.9651	0.1859 0.0978	0.0098 0.0187	$\frac{293}{312}$
·	mobile_per_day	2.3841	-0.0794		
efficiency_compared_to_peers	consciously_no_phone motivated	2.3841 2.3180	0.0794 0.4213	0.0077 0.0000	311 320
positive_feedback					
positive_feedback	other_better_lives	4.3073	-0.1016	0.0451	314
positive_feedback	depressive_tendencies	4.2762	-0.1162	0.0415	303
motivated	other_better_lives	4.3747	-0.1179	0.0212	314

Y	X	intercept	slope	p_value	n
motivated	depressive_tendencies	4.5728	-0.2327	0.0000	303
motivated	bad_sleep	4.5471	-0.1916	0.0021	308
motivated	phone_better_life	3.4594	0.1771	0.0028	312
motivated	phone_at_work_time	4.0945	-0.1157	0.0289	312
other better lives	depressive tendencies	1.7474	0.5226	0.0000	302
other_better_lives	bad_sleep	1.9493	0.3716	0.0000	307
other_better_lives	feel_constant_need_to_look_at_phone	2.6666	0.1089	0.0372	308
other_better_lives	is_phone_distracting	2.6529	0.1337	0.0225	289
other_better_lives	phone_at_work_time	2.8914	0.1174	0.0422	311
other_better_lives	stress_level	1.9857	0.4342	0.0000	294
other better lives	mobile_per_day	2.7714	0.1004	0.0248	312
other better lives	house_income_midpoint	3.3951	0.0000	0.0001	272
depressive_tendencies	bad_sleep	0.8692	0.5448	0.0000	298
depressive_tendencies	feel_constant_need_to_look_at_phone	2.0267	0.1173	0.0153	298
depressive_tendencies	is_phone_distracting	1.7921	0.2296	0.0000	281
depressive_tendencies	stress_level	1.0683	0.5770	0.0000	286
depressive_tendencies	mobile_per_day	2.0721	0.1368	0.0011	302
depressive_tendencies	consciously_no_phone	2.6013	-0.0871	0.0040	301
depressive_tendencies	house_income_midpoint	2.6828	0.0000	0.0020	267
bad_sleep	is_phone_distracting	2.4869	0.1036	0.0336	286
bad_sleep	stress_level	1.5839	0.5229	0.0000	289
bad_sleep	mobile_per_day	2.5075	0.1169	0.0017	306
bad_sleep	house_income_midpoint	2.9731	0.0000	0.0154	266
social_media_makes_lonely	feel_constant_need_to_look_at_phone	1.9059	0.2716	0.0000	309
social_media_makes_lonely	phone_better_life	1.8375	0.2581	0.0000	312
social_media_makes_lonely	mobile_per_day	2.4504	0.1051	0.0074	313
social_media_makes_lonely	consciously_no_phone	2.8805	-0.0779	0.0056	312
social_media_makes_lonely	house_income_midpoint	2.8743	0.0000	0.0071	273
feel_constant_need_to_look_at_phone	is_phone_distracting	1.5885	0.5002	0.0000	286
feel_constant_need_to_look_at_phone	phone_at_work_time	2.5433	0.3393	0.0000	308
feel_constant_need_to_look_at_phone	stress_level	2.2481	0.2255	0.0123	290
feel_constant_need_to_look_at_phone	mobile_per_day	2.0183	0.3717	0.0000	309
feel_constant_need_to_look_at_phone	consciously_no_phone	3.4250	-0.2347	0.0000	308
is_phone_distracting	stress_level	1.7720	0.2761	0.0010	272
is_phone_distracting	mobile_per_day	1.8993	0.2466	0.0000	290
is_phone_distracting	consciously_no_phone	2.7692	-0.1327	0.0001	290
phone_better_life	mobile_per_day	2.9401	0.1198	0.0021	312
phone_at_work_time	mobile_per_day	-0.0305	0.3304	0.0000	312
phone_at_work_time	consciously_no_phone	0.9350	-0.1101	0.0004	311
stress_level	mobile_per_day	2.0680	0.0689	0.0383	293
mobile_per_day	consciously_no_phone	2.4739	-0.1728	0.0000	312

Table 2: Significant relationships at the 0.00014 level

Y	X	intercept	slope	p_value	n
Org_satisfaction	Better_org	1.0064	0.7369	0e+00	330
Org_satisfaction	$still_engaged$	5.0326	-0.3742	0e + 00	331
Org_satisfaction	$professional_path_sat$	1.7432	0.5964	0e + 00	332
Org_satisfaction	Depressed_while_at_work	5.1828	-0.5181	0e+00	331
Org_satisfaction	searching_new_employment	5.0972	-0.4223	0e+00	330
Org satisfaction	personal satisfaction	1.6078	0.6441	0e+00	331

Y	X	intercent	slope	p_value	12
		intercept			<u>n</u>
Org_satisfaction	go_above	2.8164	0.2608	0e+00	319
Org_satisfaction	lonely	4.4676	-0.2600	0e+00	310
Org_satisfaction	positive_feedback	2.6474	0.3053	0e + 00	320
Org_satisfaction	motivated	1.5993	0.5652	0e+00	320
Org_satisfaction	depressive_tendencies	4.4683	-0.2456	0e+00	303
Better_org	still_engaged	4.6288	-0.2370	0e + 00	329
Better_org	professional_path_sat	2.4296	0.4095	0e + 00	330
Better_org	Depressed_while_at_work	4.7338	-0.3343	0e + 00	329
Better_org	searching_new_employment	4.6608	-0.2654	0e + 00	328
Better_org	personal_satisfaction	2.2872	0.4568	0e + 00	329
Better_org	positive_feedback	2.7323	0.2878	0e + 00	318
Better_org	motivated	2.2750	0.4008	0e + 00	318
still_engaged	professional_path_sat	4.4408	-0.3796	0e + 00	331
still_engaged	Depressed_while_at_work	1.9955	0.4312	0e + 00	330
still_engaged	searching_new_employment	2.1917	0.3083	0e + 00	329
still_engaged	personal_satisfaction	4.4277	-0.3817	0e + 00	330
still_engaged	difficult_to_concentrate	2.5405	0.2105	1e-04	318
still_engaged	motivated	4.8216	-0.4335	0e + 00	319
professional_path_sat	Depressed_while_at_work	4.9985	-0.5621	0e + 00	331
professional_path_sat	$searching_new_employment$	4.7063	-0.3906	0e + 00	330
professional_path_sat	personal_satisfaction	1.1322	0.6943	0e + 00	331
professional_path_sat	go_above	2.0095	0.3856	0e+00	319
professional_path_sat	use_time_efficient	2.0224	0.3943	0e + 00	320
professional_path_sat	lonely	4.2506	-0.3039	0e + 00	310
professional_path_sat	efficiency_compared_to_peers	4.1006	-0.2452	1e-04	319
professional_path_sat	positive_feedback	2.5703	0.2507	1e-04	320
professional_path_sat	motivated	1.2351	0.5821	0e + 00	320
professional_path_sat	other_better_lives	4.3994	-0.2774	0e + 00	314
professional_path_sat	depressive_tendencies	4.2816	-0.2964	0e + 00	303
coworkers_happier	Depressed_while_at_work	2.0458	0.2554	0e + 00	331
coworkers_happier	searching_new_employment	2.0679	0.2137	0e + 00	330
coworkers_happier	personal_satisfaction	3.3831	-0.1961	1e-04	331
coworkers_happier	lonely	2.1603	0.2308	0e + 00	310
coworkers_happier	efficiency_compared_to_peers	2.1203	0.2572	0e + 00	319
coworkers_happier	other_better_lives	2.0579	0.2066	0e + 00	314
coworkers_happier	depressive_tendencies	2.0707	0.2472	0e + 00	303
Depressed_while_at_work	searching_new_employment	1.1661	0.4703	0e + 00	329
Depressed_while_at_work	personal_satisfaction	4.8013	-0.6469	0e + 00	330
Depressed_while_at_work	go_above	4.2687	-0.4268	0e + 00	318
Depressed_while_at_work	use_time_efficient	3.8125	-0.3238	0e + 00	319
Depressed_while_at_work	fatigued	1.0909	0.5424	0e + 00	317
Depressed_while_at_work	lonely	1.2110	0.5905	0e + 00	309
Depressed_while_at_work	difficult_to_concentrate	1.5957	0.3646	0e + 00	318
Depressed_while_at_work	efficiency_compared_to_peers	1.7164	0.3815	0e + 00	318
Depressed_while_at_work	positive_feedback	3.7531	-0.3032	0e + 00	319
Depressed_while_at_work	motivated	4.9284	-0.5949	0e + 00	319
Depressed_while_at_work	other_better_lives	1.0924	0.4844	0e + 00	313
Depressed_while_at_work	depressive_tendencies	1.0987	0.6111	0e + 00	302
Depressed_while_at_work	bad_sleep	1.5319	0.3632	0e+00	307
Depressed_while_at_work	stress_level	1.2046	0.5841	0e+00	294
searching_new_employment	personal_satisfaction	4.8552	-0.5568	0e+00	329
searching_new_employment	lonely	2.1097	0.3427	0e+00	308
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Y	X	intercept	slope	p_value	n
searching_new_employment	motivated	4.4598	-0.3937	0e+00	318
searching_new_employment searching_new_employment	other_better_lives	1.9768	0.3016	0e+00	312
searching_new_employment searching_new_employment	depressive_tendencies	2.0338	0.3516	0e+00	301
personal_satisfaction	go above	1.8457	0.3330 0.4145	0e+00	318
personal_satisfaction	use_time_efficient	2.1539	0.4143 0.3493	0e+00	319
personal_satisfaction	difficult_to_concentrate	4.0543	-0.2045	0e+00	$319 \\ 318$
personal_satisfaction	motivated	1.1776	0.5843	0e+00	319
-		4.1517	-0.2050	1e-04	313
personal_satisfaction go above	other_better_lives	$\frac{4.1517}{1.5090}$	0.6472	0e+00	319
0 =	use_time_efficient fatigued	4.8679	-0.3043	0e+00	319 317
go_above	~	4.7527	-0.3043	0e+00	318
go_above go_above	difficult_to_concentrate	4.7527	-0.2000	0e+00	318
~	efficiency_compared_to_peers				
go_above	positive_feedback	2.9913	0.2656	0e+00	319
go_above	motivated	2.1809	0.4671	0e+00	319 302
go_above	depressive_tendencies	4.5526	-0.2045	1e-04	
go_above	phone_at_work_time	4.1953	-0.2099	0e+00	311
use_time_efficient	difficult_to_concentrate	4.6612	-0.2793	0e+00	319
use_time_efficient	efficiency_compared_to_peers	4.7022	-0.3546	0e+00	319
use_time_efficient	motivated	2.5491	0.3460	0e+00	320
fatigued	lonely	2.0141	0.2980	0e+00	308
fatigued	difficult_to_concentrate	2.0546	0.2401	0e+00	317
fatigued	efficiency_compared_to_peers	2.1782	0.2308	0e+00	317
fatigued	motivated	3.3930	-0.1781	0e+00	318
fatigued	other_better_lives	1.9779	0.2354	0e+00	312
fatigued	depressive_tendencies	1.9515	0.3127	0e+00	301
fatigued	bad_sleep	1.6031	0.3913	0e+00	306
fatigued	feel_constant_need_to_look_at_phone	2.2648	0.1513	0e+00	307
fatigued	stress_level	1.9556	0.3257	0e + 00	293
lonely	difficult_to_concentrate	1.4708	0.2937	0e + 00	309
lonely	efficiency_compared_to_peers	1.6041	0.2900	0e + 00	309
lonely	other_better_lives	1.0374	0.4020	0e+00	309
lonely	depressive_tendencies	0.9013	0.5688	0e + 00	300
lonely	bad_sleep	1.1540	0.3952	0e + 00	304
lonely	stress_level	1.3355	0.4009	0e+00	290
difficult_to_concentrate	efficiency_compared_to_peers	1.3364	0.5739	0e + 00	318
difficult_to_concentrate	motivated	4.1393	-0.3908	0e+00	319
difficult_to_concentrate	other_better_lives	1.7074	0.2919	0e + 00	313
difficult_to_concentrate	depressive_tendencies	1.4817	0.4530	0e + 00	302
difficult_to_concentrate	bad_sleep	1.4287	0.4156	0e + 00	307
difficult_to_concentrate	feel_constant_need_to_look_at_phone	1.8327	0.2687	0e + 00	308
difficult_to_concentrate	is_phone_distracting	1.7271	0.3623	0e + 00	290
difficult_to_concentrate	stress_level	1.8103	0.3346	1e-04	295
difficult_to_concentrate	consciously_no_phone	3.0361	-0.1616	0e + 00	311
$efficiency_compared_to_peers$	positive_feedback	3.0831	-0.2306	1e-04	319
$efficiency_compared_to_peers$	motivated	3.2886	-0.2818	0e + 00	319
$efficiency_compared_to_peers$	other_better_lives	1.3277	0.2797	0e + 00	313
$efficiency_compared_to_peers$	depressive_tendencies	1.3265	0.3503	0e + 00	302
positive_feedback	motivated	2.3180	0.4213	0e + 00	320
motivated	depressive_tendencies	4.5728	-0.2327	0e + 00	303
other_better_lives	depressive_tendencies	1.7474	0.5226	0e + 00	302
other_better_lives	bad_sleep	1.9493	0.3716	0e + 00	307
other_better_lives	stress_level	1.9857	0.4342	0e + 00	294

Y	X	intercept	slope	p_value	n
other_better_lives	house_income_midpoint	3.3951	0.0000	1e-04	272
depressive_tendencies	bad_sleep	0.8692	0.5448	0e + 00	298
depressive_tendencies	is_phone_distracting	1.7921	0.2296	0e + 00	281
depressive_tendencies	stress_level	1.0683	0.5770	0e + 00	286
bad_sleep	stress_level	1.5839	0.5229	0e + 00	289
social_media_makes_lonely	feel_constant_need_to_look_at_phone	1.9059	0.2716	0e + 00	309
social_media_makes_lonely	phone_better_life	1.8375	0.2581	0e + 00	312
feel_constant_need_to_look_at_phone	is_phone_distracting	1.5885	0.5002	0e + 00	286
feel_constant_need_to_look_at_phone	phone_at_work_time	2.5433	0.3393	0e + 00	308
feel_constant_need_to_look_at_phone	mobile_per_day	2.0183	0.3717	0e + 00	309
feel_constant_need_to_look_at_phone	consciously_no_phone	3.4250	-0.2347	0e + 00	308
is_phone_distracting	mobile_per_day	1.8993	0.2466	0e + 00	290
is_phone_distracting	consciously_no_phone	2.7692	-0.1327	1e-04	290
phone_at_work_time	mobile_per_day	-0.0305	0.3304	0e + 00	312
mobile_per_day	consciously_no_phone	2.4739	-0.1728	0e+00	312