Gender Differences in Perception of Satisfaction, Inclusion, and Participation in Information Technology Careers: Insights for Recruitment and Retention of Female Students

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Abstract

This paper examines responses to questions about job satisfaction and inclusion from professionals in the information technology field. Responses from over 10,000 professionals were analyzed to determine if there were differences in response to these questions based on gender of respondent. This information, along with previous research on inclusion of women in higher education and industry, are discussed to determine similarities with previous research. Results from the study are used to suggest ways that educators can use the responses to improve recruitment and retention of females in technology majors and minors.

Keywords: Women in technology, recruitment, retention, job satisfaction, inclusion.

1. INTRODUCTION

Jobs in information technology (IT) continue to grow in the United States and new jobs are predicted to increase by 11%, adding approximately half a million new jobs by 2029 (Bureau of Labor Statistics, 2021). In 2015, only 25% of computing jobs in the United States were occupied by women which declined sharply since the 1990's but has been holding steady in recent years (Ashcraft, McLain, & Eger, 2016). In rapidly growing fields within IT such as information security analysis, jobs are projected to grow at a staggering rate of 31% over the next 10 years with only 16.8% of jobs in the area held by women (Women's Bureau, n.d.). Retention of female employees in IT related fields is dismal with more than 50% of women leaving the field (Hewlett et al., 2008). There are many factors leading to this underrepresentation, starting with fewer women choosing information technology careers in college and large numbers leaving the field for various reasons.

In order to increase participation by women in the technology field, it is important to understand why women choose or do not choose to major in information technology related fields in college and why they choose to leave their careers in large numbers. Understanding these factors may help educators recruit and prepare female students for IT careers and aid employers in retaining employees.

The purpose of this study is to look at various aspects of job satisfaction and inclusion for professionals in IT careers and determine if there are differences in these beliefs between genders. This study will compare responses to male counterparts whereas many previous studies on women in the workplace are studied as a standalone population. Comparing the two populations will provide insight into whether certain factors are considered differently across gender or if there are factors of job dissatisfaction that are shared by both males and females.

2. BACKGROUND INFORMATION

Fewer Women Entering the Field

In 2019, more 18-24 year old females were enrolled in colleges and universities than males with 57% compared to 43%, respectively (National Center for Education Statistics, 2021a). This trend has held steady since 2010 and graduation rates show similar differences with 66% of female students earning a baccalaureate degree within 6 years of enrollment compared with 60% of male students (National Center for Education Statistics, 2021c). However, in IT related fields these numbers vary greatly. At the associate's degree level in computer and information sciences, 80% of the degrees were awarded to male students. In 2018 and 2019, 63,703 bachelor's degrees in computer and information science were awarded to male students and 15,894 awarded to female students during the same time period. Even though female populations in four-year schools continue to exceed those of males, degrees awarded in computer related fields are significantly skewed towards males (National Center for Education Statistics, 2021b).

Reasons why females are underrepresented in baccalaureate programs have been studied by many researchers over the years with hopes of mitigating the problem. Serapiglia & Lenox (2010) discussed a complex decision-making process for women pursuing computer information systems degrees. They found that male role models, positive introduction to computers and technology, the opportunity for earnings, and natural talent at problem solving were some factors that lead women to choose CIS as a major. Lack of female role models in IT, media perceptions, parental guidance as well as previous programming experience also potentially play a role in selection of computer related majors (Jung, et.al, 2017). In countries where females are more represented in technology fields like Malaysia, lack of female role models is not a problem as it is for students in the United States and Europe (Othman & Latih, 2006).

Socialization and early education have also been studied as possible reasons women do not pursue careers in STEM fields and computer science, in particular. An increasing lack of confidence and fear of failure in technical fields as female students progress through their education has been cited by many researchers as a deterrent for choosing computer related fields as a career (Jung, et al., 2017; McGee, 2018; Serapiglia & Lenox, 2010). Lack of female role models and stereotypes of "geeks only" mindsets have also been cited as reasons female students do not enroll in technology related degree problems (Serapiglia & Lenox, 2010). Preconceptions deterring women from studying computer science indicate that computer science is a male dominated field and that women who work or study computers have low self-worth, are unattractive, and are different or atypical (Berg, Sharpe, & Aitkin, 2018).

Fewer Women Remaining or Advancing in Field

Once women decide to pursue educational opportunities in computer related fields, they face many barriers in the workplace that lead to problems with retention. In 2008, technology fields had the highest rate of abandonment of the STEM fields with over 50% of women leaving the field and at a higher rate than their male counterparts (DuBow, & Gonzalez, 2020). Research has shown that five areas of concern are responsible for many women leaving the field. Bias, isolation, supervisory issues, promotion opportunity and process, and other external life issues are the often cited reasons for women leaving technology (Hewlett, et.al, 2008).

While many women remain in technology careers, those that leave discuss multiple factors influencing their decision. Mentioned in their report on brain drain in STEM fields, Hewlett and colleagues (2008) found a significant number of women who quit in their thirties due to lack of support at their job and challenges with work/life balance. In addition to these, women also mentioned male-dominant attitudes, isolation, undefined career paths, and reward systems based on risk-taking as barriers confronted in the technology workplace. In focus groups investigating workplace barriers and voluntary turnover, Allen, et al., (2006) found that women left their jobs due to problems with flexibility in scheduling, family issues, stress, and workplace policy issues.

Once in field, many women report feelings of career "stall", where they feel they are no longer getting ahead at work. In 2014, approximately 33% of Asian, Hispanic, and Caucasian women reported feelings of career "stall" and a staggering 48% of African American women felt that their careers had stalled (Hewlett, et.al, 2014).

Advancement opportunities for women in technology fields have also lagged behind opportunities for men. In 2016, only 20% of the Chief Information Officer positions in Fortune 100

companies were held by women (Shein, 2018). While some attribute this to the relative numbers of women in the field, other researchers have proposed other barriers for women. In her article on the influence of gender and race of advancement in IT, McGee (2018) reviewed a large body of literature that found women's views towards IT culture were not favorable. Common themes throughout the research presented, described the field as "predominately male and white, anti-social, individualistic, competitive, hostile toward women, misogynistic, and sexist". Roldan, Soe, and Yakura (2004) believe that this masculine environment is not conducive to career advancement for women and results in high turnover, in general, for female employees. Although women receive similar job performance ratings in IT, evidence suggests that the effect of job performance ratings on advancement is skewed in favor of men (Igbaria & Baroudi, 1995). Women also cite lack of respect, ageism, stress, and scheduling flexibility as barriers to advancement in their careers (Allen, et al., 2006). Other researchers have investigated structural barriers around formal and informal networking as well as lack of mentors as another impediment to women advancing in technology careers (Armstrong & Reimenschneider, 2014; Roldan, Soe, & Yakura, 2004). Many of the interventions by major tech companies wishing to increase retention of diverse work forces center on support structures and networks (Barker, et al., 2014). The importance and improvement of professional networking for women in IT has been studied in depth and has been shown to be an important part in retention and advancement of women in IT (Bapna & Funk, 2021; Ahuja, 2002; Kleinbaum, et al., 2013).

Importance of Gender Diversity in Workforce

There are social as well as economic reasons that businesses and society at large should be interested in increasing diversity in the IT workplace. From a social aspect, women should be encouraged to find employment in a field that offers significant opportunity in terms of salary as well as impact of work. In 2020, the average salary of $91,250 per year for computer related careers, compared to the national average salary of $41,950 (Bureau of Labor Statistics, 2021). Salaries and job security are still attractive incentives for women in the workforce, even though the pay gap in technology related fields is wider than other sectors, (Chamberlain, 2016).

In their research review of the importance of diversity in the tech workplace, Barker, Mancha & Ashcraft (2014) found that companies perform better when women hold leadership positions. They found superior team dynamics and increased productivity. Research from the report indicates that diverse teams are more likely to stay on schedule and on budget. Collaboration is improved when teams represent both genders (Bear & Wooley, 2011)

Because innovation is critical in many areas of IT, impact of diverse working groups should be of interest to businesses. When groups are diverse, there is an increased level of experimentation and efficiency (Lehman Brothers Centre for Women in Business, 2007).

From an economic standpoint, companies should consider diversity in terms of coming, costly labor shortages. With the expected demand for computer related talent discussed in the introduction, industry should be grooming and recruiting talented labor from all walks of life and should work at avoiding the costly brain drain on their workforce as women continue to leave the field and retention efforts flounder.

3. METHODOLOGY

Anonymized data were used from an online developer survey conducted by Stack Overflow under their Open Database License program. Stack Overflow is a website dedicated to question and answer communities covering a wide range of information technology topics. The survey was completed by over 65,000 participants worldwide in February 2019. Data that were submitted where participants spent less than three minutes on the survey were omitted. Participants were recruited by Stack Overflow through its various online sites and the survey methodology indicates that there is a potential bias of participation from users who are highly engaged in Stack Overflow online properties (Stack Overflow, 2020).

For the purposes of this study, a subset of responses from participants were filtered to include only respondents in the United States and those that indicated a binary gender (male or female). Participants that indicated non-binary or selected more than one gender were excluded but warrant further study in future analysis. Data were further filtered to only include responses from currently employed respondents. Both part time and full-time respondents were included and student and hobbyist respondents were excluded. The final number of responses collected totaled 10,148 but all respondents did not respond to all of the selected questions.

Because the survey covers a wide range of topics, questions that related to work environment,

participation, and job satisfaction were selected for the purposes of this study. Questions used for analysis are presented in the appendix. In a few instances, such as computer major and education level, responses were grouped to create a subset that was of interest to the study.

Data were imported into SPSS for analysis of selected criteria related to job satisfaction, participation, and inclusion. Welch's T-tests for samples of unequal variance were performed to determine if responses to survey questions differed by gender.

4. RESULTS

Education and Computer Related Majors
Women responding to the survey were more likely to have a college degree than their male counterparts with 86% of women reporting degree completion compared to 79% of male respondents. However, when looking at field of study in degrees, 67% of male respondents had an information technology related degree compared to female respondents who reported in field degrees at 51%.

When asked about the importance of formal education, such as a degree in computer science, there was no statistical difference in how men and women responded. Most of the responses for the question indicated that both genders indicated it to be somewhat important with very few respondents believing that it was either critically or not important at all.

Job Satisfaction
When asked to rate their current job satisfaction, there was little difference between male and female respondents. Over 70% of all respondents reported some level of job satisfaction while only approximately 20% of all respondents reported some level of dissatisfaction with their current job.

Reasons to Initiate a Job Search
When asked to select from a list of issues that might cause respondents to search for a new job, there were many shared reasons and some significant differences between men and women. Both were as likely to job hunt out of curiosity, a desire to share accomplishments, leadership issues, or for no reason at all. Men were more likely to select compensation issues, $t(1038)=-4.05$, $p<.001$, and desire to work with new technologies, $t(1060)=-4.40$, $p<.001$, as reasons to consider switching jobs.

Women were more likely to job hunt after having a bad day, $t(1033)=4.20$, $p<.001$, relocation $t(1039)=3.09$, $p=.002$, trouble with manager, $t(1024)=4.93$, $p<.001$, trouble with teammates, $t(991)=6.22$, $p<.001$, and issues with work/life balance, $t(1060)=2.04$, $p=.041$. Women were also more likely to select interest in growth opportunities as a reason to initiate a job search, $t(1076)=2.84$, $p=.004$.

Problem Solving in the Workplace
When asked how respondents reacted to getting "stuck on a problem", there were many shared strategies among women and men. Both genders were equally likely to consult online communities like Stack Overflow, watch help videos, or do other distracting activities such as meditate, or walk. Men were more likely to indicate they would play games while working through a problem, $t(1391)=-2.47$, $p=.013$. Women were more likely to indicate that they would ask a coworker for help, $t(1347)=3.66$, $p<.001$, focus on other work as a distraction, , $t(1399)=6.29$, $p<.001$, or panic , $t(1229)=8.63$, $p<.001$.

Criteria for Job Search
When asked which three factors were important when deciding between two theoretical jobs with similar pay, benefits, and location, there were some factors that were selected equally by both genders and some that were significant to a respective gender. Selecting factors such as ability to work remotely, professional development, department or team, flex time, and family friendliness were as likely to be selected as one of the three most important factors in a job search by both sexes.

Men were more likely to indicate that the following three factors were most important ot consider: financial performance of a company, $t(1421)=-5.51$, $p<.001$, impact of contributions, $t(1304)=-2.79$, $p=.005$, industry, and technologies used, $t(1296)=-9.06$, $p<.001$. Women were more likely to select office environment/company culture, $t(1269)=2.63$, $p<.001$, and company diversity, $t(1486)=10.86$, $p<.001$, as reasons to distinguish between two jobs.

Other factors that were not selected at significant levels between men and women include remote work options, professional development, specific department or team assignment, flexible schedules and family friendliness.

Overtime
When asked about overtime requirements in their current job, men and women both responded

similarly with no significant difference between either gender. Over 75% of both groups indicated that overtime was required either occasionally, sometimes, or often.

Purchasing Influence

When asked about level of influence respondents had when choosing technology at their job, there were significant differences between men and women. Men were more likely to indicate that they had a great deal of influence over technology purchasing, $t(1169)=7.61$, $p<.001$, whereas women were more likely to indicate that they had little or no influence over selection of technology in the workplace, $t(1008)=4.937.55$, $p<.001$.

Online Membership and Participation

When examining the online communities like Stack Overflow, men were more likely to indicate some level of membership than their female counterparts.

When participation is examined, men are more likely to have participated multiple times per day, daily, and multiple times per week or month as opposed to their female colleagues who were unlikely to participate at all, $t(1242)=4.52$, $p<.001$, in Stack Overflow activities such as ask, answer, vote, or comment in the community. However, this does not seem to be a result of feeling welcome as there was no significant difference in levels of welcome in the community.

5. DISCUSSION

While some of the results from the survey were similar to findings from previous studies (Allen, et al., 2006; Berg, Sharpe, & Aitkin, 2018), there were a few surprising results. With a similar response across genders, work satisfaction seems relatively high among all respondents indicating that women can find fulfilling and satisfying careers in IT beyond all of the problems revealed in previous research.

From a general standpoint, the importance of interpersonal relationships appeared to have more importance in women's responses than men. Company culture, diversity, problems in the workplace regarding team members and managers were more likely to be cited as reasons to search for a new job by women, whereas more concrete issues of salary and new technologies tended to be more likely to be cited by men. While both men and women turned to colleagues for help when stuck on a problem, women were more likely to rely on other people for help than men.

What was surprising, however, was that issues that have appeared to carry importance in other research were not present in this study. Issues such as flexible schedules, remote work schedules, and family friendliness were of similar importance to both men and women respondents. Additional data about family status and current work environments weren't available in this study but could provide additional insights about the results. Additionally, this survey was conducted in February of 2020, right before the pandemic shutdowns began, which significantly changed work environments in all industries. Overtime requirements seemed to be equal across genders but also distributed in frequency, indicating many IT jobs do not require the hyperbolic eighty-hour work week.

From an education perspective, it is not surprising that women were more likely to have a bachelor's degree than male respondents given the general statistics about female vs. male enrollment in US colleges and universities. Of the respondents that did have a bachelor's degree, men were more likely to have majored in a computer related field with almost half of the respondents coming from other areas of study. This also mirrors the findings reported by the National Center for Education Statistics (2021b).

So, what, as educators, can we take away from this snapshot of men and women in the workplace? Can we do something to increase diversity recruitment and retention of female technologists? There are a few areas from previous research that are supported by this research as well.

Recruitment of Female Students in IT Careers

As shown by many other studies, there are many reasons women do not choose IT as a major and there are as many studies trying to change that. Perhaps the answer does not lie in recruiting women to the IT field but in bringing IT to their chosen fields. Almost 50% of women tech professionals responding to the survey had college degrees in areas other than IT. They eventually discover, either through interest or necessity or other life circumstances, that they can be interested and successful in the IT field. Departments that are looking to increase gender diversity in their classrooms might consider minors or certificate programs in conjunction with other majors in the university. This exposes more students to information technology education and potentially opens the door of opportunity for more women to choose careers in IT.

If circumstances and resources allow, creating cohort groups in introductory computing classes that require students from all majors to explore how technology is used specifically in their chosen field of study could be helpful. Not only will this benefit students in that field but potentially will spark an interest in students that might not have considered a career in information technology. Doing so, may allow many women to receive the technical training and confidence in their skills that might transition them to an IT career, sooner than later. Presenting different problems across multiple disciplines could help disperse the "geeky" stereotypes of computer nerds writing code only to solve science problems and broaden horizons to include how technology plays an important role in all fields from business to the arts and humanities.

Retention of Female Students in IT Programs

Because issues like panic in the face of a problem, as well as dissatisfaction or issues with interpersonal relationships at work were significant concerns of female respondents, a strong support system for women in IT should be instituted at the educational as well as professional level. Participation in student groups and professional memberships should be strongly encouraged for all students, and women in particular. Participation in these activities will allow them to practice their networking skills, both formal in informal, that can help mitigate advancement issues they may encounter in the workplace.

In addition, there are case studies supporting the formulation of women specific professional organizations to make selection of IT as a career more appealing (Wang, Goldgof, & Christensen, 2019; Heistand-Tupper, et al., 2010). Encouraging female participation in student or professional groups for women allows students to find mentors and build networks that will help them in their future career. If there aren't that many or any female faculty in a department, consider teaming up with other STEM related departments on campus or encourage participation in local or national organizations intended to promote women in computer related fields. Also consider encouraging female students to participate more in online communities like Stackflow or other industry specific communities at an early stage to normalize this behavior and open networking and help opportunities that may benefit them in the workplace.

Interpersonal Skills

While interpersonal skills rarely appear in the curriculum, there are ways to consider preparing our students, both male and female, how to be successful in the workplace and this carries on beyond pure technical skills. Many programs emphasize concepts such as group work, written ability, and public speaking. When considering these soft skills, also consider some of the issues presented in this study. When assigning group projects, try to create diverse groups when possible. If assigning roles within the group, give female students a chance to lead her male colleagues and give male students the chance to interact in meaningful ways with their female colleagues. If recruitment efforts in higher education are successful and women choose computer related majors with more frequency, the ability to interact and become familiar with colleagues of all genders, races, and backgrounds should mitigate some of the issues currently faced by women in the technology field.

Future Studies

While this study is just a snapshot of some opinions held by professionals in the workplace, it gives us a glimpse of some of the issues that affect a woman's satisfaction and success in her career. A broader, more nuanced look at some of these issues would provide even more information on how the industry is changing and can reveal other steps that can be made to improve women's place in IT.

This study did not examine any aspect beyond gender. Other factors such as women of color help increase the diversity of our field, yet they are even rarer participants than the scope of this study. While women are chronically underrepresented in this field, other groups such as African-American women make a small fraction of the technology workforce and tend to leave at greater rates. These issues, along with gender should also be studied to increase participation and diversity.

Another aspect that limits this study is the concept of gender, in general. This study looked at binary genders only for ease and clarity of results. Respondents that indicated non-binary or multiple gender affiliations were not included. With the increase and acceptance of gender fluidity of younger generations, the research done in this field to this point could see major shifts as younger people reconceptualize the concept of gender overall.

6. CONCLUSION

As mentioned before, this study gives a snapshot of women's feelings about their jobs in IT fields, but it is just that, a snapshot. It gives us ideas of where problems might lurk and where opportunity exists. This study supports findings from many previous areas of research but also provides some surprising divergence. Issues that many times are considered "women's issues" such as family support and flexible work schedules, really are employee concerns across all genders. With a growing demand for technical talent, higher education and the tech industry should focus on encouraging and including women to increase participation in areas of technical expertise. Researchers should continue to identify strategies to recruit women to the field and retention strategies to retain and advance women to make IT a richer, more inclusive industry.

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Appendix: Survey Questions (Stack Overflow, 2020) and Statistical Results

	Gender	N	Mean	Std. Deviation	Difference (F-NF)	t	df	p-value
Which of the following best describes the highest level of formal education that you've completed?								
I never completed any formal education; Primary/elementary school; Secondary school (e.g. American high school, German Realschule or Gymnasium, etc.); Some college/university study without earning a degree; Associate degree (A.A., A.S., etc.); Bachelor's degree (B.A., B.S., B.Eng., etc.); Master's degree (M.A., M.S., M.Eng., MBA, etc.); Professional degree (JD, MD, etc.) Other doctoral degree (Ph.D., Ed.D., etc.); Other (please specify):								
Bachelor's Degree or Above	F	1065	0.86	0.3460747	0.0688609	6.03	1430	<.001*
	M	9070	0.79	0.4057754				
What was your primary field of study?								
*Computer science, computer engineering, or software engineering; *Web development or web design; *Information systems, information technology, or system administration; Mathematics or statistics; Another engineering discipline (such as civil, electrical, mechanical, etc.); A business discipline (such as accounting, finance, marketing, etc.); A health science (such as nursing, pharmacy, radiology, etc.); A humanities discipline (such as literature, history, philosophy, etc.); A natural science (such as biology, chemistry, physics, etc.); A social science (such as anthropology, psychology, political science, etc.); Fine arts or performing arts (such as graphic design, music, studio art, etc.); I never declared a major								
Computer related majors (indicated with *)	F	971	0.51	0.5000918	-0.1584057	-9.40	1178	<.001*
	M	8311	0.67	0.4697766				
How important is a formal education, such as a university degree in computer science, to your career?								
Critically important	F	942	0.09	0.2804942	-0.0096209	-0.99	1194	0.321
	M	8106	0.10	0.2940713				
Very important	F	942	0.20	0.3982879	-0.0115288	-0.84	1180	0.401
	M	8106	0.21	0.4066059				
Fairly important	F	942	0.24	0.4259572	-0.0038809	-0.26	1173	0.791
	M	8106	0.24	0.4281234				

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Somewhat important	F	942	0.27	0.4417767	0.0043516	0.29	1167	0.774
	M	8106	0.26	0.4392294				
Not important	F	942	0.21	0.4099084	0.020679	1.47	1152	0.141
	M	8106	0.19	0.3944413				
Which of the following best describes your current employment status?								
Employed full-time; Employed part-time; Independent contractor, freelancer, or self-employed; Not employed, but looking for work; Not employed, and not looking for work; Student; Retired;I prefer not to say								
Employed	F	1020	0.91	0.2823467	0.0007469	0.08	1268	0.936
	M	8818	0.91	0.2833136				
How satisfied are you with your current job? (If you work multiple jobs, answer for the one you spend the most hours on.)								
Very satisfied	F	868	0.44	0.4972191	0.0329204	1.85	1068	0.064
	M	7657	0.41	0.4921879				
Slighlty satisfied	F	868	0.28	0.4514658	-0.0118985	-0.74	1078	0.462
	M	7657	0.30	0.4567264				
Neither satisfied nor dissatisfied	F	868	0.08	0.2776998	-0.0056204	-0.56	1085	0.573
	M	7657	0.09	0.2858015				
Slightly dissatisfied	F	868	0.12	0.3302549	-0.0158398	-1.33	1096	0.183
	M	7657	0.14	0.3472832				
Very dissatisfied	F	868	0.06	0.2416794	0.0004384	0.05	1071	0.959
	M	7657	0.06	0.2407595				
Imagine that you are deciding between two job offers with the same compensation, benefits, and location. Of the following factors, which 3 are MOST important to you?								
Remote work options	F	1014	0.38	0.4867443	0.0146986	0.91	1265	0.363
	M	8410	0.37	0.4828106				
Office environment or company culture	F	1014	0.52	0.4999314	0.043673	2.63	1269	0.008*
	M	8410	0.47	0.4993573				
	F	1014	0.08	0.2697086		-5.51	1421	<.001*

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Financial performance or funding status of the company or organization	M	8410	0.13	0.3360223	-0.0508311			
Opportunities for professional development	F	1014	0.33	0.4705801	-0.0061294	-0.39	1272	0.695
	M	8410	0.34	0.4725417				
Diversity of the company or organization	F	1014	0.28	0.4473046	0.2125194	14.86	1086	<.001*
	M	8410	0.06	0.2440799				
How widely used or impactful my work output would be	F	1014	0.20	0.4010827	-0.037461	-2.79	1304	0.005*
	M	8410	0.24	0.4262803				
Industry that I'd be working in	F	1014	0.14	0.3471992	-0.0250022	-2.15	1308	0.031*
	M	8410	0.17	0.3712402				
Specific department or team I'd be working on	F	1014	0.15	0.36003	-0.0073065	-0.61	1279	0.542
	M	8410	0.16	0.3667822				
Flex time or a flexible schedule	F	1014	0.43	0.4957269	0.0227129	1.38	1265	0.168
	M	8410	0.41	0.4919038				
Languages, frameworks, and other technologies I'd be working with	F	1014	0.35	0.4766114	-0.1442638	-9.06	1296	<.001*
	M	8410	0.49	0.4999718				
Family friendliness	F	1014	0.11	0.3160458	-0.0169438	-1.60	1304	0.109
	M	8410	0.13	0.3356287				
In general, what drives you to look for a new job? Select all that apply.								
Curious about other opportunities	F	860	0.60	0.4904191	0.0047673	0.27	1065	0.787
	M	7521	0.59	0.4911038				
Better compensation	F	860	0.67	0.4709888	-0.0682654	-4.05	1038	<.001*
	M	7521	0.74	0.4403616				
Having a bad day (or week or month) at work	F	860	0.31	0.4629533	0.0695397	4.20	1033	<.001*
	M	7521	0.24	0.4276736				
Wanting to share accomplishments with a wider network	F	860	0.06	0.2341433	-0.0123298	-1.45	1107	0.147
	M	7521	0.07	0.2559534				
Looking to relocate	F	860	0.29	0.4527234	0.0500068	3.09	1039	0.002*

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	M	7521	0.24	0.4253957				
Just because	F	860	0.13	0.3405503	-0.0085474	-0.70	1076	0.486
	M	7521	0.14	0.3493483				
Trouble with my direct manager	F	860	0.29	0.4554139	0.0800197	4.93	1024	<.001*
	M	7521	0.21	0.4094574				
Better work/life balance	F	860	0.45	0.4976649	0.036525	2.04	1060	0.041*
	M	7521	0.41	0.4922835				
Wanting to work with new technologies	F	860	0.49	0.5002247	-0.079872	-4.44	1060	<.001*
	M	7521	0.57	0.4948606				
Growth or leadership opportunities	F	860	0.65	0.4783308	0.0489847	2.84	1076	0.004*
	M	7521	0.60	0.4904289				
Trouble with my teammates	F	860	0.22	0.41433	0.0910612	6.22	991	<.001*
	M	7521	0.13	0.3348968				
Trouble with leadership at my company	F	860	0.38	0.4851463	0.0314105	1.80	1056	0.071
	M	7521	0.35	0.4758853				
How often do you work overtime or beyond the formal time expectation of your job?								
Often: 1-2 days per week or more	F	859	0.21	0.404705	-0.0153365	-1.05	1072	0.293
	M	7611	0.22	0.4152098				
Sometimes: 1-2 days per month but less than weekly	F	859	0.26	0.4399422	-0.0079401	-0.50	1064	0.616
	M	7611	0.27	0.4439226				
Occasionally: 1-2 days per quarter but less than monthly	F	859	0.25	0.4341023	-0.0025193	-0.16	1062	0.871
	M	7611	0.25	0.4353118				
Rarely: 1-2 days per year or less	F	859	0.17	0.3778552	0.0196196	1.45	1041	0.147
	M	7611	0.15	0.3596964				
Never	F	859	0.11	0.3108964	0.0061763	0.55	1050	0.580
	M	7611	0.10	0.3027853				
What do you do when you get stuck on a problem? Select all that apply								
Visit Stack Overflow	F	1077	0.90	0.2942281	0.0049818	0.52	1357	0.600

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	M	9064	0.90	0.3008386				
Call a coworker or friend	F	1077	0.55	0.4977574	0.0587218	3.66	1347	<.001*
	M	9064	0.49	0.4999457				
Play games	F	1077	0.13	0.34149	-0.0274365	-2.47	1391	0.013*
	M	9064	0.16	0.3685351				
Meditate	F	1077	0.11	0.3147985	-0.0120348	-1.18	1370	0.238
	M	9064	0.12	0.3289774				
Go for a walk or other physical activity	F	1077	0.60	0.4909058	0.0236157	1.49	1349	0.136
	M	9064	0.57	0.4947454				
Watch help / tutorial videos	F	1077	0.53	0.4990179	0.0306265	1.90	1345	0.057
	M	9064	0.50	0.50001				
Do other work and come back later	F	1077	0.75	0.4325414	0.0885393	6.29	1399	<.001*
	M	9064	0.66	0.4728414				
Panic	F	1077	0.23	0.4229732	0.1150054	8.63	1229	<.001*
	M	9064	0.12	0.3226844				
Visit another developer community (please name)	F	1077	0.13	0.3323153	0.0222387	2.09	1301	0.036*
	M	9064	0.10	0.3053266				
What level of influence do you, personally, have over new technology purchases at your organization?								
I have a great deal of influence	F	817	0.09	0.28718	-0.0837765	-7.61	1169	<.001*
	M	7135	0.17	0.3794383				
I have some influence	F	817	0.35	0.4784205	-0.0546761	-3.09	1023	0.002*
	M	7135	0.41	0.491574				
I have little or no influence	F	817	0.56	0.4971931	0.1384526	7.55	1008	<.001*
	M	7135	0.42	0.4931376				
Do you consider yourself a member of the Stack Overflow community?								
Yes, definitely	F	1063	0.06	0.2290678	-0.0620531	-7.96	1600	<.001*
	M	9085	0.12	0.3220999				

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Yes, somewhat	F	1063	0.15	0.3613873	-0.1051583	-8.76	1454	<.001*
	M	9085	0.26	0.4383508				
Neutral	F	1063	0.21	0.4066732	0.010494	0.80	1312	0.425
	M	9085	0.20	0.3987783				
No, not really	F	1063	0.42	0.4940236	0.1045527	6.57	1292	<.001*
	M	9085	0.32	0.4652921				
No, no at all	F	1063	0.15	0.3595763	0.0517935	4.52	1242	<.001*
	M	9085	0.10	0.3008221				
Not sure	F	1063	0.01	0.0864654	0.0003712	0.13	1309	0.894
	M	9085	0.01	0.0842867				
How frequently would you say you participate in Q&A on Stack Overflow? By participate we mean ask, answer, vote for, or comment on questions.								
Multiple times per day	F	746	0.01	0.0816482	-0.0160763	-4.66	1307	<.001*
	M	7507	0.02	0.1492074				
Daily or almost daily	F	746	0.01	0.096477	-0.0331103	-7.83	1504	<.001*
	M	7507	0.04	0.201726				
A few times per week	F	746	0.04	0.2027573	-0.0406266	-5.03	1042	<.001*
	M	7507	0.08	0.2766881				
A few times per month or weekly	F	746	0.12	0.3243621	-0.0567994	-4.49	961	<.001*
	M	7507	0.18	0.3809326				
Less than once per month or monthly	F	746	0.48	0.4998749	-0.0153867	-0.80	899	0.422
	M	7507	0.49	0.4999966				
I have never participated in Q&A on Stack Overflow	F	746	0.34	0.4750841	0.1619993	9.02	845	<.001*
	M	7507	0.18	0.3851799				
Compared to last year, how welcome do you feel on Stack Overflow?								
A lot more welcome now than last year	F	1042	0.01	0.1151864	-0.0062698	-1.62	1424	0.104
	M	8830	0.02	0.1389943				
Somewhat more welcome now than last year	F	1042	0.08	0.2723724	0.0128905	1.46	1259	0.145

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	M	8830	0.07	0.2512853				
Just as welcome now as I felt last year	F	1042	0.76	0.4284051	-0.0206648	-1.48	1282	0.139
	M	8830	0.78	0.4150635				
Somewhat less welcome now than last year	F	1042	0.05	0.2198249	-0.0177659	-2.43	1387	0.015*
	M	8830	0.07	0.2528377				
A lot less welcome now than last year	F	1042	0.04	0.1945135	-0.0005167	-0.08	1302	0.935
	M	8830	0.04	0.1956509				
Not applicable - I did not use Stack Overflow last year	F	1042	0.06	0.2330624	0.0323268	4.36	1154	<.001*
	M	8830	0.03	0.156907				