Goals

The goal of this research is to gather quantitative findings on the new CB.com Homepage, Job Results Page, and Job Description Page.

Methodology:

Unmoderated Usability Study with SUS score survey

Participants (n=104) were pre-tested for the their motivations, ideal job attributes and decision apply criteria.

Then participants interacted with the CB.com Homepage and JDP/JRP with this task:

Imagine yourself in this scenario:

I am online looking for a new job. I happen to come to this website. My goal is to look for the best job, because I don't want to spend time on applications if it's not really right for me.

Based on the scenario above, please show us how you would find the best job for you.

Move on to the next task when you feel you would decide to apply or you could not find a better job.

In a post-test survey participants reported their decision on applying, and were probed according to their decision level.

Then participants took the SUS survey.

Preliminary Findings

- On average, participants scored the system usability at 84.35, which is consistent with previous moderated research (CI: 82 to 87; Min: 37.5, Max: 100).
- 54% of the sample did not decide to apply.
- The decision to apply is subtly but positively correlated with SUS at the p < 0.009 level; Effect Size = 0.25 (Spearman's rho shows a small to medium effect).

Controlling for Age, Income, Education, Pay Type, Persona, Employment Situation, and the Decision to Apply:

• When Gender changes from Male to Female, SUS Score averages a decrease of 6.14 in SUS Score at the p < 0.03 level.

When interacting Education with Decide-to-apply -Gender is the only significant predictor of SUS, on average controlling for all other variables in the model (44% of the relative weight within the model.)

The top associations with No- I did not find a good job:

In order of significance and effect size:

- Job Title(s)/Role(s)- difficult to find (Effect 1.53, p < 0.0001)
- Job Description Information difficult to find (Effect 0.99, p < 0.009)
- Location difficult to find (Effect 0.96, p < 0.005)
- Career Path Pursuits with national gender imbalances (Effect -0.21, p < 0.05)
- Career Paths with standardized state tests (Effect -0.20, p < 0.05)
- By looking at the participants that had a SUS of less than 60 and didn't decide to apply, these mostly relate to location related issues being conflated with Job Title and Filtering tasks. This seems to be the most reliable explanation for gender influences on the decide to apply rate and the SUS score average.

PARTICIPANTS

Income

52% of participants had an income less than \$55K (60% of the sample was between \$26K -\$85K/year)

Age

64% of the sample was between 26 and 45 years of age

Gender

46% female, 54% Male

Education

48% of participants had a bachelors degree or higher

Current or Expected Pay Type 48% were hourly, 52% salaried

Employment Status

40% Employed Full-Time, 18% Freelance/Self Employed, 14% Unemployed, 9% full-time student

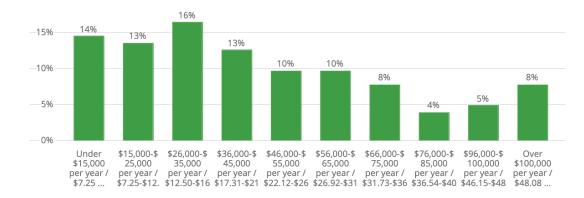
Persona

34% were Skilled, 24% Side-hustlers, 20% Parental, 16% Hand-holders, 6% Discoverers

Gender

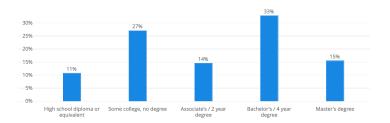
20%

Income



Education

Female

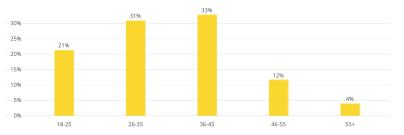


transition to a new career, but I'm

just not sure how.

Male

Age



it, so I want a recognized company,

good employee culture, and

opportunities for advancement.

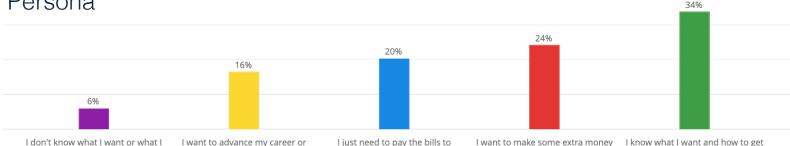
and stay busy, so I want to work

from or near my home with decent

Persona

can do, so I'm not sure what to

search for.



support my family, so I need a

reliable company with a good

work-life balance.

TEST DESIGN

Pre-Test Job Seeker Goals Assessment



MOTIVATIONS



Job Search Criteria



Decision Apply
Criteria

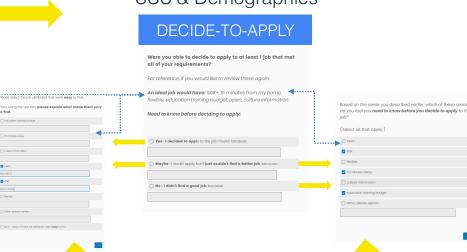
Task Prompt for Job Search Task

Imagine yourself in this scenario:

I am online looking for a new job. I happen to come to this website. My goal is to look for the best job, because I don't want to spend time on applications if it's not really right for me.

Based on the scenario above, please show us how you would find the best job for you.

Move on to the next task when you feel you would decide to apply or you could not find a better job. Post Test Job Seeker Decide to Apply Success, SUS & Demographics



SUS

10 questions

Demographics

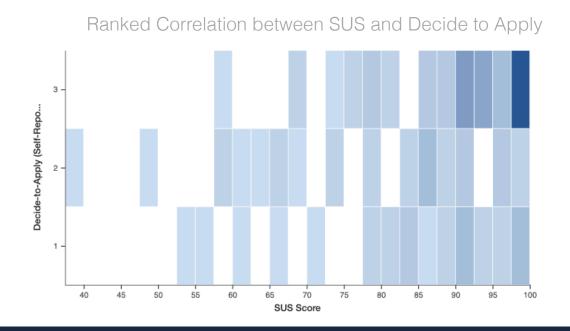
10 questions



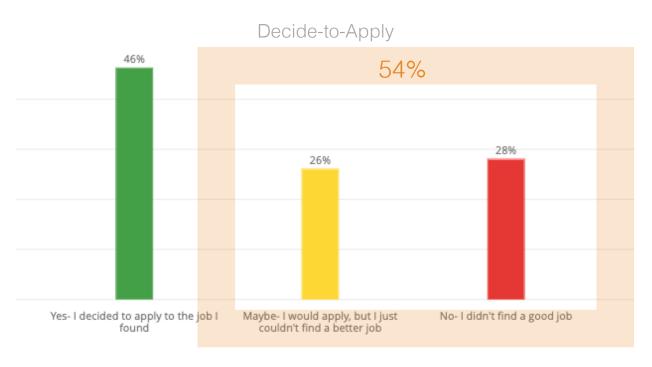
SUS & DECIDE-TO-APPLY

SUS Score is good, however the majority did not decide to apply.

- On average, participants scored the system usability at 84.35, which is precisely consistent with previous moderated research (CI: 82 to 87; Min: 37.5, Max: 100)
- 54% of the sample did not decide to apply.
- The decision to apply is subtly but positively correlated with SUS at the p < 0.009 level; Effect Size = 0.25 (Spearman's rho shows a small to medium effect)





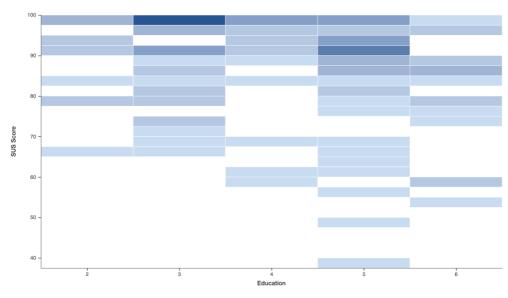


SUS SCORE ASSOCIATIONS

So why is the usability score good and the rates of deciding to apply *not so good*? (Let's look at SUS first.)

- RE: On average, participants scored the system usability at 84.35,
 - SUS is subtly negatively correlated with education at the p < 0.02 level (Effect Size: -0.22, Spearman's rho see top right graph)
 - SUS was not associated with Age, Income, Pay Type, Career Path Pursuit, or Employment Situation, Employment Situation, Persona or Gender at the p < 0.05 level (See Qualtrics workspace: SUS Relation to demos)
 - Gender was associated at the p < 0.058 level (Effect Size: 0.38, Ranked T-Test)

Education is subtly negatively correlated with SUS Score



Ranked Correlation (Recommended)

Effect Size (Spearman's rho)

Sample Size

Confidence Interval of Effect Size

0.0286

-0.215

-0.391

104

to -0.023

Gender and SUS Score are
associated at the $p < 0.058$
level



Reorder Filter: Count v is greater than

Hide unranked T-Test results

Gender ÷	Count ÷	Average -	Median ÷	% N
Male	56	87.5	90.0	and the second
Female	48	80.7	85.0	and the second second second
Total (2)	104	84.4	87.5	37.5 60 80 100

So why is the usability score good and the rates of deciding to apply *not so good*? (Now let's look demographics related to the decision to apply.)

RE: 54% of the sample did not decide to apply.

- Deciding to apply is not associated with Age, Income, Education, Pay Type, Income, Employment Situation, Persona, or Career Path Pursuit.
- Gender is associated with the decision to apply (T-Test Effect Size: 40.8%, p < 0.04; Difference: 20%)
 - 55% of males decided to apply; 35% of females decided to apply (See bottom table.)

Gender -	Count ÷	Average ÷	Median ÷	% N
Male	56	0.554	1	55.4% of Males
Female	48	0.354	0	35.4% of Female
Total (2)	104	0.462	0	0 0.200 0.400 0.600 0.800 1 1.20 1.40

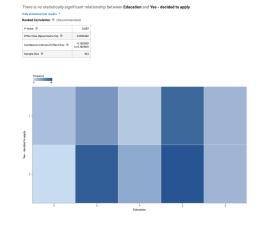
P-Value	0.0419
Effect Size (Cohen's d)	0.408
Difference Between Averages (Female - Male)	-0.199
Confidence Interval of Difference	-0.391 to -0.00748

There is no statistically significant relationship between **Gender** and **Education**

Reorder Filter: Count v is greater than of

Gender	Count ÷	Average -	Median ‡	% N
Female	48	4.17	4.00	
Male	56	4.14	4.00	
Total (2)	104	4.15	4.00	22.5033.5044.5055.506

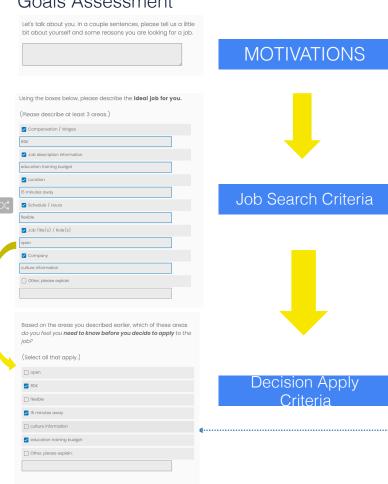
- Gender is also not associated with education at the p < 0.97 level, see left (also analyzed for a binary levels).
- And the decision to apply is <u>not</u> associated with education at the 0.9 level (see right), which is different from the SUS Score.



PRE-TEST JOB SEEKER GOALS

TEST DESIGN

Pre-Test Job Seeker Goals Assessment



Task Prompt for Job Search Task

Imagine yourself in this scenario:

I am online looking for a new job. I happen to come to this website. My goal is to look for the best job, because I don't want to spend time on applications if it's not really right for me.

Based on the scenario above, please show us how you would find the best job for you.

Move on to the next task when you feel you would decide to apply or you could not find a better iob. Post Test
Job Seeker
Decide to Apply Success,
SUS & Demographics

DECIDE-TO-APPLY



SUS

10 questions

Demographics

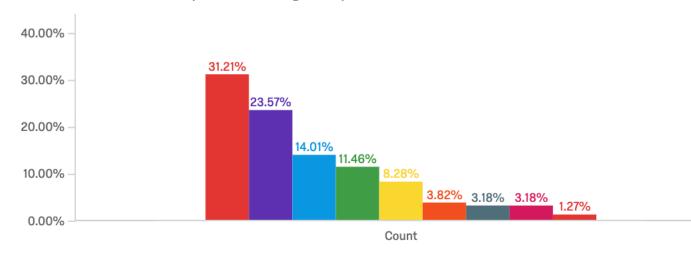
10 questions

Participants' reasons to look for a job

Most participants (31%) described money related topics for looking for a job. For those who described skill attributes (23%), these observations were related to not being able to use their current or desired skill set at their job, or looking to implement skills they recently attained from an educational program. The third highest frequency of topics (14%) were related to finding a suitable company culture. Many participants (12%) identified their parental role in their family first or indicated that this was the sole reason for looking for a job.

Related topics such as seeking security, enjoyment, work/life balance, working from home, may easily be related to previous said topics, however the individual observations in those topics seem to less clearly fit, relative to other participants' indications in that group (e.g. seeking more security, could be related to predictable schedule/hours or simply more money.)

Let's talk about you. In a couple sentences, please tell us a little bit about yourself and some reasons you are looking for a job.



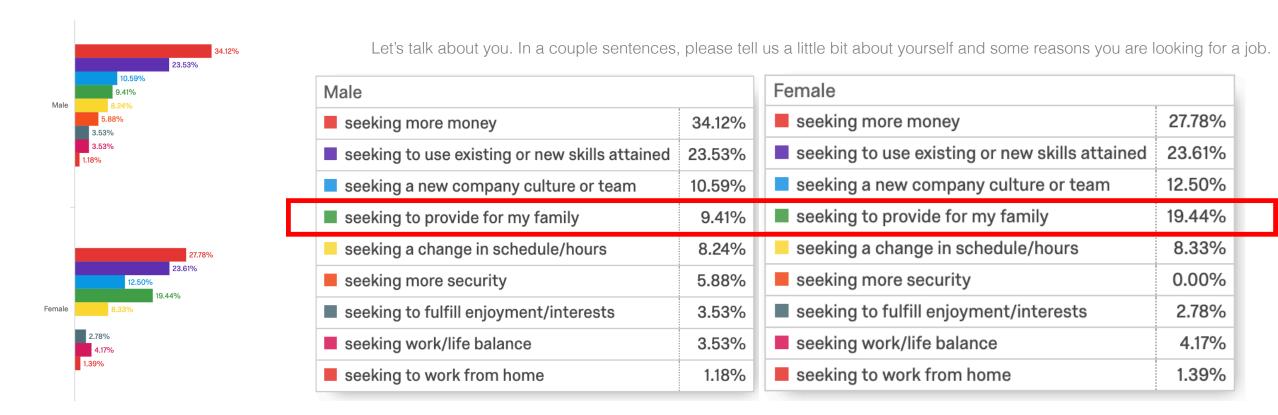
Count	
seeking more money	31.21%
seeking to use existing or new skills attained	23.57%
seeking a new company culture or team	14.01%
seeking to provide for my family	11.46%
seeking a change in schedule/hours	8.28%
seeking more security	3.82%
seeking to fulfill enjoyment/interests	3.18%
seeking work/life balance	3.18%
seeking to work from home	1.27%



Female respondents reported their parental role almost twice as much as males as a reason for looking for a job.

The distribution of reasons for both male and female respondents are statistically equal on almost every dimension, with the exception of reporting that their parental role was an impetus for looking for a job.

- 19.44% of the respondents who identified as female reported their children, family or parental role as part of their reason for looking for a job.
- 9.41% of respondents who identified as male, reported their children, family or parental role as part of their reason for looking for a job.



"Ideal" Attributes of a Job

A randomized set of attribute categories were presented to participants in order to inform their post-test report on what was easy or difficult to find.

The top 3 highest frequency of "ideal" job attribute categories were:

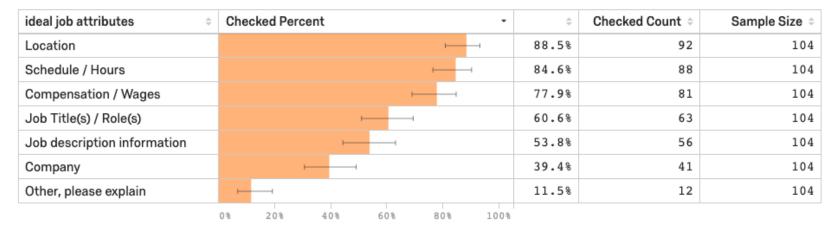
- Location 89%
- Schedule/Hours 85%
- Compensation/Wages 78%

Their "need to knows" also had the top 3 highest frequency.

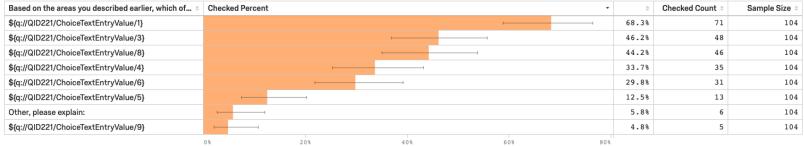
Location >
Compensation Wages
Schedule/Hours>
Job Title(s)/Role(s)>
Company(s)>

Other Ideal>

Summary of ideal job attributes



Summary of Based on the areas you described earlier, which of these areas do you feel you need to know before you decide to apply to the job? (Select all that apply.) - Selected Choice





Prediction models

TEST DESIGN

Pre-Test Job Seeker Goals Assessment

-

MOTIVATIONS



Job Search Criteria



Decision Apply

Criteria

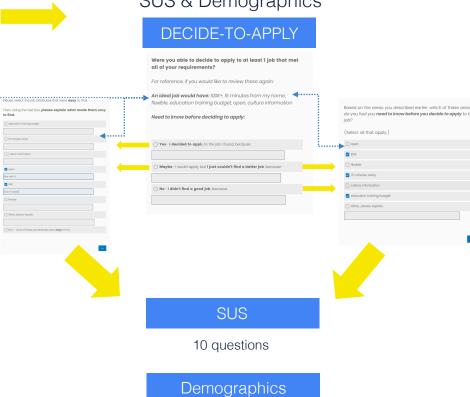
Task Prompt for Job Search Task

Imagine yourself in this scenario:

I am online looking for a new job. I happen to come to this website. My goal is to look for the best job, because I don't want to spend time on applications if it's not really right for me.

Based on the scenario above, please show us how you would find the best job for you.

Move on to the next task when you feel you would decide to apply or you could not find a better job. Post Test Job Seeker Decide to Apply Success, SUS & Demographics



10 questions

SUS PREDICTORS

Controlling for just the basics (for now), Gender is the most significant predictor of SUS change (we'll get to decide-to-apply next).

- When Gender changes from Male to: Female averages a decrease of 6.48 in SUS Score (p < 0.008), controlling for other variables in (top right figure).
- when Education increases by one, SUS Score decreases by 2.05 on average (p < 0.04), controlling for other variables in the model.

But look what happens when we interact these two terms:

- Changes in SUS Score due to Education depend on the value of Gender and vice versa.*
 - So in addition to the non-interaction change when *Education* increases by one and *Gender* is: Female *SUS Score* decreases by 4.79 (p < 0.01).

*However, *Gender* is the more significant predictor in the interaction model at the 0.004 level (see bottom table right); compared to education alone (Education by itself is comparatively not a significant influencer of SUS change, when considering gender.)

Interactions between Education & Gender does result in having the most influence on the model but only slightly more than Gender alone (see relative weights: 44% interaction, 42% Gender) and Gender is still the most significant (least likely to be a false positive) at the p < 0.005 level.

Regression of SUS Score with 4 explanatory variables

Guide to Linear Regression



Regression of SUS Score with 4 explanatory variables

Guide to Linear Regression

Gender[Female]:Education

Sample Size	Method	R-Squared	Standard Error	Coefficient of Variation	Model Fit (AICR)
104	M-estimation	0.134	12.7	0.151	92.8



Parameters	Relative ÷ Weights	Coefficients	Lower CI ÷	Upper CI ÷	Standardized Coefficients	P-value ÷
Intercept	0.0%	86.99	79.6	94.4	0	< 0.00001
Gender[Female]	42.3%	-6.95	-11.8	-2.1	-0.2599	0.00455
Age	0.5%	0.62	-1.7	2.9	0.0491	0.603
Income	0.5%	-0.04	-0.7	0.6	-0.0115	0.901
Education	12.5%	-0.22	-2.7	2.3	-0.0207	0.866

-4.79

-8.5

-1.0

-0.2960

0.0124

44.1%

DECIDE-TO-APPLY PREDICTORS

Controlling for just the basics (for now), Gender is the most significant predictor of the decision to apply.

- When Gender changes from Male to Female, Deciding-to-Apply is on average 2.44 times less likely, controlling for age, income and education at the (p < 0.03 level.)
- Education is not a significant predictor (p < 0.7)

But look what happens when we interact these two terms:

- Changes in Deciding to Apply (From No and Maybe to Yes) due to Education do not depend on the value of Gender and vice versa.
 - See the bottom table The interaction variable is not significant; Gender is still the most significant predictor, controlling for these demographics.

So next we'll control for various levels of deciding to apply.

- (Changes from No, to Maybe, to Yes).
- This essentially means that we are exploring changes in perceptions of usability, *regardless of the ultimate decision to apply.*
- Then we can see if Gender or the decision to apply are separate constructs, or if they work together to influence perceptions of usability.
- And secondly, we'll explore it in the reverse case: Are there unique attributes of gender that influence usability perceptions, which ultimately affect the decision to apply?

Logistic Regression of Yes - decided to apply with 4 explanatory variables

0.0468

0.0892

Add a variable to the model

Add an interaction between

Guide to Logistic Regression Sample Size Method

104 Logistic Regression 0.0428 148 /res - decided to probabilities 0 0 - s = 1 - s = 0.891									
O - s = Clearly significant Controlling for other variables in this regression when Gender changes from Male to: + 0.245 × Age Enter a value - 0.0478 × Income Enter a value	104	Logistic Regressio	n			0.0428	148		
1						Gende	r	×	Clearly significant
+ 0.245 × Age Tis on average 2.44 times less likely - 0.0478 × Income	1		+						
- 0.0478 × Income			+	0.245	×	Age			
Enter a value			_	0.0478	×	Incom		9	
							Enter a value	9	

McFadden's R-Squared Model Fit (AICc)

Education & Gender Separate

and Variable 2

Parameters	Coefficients 0 ÷	Odds 0 ÷	Standardized Coefficients	P-value ÷
Intercept	0.089	1.09	0	0.912
Gender[Female]	-0.891	0.41	-0.765	0.0332
Age	0.245	1.28	0.449	0.221
Income	-0.048	0.95	-0.288	0.431
Education	-0.047	0.95	-0.102	0.780

Interaction between Education & Gender

Parameters	Coefficients	Odds 🕕 💠	Standardized Coefficients	P-value ÷
Intercept	-0.099	0.91	0	0.876
Gender[Female]	-0.891	0.41	-0.765	0.0332
Age	0.243	1.27	0.445	0.226
Income	-0.048	0.95	-0.289	0.430
Education	-0.024	0.98	-0.051	0.913
Gender[Female]:Education	-0.056	0.95	-0.080	0.863

SUS PREDICTORS: Controlling for Decisions to Apply

When decisions to apply are controlled for, education becomes a non-predictor all together (and so does the decision to apply).

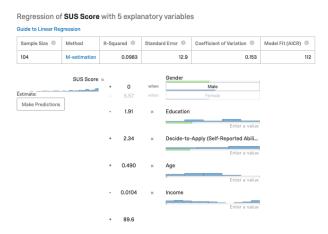
We show this by holding equal all decide to apply outcomes -shown in the models on the right:

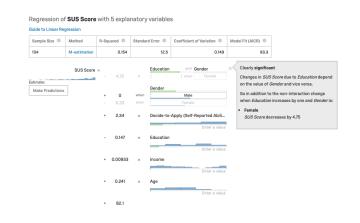
- When Gender changes from Male to Female averages a decrease of 5.57 in SUS Score, controlling for other variables in this regression at the p < 0.03 level.
- This accounted for 46% of the influence on SUS change.

The same effect happens when interacting education and gender (when looking at the the model with out the apply decision observations) While gender by itself in both the interaction and non-interaction model is relatively more influential on SUS than education-the interaction between the two becomes more influential (see tables right).

- Changes in SUS Score due to Education depend on the value of Gender and vice versa. So in addition to the non-interaction change when Education increases by one and Gender is Female, SUS Score decreases by 4.75 (p < 0.0125).
- However, Gender is still the most significant predictor (p < 0.0102)
 and has only a 6% less relative weight than the interaction between
 Gender and Education.

This may mean that females with higher levels of education perceive the system as less usable than males with higher levels of education, regardless of the factors that helped or did not help them decide-toapply.





Changes in SUS (Gender & Education separately) controlling for the Decision to Apply

Parameters	Relative ÷ Weights •	Coefficients	Lower CI ÷	Upper CI ‡	Standardized Coefficients	P-value ÷
Intercept	80.0	89.65	77.9	101	0	< 0.00001
Gender[Female]	45.8%	-5.57	-10.6	-1	-0.208	0.0295
Age	0.9%	0.49	-1.9	3	0.039	0.691
Income	0.6%	-0.01	-0.7	1	-0.003	0.977
Education	27.7%	-1.91	-3.9	0	-0.182	0.0620
Decide-to-Apply (Self-Reported Ability: 3 = Yes)	25.0%	2.34	-0.7	5	0.145	0.128

Changes in SUS with interactions between Gender and Education controlling for the Decision to Apply

Parameters	Relative Weights	Coefficients	Lower CI ÷	Upper CI ÷	Standardized Coefficients	P-value ÷
Intercept	0.0%	82.10	72.5	91.7	0	< 0.00001
Gender[Female]	33.0%	-6.33	-11.2	-1.5	-0.237	0.0102
Age	0.4%	0.24	-2.1	2.6	0.019	0.839
Income	0.5%	0.01	-0.7	0.7	0.002	0.979
Education	11.1%	-0.15	-2.7	2.4	-0.014	0.908
Gender[Female]:Education	39.0%	-4.75	-8.5	-1.0	-0.294	0.0125
Decide-to-Apply (Self-Reported Ability: 3 = Yes)	16.0%	2.34	-0.6	5.2	0.145	0.113

Interacting Education and Gender on Decide to Apply

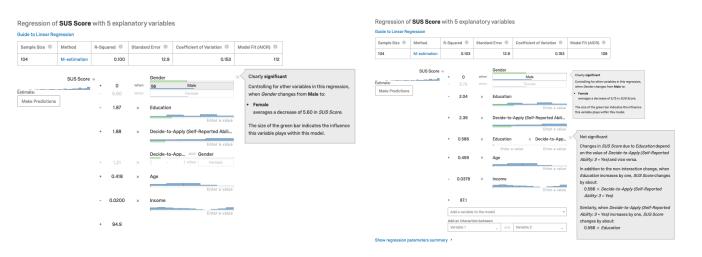
So which is it? Education, Gender or the Decision-to-Apply?

Model 1: When decisions-to-apply are interacted on Gender or Education, both interaction variables are not statistically significant at the p < 0.7 level.

 Gender changes from Male to Female averages a decrease of 5.60 in SUS Score, controlling for other variables in this regression (at the p < 0.05)

Model 2: Education is not a significant when interacted on the decision-to-apply observations:

- When interacting Education with Decide-to-apply Gender is the only significant predictor SUS, on average controlling for all other variables in the model (44% of the relative weight within the model.)
 - (Model 2) When Gender changes from Male to Female, averages a decrease of 5.73 in SUS Score, Controlling for other variables in this regression including Education x Decide to apply (at the p < 0.02 level)



Changes in SUS due to Gender & Decide to Apply Interaction

Parameters	Relative Weights	Coefficients	Lower CI ÷	Upper CI ÷	Standardized Coefficients	P-value ÷
Intercept	0.0%	94.94	85.1	105	0	< 0.00001
Gender[Female]	43.6%	-5.60	-10.7	-0	-0.209	0.0326
Age	0.8%	0.42	-2.1	3	0.033	0.742
Income	0.6%	-0.02	-0.8	1	-0.005	0.957
Education	25.6%	-1.87	-3.9	0	-0.178	0.0744
Decide-to-Apply (Self-Reported Ability: 3 = Yes)	17.5%	1.88	-2.2	6	0.116	0.369
Gender[Female]:Decide-to-Apply (Self-Reported	11.9%	1.21	-4.9	7	0.050	0.701

Changes in SUS due to Education & Decide to Apply Interaction

Parameters	Relative ÷ Weights	Coefficients	Lower CI ÷	Upper CI ÷	Standardized Coefficients	P-value ÷
Intercept	0.0%	87.06	79.4	94.8	0	< 0.00001
Gender[Female]	44.4%	-5.73	-10.8	-0.7	-0.214	0.0268
Age	0.8%	0.46	-2.0	2.9	0.037	0.712
Income	0.6%	-0.04	-0.8	0.7	-0.010	0.919
Education	28.4%	-2.04	-4.1	0.0	-0.194	0.0532
Decide-to-Apply (Self-Reported Ability: 3 = Yes)	24.7%	2.39	-0.7	5.4	0.148	0.124
Education:Decide-to-Apply (Self-Reported Abilit	1.1%	0.59	-2.1	3.3	0.042	0.665

SUS PREDICTOR: GENDER

Controlling for Age, Income, Education, Pay Type, Persona, Employment Situation, and the Decision to Apply:

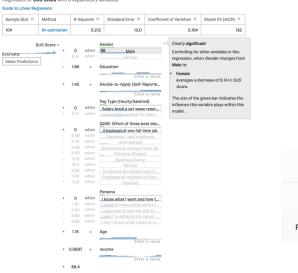
When Gender changes from Male to Female, SUS Score averages a decrease of 6.14 in SUS Score at the p < 0.03 level.

(Note: the difference in Male/Female SUS scores is 6.82)

This accounts for 22% of the influence on SUS Scores (see table right).

No other job seeker attribute in the model was significant at the p < 0.05 level.

And the Decision to Apply is not a significant predictor a at the p < 0.3 level.





100.00

100.00

80.68

37.50

47.50

Changes	in S	LIS d	ue to	Gender	

Parameters ÷	Relative + Weights	Coefficients	Lower CI =	Upper ÷	Standardized = Coefficients	P-value :
Intercept	0.0%	89.4	74.0	105	0	< 0.00
Gender[Female]	22.3%	-6.1	-11.5	-1	-0.230	0.0247
Persona[/ want to make some extra money and stay busy, so / want	5.1%	-1.0	-9.5	6	-0.058	0.643
Persona[/ just need to pay the bills to support my family, so I need a	2.2%	-3.6	-10.7	3	-0.110	0.309
Persona[/ want to advance my career or transition to a new career,	1.6%	-3.6	-11.2	4	-0.101	0.343
Persona[I don't know what I want or what I can do, so I'm not sure	3.3%	5.7	-5.4	17	0.099	0.316
Pay Type (/Salaried) [Hourly (paid a wage for each hour worked)]	9.3%	5.1	-0.7	11	0.192	0.0868
Q249: Whicsituation? [Freelance / self employed]	6.4%	-6.9	-14.2	1	-0.199	0.0680
Q249: Whicsituation? [Unemployed]	0.5%	-2.2	-9.9	6	-0.057	0.581
Q249: Whicsituation? [Employed at one part time job]	1.4%	-3.7	-12.5	5	-0.085	0.415
Q249: Whicsituation? [Full-time Student]	2.8%	-5.4	-15.0	4	-0.114	0.269
Q249: Whicsituation? [Business Owner]	5.4%	-12.8	-28.5	3	-0.161	0.109
Q249: Whicsituation? [Retired]	7.2%	-19.2	-39.1	1	-0.197	0.0595
Q249: Whicsituation? [Employed at multiple part time jobs]	3.7%	-9.8	-27.9	8	-0.101	0.286
Q249: Whicsituation? [Employed at multiple full time jobs]	0.3%	-1.7	-26.8	23	-0.012	0.896
Q249: Whicsituation? [Disabled]	6.0%	15.6	-9.7	41	0.114	0.226
Age	1.8%	1.7	-1.1	5	0.139	0.232
Income	0.7%	0.1	-0.6	1	0.018	0.847
Education	10.5%	-1.7	-4.0	1	-0.158	0.160
Decide-to-Apply (Self-Reported Ability: 3 = Yes)	9.5%	1.4	-1.7	5	0.088	0.375

SUS PREDICTOR: GENDER

Employment Situation transformation:

Controlling for Age, Income, Education, Pay Type, Persona, and *Having a Full-time or not having Full-Time Job:*

When Gender changes from Male to Female, SUS Score averages a decrease of 5.82 in SUS Score at the p < 0.03 level.

(Note: the difference in Male/Female SUS scores is 6.82)

This accounts for 35% of the influence on SUS Scores (see table right).

There is also no other attribute in the model that was statistically significant.



Changes in SUS due to Gender

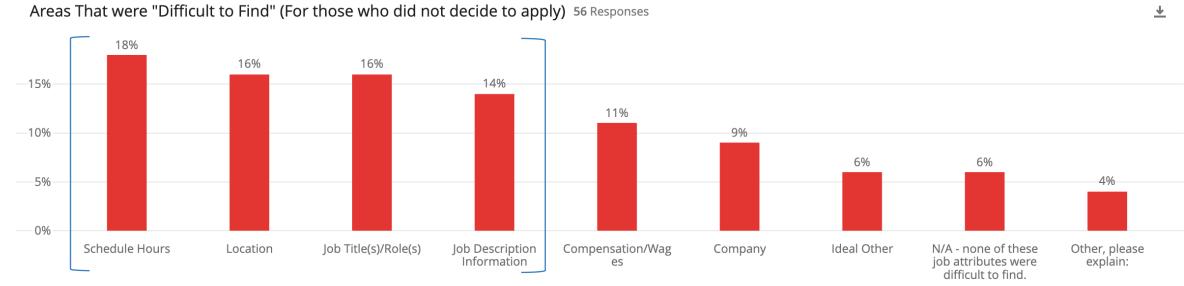
Parameters	Relative Weights	Coefficients	Lower CI :	Upper CI :	Standardized Coefficients	P-value 0
Intercept	0.0%	91.83	79.3	104	0	< 0.00001
Pay Type (/Salaried) [Hourly (pa	9.3%	3.40	-2.3	9	0.128	0.243
Persona[/ want to make some ext	9.3%	-3.24	-10.5	4	-0.104	0.382
Persona[I just need to pay the bill	3.4%	-3.56	-10.6	3	-0.107	0.322
Persona[/ want to advance my ca	1.5%	-2.89	-10.3	5	-0.080	0.446
Persona[/ don't know what / want	5.5%	4.45	-6.5	15	0.078	0.425
Gender[Female]	35.2%	-5.82	-11.0	-1	-0.218	0.0261
Age	1.4%	0.86	-1.6	3	0.069	0.490
Income	0.7%	0.01	-0.7	1	0.002	0.984
Education	18.1%	-1.91	-4.2	0	-0.182	0.0942
Has at least one full-time job	15.8%	4.34	-1.2	10	0.161	0.122

Most "Difficult to Find"

18% percent of respondents who did not report "Yes- I decided to apply" reported that finding desired attributes of Schedule/Hours were difficult to find (16% for location and 16% for Job Title(s)/Role(s).

These selections were only populated to respondents who had selected it as an ideal attribute of a job (so if it didn't matter to them in the pre-test, then it wasn't probed for in the post-test.)

However, the difference between male and female responses did not vary significantly at the 0.07 level (Female 21%, Male 14%).



SUS PREDICTORS – WITH SYSTEM DIFFICULTIES

So let's look at what happens when we take all the areas that respondents who couldn't decide to apply thought were "difficult to find."

When Location- difficult to find changes from not being a function of not deciding to apply to being a factor in not being able to decide to apply, SUS Score averages a decrease of 9.08 (p < 0.05), controlling for other variables in the model.

When Job Description Information - difficult to find changes from not being a function of not deciding to being a factor in not being able to decide to apply, Job Description Information - difficult to find, averages a decrease of 8.93 in SUS Score (p < 0.05), controlling for other variables in the model.

Changes in SUS Score due to Education depend on the value of Gender and vice versa. So in addition to the non-interaction change when Education increases by one and Gender is Female SUS Score decreases by 4.67 (p < 0.01). Controlling for other variables in this regression, when Gender changes from Male to:

Female averages a decrease of 5.01 in SUS Score (p < 0.05)

This may mean that perceiving certain types of Location and Job Description information as difficult to find, is *more often associated with higher educated females, and has the opposite effect for males.*

So what are higher educated females pursuing, career path wise? And how does this inform the contents of the job description information?

In order to do this, we'll take a look at the Career Path pursuits of higher educated females vs. higher educated males in the sample.

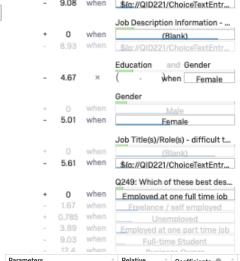
Regression of SUS Score with 11 explanatory variables

SUS Score =

Guide to Linear Regression

Sample Size ®	Method	R-Squared ®	Standard Error	Coefficient of Variation	Model Fit (AICR)
104	M-estimation	0.374	11.2	0.133	128

Location - difficult to find



Clearly significant

Controlling for other variables in this regression, when Location - difficult to find changes from (Blank) to:

 \$(q://QID221/ChoiceTextEntryValue/1) averages a decrease of 9.08 in SUS Score

The size of the green bar indicates the influence this variable plays within this model.

Parameters	Relative + Weights	Coefficients	Lower CI ÷	Upper CI ÷	Standardized + Coefficients	P-value ÷
Intercept	0.0%	90.8	82.5	99.1	0	< 0.00001
Gender[Female]	9.3%	-5.0	-9.7	-0.3	-0.187	0.0362
LocationIt to find [\${q://QID22	17.9%	-9.1	-16.8	-1.4	-0.246	0.0207
Compensatidifficult [\${q://QID2	1.0%	3.4	-4.9	11.8	0.080	0.417
Job Title(It to find [\${q://QID221	10.2%	-5.6	-12.4	1.2	-0.152	0.104
CompanyIt to find [\${q://QID2	3.0%	7.1	-1.2	15.4	0.149	0.0931
Job DescriIt to find [\${q://QID22	15.6%	-8.9	-16.5	-1.4	-0.229	0.0208
Schedule/Hdifficult [\${q://QID2	5.8%	-2.7	-10.3	4.9	-0.076	0.488
Q249: Whicsituation? [Freelanc	0.8%	-1.7	-8.2	4.8	-0.048	0.615
Q249: Whicsituation? [Unemplo	0.4%	0.8	-6.4	8.0	0.021	0.832
Q249: Whicsituation? [Employe	0.7%	-3.9	-11.9	4.1	-0.090	0.338
Q249: Whicsituation? [Full-time	2.6%	-9.0	-18.5	0.5	-0.191	0.0620
Q249: Whicsituation? [Business	6.7%	-12.4	-26.7	1.8	-0.156	0.0863
Q249: Whicsituation? [Retired]	2.6%	-14.7	-32.7	3.3	-0.151	0.110
Q249: Whicsituation? [Employe	1.8%	-9.6	-25.8	6.6	-0.099	0.247
Q249: Whicsituation? [Employe	0.0%	-2.2	-24.5	20.1	-0.016	0.847
Q249: Whicsituation? [Disabled]	1.6%	7.8	-14.7	30.3	0.057	0.496
Age	0.4%	0.5	-2.1	3.0	0.038	0.715
Income	0.4%	-0.0	-0.7	0.7	-0.003	0.971
Education	4.3%	-0.0	-2.5	2.4	-0.004	0.973
Education:Gender[Female]	14.9%	-4.7	-8.3	-1.0	-0.289	0.0119

Associations with "No- I did not find a good job"

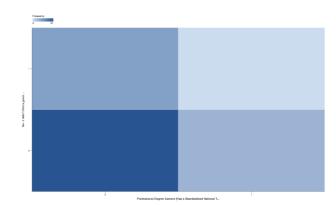
The top associations with No- I did not find a good job:

In order of significance and effect Size:

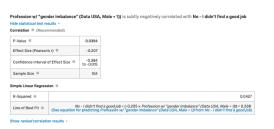
- Job Title(s)/Role(s)- difficult to find (Effect 1.53, p < 0.0001)
- Job Description Information difficult to find (Effect 0.99, p < 0.009)
- Location difficult to find (Effect 0.96, p < 0.005)
- Career Path Pursuits with national gender imbalances (Effect -0.21, p < 0.05)
- Career Paths with standardized state tests (Effect -0.20, p < 0.05)

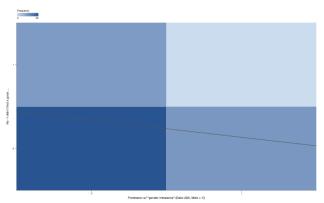
However, it's important to see these while controlling for all other demographics.

So now we'll put them in another model after assessing associations with the top two associations with "No- I didn't find a good job"

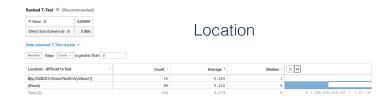


Professional Degree Careers (Has a Standardized National Tests) is subtly negatively correlated with No - I didn't find a good ju









57 of 104 datapoints (54.8%)
O Professional Degree Careers (Has a Standardized National
T...
O No - I didn't find a good ...

49 of 104 datapoints (47.1%)
0 Profession w/ "gender imbalance" (Data USA, Male = 1))
0 No - I didn't find a good ...

What's associated with "Yes - Decided to Apply"?

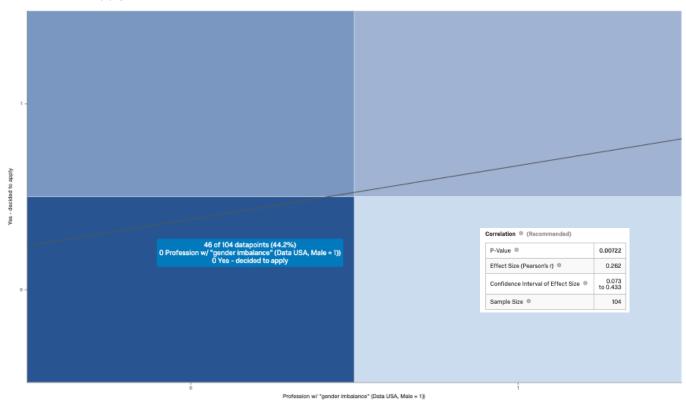
Observations associated with reporting "Yes-I decided to apply":

- RE: SUS positively correlated with "yes" -0.320 (p < 0.000931)
- RE: Male significantly higher (Cohen's D;
 = 0.408; p < 0.05)
- Career Path Pursuits (Industries) with national average gender imbalances towards male:
 - Subtly positively correlated (Effect Size: 0.26, p < 0.01) (see graph right)

Professions that are *not*, on average, more male dominated, had significantly lower observations of reporting "Yes-I decided to apply."

So why is that?

Correlation of Career Path Pursuits w/ male "gender imbalance" is subtly positively correlated with Yes - decided to apply



Variable Coding:

Career Path Pursuits w/ male "gender imbalance" (Professions, Data USA) = 1
Accounting, Finance, Information Technology, Military Protective Services, Engineering

Decide-To-Apply Predictors

When we add Career Path Pursuits and look at the differences between Gender:

Changes in *Decide-to-Apply (Self-Reported Ability: 3 = Yes)* due to *Gender* depend on the value of *Career Path Pursuing* and vice versa. So in addition to the non-interaction change, when *Gender* and *Career Path Pursuing* changes to:

- Female and Administrative/Clerical there is on average a decrease of 1.16 in Decide-to-Apply (Self-Reported Ability: 3 = Yes)
 - Significant at the p < 0.0001 level (R-squared 0.63)
 - Controlling for all high level areas that participants thought were difficult to find.
 - (Model is too large to be depicted Excel of Model depicted on right)

This may indicate that the overall decision to apply relies on the types of jobs that are easy to search for, have relatively high standardized job descriptions, titles, and on average

Regression of Decide-to-Apply (Self-Reported Ability: 3 = Yes) with 14 explanatory variables

Guide to Linear Regression

Sample Size	Method	R-Squared	Standard Error 0	Coefficient of Variation	Model Fit (AICR)
104	M-estimation	0.636	0.740	0.336	353

and Career Path.

-estimation		0.63	6
Rep ≈			Gender
-	1.00	when	Female
-	0.134	when	Female
-	0.102	when	Female
-	1.06	when	Female
-	0.271	when	Female
-	0.211	when	Female
-	0.131	when	Female
-	0.200	when	Female
-	0.973	when	Female
-	2.01	when	Female
-	2.24	when	Female
-	0.645	when	Female
-	0.877	when	Female
-	1.16	when	Female
-	~0	when	Female
+	0	when	Female
+	0	when	Female
-	0.102	when	Female
+	0	when	Female
+	0	when	Female
+	0	when	Female
+	0.237	×	Age
			Job Descripti
+	0	when	COO DOGGETIPE
-	0.647	when	\$fa://QID22
			Career Path F
+	0	when	Informat
-	0.333	when	Art
-	0.0883	when	Б
-	0.435	when	M
-	0.146	when	En
+	0.105	when	Health
-	0.171	when	
-	0.0262	when	_ Entre
+	0.205	when	
-	1.13	when	Community
+	0.946	when	Customer
+	0.763	when	
-	0.645	when	Huma
+	0.442	when	Co

legression parameters summary			** *********		
arameters iender[Female]:Career Path Pursuing[Administrative/Clerical]	Coefficients -1.156622374			Standardized Coeff -0.192573832	P-value 0.000114503
(249: Which of these best describes your current employment situation? [Em					0.017669432
areer Path Pursuing [Real Estate]	-1.625693131	-3.059687915			0.026285022
ob Description Information - difficult to find[\$(q://QID221&#	-0.646815266	-1.221807412	-0.071823119	-0.26764315	0.027469116
ompensation/Wages - difficult[\${q://QID221/ChoiceTe		-1.13281069			0.03320673
Gender [Female]: Career Path Pursuing [Human Resources]	-0.6452059 -0.6452059	-1.285949772 -1.285949772			0.048425784
areer Path Pursuing[Human Resources] areer Path Pursuing[Community & Decial Services]	-0.6452059	-1.285949772 -2.314890732			0.048425784
ompany - difficult to find[\${q://QID221/ChoiceTextEntryV		-1.130146554			0.064475597
iender[Female]:Career Path Pursuing[Finance]	-2.241525158	-4.83604765			0.090398111
ob Title(s)/Role(s) = difficult to find[\${q://QID221/ChoiceTe	-0.41595742	-0.909821154	0.077906313	-0.181945284	0.098783014
ender[Female]:Career Path Pursuing[Arts & Design]	-1.00100193	-2.236609575	0.234605716	-0.259614002	0.112326096
ersona[I want to advance my career or transition to a new career, but 18c#x27;1		-0.113006915	4010010400	0.10002.1010	0.125856884
ender[Female]:Career Path Pursuing[Customer Service/Support]	-2.009999554				0.134109334
(249: Which of these best describes your current employment situation? [Unemp	0.322416665	-0.170766375 -2.740054481	0.815599706 0.611123551	0.137324717	0.200081463
ender[Female]:Career Path Pursuing[Engineering] areer Path Pursuing[Finance]	0.762803012	-0.544553471	2.070159495	-9.123733337	0.213080639
areer Path Pursuing[Quality Assurance]	-0.891468557	-2.437053346		-0.105466672	0.258275772
249: Which of these best describes your current employment situation? [Employ		-0.302334497		0.125533589	0.30175851
iender[Female]:Career Path Pursuing[Community & Docial Services]	-0.97258283	-2.907489875	0.962324214	-0.161931851	0.32453678
areer Path Pursuing[Accounting]	-0.542220709	-1.625137656		-0.09027797	0.326414477
ducation	-0.091203224	-0.27936655			0.342112592
areer Path Pursuing[Arts & Design]	-0.332857209	-1.027577434			0.34769686
areer Path Pursuing[Marketing]	-0.4352192 0.42742046	-1.355367141 -0.515467609	0.48492874	-0.132200632 0.120818814	0.35390576
ersona[I don't know what I want or what I can do, so I'm not sure iender[Female]:Career Path Pursuing[Consulting]	-0.876525931	-2.819344061	1.066292198	-0.103698859	0.374287447
249: Which of these best describes your current employment situation? [Employ		-0.742972233	1.859057821	0.092912295	0.400524443
areer Path Pursuing[Customer Service/Support]	0.946046261	-1.437160989	3.329253511	0.191965987	0.436548888
249: Which of these best describes your current employment situation? [Retired	-0.652554567	-2.322476813	1.017367678	-0.108648195	0.443739369
ersona[I just need to pay the bills to support my family, so I need a reliable com	-0.173586703	-0.628758209	0.281584802	-0.084480358	0.454784357
ersona[I want to make some extra money and stay busy, so I want to work from		-0.320451922		0.088271042	0.496264865
areer Path Pursuing[Consulting]	0.442377492	-0.924174325		0.073654401	0.525770405
areer Path Pursuing[Hospitality]	0.407381419	-0.977554008 -1.083479705		0.048195937	0.564258907
[249: Which of these best describes your current employment situation? [Full-tim areer Path Pursuing Other]	-0.232834926 0.2054823	-0.617940282		-0.079363677 0.053292687	0.591631599
iender[Female]:Career Path Pursuing[Healthcare Services]	-0.271015313	-1.531022455		-0.070288946	0.673339462
areer Path Pursuing[Sales]	-0.170932577	-0.973265297			0.676269173
areer Path Pursuing[Engineering]	-0.145804204	-0.871248037	0.579639629	-0.044288965	0.693635876
249: Which of these best describes your current employment situation? [Disable	0.26482183	-1.076501446	1.606145105	0.031330187	0.698784279
nc ome	0.009805646	-0.044483801			0.723335442
areer Path Pursuing[Business Development]	0.205444874			0.024305498	0.759007589
iender[Female]:Career Path Pursuing[Sales] iender[Female]:Career Path Pursuing[Other]	-0.21128737 -0.199871208	-1.57203124 -1.717107278		-0.042873156 -0.033277901	0.760876238 0.796257636
ender[Female]:Career Path Pursuing[Outer]	-1.8147E-17	-1.59797E-16			0.80174146
ender[Female]	0.102197661	-0.737529913		0.061765532	0.811466802
249: Which of these best describes your current employment situation?[Freelan		-0.554079441		-0.0262108	0.825757894
ender[Female]:Career Path Pursuing[Media & Dommuniciations]	-0.102402129	-1.040515157	0.835710898	-0.012114854	0.830590036
areer Path Pursuing[Media & Dommuniciations]	-0.102402129	-1.040515157	0.835710898		0.830590036
areer Path Pursuing[Healthcare Services]	0.10460277	-0.895043126		0.031773764	0.837501586
iender[Female]:Career Path Pursuing[Education]	-0.133890402 -0.131407942	-1.570433821 -1.61774267	1.302653016	-0.047852427 -0.026664505	0.855053144 0.862429888
iender[Female]:Career Path Pursuing[Entrepreneurship] areer Path Pursuing[Education]	-0.13140/942	-1.01//426/	1.334926786	-0.026664303	0.862429888
ender[Female]:Career Path Pursuing[Marketing]	-0.102236099	-1.424610733	1.220138535	-0.034211145	0.87955786
ay Type (Hourly/Salaried)[Hourly (paid a wage for each hour worked)]	0.028707002	-0.350222701	0.407636705	0.017388428	0.881961453
chedule/Hours - difficult(\${q://QID221/ChoiceTextEntryV	0.027546416	-0.495899832	0.550992665	0.012634009	0.917849224
areer Path Pursuing[Purchasing]	0.065278511	-1.243530892		0.007722883	0.922126314
areer Path Pursuing[Entrepreneurship]	-0.026227278	-1.002196728	400-401-44410	-0.007413657	0.957994672
ocation - difficult to find[\$\q:&\x2F;&\x2F;QID221&\x2F;ChoiceTextEntryVi		-0.526927065		0.004467528	0.970271361
ender[Female]:Career Path Pursuing[Real Estate] ender[Female]:Career Path Pursuing[Hospitality]	0	0	-	-	NaN NaN
ender[Female]:Career Path Pursuing[Hospitality]	0				NaN NaN
ender[Female]:Career Path Pursuing[Purchasing]	0	0	-		NaN
ender[Female]:Career Path Pursuing[Quality Assurance]	0	0			NaN
ntercept	2.454420882	1.219157005	3.689684758		9.84536E-05
areer Path Pursuing[Administrative/Clerical]	-1.156622374	-1.744276646		-0.192573832	0.000114503
249: Which of these best describes your current employment situation? [Busines		-2.190904045		-0.24751552	0.013819266
ge ample Size	0.237289779 Method	0.042790566 R-Squared		0.306227371 Coefficient of Varia	0.016795071

What was most difficult by gender?

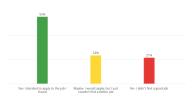
Of all the areas that were "difficult to find":

22% of females reported Location as "difficult to find" vs. 8.9% of males (however this is only significant at the p < 0.06 level)

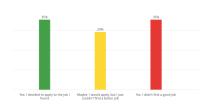
This was the only topic area of difficulty that was associated with gender, at this significance level.

Additionally, males in the sample are reflective of the normal population phenomenon, by having a career path pursuits in predominately male dominated fields.

55% of Males reported "Yes – I decided to apply..."



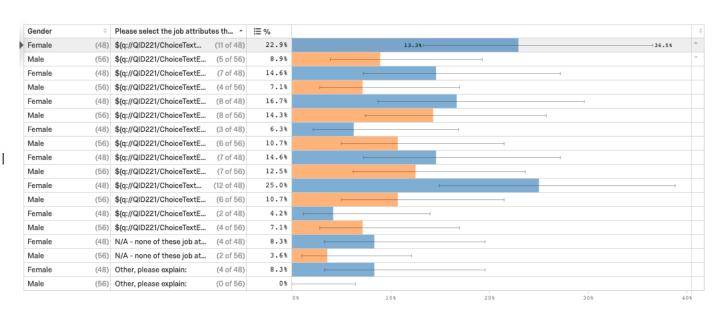
35% of females reported "Yes – decided to apply..."



Male tends to have much higher values for Profession w/ "gender imbalance" (Data USA, Male = 1)) than Female



22% of females reported Location as "difficult to find" vs. 8.9% of males

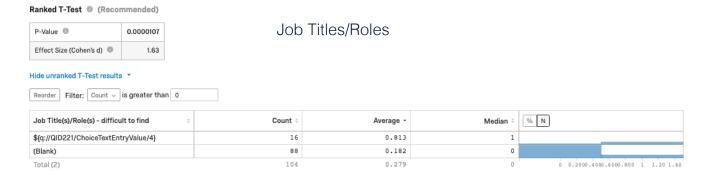


Associations with "Job Titles"

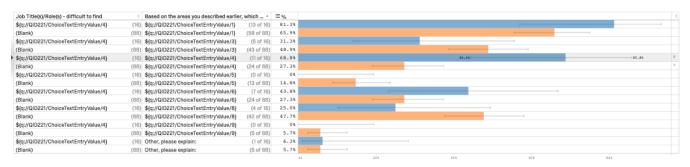
Job Title's – difficult to find – mostly associated with No- I did not find a good job, therefore, these are the associations with difficulty in finding a Job Titles:

- RE: Job Title(s)/Role(s) (Effect 1.53, p < 0.0001) on "No"
 - Job Title(s)/Role(s) had the only statistically different disparity between needing to know the job title before deciding to apply and not needing to know before deciding to apply (Difference: 68% vs. 27%, significantly different at the p < 0.01 level (see middle chart right)
 - (and "ideal" job attributes)
 - Associated with Job Description information being identified as difficult to find (Effect = 0.3, p < 0.05)
 - But there was no other association to any other variable in the survey (including all demographics)

Therefore, the broader category of industry is likely to be a predictor of SUS and decisions to apply.



Based on the areas you described earlier, which of these areas do you feel you need to know before you decide to apply to the job? (Select all that apply.) - Selected Choice



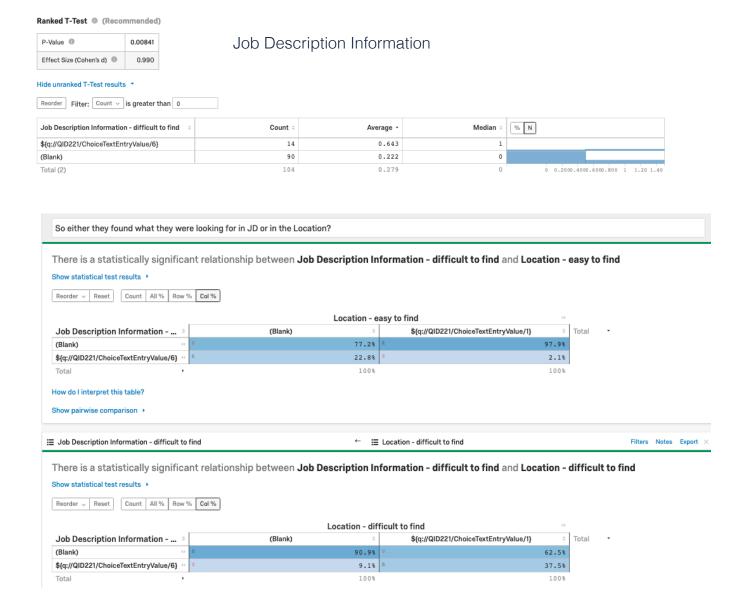
There is a statistically significant relationship between Job Title(s)/Role(s) - difficult to find and Job Description Information - difficult to find Hide statistical test results Fisher's Exact Test @ (Recom P-Value 0.00748 Effect Size (Cramér's V) 0 0.300 104 Sample Size 0 Show/hide Chi-Squared results Reorder - Reset Count All % Row % Col % Job Title(s)/Role(s) - difficult to find \$fg://QID221/ChoiceTextEntryValue/61 57.1% 11.1% \${q://QID221/ChoiceTextEntryValue/4} 42.9%

Associations with "Job Description Information"

Secondly, *Job Description information*—difficult to find – is mostly associated with *No- I did not find a good job,* therefore, these are the associations with difficulty in finding Job Description information:

- RE: Job Title(s)/Role(s) (Effect 1.53, p < 0.0001) on "No"
 - Of those who thought that location was <u>easy</u> to find 97% thought that JD information was <u>difficult</u> to find
 - Of those who thought that location was <u>difficult</u> to find 62% thought that JD information was <u>difficult</u> to find
 - Both observations statistical at the 0.05 level

So we have this relationship between Job Descriptions and Location.



So which is it?

Location/Schedules hours or Job Titles & Job Descriptions? or Gender & Education

(Task Analysis)

TEST DESIGN

Pre-Test Job Seeker Goals Assessment

MOTIVATIONS



Job Search Criteria



Decision Apply

Criteria



Task Prompt for Job Search Task

Imagine yourself in this scenario:

I am online looking for a new job. I happen to come to this website. My goal is to look for the best job, because I don't want to spend time on applications if it's not really right for me.

Based on the scenario above, please show us how you would find the best job for you.

Move on to the next task when you feel you would decide to apply or you could not find a better job. Post Test
Job Seeker
Decide to Apply Success,
SUS & Demographics

DECIDE-TO-APPLY



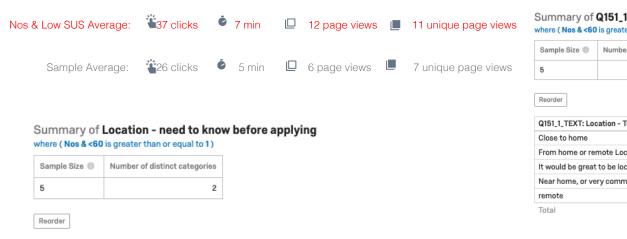
SUS

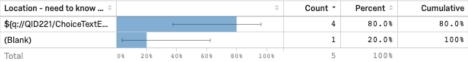
10 questions

Demographics

10 questions

Worst case scenario: "No- I could not find a good job" and SUS <60





Summary of Location - need to know before applying

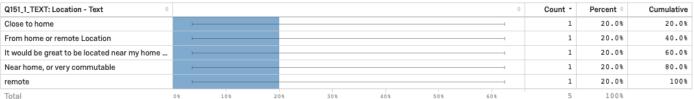
where (Nos & <60 is greater than or equal to 1)
AND (Gender equals Female)

Sample Size	Number of distinct categories
4	1

Reorder

Location - need to know ÷		÷						Count -	Percent ÷	Cumulative
\${q://QID221/ChoiceTextE		· · · · · · · · · · · · · · · · · · ·						4	100%	100%
Total	9.0	20%	40%	60%	80%	100%		4	100%	





Predictably, participants that could not find a job at all (Nos) and had a SUS of < 60, their interactions with the system were much higher (i.e. participants weren't just lazy.)

On average they had 30% more clicks, spent 29% more time, and searched at least 24% more search queries.*

These participant's videos were analyzed. Their pain points (shown on the right) were very similar.

- 80% of these participants happen to be female
- 80% had a bachelors or more
- 80% were in non-STEM jobs and non-standardized, non-male predominated fields

What were 100% of them looking for?

A location where they could be remote or close to their home. #Location

• 80% said they need to know this before applying (these were also all the females in this group.)

Their location text field description is depicted on the right.



Females statistically differ in location preference

10.00%

0.00%

Twice as many females, verses males did not describe their ideal location as a city state and zip.

Twice as many females than males described WFH as an ideal location.

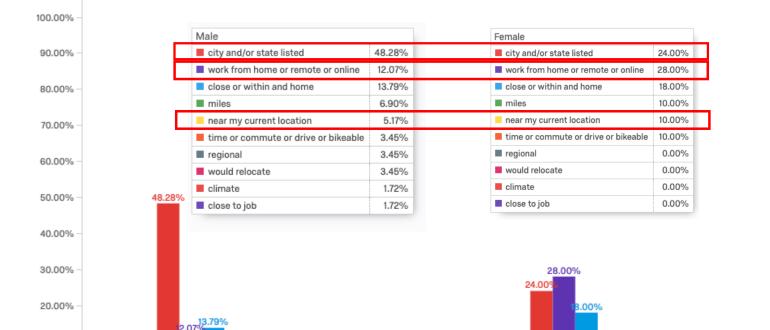
48% of the participants who identified as males reported a city and/or state in their "ideal" location description, verses 24% of females.

Twice as many females than males described their ideal location as near the current location.

28% of females in the sample wrote about working from home, remote or online, versus 12% of males.

18% of females wrote about working "close" or "within" certain time or distance from their "home" versus 14% of males.

The inference here is that there is location sensitivity (to being where one is currently living) which is mostly observed with participants who identify as female in the sample.



4.45%.45%.45% .72%

Frequency of Topics in Text Descriptions of the "Ideal" Location by Gender



Female

0.00%.00%.00%

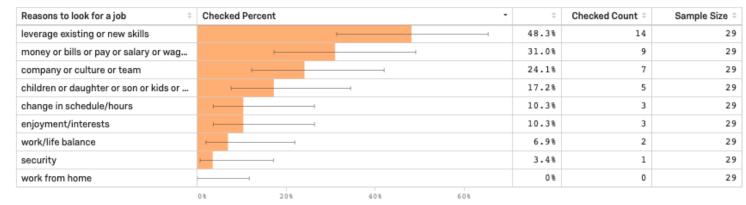
Nos or < SUS 60: Reasons they were looking for a job

Participants who reported "No-I could not find a good job" the highest topic frequency of their reasons were *leveraging* a new or existing skill set.

Participants who had a SUS Score less than 60, their top reasons for looking for a job involved their parental role.

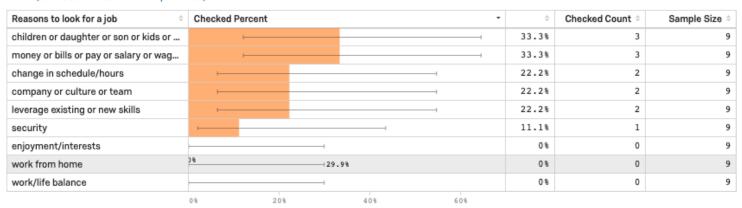
Summary of Reasons to look for a job

where (Decide-to-Apply (Self-Reported Ability: 3 = Yes) equals No- I didn't find a good job, because:)



Summary of Reasons to look for a job

where (SUS Score is less than or equal to 60)



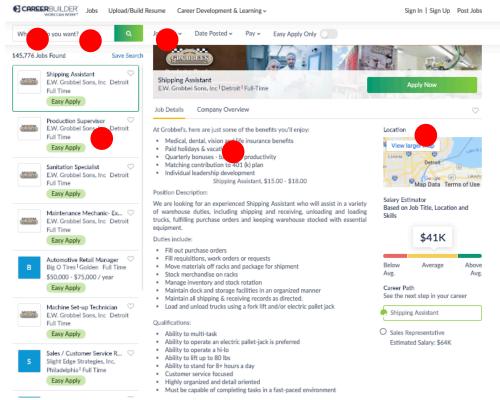


Behavior on the Experience: So why is Job Titles and Job Descriptions a predictor of Decide-To-Apply?

Video Analysis for the participants who reported No- I did not find a good job and had a SUS less 60 did these things:



- For those that were looking for remote jobs, a few searched for "remote" in the Job Title Field and the location field for "remote" initially, but then started looking in the Job Type field.
 - Then after not viewing relevant results, participants changed their term and had to figure out whether it was due to remote or the job title.
- For those who were searching for a job with a location near their home those participants initially got irrelevant job titles, and
 used the related search suggestions which removed their location
- Or they used an even more specific search term from the suggested search after viewing 0 jobs found for that location. However, they could not determine if it was related to the Job Title or the location.
- A couple expected the Job Titles or cards to include the word remote "remote"
- Some scanned the JDP for the word remote (didn't use Ctrl +F)
- A couple tried to find a way to change the location for all the search results using the map.
- A few verbalized that they didn't know where the location selections could be made (and hovered their curser at the top when the filter/search bar was hidden above the fold or when they had not used the JRP's dynamic location box before.
- All who had used more than one search term and initially set their filters had to re-filter again and again using the same filter criteria.
- All participants in this group who perceived that the first 25 results were irrelevant never loaded more jobs or used filters, -despite most getting several hundred result listings, some started clicking on only a few cards and then changed their search
 term. The implication is that users will perceive the whole list as irrelevant BEFORE they narrow down the list to identify
 anything in their "ideal" job criteria.
- This may mean that when location is a "need to know" before applying, even if there are hundreds of relevant jobs within the
 list results, that are not within the first 25, users will never see them and continue searching for permutations of location and
 job titles.





Recommendations

- Overall, add more nuanced selections for location in the search fields and filters
 - Include or improve "Remote" or "WFH" or "work from home" in the location and the job title search fields' SERP algorithms
 - Or create a filter for Remote (or add it to "Job Type") so that users can isolate the job title queries from their location preferences
 - Or consider using a map widget modal for setting more nuanced selections (by radius or time) by providing a
 icon to open it from the Location search box
 - And then having a check box within the modal for "remote/work from home"
- Consider adding more visual affordance for interacting with filters first before searching for new titles by re-creating the same experience that happens on the homepage with the focus state transition from the job title field to the location box (green box appears on filters) this way users will actually leverage their other "need to knows" and be able to see at least other jobs that meet other criteria (RE: users are not getting to the bottom of the lists with potentially relevant results.)
 - Keep filters static on the top upon scroll
 - Don't auto remove filter settings with every new search term especially when selecting "related searches"
 - Consider having a secondary search box in the Job Details area for any secondary words that user's would like to find within the JD (users' don't use Ctrl+F for "need to knows" that are lower in their motivational hierarchy.)

