

The Impact of Unconscious Gender Bias on Online Professional Networking & Recruitment.

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DECLARATION

This Thesis is entirely my own work, and has not been previously submitted to this or any other third level institution.

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Abstract

The differences in how men and women communicate has been a popular debate and of interest to researchers for many years. Conflict and misunderstanding derived from different gender communication styles have had an impact on how sexes work together and progress in careers. This study analysed gender communication styles in the Information Technology field, more specifically in online networking and within recruitment processes using computer mediated communication. This research attempts to answer if training can aid in combating unconscious gender bias in recruitment? are gender neutral CV's effective in combating unconscious gender bias? and does language style used online help identify gender and lead to unconscious bias?

The study uses quantitative surveys and resume interaction analysis to analyse 82 IT field participants based on gender and the effects of training on unconscious bias during recruitment. The results are analysed in SPSS using descriptive and inferential statistics. The results show that, yes unconscious bias training aids in combating unconscious gender bias and gender-neutral CV's aid in combating unconscious gender bias. Results also indicate that language style used online helps to identify gender and may lead to unconscious bias. The goal of the study is to increase the amount of knowledge available regarding unconscious gender bias already present in IT work place in Ireland and identify any impact as a result on initial online recruitment selection.

Implications of not understanding unconscious gender bias at recruitment level could have negative effects towards shaping a business's culture, diversity.

KEYWORDS: Gender, unconscious gender bias, recruitment, STEM, professional networking, Language online, Information technology

I. INTRODUCTION

Unconscious Gender bias is the prejudice or preference toward one gender over the other and may manifest in both subtle and obvious ways.

Referring to the attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner, unconscious biases are basically prejudices we have but are unaware of. They are “mental shortcuts based on social norms and stereotypes” (Guynn, 2015).

Research published indicates that unconscious bias can have an impact in various including legal justice, education, and healthcare and general work place (Kirwan Institute, 2014).

Wilkie, 2014 research examined various biases and where they stem from. Findings showed different biological biases including from skin colour, gender, age, height, weight, as well as social biases including parental status, marital status, foreign accents, education, and so forth (Wilkie, 2014).

Acted involuntarily from within the subconscious, these biases can be favourable and unfavourable, but ultimately are different from other known but publicly concealed biases such as sexism, racism or anti-Semitism.

As much as known or conscious biases are a part of everyday life, unconscious biases are also a fact of life. ‘Everyone harbours them and takes them into the workplace. Numerous studies since the 1980s confirm that people harbour unconscious bias even when they believe that prejudice and discrimination are wrong’ (Henneman, 2014).

Over the last three decades, our understanding of unconscious bias has evolved. We now know that Unconscious biases develop at an early age: biases emerge during middle childhood and appear to develop across childhood when as children we learning to group, associate and categories everything we are learning, this is where we are most susceptible to stereotypes.

But as nature of unconscious bias is becoming more understood, but we still have very little insight into how it impacts the tech industry in Ireland and also how we are being impacted by unconscious bias by the way we are communicating online.

Workplace unconscious biases in the workplace can impact recruiting efforts, employee satisfaction, performance reviews, promotions and unknowingly re-shape business culture.

Companies focused on improving gender balance and culture quality are looking to 'Human Resources and talent management professionals to ask the question, "To what extent are our organizational culture and business results being affected by unconscious bias?" (Nassif, 2016)

1.1. Significance of study

Some interesting studies have been conducted in the gender bias field relating to recruitment and overall workplace impact. Moss-Racusin et al, study in 2012 on the recruitment impact of a gender identifiable name on a CV or how unconscious gender bias perception exists in the workplace in a Stanford University's Clayman Institute for Gender Research finding that men had attributed a 'woman's success to external factors and "luck" rather

than attributing it to her individual effort and abilities the same way they would have for a man.’ (Anderson, A. R. 2016, Silverman, R. E. 2015).

The current review of related literature does not combine the constructs of whether gender bias exists from being gender recognisable online through language alone, or with a focus on only IT sector and recruitment. It also does not analyse unconscious bias trainings effectiveness in IT analyse the benefits of unconscious bias training or even the current perception of unconscious gender bias as a problem in the IT sector in Ireland. This research aims to contribute to closing this gap in research.

Computer Mediated Communication

Computer Mediated Communication (CMC) is the communication between humans across a network consisting of 2 or more electronic devices. There are 3 main types of CMC, audio-video, audio only and text only. Gender neutrality is not feasible through Audio- Video interaction platforms such as Skype or Zoom, typically used for face to face audio-visual conferencing purposes, but it is possible to achieve gender neutrality through text-only communication such as email or chat conversation tools such as Slack. Understanding the differences in communication styles between men and women will aid in understanding how gender can be identified even without face to face communication.

1.2. Purpose of the study

The purpose of this study is to examine the impact Unconscious Gender Bias has in IT recruitment and online professional networking and what part the language we use online contributes towards gender identification.

1.3. Research questions

The research questions of this study are:

1. Does unconscious bias training aid in combating unconscious gender bias
2. Do gender neutral CV's aid in combating unconscious gender bias
3. Does language style used online help identify gender and lead to unconscious bias

II. REVIEW OF LITERATURE

This literature review will discuss communication styles, including language used in resume applications for the IT sector. The first section introduces sex and gender, this is integral to understanding the root of gender bias issues as well as understanding key misconceptions. The second section contains reviews of literature relating to gender communication styles. This is an important follow on analysis from gender identity looking specifically at how we communicate. Lending into the third section which focuses on specifically online gender communication styles, this is the key area now relevant today for CMC in organisations. The fourth and final section will tie together at recruitment communication and unconscious gender bias research which will lead then to what this study suggests is the current gap research.

2.1. Sex and Gender

What is sex and is it different from gender? It is a common misconception that gender is the same as sex. However gender is not scientifically based but instead is affected in both the physical and biological ways each gender displays traits or characteristics. These perception of these traits shape the belief system on what it means to be a man or a women, or masculine and feminine.

'The gender identity that most people adhere to is usually unconscious or forced upon us at an early age. We see the concepts of gender in the colours assigned to children (blue for boys, pink for girls), the common length of our hair (men-short, women-long), the toys we play with, the jobs we aspire to, and the behaviour's and interests we are "supposed" to embrace.' (Staughton, J., 2016)

We see gender identity and gender bias in several key aspects of society including home, education, socialising and career.

Sexual discrimination can be seen starting at a young age in education. 'The American Association of University Women published a report in 1992 indicating that females receive less attention from teachers and the attention that female students do receive is often more negative than attention received by boys.' (Bailey, 1992)

Discrimination here can also take seemingly harmless forms as well, such as boys being chosen to move desks in a room or girls being asked to serve tea at parent- teacher associations. This forces a biological bias that men are boys are stronger than girls that could start to develop psychological misgivings relating to attitude and behaviour that continues on from childhood into how as adults we socialise, engage with loved ones and choose our career.

"Because classrooms are microcosms of society, mirroring its strengths and ills alike, it follows that the normal socialization patterns of young children that often lead to distorted perceptions of gender roles are reflected in the classrooms"(Marshall, 1997)

Conventional wisdom says that we know it is wrong to treat someone differently because of their gender. This is why identifying unconscious gender bias is significant in improving work culture. Becoming more aware that, whether intentional or not, we can show bias for one gender over another is important to looking at ways to educate and limit the risk of negative impacts within organisations.

2.2. Gender Communication Styles

Often emotion or expression are traits overlooked or deemed less important in light of more assertive personalities. Much of the research in communication style has found these traits relate most to how women communicate, demonstrating a natural tendency to be more expressive than males. We see women are generally more expressive and politer in conversation, while men are shown as more assertive and power-hungry (Basow & Rubenfield, 2003).

Research has shown that women use language as a tool to create relationships and social connections where as men use language to achieve tangible outcomes or exert dominance (Leaper, 1991; Maltz & Borker 1982; Wood, 1996; Mason, 1994).

In a 2010 study, scientists asked students between the ages of 18 and 44 to 'keep journals detailing occasions when they apologised, felt the need to apologise, or perceived they had done something wrong. While both men and women apologized 81% of the time when they deemed their actions offensive, women reported committing more offensive acts.' (Schumann, K., & Ross, M. 2010).

The above research contributed to the belief that men and women view situations differently, believing women more likely to apologies to maintain social harmony. "We think we're making everyone mad when we speak up saying women apologize more because they are more emotional is a copout plain and simple." (Schumann, K., & Ross, M. 2010).

Identifying another reason for the difference in communication styles through more historic research shows place in society has had an impact on the psychological communication between men and women. (Lakoff, R.

T. in 1975) suggested that women use less powerful speech: they tend to swear less, speak more politely, use intensifiers and more unnecessary tag or tail questions added after a statement is made i.e. 'it's a nice day, isn't it?' (Lakoff, 1975). 'Women also tend to interrupt less than men do; researchers have hypothesized that this is possibly because of their perceived lower status to men' (Thorne & Henley, 1975).

These differences in communication styles put women at a disadvantage in areas of leadership when interacting with others because they speak more tentatively than men, giving the impression that men are more confident and capable (Lakoff, 1975).

These studies put forward interesting theories on female behaviour and favour towards social harmony and how that links to perception of dominance by men over women.

2.3. Online Gender Communication Styles

Computer mediated communication (CMC) 'Text-based computer-mediated communication, with its lack of physical and auditory cues, makes the gender of online communicators irrelevant or invisible, allowing women and men to participate equally, in contrast with traditional patterns of male dominance observed in face-to-face conversations' (Graddol & Swann 1989).

Contrary to this claim that CMC neutralises distinctions of gender research in social networking has shown genders are still distinguishable and bring many traits from nonverbal or face-to-face communication styles online. In 2016, over 65,000 Facebook users gave researchers permission to employ data-driven analysis to determine how and men and women express themselves differently on social media and what sort of words they were

more likely to use in an online post. The results indicated men were more likely to be aggressive online and women tended to be warmer and gentler in their choice of words. Women talked more about personal or home life, using words such as 'Wonderful', 'Thankful' and 'Excited' where as men, on the other hand, gravitated towards more impersonal communication by preferring to talk about topics like work, politics, and competition and using words such as 'Battle', 'Freedom' and 'Win' (Gregory Park et al. 2016)

This research is one of the biggest participant studies, on a large-scale network platform, in recent years to analyse language and recruitment in gender. Strong findings reinforce Lakoff's 1975 study on how women were using less powerful language than men. The implications from findings in the Gregory Park et al. 2016 study in a modern, large sample survey highlights a further need to analyse further areas historically dominated by male gender such as STEM (Science, Technology, Engineering and Mathematic) fields.

2.4. Recruitment Language & Unconscious Gender Bias

As bias is a psychological concept that widely effects humans it is no surprise that humans have a rooted tendency toward unconscious bias that stems from deep within the subconscious of the brain. Scientists have found that bias is widely spread and is found in multiple different regions in the brain 'in the same region of the brain (the amygdala) associated with fear and threat... stereotyping, a form of bias, is associated with the temporal and frontal lobes...the left temporal lobe of the brain stores general information about people and objects and is the storage place for social stereotypes...the frontal cortex is associated with forming impressions of others, empathy, and reasoning.'(McCormick, Horace, 2015)

The brain looks to categorise the world for processing efficiency, it does this by mentally group things together, quickly tagging general descriptions to all manners of information.

Tagging categories of information with simplistic labels like better, worse, right or wrong leads to bias when this categorisation then leads to information getting generalised and attached to entire groups. Trix and Psenka, 2003, reveal the extent of unconscious gender bias and gender preconception in academia and recruitment through their study. In their study they find that 'women were two and a half times more likely than men to receive short letters of minimal assurance' based on an analysis of new job, promotion and tenure letters of recommendation. The same letters were also 'twice as likely to contain "doubt raisers" such as negative language, faint praise, or irrelevancies, and more likely to include references to personal life.' Revealing that recommenders unknowingly stereotyped their responses when writing the letters based on gender (Trix & Psenka, 2003).

An example of the impact unconscious gender bias can have on the recruitment process can be seen in Joseph, J., 2014 study. The study found that when participants evaluated candidate resumes of equally qualified male and female candidates the evaluators rated the male candidate as 'more competent and enjoyable' and 'offered higher salaries and more mentoring support.' (Joseph, J., 2016).

Other research has focused on particular gender identifiers such as names used during initial recruitment processes, asking the question, should we remove gender identifiers from resume? An approach that is being increasingly explored by businesses is that of Anonymous or blind recruitment where gender and other personally identifying information is removed from the resume for example initials are used instead of full names and photographs are removed. While it does not completely

remove bias in hiring it can significantly reduce the possibility for biases to impact applicant selection. Additional research in Europe reinforces this theory with a study that found evidence suggesting that blind recruitment approaches tend to lead to 'more equal outcomes among groups within the initial phase of candidate selection'. The same study calls attention to other UK businesses who have gone a step further and redacted the names of education institutions candidates have attended and while it is likely the impact will also reduce unconscious bias in initial recruitment stages, they mention that the initiatives are still recent so the exact impacts of the changes are as of yet unknown (Kottasova, I., 2015).

This blind recruitment style of hiring also has an impact directly on candidate perception throughout the hiring process. In Joseph, J. 2016 study, results showed that 41% of candidates self-evaluated their chances at getting an interview as higher when the process employed anonymous job applications (Joseph, J., 2016).

Previous research has also shown implications with using names on work emails, resumes, by lines and sign offs, showing that in certain situations the use of a name has a higher chance of gender discrimination and unconscious gender bias. An interesting study by Moss-Racusin, et al., 2012, around recruitment processes in STEM fields, was conducted to discover the implication of using the name "Jennifer" over "John". The study eventually showed that faculty at academic institutions, 'despite training in conducting scientifically objective research, held implicit gender biases that were disadvantaging women who were pursuing STEM careers.' (Moss-Racusin, et al., 2012)

In the study, two versions of the same resume were created with the only difference being the name used, Jennifer or John. Out of over 100 applicants in STEM fields, Jennifer was perceived as being less qualified

despite being equally qualified to John. 'As a result, Jennifer experienced several disadvantages that would have hindered her career advancement if she were a real applicant. Because they perceived the female candidate as less competent, the scientists in the study were less willing to mentor Jennifer or to hire her as a lab manager. They also recommended paying her a lower salary. Jennifer was offered, on average, \$4,000 per year (13%) less than John' (Moss-Racusin et al., 2012) Moss-Racusin stressed that the participants in her study were likely unaware they were discriminating against Jennifer.

Unconscious gender bias is not just a women's right issue, it is a gender equality issue that also shows women having gender bias against women. 'Babcock and Laschever, 2007 described several studies that revealed that people -- even women themselves -- still hold stereotypes about women. Their research proved that women under-value the work they perform. For example, when offered a specified dollar amount for a particular task, women more often than men accepted the amount offered. Men, on the other hand, were more likely to ask for additional money. Although the level of success was the same for women and men, women did not feel they deserved more' (Anderson, A. R. 2016).

implications of unconscious gender bias can lead to large consequences for organisations. Lacking gender diversity in business leadership leads to organisations suffering from lower levels of innovation while 'organisations that do have prominent females in leadership roles are outperforming organizations with all male leadership by over 53%' (Catalyst, 2017).

Another study on the impact of unconscious gender bias conducted by Stanford University's Clayman Institute for Gender Research found that 'in the workplace men tend to attribute a woman's success to external factors

and “luck” rather than individual effort and abilities as they would have for a man’(Anderson, A. R. 2016, Silverman, R. E. 2015).

Some businesses are already tackling the issue of gender diversity as a serious business concern. More recent studies by in May 2014 by Google showed poor diversity figures stating that 70 percent of its 56,000 employees were men and in 2013 only 36 executives were women. Google blamed the poor figures in part on unconscious bias and then then announced a new initiative to solve this issue. At the time of the study over 2000 employees had undergone unconscious gender bias training (Guynn, J. 2015, McCormick, Horace, 2015).

These recent studies from large IT corporations such as Google mark an exciting stage in understanding the impact of unconscious gender bias within STEM fields. When industry leading companies such as these highlight issues and methods to resolve and combat unconscious gender bias, it at the very least helps highlight and evangelise work being done in this field. There is a potential gap in research here where analysis of online language used between males and females could expand on these research findings. Also considering Google is the largest search engine platform globally, a text analysis of user search queries would be interesting to see, i.e. the usage of gender identifiable language in user search queries such as “beautiful homes for sale” vs “house for sale”.

2.5. Research Aim and Hypothesis

The questions this research attempts to answer are does unconscious bias training aid in combating unconscious gender bias?, do gender neutral CV's aid in combating unconscious gender bias? and does language style used online help identify gender and lead to unconscious bias?

The aim of the research is to increase the amount of knowledge available regarding unconscious gender bias already present in IT work places and networks in Ireland and to identify any potential impact it has on the online recruitment process.

The hypothesis is that unconscious gender bias is being experienced by the majority of people in IT networks and that it is present in online recruitment in turn potentially limiting IT professional career progression.

III. METHODOLOGY

In order to answer the research questions, this research used a two stage approach leveraging quantitative surveys in both to first gain information on perception of unconscious gender bias (UGB) in the population and then using a mock-hiring process scenario to test for UGB in a sample of the initial population. The research is broken into five topics; design, participants, materials, procedure and limitation and ethical consideration below and data analysis methods and limitations are discussed throughout.

3.1. Design

The research was broken into two stages. Stage one was a quantitative survey of IT employees in Ireland to understand the perception of unconscious gender bias in 2018. (Survey in appendix A.1, Survey results in appendix A.2.)

Independent variables were participant gender, and dependant variables were weekly time spent using online networking sites, percent of participants aware of unconscious gender bias (UGB), percent of participants who have undergone UGB training, percent of participants who have experienced UGB, percent of participants who have reported UGB, percent of participants who believe training can reduce UGB.

Stage two was a quantitative survey using selected participants from stage one in a mock-hiring process scenario. Participants who had agreed to participate further in the study, had not previously taken any unconscious gender bias training and had a professional networking site listed as their most used weekly networking site were contacted and from the respondents two sample groups were chosen. One control group and one who then underwent Microsoft UGB training (Microsoft.com, 2018). Both

groups were asked to choose a candidate for a fictional job listing based on fictional resumes.

Independent variables were gender, job listing gender scrubbed status and UGB training status. Dependant variables were ratings of candidate job listing suitability based on four-point Likert scales. These ratings spanned 6 areas, Education/Training, work experience, skills, teamwork, customer service and problem solving. An overall recommendation rating indicating whether the participant thought the candidate suitable to progress in the fictional hiring process was also included and a measure of the time to complete was also included. The language used in the fictional resumes was crafted to depict either a male or a female candidate. For female candidates, longer sentences were used (Mulac & Lundell, 1994). Language for females also contained some extreme and commendatory adjectives proven to be more used by females (Newman et al., 2008)

3.2. Participants

Stage one participants were recruited from different IT social networking groups including a sample of multinational IT companies with employees situated in Ireland, LinkedIn Irish STEM groups and IT gender focused industry events such as “Girl Geek Dinners” and “Women who Code” that were held in Dublin city to gain as many STEM participants as possible. Participants were then limited to those who worked in “IT, Computer and mathematical Occupations” and who agreed to participate in the study, resulting in 82 eligible participants for the study.

The sample consisted of 31.7% Male and 68.3% female participants and the participant age breakdown was 18-24 (14.6%), 25-34 (54.9%), 35-44 (25.6%), 45-54 (1.2%), 55-64 (3.7%). All participants were situated within Ireland.

Stage two participants were then selected from stage one participants through combined quota sampling and a self-selecting sample method. Criteria for stage two participants were that they had agreed to participate further in the study, had not previously taken any unconscious gender bias training and had a professional networking site listed as their most used weekly networking site, resulting in 25 selected participants who were then contacted to participate further. Out of these 25 the first 12 participants who declared themselves available and willing to participate in further stages of the study and who fit an equal gender split were chosen.

The sample consisted of 50% Male and 50% female and the participants age breakdown was 18-24 (33.3%), 25-34 (50%), 35-44 (16.7%). All participants were situated within Ireland.

3.3. Materials

Stage one participants were recruited using a quantitative survey created in Microsoft Forms, the link to which was circulated around various IT networks. As a result, the survey would have been completed on various devices. The form consisted of 25 questions relating to the participants perception and experiences with unconscious gender bias (Appendix A). The form also included a specific hyperlink that could be circulated to allow people to participate.

Stage two consisted of four separate surveys consisting of 7 Likert scale questions each again created in Microsoft Forms, the links to which were sent via email to the selected stage 2 participants (Appendix B). One sample group of stage two participants was also sent instructions and a link to Microsoft's unconscious gender bias training online (Appendix D). Each survey also had three hyperlinked pdf documents that were stored in DropBox. The documents represented a fictional job listing and two fictional

candidate resumes which were used in tandem with the survey (Appendix C).

All results were exported from Microsoft Forms into Microsoft excel, were then coded and anonymised and imported into SPSS for analysis(Appendix A.2 and B.2)

3.4. Procedure

For this research quantitative data was gathered in two separate stages and analysed, employing descriptive statistics and inferential statistics using SPSS 25.0.

In stage one, survey links were circulated in moderated IT networks. For both online and in-person networks, a brief description of the survey was covered and a link to the initial survey was shared with the network members. Also included in the beginning of the survey was a description of the purpose of the survey, what was to be examined, contact details should there be any questions or clarification and a confidentiality agreement to protect the privacy of the participant (Appendix E).

After a three-month period, the survey was closed, and the results were exported from Microsoft forms into Microsoft excel. The results were then anonymised, coded, tabulated and imported into SPSS for analysis(appendix A.2 and A.3).

At this stage eligible candidates for stage two were isolated resulting in 25 eligible participants. This group of 36 participants were emailed further instructions on how the final selection would be made for stage two of the study and asked to confirm the timeline of their availability. Out of these 25 the first 12 participants who declared themselves available and willing to

participate in further stages of the study and who fit an equal gender split by were chosen by quota sampling.

Two groups were then chosen by random sampling both male and female participants and labelled group A, the control group, and group B, both of which consisted of 3 male and 3 female participants.

Approximately 1 month before stage two began, Group B was sent an email containing the confidentiality agreement (appendix B.4) again as well as instructions and a link to complete the Microsoft UGB eLearning training (Microsoft.com, 2018). With the requirement to send a screenshot of the training completion screen back by return email. Within 8 weeks of the closure of stage one all candidates had been contacted and had completed the required training.

Both groups were then sent an email containing the confidentiality agreement (appendix E.1) again as well as instructions for stage two of the study and the survey links for the 4 stage two surveys (Appendix B.5)

In two of the surveys, participants were presented with two resumes (appendix C.2) with gender identifiers, picture and name, removed while in the other two surveys they remained. In each survey there was one fictional female and one fictional male candidate. The resumes and profiles were equal in qualifications and skills but had slightly varying job history and differed in language style used.

Both groups were given a technical job specification and asked to review(Appendix C.1) the fictional candidate profiles and resumes to see who they would consider referring to progress to the next stage in the recruitment process. They were then asked to complete an industry standard candidate review form to assess the candidate's suitability for the job listing(Appendix B.1).

The final element of the research unbeknown to participants was that their interaction and decision on each candidate would be timed. Since all profiles were in effect similar or equally qualified for the role, the time taken on each candidate should not have differed much by gender or the gender identifying language used.

Stage two survey data was then exported from Microsoft Forms into Microsoft excel and using the email used to complete the stage two survey, gender data from stage one data was joined to the results. The data was then anonymised, coded, tabulated and imported into SPSS for analysis.

3.5. Limitation & Ethical Consideration

This research has some limitation. First the sample number is limited, containing only 82 completed participants. The second stage with fewer participants again, with 12, to help analyse two of the key research questions. Only one unconscious bias training standard was used to separate the control group A from group B the test group, this training was provided by Microsoft where other biases aside from gender are also discussed. Participant employment was IT sector but not defined further to distinguish company size or industry description.

Ethical approval for this research was granted by the Dún Laoghaire Institute of Art, Design and Technology in December 2017.

For ethical reasons such as potentially identifying candidates in my study and knowing any work complaints or revealed biases that could potentially make a participant uncomfortable I chose to keep participation anonymous, liaising with participants taking the survey and trainings online and

communicate over email with the strong suggestion that they create anonymous emails and not use a work email or identifiable signature.

IV. RESULTS

The results are presented in this stage. The first section contains the descriptive statistics of stage 1 survey participant results and leads to identifying perception of unconscious gender bias and online professional networking statistics.

The second section analyses the stage 2 participants of the survey including selection to participate, group A and group B descriptive statistics

The third section analyses the stage 2 candidate recruitment selection by the participants. This is broken into both groups and by gender neutral vs gender language identifying CVs. It also analyses the time taken by participants to complete gender-neutral vs non-gender-neutral identical CVs.

4.1. Stage 1 Participant Survey Results

The first survey was to analyse the overall awareness of unconscious gender bias by gender. From the initial sample group of 82 participants, (89.3%) of female participants were aware of UGB compared to (69,2%) of male participants.

Table 4.1.1 – *Awareness of UGB by Gender*

Gender * AwareOfUGB Crosstabulation					
			AwareOfUGB		
			No	Yes	Total
Gender	Female	Count	6	50	56
		% within Gender	10.7%	89.3%	100.0%
	Male	Count	8	18	26
		% within Gender	30.8%	69.2%	100.0%
Total	Count	14	68	82	
	% within Gender	17.1%	82.9%	100.0%	

An analysis of the time spent online using online networks broken down by gender showed (51.2%) of overall participants spending 3-5 hours online weekly with (57.7%) of males spending 3-5 hours online and (48.2%) of females spending 3-5 hours online weekly.

Table 4.1.2 – *Weekly Time Spent Using Online Networking Sites by Gender*

Gender * WklyTimeUsingOnlineNetworkingSites Crosstabulation							
			WklyTimeUsingOnlineNetworkingSites				
			1-2 Hours	3-5 Hours	6-10 Hours	10 Hours+	Total
Gender	Female	Count	11	27	11	7	56
		% within Gender	19.6%	48.2%	19.6%	12.5%	100.0%
	Male	Count	9	15	2	0	26
		% within Gender	34.6%	57.7%	7.7%	0.0%	100.0%
Total	Count	20	42	13	7	82	
	% within Gender	24.4%	51.2%	15.9%	8.5%	100.0%	

Looking at whether the participants had previously undertaken UGB training, (76.9%) of males and (75%) of females had previously undertaken UGB training.

Table 4.1.3 – *Have Taken Unconscious Gender Bias Training by Gender*

Gender * TakenUnconsciousBiasTraining Crosstabulation					
			TakenUnconsciousBiasTrainin g		Total
			No	Yes	
Gender	Female	Count	42	14	56
		% within Gender	75.0%	25.0%	100.0%
	Male	Count	20	6	26
		% within Gender	76.9%	23.1%	100.0%
Total	Count	62	20	82	
	% within Gender	75.6%	24.4%	100.0%	

From the group (85.4%) of the overall sample stated that they believed UGB had affected them or a colleague with (76.9%) of males and (89.3%) of females stating the same.

Table 4.1.4 – *Believe UGB Affected You or a Colleague by Gender*

Gender * BeleiveUGBAffectedYouOrColleague Crosstabulation							
			BeleiveUGBAffectedYouOrColleague				
			No	Yes	Prefer not to say	Total	
Gender	Female	Count	4	50	2	56	
		% within Gender	7.1%	89.3%	3.6%	100.0%	
	Male	Count	6	20	0	26	
		% within Gender	23.1%	76.9%	0.0%	100.0%	
	Total		Count	10	70	2	82
			% within Gender	12.2%	85.4%	2.4%	100.0%

When looking if participants believed that UGB training can reduce UGB (52.4%) of participants responded that yes, they did believe that it could reduce UGB. (53.8%) of males and (52.8%) of females thought that UGB training could reduce UGB.

Table 4.1.5 – *Believe UGB Training Can Reduce Gender Bias by Gender*

Gender * BeleiveUGBCanReduceGB Crosstabulation						
			BeleiveUGBCanReduceGB			
			No	Yes	Maybe	Total
Gender	Female	Count	6	29	21	56
		% within Gender	10.7%	51.8%	37.5%	100.0%
	Male	Count	0	14	12	26
		% within Gender	0.0%	53.8%	46.2%	100.0%
Total	Count	6	43	33	82	
	% within Gender	7.3%	52.4%	40.2%	100.0%	

When looking at respondents who believed that UGB had affected them or a colleague, (94.3%) of the overall sample stated that they had never

reported UGB in the workplace. (100%) of males and (92%) of females stated the same.

Table 4.1.6 – *When Believe UGB Affected You or Colleague, Have Reported UGB in the Workplace by Gender*

Gender * HaveReportedUGBInWork Crosstabulation When BelieveUGBAffectedYouOrColleague					
			HaveReportedUGBInWork		Total
			No	Yes	
Gender	Female	Count	46	4	50
		% within Gender	92.0%	8.0%	100.0%
	Male	Count	20	0	20
		% within Gender	100.0%	0.0%	100.0%
Total		Count	66	4	70
		% within Gender	94.3%	5.7%	100.0%

Looking at this same sample of respondents who believed they or a colleague had been affected by UGB, (48.6%) believe that UGB training can reduce gender bias with (42.9%) believing that maybe UGB training can reduce gender bias.

Table 4.1.7 – *When Believe UGB Affected You or Colleague, Believe UGB Training Can Reduce Gender Bias by Gender*

Gender * BeleiveUGBCanReduceGB Crosstabulation When BelieveUGBAffectedYouOrColleague						
			BeleiveUGBCanReduceGB			
			No	Yes	Maybe	Total
Gender	Female	Count	6	23	21	50
		% within Gender	12.0%	46.0%	42.0%	100.0%
	Male	Count	0	11	9	20
		% within Gender	0.0%	55.0%	45.0%	100.0%
Total		Count	6	34	30	70
		% within Gender	8.6%	48.6%	42.9%	100.0%

The most used weekly networking site by participants was Facebook with (52.4%) of participants using it the most, second was LinkedIn with (30.5%) of participants using it the most weekly and lastly was twitter with (17.1%) of respondents using it the most weekly.

Table 4.1.8 – *Weekly Most Used Networking Site by Gender*

Gender * WklyMostUsedNetworkingSites Crosstabulation						
			WklyMostUsedNetworkingSites			Total
			LinkedIn	Twitter	Facebook	
Gender	Female	Count	19	9	28	56
		% within Gender	33.9%	16.1%	50.0%	100.0%
	Male	Count	6	5	15	26
		% within Gender	23.1%	19.2%	57.7%	100.0%
Total	Count		25	14	43	82
	% within Gender		30.5%	17.1%	52.4%	100.0%

4.2 Stage 2 Participant Selection and Training Completion

From the initial sample of 82 eligible respondents a further sample was taken to proceed to stage 2 of the study. In keeping with the theme of the study the candidates chosen were chosen firstly by their preference for professional networking sites to increase likelihood of their exposure to online recruiting scenarios. As such, participants who had chosen LinkedIn as their most used online networking site were chosen first. This left a sample of 6 males and 19 females.

Table 4.2.1 – *Sample with Professional Network as Most Used Network*

Gender * AgeGroup Crosstabulation							
Count		AgeGroup					Total
		18-24	25-34	35-44	45-54	55-64	
Gender	Female	0	12	5	1	1	19
	Male	2	4	0	0	0	6
Total		2	16	5	1	1	25

As there were only 6 males, a random sample of 6 females was chosen from the 19 to maintain an equal balance of gender.

Table 4.2.2 – *Group A and Group B Sample*

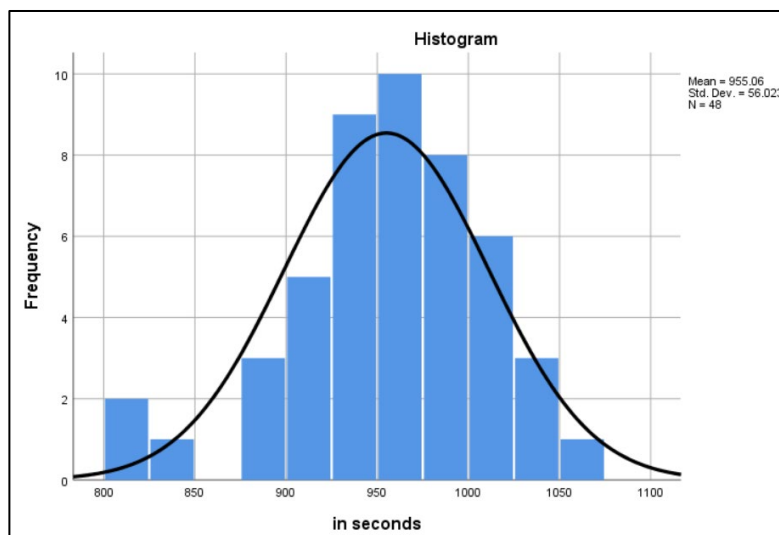
Group * Gender Crosstabulation				
Count		Gender		Total
		Female	Male	
Group	Group A	3	3	6
	Group B	3	3	6
Total		6	6	12

4.3 Stage 2 Candidate Recruitment & Gender CV's

Before analyzing any results, the time to complete the survey variable was first checked for normal distribution to determine which inferential statistics would be used.

Upon plotting a histogram of the number of seconds for each participant to complete the survey the distribution appears to follow expected standards for a normal distribution.

Chart 4.3.1 – Histogram of survey time to complete in seconds



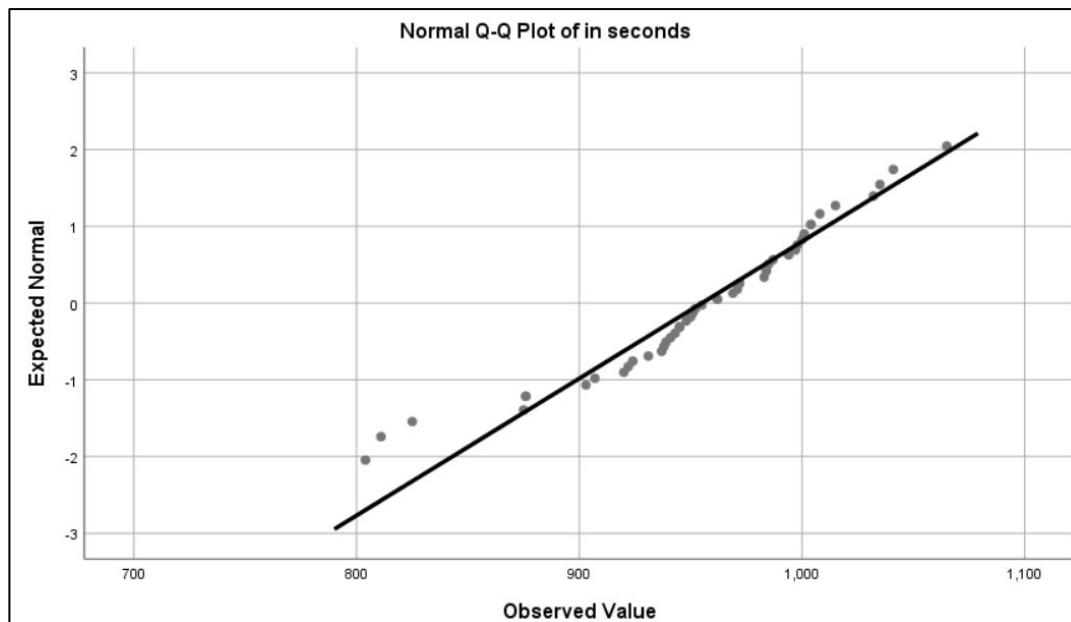
When the descriptive statistics were then analysed a skewness of -0.816 was obtained which is within the expected -1 to 1 range for a normal distribution. For Kurtosis a value of 0.98 was obtained, again well within the expected range of -2 to 2 for a normal distribution.

Table 4.3.2 – Descriptive statistics for survey time to complete

Descriptives			
		Statistic	Std. Error
in seconds	Mean	955.06	8.086
	95% Confidence Interval for Mean	Lower Bound	938.80
		Upper Bound	971.33
	5% Trimmed Mean	957.82	
	Median	958.50	
	Variance	3138.613	
	Std. Deviation	56.023	
	Minimum	804	
	Maximum	1065	
	Range	261	
	Interquartile Range	64	
	Skewness	-.816	.343
	Kurtosis	.980	.674

Upon looking at the normal Q-Q Plot the majority of cases are in line with the normal distribution line again indicating a normal distribution however there are a few cases that do not fit the normal line.

Chart 4.3.2 – Normal Q-Q Plot of survey time to complete in seconds



As a final check for normality and as the data set only contained 48 data points the Shapiro-Wilk significance was examined and found to be less than 0.05 indicating that the data is 95 percent likely not to be normally distributed.

Table 4.3.3 – Tests of Normality for survey time to complete

Tests of Normality						
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
in seconds	.124	48	.064	.948	48	.033
a. Lilliefors Significance Correction						

From these results the decision was made to use non-parametric tests.

The first question to analyse if there is a statistically significant difference in time to complete between group A who underwent no training and group B that did.

To analyse this, inferential statistics were used and the non-parametric Mann-Whitney U test was used on the Time To Complete and group variables.

Table 4.3.4 – *Mann-Whitney Test – difference in survey time to complete between group A and group B*

Mann-Whitney Test				
Ranks				
	Group	N	Mean Rank	Sum of Ranks
in seconds	Group A	24	22.92	550.00
	Group B	24	26.08	626.00
	Total	48		
Test Statistics^a				
in seconds				
	Mann-Whitney U	250.000		
	Wilcoxon W	550.000		
	Z	-.784		
	Asymp. Sig. (2-tailed)	.433		
a. Grouping Variable: Group				

As the Asymp. sig value is not less than 0.05 there is no statistical significance between the results from group A who have not had training and group B who have.

Additionally, examined was the difference in time taken to complete the surveys when resumes were not gender scrubbed. A Mann-Whitney U test

was conducted on the Gender Scrubbed Resume and Time ToComplete. variables.

Table 4.3.5 – *Mann-Whitney Test – Difference in survey time to complete for gender scrubbed and non-gender scrubbed resumes*

Mann-Whitney Test				
		Ranks		
	GenderScrubbedResume	N	Mean Rank	Sum of Ranks
in seconds	No	24	19.50	468.00
	Yes	24	29.50	708.00
	Total	48		

Test Statistics ^a	
	in seconds
Mann-Whitney U	168.000
Wilcoxon W	468.000
Z	-2.475
Asymp. Sig. (2-tailed)	.013

a. Grouping Variable:
GenderScrubbedResume

As the Asymp. Sig value was less than 0.05 this indicated that there was a statistically significant difference in time to complete surveys based on whether they were gender scrubbed or not. From the mean rank it can be seen that non-gender scrubbed surveys are completed much faster than gender scrubbed surveys.

Examining the same question for group A who received no UGB training reveals the same statistical significance.

Table 4.3.6 – *Mann Whitney Test – Difference in survey time to complete gender scrubber and non-gender scrubbed resumes – Group A*

Mann-Whitney Test				
Ranks				
	GenderScrubbedResume	N	Mean Rank	Sum of Ranks
in seconds	No	12	9.46	113.50
	Yes	12	15.54	186.50
	Total	24		
Test Statistics ^a				
	in seconds			
Mann-Whitney U	35.500			
Wilcoxon W	113.500			
Z	-2.108			
Asymp. Sig. (2-tailed)	.035			
Exact Sig. [2*(1-tailed Sig.)]	.033 ^b			
a. Grouping Variable: GenderScrubbedResume				
b. Not corrected for ties.				

Analysing the same question for group B shows that there is no statistical significance for participants who underwent UGB training.

Table 4.3.7 – *Mann Whitney Test – Difference in survey time to complete gender scrubber and non-gender scrubbed resumes – Group B*

Mann-Whitney Test				
Ranks				
	GenderScrubbedResume	N	Mean Rank	Sum of Ranks
in seconds	No	12	10.46	125.50
	Yes	12	14.54	174.50
	Total	24		
Test Statistics ^a				
	in seconds			
Mann-Whitney U	47.500			
Wilcoxon W	125.500			
Z	-1.415			
Asymp. Sig. (2-tailed)	.157			
Exact Sig. [2*(1-tailed Sig.)]	.160 ^b			
a. Grouping Variable: GenderScrubbedResume				
b. Not corrected for ties.				

Additionally, from the survey results there were instances of participant survey completions where the candidate eventually chosen was not the

candidate the participant scored highest throughout the survey overall. The number of these incidents was lower in Group B who had undergone UGB training.

Table 4.3.8 – Incidents Where Participants Chose Candidates Other Than the One They Scored Highest

Group * Participant Survey Completion Where Chosen Gender Was Not Highest Scored				
Participant Survey Completions Where Participant Chose Candidate Despite Higher Scoring for Other Gender				
		Count	Total	
Group	Group A	7	7	
	Group B	3	3	
Total		10	10	

When candidate resumes were gender scrubbed these incidents were less frequent.

Group * Participant Survey Completion Where Chosen Gender Was Not Highest Scored When Gender Was Scrubbed				
Participant Survey Completions Where Participant Chose Candidate Despite Higher Scoring for Other Gender				
		Count	Total	
Group	Group A	3	3	
	Group B	2	2	
Total		5	5	

V. DISCUSSION

From the results, it appears that initially there is no statistical significance between the results from group A who have not had training and group B who have. However, upon deeper investigation there is a statistical significance between the time to complete and whether the candidate surveys were gender scrubbed for the control group, with the control group making a hiring decision quicker than if the resume was not gender scrubbed. This same significance was not present for group B, indicating that the control group's decisions may have been affected by UGB when they were presented with the gender identity of the candidate.

Additionally, there are incidents where the participant's final decision on a candidate to advocate differed from what the outcome would have been if they would have considered their total scores from previous questions. This was more evident again in the control group with 7 incidents whereas group B only had 3.

When analysing only gender scrubbed resumes these results reduced but were still higher in the control group. These support the idea that UGB was more of an influencing factor in the control group where no UGB training had been undertaken.

These results point towards the answer that, yes, unconscious bias training does aid in combating unconscious gender bias and that yes gender neutral CV's aid in combating unconscious gender bias.

As there were instances where the participant's final chosen candidate did not match the question scores they answered throughout the surveys even when the candidate's resumes were gender scrubbed, it could be assumed that the language style used helped to identify the gender of the candidate

and lead to a decision that was influenced by UGB. However due to the small sample size further study with a larger sample size would be recommended before a conclusive decision is drawn upon. To further expand this field additional study an additional research piece could be analysing how suggestions given to a team are perceived and accepted to analyse the impact of unconscious gender bias in everyday workplace environments in the IT sector.

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VI. APPENDICES

JOURNAL FOR PUBLICATION CONSIDERATION

The chosen Journal for publication is *the "Organizational Behavior and Human Decision Processes"* a monthly edition peer reviewed scientific journal covering psychology and organisational behaviour.

AIM AND SCOPE OF JOURNAL

'The aim and scope of the journal is to publish fundamental research in organizational behaviour, organizational psychology, and human cognition, judgment, and decision-making

The journal features articles that present original empirical research, theory development, meta-analysis, and methodological advancements relevant to the substantive domains served by the journal. Topics covered by the journal include perception, cognition, judgement, attitudes, emotion, well-being, motivation, choice, and performance.

For each topic of research the Journal places a premium on articles that make fundamental and substantial contributions to understanding psychological processes relevant to human attitudes, cognition, and behaviour in organisations.' (Journals.elsevier.com, 2018)

This study on *THE IMPACT OF UNCONSCIOUS GENDER BIAS ON ONLINE PROFESSIONAL NETWORKING & RECRUITMENT* is relevant to this journal as it explores organisation behaviour, human attitudes as well perception and cognitive psychology. It explores a topic relevant to an international audience.

METHOD SUITABILITY

My quantitative method is in line with suitability for this publication. The tools, SPSS 25.0 and procedure of quantitative survey analysis is in keeping with similar methods used within the Journal.

JOURNAL REACH

The Organizational Behavior and Human Decision Processes Journal has a global authorship and readership. Journal Insights provides graphics indicating: The number of downloads at the country/regional level over the last five full years available with UK and Ireland download over 400,000. A full breakdown of readership by country over the past 5 years can be found here: <https://journalinsights.elsevier.com/journals/0749-5978/downloads>

JOURNAL METRICS & IMPACT FACTOR

The following are some of the core metrics for this publication and outline the current impact factor:

Journal Metrics

‘CiteScore: 3.09: CiteScore measures the average citations received per document published in this title. CiteScore values are based on citation counts in a given year (e.g. 2015) to documents published in three previous calendar years (e.g. 2012 — 14), divided by the number of documents in these three previous years (e.g. 2012 — 14).’ (Journals.elsevier.com, 2018)

Impact

‘Impact Factor 2017 : 2.259 The Impact Factor measures the average number of citations received in a particular year by papers published in the journal during the two preceding years. 2017 Journal Citation Reports’ (Clarivate Analytics, 2018)

Rank

‘SCImago Journal Rank (SJR): 1.989 SJR is a prestige metric based on the idea that not all citations are the same. SJR uses a similar algorithm as the Google page rank; it provides a quantitative and a qualitative measure of the journal's impact.’(Journals.elsevier.com, 2018)

Appendix A

A.1 – Stage One Survey - Questionnaire

Impact of Unconscious Gender Bias in Online Professional Networking

This study will examine if unconscious gender bias can limit people professionally in the IT sector. It will examine online professional networking sites and the language male and females use to describe themselves professionally. It will examine whether online professional profiles and CV's, when made gender neutral, can still be identifiable as male/female from the language style. The results will help further understand if unconscious bias training or removing gender from CV's or online professional profiles can reduce the impact of gender bias in the workplace and in recruitment process. This research is conducted under Dun Laoghaire Institute of Art, Design and Technology for MSc in Cyber psychology research. If you have any questions before taking the questionnaire below please feel free to contact me through alison.shevlin@gmail.com and I will be happy to answer any questions you have about participating. Thank in advance for your time, Kindest regards
Alison Shevlin

Required

1. Confidentiality Agreement Do you agree to take part in the following questionnaire as part of a psychological research study on the effects of unconscious bias in the IT Field using online professional networking sites. If you choose to participate fully you will be required to complete in a questionnaire below and then if selected you will be asked to participate further in the study by reviewing and selecting sample professional profiles for IT recruitment recommendation. You will have the opportunity to ask questions regarding the full nature of the study and will have the opportunity to withdraw from the study at any point. It is understood and agreed to that the below identified discloser of confidential information may provide certain information that is and must be kept confidential. To ensure

the protection of such information, and to preserve any confidentiality necessary, It is agreed that the Confidential Information to be disclosed can be described as and includes: 1. Personal description(s), technical, financial and business information relating to any individual person or organisation. 2. The Recipient agrees not to disclose the confidential information obtained from the discloser to anyone. WHEREFORE, the parties acknowledge that they have read and understand this Agreement and voluntarily accept the duties and obligations set forth herein.

☐ I agree to participate in the study, I understand I can withdraw at any point in the study

☐ No thank you I would not like to participate in this study

2. Gender: M/F Please tick as appropriate

☐ Male

☐ Female

☐ Prefer not to say

3. Please select your appropriate age group category

☐ 18-24 years old

☐ 25-34 years old

☐ 35-44 years old

☐ 45-54 years old

☐ 55-64 years old

☐ 65+

4. Which of the following categories best describes your employment status?

☐ Employed

☐ Unemployed

☐ Retired

☐ Student

5. Occupation: Which of the following best describes your current occupation?

Select your answer

6. What is the approx. gender diversity in your company/team

- ☐ Mostly Male
- ☐ Mostly Female
- ☐ Fairly even balance between Male and Female
- ☐ Im not sure

7. What Gender is your Manager/Team lead?

- ☐ Male
- ☐ Female
- ☐ Prefer Not to Say

8. Do You Use professional Networking Sites eg. LinkedIn

- ☐ Yes
- ☐ No

9. Which of the following professional networking websites do you currently have an account with? (Check all that apply)

- ☐ LinkedIn
- ☐ Twitter
- ☐ Google+
- ☐ Meetup
- ☐ Facebook
- ☐ Other - please specify in next question

10. If you selected 'other' please specify what other Online Social Networking Sites You use professionally

11. In a typical week, how likely are you to use professional networking websites?

- ☐ Extremely likely
- ☐ Very likely
- ☐ Somewhat likely
- ☐ Not so likely
- ☐ Not at all likely

12. In a typical week, which of the following online social networking websites do you use most often?

- ☐ LinkedIn
- ☐ Twitter
- ☐ Google+
- ☐ Facebook
- ☐ Meetup
- ☐

13. In a typical week, about how much time do you spend using online networking websites?

- ☐ 1-2 hours
- ☐ 3-5 hours
- ☐ 6-10 Hours
- ☐ 10 hours +

14. Approx. how many People make up your social network groups online - these can include a combination of "Connects" "friends" "followers" on various online networking websites?

Select your answer

15. Approx. What percentage of your online social network connections do you work with?

☐ less than 5%

☐ 10%+

☒ 25%+

☐ 50%+

☐ 75%+

16. Are you aware of Unconscious Gender Bias

☐ Yes

☐ No

☐

17. Have you ever taken Unconscious Bias Training

☐ Yes

☐ No

18. Do you feel Unconscious Gender Bias is present in your workplace

☐ Yes

☐ No

☐ Prefer not to say

19. Do you believe Unconscious Gender Bias has affected you or someone you work with?

☐ Yes

☐ No

☐ Prefer not to say

20. If you have experienced unconscious gender bias would you like to further comment? (Reminder: Your details will be kept 100% anonymous but please still avoid giving personal or business identification details if you choose to answer this question)

21. If you have been impacted by unconscious gender bias can you describe the severity you felt it impacted you? (1 being once off occurrence where you witnessed/experienced unconscious gender bias - 5 being ongoing gender bias you feel you are facing)

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ 4
- ☐ 5
- ☐

22. Have you ever reported gender bias in your workplace?

- ☐ Yes
- ☐ No
- ☐ Prefer not to say

23. Do you believe Unconscious Gender Bias training can help reduce gender bias in the workplace

- ☐ Yes
- ☐ No
- ☐ Maybe

24. Would you like to participate further in this research study? If selected you would be asked to review online networking profiles and CV's for hypothetical job scenarios and select who you feel would be the suitable candidate. Further participation in this study will remain completely anonymous and in an online environment for approx. 1 hour where you will

be asked to review fictional profiles and selected the most suited/preferred for different roles.

- ☐ Yes I would be interested in participating further
- ☐ No thank you I would not like to participate beyond this point in the research
- ☐ I would like to know more before I decide

25. If you would like to participate further in this study please provide any email address where you can be contacted and sent the next questionnaire and online profiles to review. Only your email is required, you do not need to give any other personal details and you will only be contacted regarding the survey research if you are chosen to continue participating. You can opt out at any point and you will not be contacted further. Please note we are using a small number of participants to proceed further in the survey and online profile review stages of this research but you will be notified within the next 4 weeks if you are required to participate further and details will be provided. Please provide your email address below:

A.2 – Stage One Survey - Results

[illegible]

WWT/Time/In/Online/Networking/Offline	SocialNetwork/Size	Period/Network/Arch/Colleague	Answer/ID/ID	Talent/In/Condition/Bar/Training	Feedback/Availability	Believe/Use/Research/Of/Colleague	Use/Experienced/After/Comment/ID/ID/Experienced/Why	Have/Experienced/Did/Work
1 6-10 Hours	50-100	<5%	No	No	Prefer not to say	Prefer not to say		1 No
2 3-5 Hours	100-200	<5%	Yes	No	Yes	Yes		No
3 3-5 Hours	50-100	<5%	Yes	No	Yes	Yes		No
4 3-5 Hours	50-100	<5%	Yes	No	Yes	Yes		No
5 3-5 Hours	500-600	<5%	Yes	No	Yes	Yes		4 No
6 1-2 Hours	400-500	<5%	Yes	No	Yes	Yes		4 No
7 1-2 Hours	400-500	<5%	Yes	No	Yes	Yes		4 No
8 3-5 Hours	400-500	<5%	Yes	No	Yes	Yes		4 No
9 3-5 Hours	500-600	<10%	No	No	Yes	Yes		1 No
10 3-5 Hours	500-600	<10%	No	No	Yes	No		1 No
11 3-5 Hours	500-600	<10%	No	No	Yes	No		1 No
12 3-5 Hours	500-600	>10%	No	No	Yes	No		1 No
13 3-5 Hours	500-600	<5%	Yes	No	Yes	Yes		No
14 1-2 Hours	500-600	<5%	Yes	Yes	No	Prefer not to say		4 No
15 1-2 Hours	500-600	<5%	Yes	No	Prefer not to say	No		2 No
16 3-5 Hours	500-600	>10%	Yes	Yes	Prefer not to say	Yes		2 No
17 3-5 Hours	50-100	>10%	Yes	No	Yes	Yes		4 No
18 3-5 Hours	200-300	>25%	Yes	No	Yes	Yes		2 No
19 3-5 Hours	200-300	>25%	Yes	No	Yes	Yes		2 No
20 3-5 Hours	50-100	<5%	Yes	No	Yes	Yes		3 Yes
21 6-10 Hours	500-600	<5%	Yes	No	Yes	Yes	on a semi-re	3 Yes
22 6-10 Hours	500-600	<5%	Yes	No	Yes	Yes	As part of a	4 No
23 3-5 Hours	500-600	<5%	Yes	No	Yes	Yes		4 No
24 3-5 Hours	500-600	<5%	Yes	No	Yes	Yes		No
25 3-5 Hours	100-200	<5%	Yes	No	No	Yes		No
26 3-5 Hours	400-500	<5%	Yes	No	No	Yes		4 No
27 3-5 Hours	400-500	>10%	Yes	No	No	Yes		4 No
28 3-5 Hours	400-500	>10%	Yes	No	No	Yes		No
29 3-5 Hours	300-400	<5%	Yes	No	No	Yes	Some of my o	3 No
30 3-5 Hours	300-400	<5%	Yes	No	No	Yes		No
31 3-5 Hours	100-200	<5%	Yes	No	Yes	Yes		3 No
32 3-5 Hours	100-200	<5%	Yes	No	Yes	Yes		2 No
33 3-5 Hours	100-200	<5%	Yes	No	Yes	Yes		4 No
34 3-5 Hours	100-200	<5%	Yes	Yes	Yes	Yes	Prefer not	4 No
35 3-5 Hours	100-200	<5%	No	Yes	Yes	Yes		4 No
36 3-5 Hours	100-200	<5%	No	No	Yes	Yes		1 No
37 3-5 Hours	100-200	<5%	Yes	No	Yes	Yes		1 No
38 3-5 Hours	100-200	<5%	Yes	No	Yes	Yes		1 No
39 3-5 Hours	500-600	<25%	No	No	No	Yes	Women are us	2 No
40 6-10 Hours	500-600	<25%	No	No	No	Yes		1 No
41 6-10 Hours	500-600	<25%	No	No	No	Yes		1 No
42 6-10 Hours	500-600	<25%	No	No	No	Yes		2 No
43 6-10 Hours	500-600	<5%	Yes	No	Yes	Yes		4 No
44 6-10 Hours	200-300	<5%	Yes	No	Yes	Yes		No
45 6-10 Hours	200-300	<5%	Yes	No	Yes	Yes		No
46 6-10 Hours	500-600	<25%	Yes	No	Yes	Yes		4 No
47 1-2 Hours	500-600	>25%	Yes	No	Yes	Yes		No
48 3-5 Hours	500-600	>25%	Yes	Yes	No	Yes		No
49 1-2 Hours	50-100	>10%	No	No	No	Yes		No
50 1-2 Hours	100-400	<5%	No	No	No	Yes		No
51 1-2 Hours	100-400	<5%	No	No	No	Yes		No
52 1-2 Hours	500-600	<5%	Yes	No	Yes	Yes		No
53 3-5 Hours	500-600	<5%	Yes	No	Yes	Yes		No
54 3-5 Hours	500-600	>25%	Yes	Yes	Yes	Yes		No
55 3-5 Hours	500-600	>25%	Yes	Yes	Yes	Yes		No
56 3-5 Hours	100-200	>25%	No	No	Yes	Yes		No
57 6-10 Hours	400-500	<5%	Yes	Yes	No	No		No
58 6-10 Hours	400-500	<5%	Yes	Yes	Yes	No		No
59 1-2 Hours	50-100	<5%	Yes	Yes	Yes	Yes		2 No
60 1-2 Hours	100-200	<5%	Yes	Yes	Yes	Yes	Programming	5 No
61 1-2 Hours	100-200	<5%	Yes	No	Yes	Yes	As a woman in	5 No
62 1-2 Hours	500-600	<5%	Yes	No	Yes	Yes		4 No
63 3-5 Hours	500-600	<5%	Yes	No	Yes	Yes		No
64 3-5 Hours	500-600	<5%	Yes	Yes	Yes	Yes		5 Yes
65 3-5 Hours	500-600	<5%	Yes	Yes	Yes	Yes		3 Yes
66 3-5 Hours	200-300	<5%	Yes	No	Yes	Yes		1 No
67 3-5 Hours	200-300	<5%	Yes	No	Yes	Yes		2 No
68 3-5 Hours	500-600	<5%	Yes	No	Yes	Yes		4 No
69 6-10 Hours	500-600	<5%	Yes	No	Yes	Yes		3 No
70 6-10 Hours	500-600	<5%	Yes	No	Yes	Yes		3 No
71 10 Hours+	200-300	<5%	Yes	No	Yes	Yes		3 No
72 10 Hours+	200-300	<5%	Yes	No	Yes	Yes		3 No
73 10 Hours+	200-300	<5%	Yes	No	Yes	Yes		3 No
74 10 Hours+	50-100	<5%	Yes	No	No	Yes	In IT indust	3 No
75 10 Hours+	50-100	<5%	Yes	No	No	Yes		3 No
76 10 Hours+	500-600	<5%	Yes	No	Yes	Yes		5 No
77 3-5 Hours	500-600	<5%	Yes	No	Yes	Yes		No
78 3-5 Hours	400-500	<5%	Yes	Yes	Yes	Yes		5 No
79 3-5 Hours	400-500	<5%	Yes	Yes	Yes	Yes		No
80 1-2 Hours	400-500	<5%	No	No	No	No		No
81 3-5 Hours	400-500	<5%	Yes	Yes	Yes	Yes		No
82 3-5 Hours	400-500	<5%	Yes	Yes	Yes	Yes		No
83 1-2 Hours	400-500	<5%	No	No	No	No		No

1	Yes	Like to participate further
2	Yes	No thank you I would not like to participate beyond this point in the research
3	Maybe	Yes I would be interested in participating further
4	Maybe	No thank you I would not like to participate beyond this point in the research
5	Maybe	Yes I would be interested in participating further
6	Maybe	Yes I would be interested in participating further
7	Maybe	Yes I would be interested in participating further
8	Maybe	Yes I would be interested in participating further
9	Maybe	Yes I would be interested in participating further
10	Maybe	Yes I would be interested in participating further
11	Maybe	Yes I would be interested in participating further
12	Maybe	Yes I would be interested in participating further
13	Yes	Yes I would be interested in participating further
14	Yes	Yes I would be interested in participating further
15	Maybe	I would like to know more before I decide
16	Yes	Yes I would be interested in participating further
17	Maybe	I would like to know more before I decide
18	Yes	Yes I would be interested in participating further
19	Maybe	Yes I would be interested in participating further
20	Yes	Yes I would be interested in participating further
21	Yes	Yes I would be interested in participating further
22	Yes	Yes I would be interested in participating further
23	Yes	Yes I would be interested in participating further
24	Yes	Yes I would be interested in participating further
25	Yes	Yes I would be interested in participating further
26	Yes	Yes I would be interested in participating further
27	Yes	I would like to know more before I decide
28	Yes	I would like to know more before I decide
29	Yes	I would like to know more before I decide
30	Yes	Yes I would be interested in participating further
31	Yes	Yes I would be interested in participating further
32	Yes	Yes I would be interested in participating further
33	Maybe	Yes I would be interested in participating further
34	Maybe	Yes I would be interested in participating further
35	Yes	Yes I would be interested in participating further
36	Yes	Yes I would be interested in participating further
37	Yes	Yes I would be interested in participating further
38	Yes	Yes I would be interested in participating further
39	Yes	Yes I would be interested in participating further
40	Yes	Yes I would be interested in participating further
41	Yes	Yes I would be interested in participating further
42	Yes	Yes I would be interested in participating further
43	Maybe	Yes I would be interested in participating further
44	Maybe	No thank you I would not like to participate beyond this point in the research
45	Yes	No thank you I would not like to participate beyond this point in the research
46	Maybe	No thank you I would not like to participate beyond this point in the research
47	Yes	Yes I would be interested in participating further
48	Yes	Yes I would be interested in participating further
49	Yes	No thank you I would not like to participate beyond this point in the research
50	Yes	No thank you I would not like to participate beyond this point in the research
51	Maybe	Yes I would be interested in participating further
52	Maybe	Yes I would be interested in participating further
53	Maybe	Yes I would be interested in participating further
54	Maybe	Yes I would be interested in participating further
55	Yes	Yes I would be interested in participating further
56	Yes	Yes I would be interested in participating further
57	Yes	Yes I would be interested in participating further
58	Yes	Yes I would be interested in participating further
59	Yes	Yes I would be interested in participating further
60	No	No thank you I would not like to participate beyond this point in the research
61	No	No thank you I would not like to participate beyond this point in the research
62	No	No thank you I would not like to participate beyond this point in the research
63	No	Yes I would be interested in participating further
64	Yes	Yes I would be interested in participating further
65	Yes	Yes I would be interested in participating further
66	Yes	Yes I would be interested in participating further
67	Maybe	Yes I would be interested in participating further
68	Maybe	No thank you I would not like to participate beyond this point in the research
69	Maybe	No thank you I would not like to participate beyond this point in the research
70	Maybe	No thank you I would not like to participate beyond this point in the research
71	Maybe	No thank you I would not like to participate beyond this point in the research
72	Maybe	I would like to know more before I decide
73	Yes	Yes I would be interested in participating further
74	Yes	Yes I would be interested in participating further
75	Yes	Yes I would be interested in participating further
76	Yes	Yes I would be interested in participating further
77	Yes	Yes I would be interested in participating further
78	Yes	Yes I would be interested in participating further
79	Yes	Yes I would be interested in participating further
80	No	Yes I would be interested in participating further
81	No	Yes I would be interested in participating further
82	Yes	Yes I would be interested in participating further
83	Yes	I would like to know more before I decide
84	Maybe	

A.3 – Stage One Survey - Result Coding Used

Stage One Questionnaire Questions	Modified Data Column Name
Confidentiality Agreement - Do you agree to take part in the following questionnaire ...	AgreeToTakePart
Gender: M/F Please tick as appropriate	Gender
Please select your appropriate age group category	AgeGroup
Which of the following categories best describes your employment status?	Employment
Occupation: Which of the following best describes your current occupation?	CurrentOccupation

What is the approx. gender diversity in your company/team	TeamGenderDiversity
What Gender is your Manager/Team lead?	ManagerGender
Do You Use professional Networking Sites eg. LinkedIn	UsesProNetworkSites
Which of the following professional networking websites do you currently have an account with? (Check all that apply)	WhichNetworkingSites
If you selected 'other' please specify what other Online Social Networking Sites You use professionally	WhichOtherNetworkingSites
In a typical week, how likely are you to use professional networking websites?	WklyLikelyUsingProNetworkingSite
In a typical week, which of the following online social networking websites do you use most often?	WklyMostUsedNetworkingSites
In a typical week, about how much time do you spend using online networking websites?	WklyTimeUsingOnlineNetworkingSites
Approx. how many People make up your social network groups online - these can include a combination of "Connects" "friends" "followers" on various online networking websites?	SocialNetworkSize

Approx. What percentage of your online social network connections do you work with?	PcntSocialNetworkAreColleagues
Are you aware of Unconscious Gender Bias	AwareOfUGB
Have you ever taken Unconscious Bias Training	TakenUnconsciousBiasTraining
Do you feel Unconscious Gender Bias is present in your workplace	FeelUGBInWorkplace
Do you believe Unconscious Gender Bias has affected you or someone you work with?	BeleiveUGBAffectedYouOrColleague
If you have experienced unconscious gender bias would you like to further comment? (Reminder: Your details will be kept 100% anonymous but please still avoid giving personal or business identific...	UGBExperiencedFurtherComments
If you have been impacted by unconscious gender bias can you describe the severity you felt it impacted you? (1 being once off occurrence where you witnessed/experienced unconscious gender bias - ...	UGBExperiencedSeverity
Have you ever reported gender bias in your workplace?	HaveReportedUGBInWork
Do you believe Unconscious	BeleiveUGBCanReduceGB

Gender Bias training can help reduce gender bias in the workplace	
Would you like to participate further in this research study? If selected you would be asked to review online networking profiles and CV's for hypothetical job scenarios and select who you feel wo...	LikeToParticipateFurther

Modified Data Column Name	Value	Coded Value
AgreeToTakePart	I agree to participate in the study, I understand I can withdraw at any point in the study	1
AgreeToTakePart	No thank you I would not like to participate in this study	0
Gender	Female	0
Gender	Male	1
Gender	Prefer Not to Say	2
AgeGroup	18-24 years old	0
AgeGroup	25-34 years old	1
AgeGroup	35-44 years old	2
AgeGroup	45-54 years old	3
AgeGroup	55-64 years old	4

AgeGroup	65+	5
Employment	Student	0
Employment	Employed	1
Employment	Retired	2
Employment	Unemployed	3
CurrentOccupation	Arts, Design, Entertainment, Sports, and Media Occupations	0
CurrentOccupation	IT, Computer and Mathematical Occupations	1
CurrentOccupation	Other	2
CurrentOccupation	Business and Financial Operations	3
CurrentOccupation	Community and Social Service Occupations	4
CurrentOccupation	Healthcare and Social Service Occupations	5
CurrentOccupation	Education, Training and Library Occupations	6
CurrentOccupation	Legal Occupations	7
CurrentOccupation	Protective Service Occupations	8
CurrentOccupation	Construction, Fishery, Farming Occupations	9
TeamGenderDiversity	Mostly Female	0
TeamGenderDiversity	Mostly Male	1

TeamGenderDiversity	Fairly even balance between Male and Female	2
TeamGenderDiversity	Im Not Sure	3
ManagerGender	Female	0
ManagerGender	Male	1
ManagerGender	Prefer Not to Say	2
UsesProNetworkSites	No	0
UsesProNetworkSites	Yes	1
WhichNetworkingSites	Multiple possible combinations of answers	Not Coded
WhichOtherNetworkingSites	Multiple possible answers	Not Coded
WklyLikelyUsingProNetworkingSite	Very likely	3
WklyLikelyUsingProNetworkingSite	Extremely likely	4
WklyLikelyUsingProNetworkingSite	Not so likely	1
WklyLikelyUsingProNetworkingSite	Somewhat likely	2
WklyLikelyUsingProNetworkingSite	Not Likely at all	0
WklyMostUsedNetworkingSites	LinkedIn	0
WklyMostUsedNetworkingSites	Twitter	1
WklyMostUsedNetworkingSites	Google+	2
WklyMostUsedNetworkingSites	Facebook	3
WklyMostUsedNetworkingSites	Meetup	4
WklyMostUsedNetworkingSites	Other	5
WklyTimeUsingOnlineNetworkingSites	3-5 hours	1
WklyTimeUsingOnlineNetworkingSites	10 hours +	3

WklyTimeUsingOnlineNetworkingSites	1-2 hours	0
WklyTimeUsingOnlineNetworkingSites	6-10 Hours	2
SocialNetworkSize	1-50	0
SocialNetworkSize	50-100	1
SocialNetworkSize	100+	2
SocialNetworkSize	200+	3
SocialNetworkSize	300+	4
SocialNetworkSize	400+	5
SocialNetworkSize	500+	6
PcntSocialNetworkAreColleagues	less than 5%	0
PcntSocialNetworkAreColleagues	10%+	1
PcntSocialNetworkAreColleagues	25%+	2
PcntSocialNetworkAreColleagues	50%+	3
PcntSocialNetworkAreColleagues	75%+	4
AwareOfUGB	No	0
AwareOfUGB	Yes	1
AwareOfUGB	Other	2
TakenUnconsciousBiasTraining	No	0
TakenUnconsciousBiasTraining	Yes	1
FeelUGBInWorkplace	No	0
FeelUGBInWorkplace	Yes	1
FeelUGBInWorkplace	Prefer not to sa+E30y	2
BeleiveUGBAffectedYouOrColleague	No	0
BeleiveUGBAffectedYouOrColleague	Yes	1
BeleiveUGBAffectedYouOrColleague	Prefer not to say	2

UGBExperiencedSeverity	5	5
UGBExperiencedSeverity	3	4
UGBExperiencedSeverity	4	3
UGBExperiencedSeverity	2	2
UGBExperiencedSeverity	1	1
UGBExperiencedFurtherComments	Multiple possible answers	Not Coded
HaveReportedUGBInWork	No	0
HaveReportedUGBInWork	Yes	1
BeleiveUGBCanReduceGB	No	0
BeleiveUGBCanReduceGB	Yes	1
BeleiveUGBCanReduceGB	Maybe	2
LikeToParticipateFurther	Yes I would be interested in participating further	1
LikeToParticipateFurther	I would like to know more before I decide	2
LikeToParticipateFurther	No thank you I would not like to particpate beyond this point in the research	0

A.4 – Stage One Survey – Participant Email

Email 1 Sample: To Participants for initial Survey

Unconscious Gender bias is the preference or prejudice toward one gender over the other and may manifest in both subtle and obvious ways.

As part of ongoing research I am conducting in this area I am inviting participants to complete the anonymous questionnaire here

on <https://forms.office.com/Pages/ResponsePage.aspx?id=v4i5cvGGr0GRqv180BHbRzf1eziBIB9Cu184QwaQORRUQWVETTE5S1NRWENGRzVRVzNTViNHUTBXSS4u>

It should take approx. 20 minutes

This study will examine if unconscious gender bias can limit people professionally in the IT sector. It will examine online professional networking sites and the language male and females use to describe themselves professionally. It will examine whether online professional profiles and CV's, when made gender neutral, can still be identifiable as male/female from the language style.

This research is conducted under Dun Laoghaire Institute of Art, Design and Technology for MSc in Cyber psychology research.

The results will help further understand if unconscious bias training or removing gender from CV's or online professional profiles can reduce the impact of gender bias in the workplace and in recruitment processes. |

Please Note: There will be a required confidentiality agreement to complete prior to taking the survey in the link above.

Please feel free to contact me and I will be happy to answer any questions you have about participating.

Thank in advance for your time.

Appendix B

B.1 – Stage Two Survey - Job Listing Surveys

Front End Developer Role - Applicants #1 and #2

If you wish to recap what this study covers you can read about the study aims and process here: <https://link.com>

This stage of the research entails you assuming the role of a first stage recruitment agent or hiring manager to review two candidate resumes for the fictional job listing below. Only one candidate will progress to the next stage of the hiring process.

Please read through the job listing and two linked candidate resumes below.
When you are finished, please fill out the review form below for each candidate.

If you have any questions about the questions please contact me through alison.shevlm@gmail.com

Job Listing:

<https://www.dropbox.com/s/4an6i7i44thypg0/Front%20End%20Developer%20-%20Job%20Listing%201.pdf?dl=0>

Candidate Resumes:

<https://www.dropbox.com/s/8d8yy62rbs19ftc/Candidate%201%20-%20M%20Peer%20-%20Resume.pdf?dl=0>

<https://www.dropbox.com/s/chhgmzf7zmhyra/Candidate%202%20-%20J%20Wilson%20-%20Resume.pdf?dl=0>

* Required

1	Candidate #1	Candidate #2
Education/Training * <i>The candidate has the necessary education and/or training required by the position</i>	M. Peer	J. Wilson

	Exceeds Requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2	Candidate #1	Candidate #2
Work Experience * <i>The Candidate has prior work experience that is related to the position</i>	M. Peer	J. Wilson

	Extensive Experience	Meets Requirements	Not related but transferable skills	No prior experience
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Candidate #1		Candidate #2	
3 Skills (Technical) * <i>The candidate demonstrates to your satisfaction that he/she had the necessary technical skills to perform the job successfully</i>	M. Peer		J. Wilson	
	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Candidate #1		Candidate #2	
4 Teamwork * <i>The candidate demonstrates the ability to work well in a team and with superiors and peers</i>	M. Peer		J. Wilson	
	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Candidate #1		Candidate #2	
5 Customer Service * <i>The candidate demonstrates the ability to be customer focused</i>	M. Peer		J. Wilson	
	Exceeds requirements	Meets requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6

Problem Solving *
The candidate demonstrates the ability to design innovative solutions and/ or solve technical problems

Candidate #1

M.
Peer

Candidate #2

J.
Wilson

	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7

Overall Recommendation *
Which candidate would you recommend for the second stage of interviews

Candidate #1

M.
Peer

Candidate #2

J.
Wilson

	Highly Recommend	Recommend	Do not recommend	Highly do not recommend
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8

Please provide a brief comment to support your candidate choice *

Enter your answer

Submit

Java Programmer Role - Applicants #3 and #4

If you wish to recap what this study covers you can read about the study aims and process here: <https://link.com>

This stage of the research entails you assuming the role of a first stage recruitment agent or hiring manager to review two candidate resumes for the fictional job listing below. Only one candidate will progress to the next stage of the hiring process.

Please read through the job listing and two linked candidate resumes below.
When you are finished, please fill out the review form below for each candidate.

If you have any questions about the questions please contact me through alison.shevlin@gmail.com

Job Listing:



<https://www.dropbox.com/s/3y0npg2ihyedbuu/Java%20Programmer%20-%20Job%20Listing%202.pdf?dl=0>


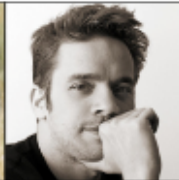
Candidate Resumes:

<https://www.dropbox.com/s/u951i5rakrtmsrb/Candidate%203%20-%20L%20Morrison%20-%20Resume.pdf?dl=0>

<https://www.dropbox.com/s/20zr3rectlyyaga/Candidate%204%20-%20M%20Bourke%20-%20Resume.pdf?dl=0>

* Required

1	Candidate #3		Candidate #4	
Education/Training * <i>The candidate has the necessary education and/or training required by the position</i>	 			
	Exceeds Requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2	Candidate #3		Candidate #4	
Work Experience * <i>The Candidate has prior work experience that is related to the position</i>	 			
	Extensive Experience	Meets Requirements	Not related but transferable skills	No prior experience
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3

Skills (Technical) *

The candidate demonstrates to your satisfaction that he/she had the necessary technical skills to perform the job successfully

Candidate #3

Candidate #4



Exceeds requirements Meets Requirements Needs a little more training Doesn't meet requirements

Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

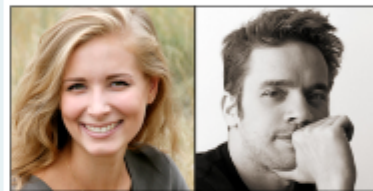
4

Teamwork *

The candidate demonstrates the ability to work well in a team and with superiors and peers

Candidate #3

Candidate #4



Exceeds requirements Meets Requirements Needs a little more training Doesn't meet requirements

Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5

Customer Service *

The candidate demonstrates the ability to be customer focused

Candidate #3

Candidate #4



Exceeds requirements Meets requirements Needs a little more training Doesn't meet requirements

Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6

Problem Solving *
The candidate demonstrates the ability to design innovative solutions and/ or solve technical problems

Candidate #3

Candidate #4




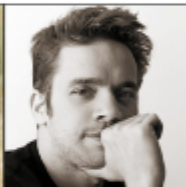

	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7

Overall Recommendation *
Which candidate would you recommend for the second stage of interviews

Candidate #3

Candidate #4

	Highly Recommend	Recommend	Do not recommend	Highly do not recommend
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8

Please provide a brief comment to support your candidate choice *

Submit

UX Designer Role - Applicants #5 and #6

If you wish to recap what this study covers you can read about the study aims and process here: <https://link.com>

This stage of the research entails you assuming the role of a first stage recruitment agent or hiring manager to review two candidate resumes for the fictional job listing below. Only one candidate will progress to the next stage of the hiring process.

Please read through the job listing and two linked candidate resumes below.
When you are finished, please fill out the review form below for each candidate.

If you have any questions about the questions please contact me through alison.shevlin@gmail.com

Job Listing:

<https://www.dropbox.com/s/8ii4wsbape6fad1/UX%20Designer%20-%20Job%20Listing%203.pdf?dl=0>

Candidate Resumes:

<https://www.dropbox.com/s/o7bu7vxet0rqxbj/Candidate%205%20-%20D%20Madden%20-%20Resume.pdf?dl=0>

<https://www.dropbox.com/s/509fuime2i55fn9/Candidate%206%20-%20J%20Keegan%20-%20Resume.pdf?dl=0>

* Required

1	Candidate #5		Candidate #6	
Education/Training * <i>The candidate has the necessary education and/or training required by the position</i>	D. Madden		J. Keegan	
	Exceeds Requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2	Candidate #5		Candidate #6	
Work Experience * <i>The Candidate has prior work experience that is related to the position</i>	D. Madden		J. Keegan	
	Extensive Experience	Meets Requirements	Not related but transferable skills	No prior experience
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3 Skills (Technical) * <i>The candidate demonstrates to your satisfaction that he/she had the necessary technical skills to perform the job successfully</i>	Candidate #5		Candidate #6	
	D. Madden		J. Keegan	

	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4 Teamwork * <i>The candidate demonstrates the ability to work well in a team and with superiors and peers</i>	Candidate #5		Candidate #6	
	D. Madden		J. Keegan	

	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5 Customer Service * <i>The candidate demonstrates the ability to be customer focused</i>	Candidate #5		Candidate #6	
	D. Madden		J. Keegan	

	Exceeds requirements	Meets requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6 Problem Solving * <i>The candidate demonstrates the ability to design innovative solutions and/or solve technical problems</i>	Candidate #5	Candidate #6
	D. Madden	J. Keegan

	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7 Overall Recommendation * <i>Which candidate would you recommend for the second stage of interviews</i>	Candidate #5	Candidate #6
	D. Madden	J. Keegan

	Highly Recommend	Recommend	Do not recommend	Highly do not recommend
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8

Please provide a brief comment to support your candidate choice *

Enter your answer

Submit

Tech Support Engineer Role - Applicants #7 and #8

If you wish to recap what this study covers you can read about the study aims and process here: <https://link.com>

This stage of the research entails you assuming the role of a first stage recruitment agent or hiring manager to review two candidate resumes for the fictional job listing below. Only one candidate will progress to the next stage of the hiring process.

Please read through the job listing and two linked candidate resumes below.
When you are finished, please fill out the review form below for each candidate.

If you have any questions about the questions please contact me through alison.shevlin@gmail.com

Job Listing:



<https://www.dropbox.com/s/pyob8ev36gkczku/Tech%20Support%20Engineer%20-%20Job%20Listing%204.pdf?dl=0>

Candidate Resumes:

<https://www.dropbox.com/s/vumwxhzc73pbzr/Candidate%207%20-%20Reynolds%20-%20Resume.pdf?dl=0>

<https://www.dropbox.com/s/yxiyuvcqpfq6mv/Candidate%208%20-%20L%20Williams%20-%20Resume.pdf?dl=0>

* Required


	Candidate #7		Candidate #8	
<div>1</div> <p>Education/Training *</p> <p><i>The candidate has the necessary education and/or training required by the position</i></p>	 			
	Exceeds Requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2


Work Experience *

The Candidate has prior work experience that is related to the position

Candidate #7



Candidate #8




	Extensive Experience	Meets Requirements	Not related but transferable skills	No prior experience
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3


Skills (Technical) *

The candidate demonstrates to your satisfaction that he/she had the necessary technical skills to perform the job successfully

Candidate #7



Candidate #8




	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4


Teamwork *

The candidate demonstrates the ability to work well in a team and with superiors and peers

Candidate #7



Candidate #8




	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5


Customer Service *

The candidate demonstrates the ability to be customer focused

Candidate #7



Candidate #8



	Exceeds requirements	Meets requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6

Problem Solving *

The candidate demonstrates the ability to design innovative solutions and/ or solve technical problems

Candidate #7



Candidate #8



	Exceeds requirements	Meets Requirements	Needs a little more training	Doesn't meet requirements
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7

Overall Recommendation *

Which candidate would you recommend for the second stage of interviews

Candidate #7



Candidate #8



	Highly Recommend	Recommend	Do not recommend	Highly do not recommend
Candidate 1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Candidate 2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

78

8

Please provide a brief comment to support your candidate choice *

Enter your answer

Submit

B.2 – Stage Two Survey - Results

[illegible]

[illegible]

B.3 – Stage Two Survey - Result Coding Used

Modified Data Column Name	Value	Coded Value
JobListing	Front End Developer	1
JobListing	Java Programmer	2
JobListing	UX Designer	3
JobListing	Tech Support Engineer	4

GenderScrubbedResume	No	0
GenderScrubbedResume	Yes	1
ParticipantGender	Female	0
ParticipantGender	Male	1
Group	Group A	1
Group	Group B	2
Q1GenderChoice	Female Candidate	1
Q1GenderChoice	Male Candidate	2
Q1GenderChoice	Both Candidates	3
Q1GenderChoice	Neither Candidates	4
Q1MaleRating	Doesn't Meet Requirements	1
Q1MaleRating	Needs a little more training	2
Q1MaleRating	Meets Requirements	3
Q1MaleRating	Exceeds Requirements	4
Q1FemaleRating	Doesn't Meet Requirements	1
Q1FemaleRating	Needs a little more training	2
Q1FemaleRating	Meets Requirements	3
Q1FemaleRating	Exceeds Requirements	4
Q2GenderChoice	Female Candidate	1
Q2GenderChoice	Male Candidate	2
Q2GenderChoice	Both Candidates	3

Q2GenderChoice	Neither Candidates	4
Q2MaleRating	No Prior Experience	1
Q2MaleRating	Not Related but transferable skills	2
Q2MaleRating	Meets Requirements	3
Q2MaleRating	Extensive requirements	4
Q2FemaleRating	No Prior Experience	1
Q2FemaleRating	Not Related but transferable skills	2
Q2FemaleRating	Meets Requirements	3
Q2FemaleRating	Extensive requirements	4
Q3GenderChoice	Female Candidate	1
Q3GenderChoice	Male Candidate	2
Q3GenderChoice	Both Candidates	3
Q3GenderChoice	Neither Candidates	4
Q3MaleRating	Doesn't Meet Requirements	1
Q3MaleRating	Needs a little more training	2
Q3MaleRating	Meets Requirements	3
Q3MaleRating	Exceeds Requirements	4
Q3FemaleRating	Doesn't Meet Requirements	1
Q3FemaleRating	Needs a little more training	2
Q3FemaleRating	Meets Requirements	3

Q3FemaleRating	Exceeds Requirements	4
Q4GenderChoice	Female Candidate	1
Q4GenderChoice	Male Candidate	2
Q4GenderChoice	Both Candidates	3
Q4GenderChoice	Neither Candidates	4
Q4MaleRating	Doesn't Meet Requirements	1
Q4MaleRating	Needs a little more training	2
Q4MaleRating	Meets Requirements	3
Q4MaleRating	Exceeds Requirements	4
Q4FemaleRating	Doesn't Meet Requirements	1
Q4FemaleRating	Needs a little more training	2
Q4FemaleRating	Meets Requirements	3
Q4FemaleRating	Exceeds Requirements	4
Q5GenderChoice	Female Candidate	1
Q5GenderChoice	Male Candidate	2
Q5GenderChoice	Both Candidates	3
Q5GenderChoice	Neither Candidates	4
Q5MaleRating	Doesn't Meet Requirements	1
Q5MaleRating	Needs a little more training	2
Q5MaleRating	Meets Requirements	3

Q5MaleRating	Exceeds Requirements	4
Q5FemaleRating	Doesn't Meet Requirements	1
Q5FemaleRating	Needs a little more training	2
Q5FemaleRating	Meets Requirements	3
Q5FemaleRating	Exceeds Requirements	4
Q6GenderChoice	Female Candidate	1
Q6GenderChoice	Male Candidate	2
Q6GenderChoice	Both Candidates	3
Q6GenderChoice	Neither Candidates	4
Q6MaleRating	Doesn't Meet Requirements	1
Q6MaleRating	Needs a little more training	2
Q6MaleRating	Meets Requirements	3
Q6MaleRating	Exceeds Requirements	4
Q6FemaleRating	Doesn't Meet Requirements	1
Q6FemaleRating	Needs a little more training	2
Q6FemaleRating	Meets Requirements	3
Q6FemaleRating	Exceeds Requirements	4
OverallRecommendationMaleRating	Highly Do Not Recommend	1
OverallRecommendationMaleRating	Do Not Recommend	2

OverallRecommendationMaleRating	Recommend	3
OverallRecommendationMaleRating	Highly Recommend	4
OverallRecommendationFemaleRating	Highly Do Not Recommend	1
OverallRecommendationFemaleRating	Do Not Recommend	2
OverallRecommendationFemaleRating	Recommend	3
OverallRecommendationFemaleRating	Highly Recommend	4
OverallRecomendation	Female Candidate	1
OverallRecomendation	Male Candidate	2
OverallRecomendation	Both Candidates	3
OverallRecomendation	Neither Candidates	4
SumOfMaleRatings	Sum of Male Candidate Results per Participant Survey Response	No Coding
SumOfFemaleRatings	Sum of Female Candidate Results per Participant Survey Response	No Coding
TimeToComplete	Each participant's time to complete each survey	No Coding

B.4 – Stage Two Survey – Group B Training Email

Email 2 Sample: Reaching out to selected participants from Survey 1 to proceed to next stage

Thank you for taking the time recently to take part in an Unconscious Gender Bias survey.

As part of ongoing research, I am conducting in this area I am inviting participants to complete the next stage of this research and would like to include you in this participant group if you are still available.

The next stage of this research will involve a 1 hour online training video and scenario questions on Unconscious Bias. This training will be done online at your own remote location anonymously. There will be a period of up to 4 weeks allowed to complete this training and send screenshot proof of the 'credit received' closing page of the training. It should take approx. 1 hour to complete:

<https://www.microsoft.com/en-us/diversity/training/default.aspx>

The final stage of this research will be to review 4 IT job descriptions then analyses and select a suitable candidate from sample resumes who you think should proceed from a stage 1 recruitment check to an interview process. It should take approx. 1 hour to complete

The time frame for completing Training and recruitment analyses for this stage 2 research will be over the next 8 weeks.

This research is conducted under Dun Laoghaire Institute of Art, Design and Technology for my MSc in Cyber psychology research.

Please feel free to contact me and I will be happy to answer any questions you have about participating.

B.5 – Stage Two Survey – Both Groups Instructional Email

Email 3 sample: Instructions for the final stage 2 survey

Thank you for agreeing to take part in the second stage research of my Unconscious Gender Bias study conducted for MSc in Cyber psychology under Dun Laoghaire Institute of Art, Design and Technology.

Instructions for participation are as follows:

Please Click here to view the job descriptions Job #1 - 4: In each link you will see the following instruction:

'This stage of the research entails you assuming the role of a first stage recruitment agent or hiring manager to review two candidate resumes for the fictional job listing below. Only one candidate will progress to the next stage of the hiring process. Please read through the job listing and two linked candidate resumes below. When you are finished, please fill out the review form below for each candidate.'

Please complete the Microsoft Form link at a time before moving to the next. There is no time limit to complete.

#1

[Microsoft Forms](#)

#2:

[Microsoft Forms](#)

#3:

[Microsoft Forms](#)

#4:

[Microsoft Forms](#)

Please feel free to contact me with any questions you have about participating.

Thank in advance for your time.

Appendix C

C.1 – Job Descriptions

Role: Front End Developer

Company: ELD Guitars

Role Summary

Our organization is looking for a Front-End Developer who can utilize HTML, CSS and jQuery to develop effective user interfaces on the company website and mobile apps released to the public. The successful candidate will work closely with our web development and software design teams to update the website and internal web tools to make them more efficient. The front-end developer will also be responsible for creating innovative solutions to web design issues to help make the website more visually appealing and enhance usability

Role Responsibilities

- Implement responsible web design principles to ensure that our company website renders well across multiple devices.
- Design a framework for creating user apps that grows with the needs of the company
- Monitor website performance watch for traffic drops related to site usability problems and rectify the issues
- Review app and feature coding and plan future website upgrades with the development team
- Assist in the development of applications and features that will be put on the website and in internal functions as well

Qualifications and Skills

- Bachelor's Degree in Computer Science or related field
- 3+ years' web development experience required
- Strong knowledge of web development tools and programming languages

Role: Java Programmer

Company: FinServe Ltd.

Role Summary

We have an immediate opening for a Java Programmer to create and maintain internal software programs for our business. The ideal candidate has a strong background in software development and programming. He or she will have an enhanced facility with the Windows operating system and associated hardware. The ideal candidate is a hard-working individual who has a creative but analytical mindset. He or she should be self-motivated and self-supervised, as telecommuting is encouraged for at least part of the work week. The position comes with opportunities for advancement within the IT department for the right candidate as well as exceptional benefits and a competitive salary.

Role Responsibilities

- Code and test programming for in-house software programs
- Debug code for existing programs based on immediate need
- Conduct end-user training upon completion of software
- Balance workday between multiple projects and respond immediately to tech support requests from staff
- Implement systems in in-house production environment
- Report issues and concerns immediately to IT manager
- Troubleshoot system bugs and issues

Qualifications and Skills

- Bachelor's Degree in Computer Science, Programming or related
- 3+ years software development experience
- Strong experience with Java, SQL server database
- HTML and CSS preferred

Role: UX Designer

Company: BidBoom

Role Summary

Our startup C2C e-commerce company is looking for an experienced and ambitious UX Designer with experience in the auction website space. We're focusing our flagship website on C2C transactions for apparel and home goods, but we plan to branch out into other consumer products at a later date. The ideal candidate will be excited about the opportunity to build a website's user experience strategy from the ground up, focusing on customer and seller loyalty as well as brand management. We're interested in taking over this particular field in C2C marketing, and we're hoping you'll be part of that experience.

Role Responsibilities

- Conduct competitive analyses of other websites that operate in the same space
- Participate in creating a content development strategy
- Coordinate with UI design team on issues like navigation, page routing, product page design and more
- Track usability goals and prepare reports for senior management
- Develop mock-ups for our development and design team

- Conduct usability tests on each independent type of page on the website and create a report showcasing your findings

Qualifications and Skills

- Bachelor's Degree in Computer Design, Development or Engineering required
- 3+ Years UX Designer Experience
- Excellent PC skills required
- Experience preparing detailed competitive and consumer analyses

Role: Tech Support Engineer

Company: Shield Wall Ltd.

Role Summary

Our design and programming teams are the best in the world at creating security software for Windows operating systems, but sometimes customers have difficulty navigating these programs. Therefore, we're looking for a Technical Support Agent to handle phone support requests from our clients. You will be responsible for walking customers through the process of achieving their goal with the software, whether the problem relates to a user error, a bug or something else entirely. The Technical Support Agent will also be responsible for communicating with our design and programming staff about suspected software problems. If this sounds like a good fit, get in touch

Role Responsibilities

- Walk customers through the process of installing the software on their machines and starting up the program for the first time
- Help customers troubleshoot issues they encounter while using the software and provide actionable tips to resolve the problem

- Send technical documentation to customers who have lost or misplaced theirs
- Refer difficult cases to a senior analyst or support tech
- Assume remote control over customers' computers when necessary to resolve problems
- Make hardware recommendations for customers whose machines cannot support the software

Qualifications and Skills

- Bachelor's Degree Required
- Minimum 1 years' experience in information technology or technical support
- Extensive familiarity with Windows operating systems
- Working knowledge of security software options and functionality preferred

C.2 – Fictional Candidate Resumes



M Peer

Profile

An experienced front end developer with years of practical experience in designing and developing front end solutions.

I am passionate about web technology and new and emerging technologies.

I thrive working in team environment and also on any own initiative. An adaptive problem solver, I am keen to challenge myself and learn new skills and subjects and relish the opportunity to adapt and excel in new and varied environments.

Employment History

Front end developer at IT r Us

January 2015 – August 2018

Revamped UI and app interface for customer-facing e-commerce site with 200,000+ unique visitors per month

Designed and developed front-end for 20+ websites, using jQuery and AJAX

Created custom AngularJS components for internal framework

Automated image optimization, using Grunt and minified JS and CSS, which reduced page load times by up to 30%

Education

BSc in Information Technologies, Irish University of Further Education

September 2011 – July 2014

Masters in Computer Science, Irish University of Further Education

August 2016 – August 2018

Courses

Advanced Javascript, Codeitnow

August 2015 – August 2015

References

References available upon request

Details

21 Oak Street

01890555555

mpeer@gmail.com

Skills

JavaScript

CSS

HTML

PHP

jQuery

AJAX

Hobbies

Amateur Hockey

Chess

Reading

Autobiographies

Languages

English



J Wilson

Details

255 Elm Grove
012329384
JWilson@gmail.com

Profile

Through my work as a front end developer I discovered a passion for development and everything related to design and coding. My current role provided me with ample opportunities to challenge myself and grow my skills but now I am ready for the next big challenge!

I love to work both as part of teams and equally learning and discovering on my own initiative. In my spare time I enjoy painting and tend to bring this creativity into my design process. I find adapting to new challenges exciting and love to learn new knowledge that I can add to my skillset.

Skills

AJAX

HTML

JavaScript

PHP

jQuery

CSS

Hobbies

Football
Puzzles
Painting

Languages

English

Employment History

Front end developer at IT Solutions

[January 2015](#) – [August 2018](#)

Translated design team's UX wireframes and mockups into responsive, interactive features, using HTML/CSS and JavaScript

Spearheaded redesign of company's flagship mobile app, which increased downloads by 28% in less than 6 months

Develop new UI functionality for multithreaded user-facing applications running on touchscreen devices, using AngularJS

Education

BSc in Information Technologies, Irish University of Further Education

[September 2011](#) – [July 2014](#)

Masters in Computer Science, Irish University of Further Education

[August 2016](#) – [August 2018](#)**Courses**

Advanced Javascript, CoderAcademy

[August 2015](#) – [August 2015](#)**References**

References available upon request



L Morrison

Profile

Everything about coding I love. as a passionate technophile I keep up to date on all new technologies arising in the market and also hone my skills on currently existing languages and skills. Adapting to new challenges is my forte and I strive to be as precise and flexible in my approach as I can to account for changing business needs. As part of a team or on my own I can work to a high standard and make sure jobs get completed and rolled out in a timely manner and to a high quality.

Employment History

Java Programmer at Main Developments Ltd.

January 2015 – August 2018

Integrated code changes, tested code changes, and documented code changes
 Developed Perl and PHP scripts to translate data between applications
 Developed automation scripts to test storage appliances in Java
 Practiced agile development methodologies and worked with current networking technologies

Education

BSc in Software Development, Irish University of Further Education

September 2011 – July 2014

Masters in Software Engineering, Irish University of Further Education

August 2016 – August 2018

Courses

Oracle Certified Java Associate, Oracle

August 2015 – August 2015

References

References available upon request

Details

54 Beech Drive

01648826

LMorrison@gmail.com

Skills

SQL

Java

HTML5

css

Eclipse IDE

Hobbies

Archery

Swimming

Running

Languages

English



M Bourke

Details

6 Cedar Lane
01735758
MBourke@gmail.com

Profile

A thorough and driven individual, I strive to be the best that I can. From learning new computing languages to new and emerging technologies, I love the challenge of emerging myself into something new and absorbing everything I can. I pride myself on being efficient and thinking outside the box to deliver robust wholistic solutions.

Skills

SQL
Java
HTML5
css
Eclipse IDE

Employment History

Java Programmer at Rite Solution Developers
[January 2015](#) – [August 2018](#)

Identified and solved software issues in Java and PHP
Integrated, tested and documented code changes
Developed base framework with Java, CSS, HTML, JavaScript, and MS SQL Server
Wrote, modified, and debugged software for clients

Hobbies

Archery
Swimming
Running

Languages

[English](#)

Education

BSc in Software Development, Irish University of Further Education
[September 2011](#) – [July 2014](#)

Masters in Software Engineering, Irish University of Further Education
[August 2016](#) – [August 2018](#)

Courses

Oracle Certified Java Associate, Oracle
[August 2015](#) – [August 2015](#)

References

References available upon request



D Madden

Profile

A passionate adaptable professional who pushes their limits to achieve top results. Through my experience in user experience design I have honed my skills in efficiently identifying user needs, developing interface prototypes and version evaluation. Through an iterative design approach I have delivered multiple success through previous roles and look forward to taking on a new challenge where I can innovate and create the best possible application user interface possible.

Employment History

User Experience Designer at Pan-EMEA Design
January 2015 – August 2018

Produced wireframes, XHTML code and CSS that contributed to user-centered design (UCD) efforts for dozens of Web pages
Partnered with user interface designers, Web developers and UX managers at client businesses to translate information architecture, navigation and process flows into beautiful and easy-to-use solutions
Completed user research to identify opportunities for improving landing page experience and client web presence.

Education

BSc in IT, Irish University of Further Education
September 2011 – July 2014

Courses

Expert Requirements Gathering, IT Mooc
August 2015 – August 2015

References

References available upon request

Details

38 Birch Grove
012343265
DMadden@gmail.com

Skills

XHTML

Usability Engineering

Interaction Design

User Research and
Persona creation

CSS

JavaScript

Hobbies

Painting
Music
Cooking

Languages

English



J Keegan

Profile

Interface design is something I am truly passionate about. Through my education and later work experience I realised how important this journey is to both user and business. For this reason I immerse myself in the world of user experience design, the technology, the wholistic journey and the challenges that come with. I pride myself on being an adaptable person who learns and grows from challenges and applies my skills to achieve the best possible results.

Employment History

User Experience Designer at Centre Pearl Designers

January 2015 – August 2018

Managed usability testing for client landing pages in preparation for Web site redesigns.

Defined testing parameters, prepared prototypes, recruited users, facilitated tests and reported results.

Efforts drove the following enhancements:

Replacement of vague objectives with clear calls to action, increasing XYZ sales pipeline by 15% and ABC donor base by 12%.

Improvement of core Web site functionality by fixing broken links and scripting errors, which lowered XYZ's page-abandonment rate by 35%.

Creation of more intuitive site navigation by eliminating misleading labels and unnecessary clicks.

Education

BSc in IT, Irish University of Further Education

September 2011 – July 2014

Courses

Expert Requirements Gathering, IT Mooc

August 2015 – August 2015

References

References available upon request

Details

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Skills

User Research and
Persona creation

Usability Engineering

css

JavaScript

XHTML

Interaction Design

Hobbies

Sailing
Cooking
Piano

Languages

English



S Reynolds

Details

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SReynolds@gmail.com

Profile

As a natural problem solver I love solving problems, and helping people to solve theirs is my ideal role. Either as part of a team or on my own I enjoy diving into customer issues and getting to the root of the problem. Maintaining customer satisfaction is always at the front of my mind and once the issue is solved I address documentation and prevention. Being passionate about support means that I continually learn and add to my skills to be the best that I can.

Employment History

Technical Support Agent at Solver Solutions

[January 2015](#) – [August 2018](#)

Solved customer issues as soon as they were raised and within SLA.

Documented issues and worked on prevention plans to mitigate risk

Worked as part of a large team and engaged in engineering projects to improve our services.

Queried business databases to proactively identify potential business risks.

Skills

SQL
Process
Documentation
css
Process Improvement

Hobbies

Camping
Puzzles
Rugby

Languages

[English](#)

Education

BSc in IT, Irish University of Further Education

[September 2011](#) – [July 2014](#)

Courses

Customer Relationship Building, Customer Service Academy

[August 2015](#) – [August 2015](#)

References

References available upon request



L Williams

Profile

A proven successful problem solver, I thrive in support environments. Through my previous work I honed my customer support skills. I pride myself on being an adaptable and empathetic person, as a result I find work in technical support both enjoyable and challenging. I enjoy working as part of a team and work equally well individually. I enjoy working with customers and getting to meet new people as I help them solve their issues.

Employment History

Technical Support Agent at Agent Support Inc
[January 2015](#) – [August 2018](#)

Answered client questions by identifying problems, researching answers and walking clients through troubleshooting processes
Handled issue escalations in a timely manner and within expected outcome timelines
Assisted in creating new documentation and policy when business needs arose
Trained new team members upon hire

Education

BSc in IT, Irish University of Further Education
[September 2011](#) – [July 2014](#)

Courses

Customer Relationship Building, Relationship Builders
[August 2018](#) – [August 2018](#)

References

References available upon request

Details

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Skills

Process
SQL
Process Improvement
Documentation
css

Hobbies

Rugby
Camping
Puzzles

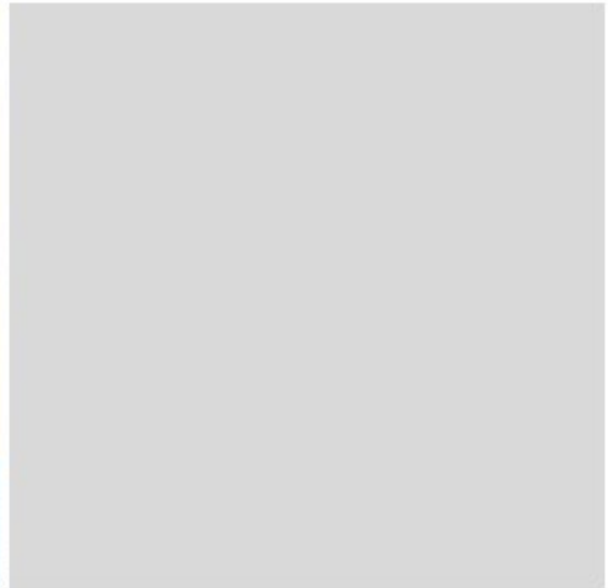
Languages

English

Appendix D

D.1 - Microsoft Unconscious Bias Training Transcript

eLesson: Unconscious Bias



Microsoft's Unconscious Bias training and related materials are for your internal use only. Microsoft offers Unconscious Bias training for informational purposes and as an additional resource you can use in your diversity training efforts.

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English Version

Welcome

Course Introduction

Welcome to the *eLesson: Unconscious Bias*. In this course, you'll deepen your understanding of unconscious biases, how they influence behavior, and how they impact us all. You'll also learn numerous actions you can take to help counter bias in your own work environment.

This course begins with a brief introduction to unconscious bias. In the scenarios that follow, you'll explore bias and what you can do about it through video scenarios, interactive exercises and opportunities for reflection.

Understanding Bias

Unconscious Bias Defined

Unconscious bias is a quick and often inaccurate judgment based on limited facts and our own life experiences. These judgments can give individuals and groups both unearned advantage and unearned disadvantage in the workplace.

People can be biased about just about anything—not just things like gender, skin color, or age, but also things like communication style or what someone does in their free time. Unconscious bias is not intentional—it's part of the lens through which we see the world.

In our everyday lives, when people don't fit our internalized expectations, we can sometimes have difficulty seeing their talents, motivations, and potential clearly—which can mean we interact with them less effectively.

When we understand how biases influence our behavior, we can take action to create an inclusive culture—one where everyone can contribute, innovate, and provide solutions that our customers love.

All People Are Biased

It's important to understand that we all have unconscious biases—it's our brains' way of dealing with an overload of information.

Brain researchers estimate the human mind takes in 11 million pieces of information per second through our senses.

Out of those 11 million, how many pieces of information do you think our brain is consciously aware of each second?

- A. 40
- B. 400
- C. 4,000
- D. 4 million

Feedback:

The answer is A. Our brain is consciously aware of only about 40 pieces of information per second. While we think we are being deliberate, rational, and thoughtful, our conscious thinking is actually a very small part of what drives our actions and judgments.

No matter how well-meaning we are, we are all susceptible to bias. It's our brains' way of making sense of the flood of information that is coming at us constantly.

How Biases Are Formed

Biases are shortcuts our brain forms based on:

- our own experiences
- things other people tell us
- media portrayals

<ul style="list-style-type: none"> ▪ institutional influences ▪ other external influences <p>When faced with situations or people that appear to fit into these "mental maps" our mind has created, we make a number of automatic associations. Not surprisingly, our perceptions and assumptions based on these automatic associations are often incorrect.</p> <p>Because our unconscious biases are so hidden from ourselves, it takes some work to disrupt them, but it can be done through active reflection and practicing inclusive behaviors. Doing this work benefits us, the people around us, and our business.</p>	
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Business Impact of Bias vs. Diversity and Inclusion

<p>Unconscious bias can undermine our engagement, ability to innovate, and ability to understand our customers. This negatively impacts us as individuals and as a business.</p> <ul style="list-style-type: none"> ▪ When we counter bias with inclusive behaviors, we increase our ability to: ▪ create innovative and relevant products and services ▪ excite our employees and customers ▪ extend our brand <p>See the impact of bias vs. diversity and inclusion:</p> <p>Engagement</p> <p>Unconscious biases can result in some individuals being underutilized and unable to contribute fully.</p> <p>When we encourage everyone's contributions, employees are more likely to be engaged, effective, and contribute to business outcomes.</p>	
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This creates a better experience for everyone.

Innovation

When bias prevents us from hearing and considering diverse points of view, our ability to innovate is negatively impacted.

Creating an inclusive environment helps us hear multiple points of view and maximize our potential to innovate.

This leads to better products and solutions for customers.

Understanding Our Customers

When we foster an environment where employees are empowered to contribute their diverse experiences and perspectives, we better serve our diverse customers, including:

- Women
- Racial and ethnic minorities
- People with disabilities
- Lesbian, gay, bisexual, and transgender people
- People of all ages
- People in emerging markets around the world

To be successful, we must understand these markets well enough to be an essential and exciting part of their lives.

Financial Results

There is a tremendous financial upside to appealing to a diverse audience. On the next few screens, we'll look at some of our untapped potential in diverse and emerging markets. When we counter unconscious bias through inclusive behaviors, it helps us reach these markets.

Financial Impact: Emerging Markets

Did you know that the top 10 growth markets for tech device spending in 2015 are all in emerging economies? The countries shown at left are the top 10 markets (not shown in order). Match the three top growth markets to their projected market growth (2015 vs. 2014).

Bangladesh	\$4.8 Billion
Brazil	\$1.8 billion
China	\$0.7 billion
Egypt	
India	
Indonesia	
Nigeria	
Pakistan	
Philippines	
Vietnam	

Feedback:

India	\$4.8 Billion
China	\$1.8 billion
Nigeria	\$0.7 billion

When we can engage effectively with employees from different backgrounds and cultures, we can better serve these tech device markets. If you'd like to see the full ranking, see the [source article on Statista \(via Gfk\)](#).

What This Means to Me

- Think of the people you feel comfortable with and work effectively with.
 - What is the reason for your comfort level and effective collaboration with these individuals?
- Now think of the people you feel less comfortable with or connect with less frequently.
 - What could you do to connect with these people?
- Do you value and actively seek diverse points of view?
- What could you do to better understand your internal and/or external customers?

Scenario: "The Right Project Lead"

Video 1

Mark: Right. So, I wanted to get everyone's input on the right person to lead the project, since Joe is moving across to the Zero base project. Now I think Cynthia is our best bet. She's a fast learner, and she's led on a similar project before.

David: I've had limited interaction with her, but it's hard for me to picture her leading the team.

Laila: Well, I think ...

Joe: I agree, I don't think she has a strong enough technical background.

David: I'm not sure that she can give the time needed for this kind of project given her family situation. Aggressive timelines like this require someone's full attention.

Joe: Two young children take a lot of looking after ... We don't want anyone having to leave early.

Mark: That doesn't necessarily mean you can't still work efficiently. Mine are a little older.

Laila: You know, it's ...

Joe: Being a project lead requires full focus.

Mark: Laila, you were saying ...

Laila: Joe, you were questioning Cynthia's technical background, but she has a PhD in Computer Engineering.

Joe: Yes, but that's just an academic qualification.

Laila: Oh, well I see a long list of qualifications here actually. What exactly are you looking for?

Joe: What about Ravi? He's been with me since we created the application. And if you're taking me off the project ...

Mark: Because, I need you on the Zero Base project.

Joe: I know, but he's got the experience and the expertise.

David: But Ravi's in India ... we need someone who's available. A lot gets accomplished in random discussions in the hallway.

Laila: And Ravi is so introverted. He has a different communication style ... you know how hard it is to get a word in edgewise at this company.

Mark: That's true. It is difficult to communicate with him sometimes. His personality is suited to his role as head engineer. It just makes better use of his talent. How about Gerry?

Laila: I like him.

David: He reminds me of that hip hop guy...what's his name?

Laila: Why, because he's black?

David: You know that's not what I mean. Because he's chill ... you know, uh ... laid back. Cool.

Mark: Yeah, he has a different style. I mean I like him, he's fun ... but I can't

help feeling that he's too laid back. What's he going to do when the project intensity increases?

Joe: He hasn't been here long enough. His previous job was at a financial corporation.

Mark: But he's got a strong application development background.

Laila: And he would bring a fresh perspective ... Plus it would be nice to have somebody leading who's likeable.

Joe: But would he keep up with the fast pace?

Mark: So, all things considered, I think Cynthia is our best option. I really appreciate your taking the time to talk this through.

Question: Identifying Bias

Which statements are true? **Select all that apply.**

- A. Technical understanding is important when leading a technical project.
- B. Cynthia's young children will make it harder for her to be fully committed to the project.
- C. Ravi's introverted nature makes him an unsuitable project leader.
- D. Gerry's relaxed demeanor would not serve this project's goals.

Feedback:

The only true statement is A. We don't have any evidence that having children, being introverted, or having a relaxed demeanor would negatively impact a project leader in this role. Assumptions about these qualities may be the result of unconscious biases.

Examine Your Assumptions

Best practice: Examine your assumptions.

Bias operates on quick judgments and assumptions—examining them more deeply is a good way to counter bias.

Can you think of ways that the following qualities could help someone contribute at work?

- Having a family
- Working in a different country
- Thinking more than speaking
- Having a relaxed demeanor

Different working styles and backgrounds have their own strengths.

The next time you catch yourself making a judgment about someone's background or working preference ask yourself, could this be an asset?

This is a simple way of reframing your thinking about a person or a situation.

Bias Comes in Many Forms

While we're talking about assumptions, take a moment to think about the huge range of things people might make assumptions about. What assumptions do you think someone might make based on the following characteristics?

- Someone with bright pink hair vs. someone with a conservative haircut
- A deeply religious person vs. someone with no religious beliefs
- A graduate of a prestigious, private university vs. a graduate of a large, public university vs. someone who did not attend a college or university at all.
- A new college graduate vs. someone mid-career vs. someone near

<ul style="list-style-type: none"> retirement Someone who loves sports vs. someone who has no interest in them <p>People might make biased assumptions about someone's skillset and ability to make an impact based on indicators like these, but of course such assumptions could easily be incorrect. It's important to be aware that biases impact people among many different vectors beyond the common and obvious ones. Whenever you're making an assumption, ask yourself whether you know it to be true.</p>	
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Be Inclusive	
<p>Best practice: Ensure all voices are heard.</p> <p>Did you notice this moment? After Laila was interrupted twice, Mark noted that Laila was trying to say something and provided her with an opportunity to speak.</p> <p>Mark served as an ally for Laila by ensuring her voice was heard. That's great for him to do as a manager—and it's something that <i>anyone</i> on a team can do to support a more inclusive working environment.</p>	

Understanding Bias: Avoid Common Mistakes	
<p>Some types of unconscious bias are very common—and being aware of that can help you be on guard for common mistakes in perception. For instance, women are often inaccurately perceived as less technically capable. Be careful and critical of your own perceptions and decision making in areas of common bias.</p> <p>If you're involved in assigning projects or hiring, it's important to know that one proven way to counteract bias is to clearly identify the requirements for a role before evaluating specific individuals. The team in this scenario does not appear to have done that.</p>	

Affinity Bias

Another common mistake is overlooking the potential impact of affinity bias.

When people think of bias, they often think of bias against a person or group in a way that negatively impacts them. But that is not the only kind of bias.

Affinity bias is the tendency to favor people who are like you in some way.

When we gravitate toward people who are like ourselves, we may pay less attention to the people who are not as much like us.

This can be a problem if we alienate the people who seem to be less like us and give the impression that we do not value their opinion as highly.

Additionally, if we tend to solicit input just from the people who are most like us, we may miss out on opportunities to gain new insights and diverse perspectives.

Best practice: To maximize the power of diverse perspectives, include and seek input from people with a wide variety of backgrounds.

Micro-behaviors (1 of 2)

Micro-behaviors are the small messages you convey each day through things like your body language, the tone of your voice, and your proximity to a person. When micro-behaviors recur over time, they can send powerful signals that impact engagement at work and how we perceive ourselves and others.

Did you spot any micro-behaviors that may have made individuals feel more or less included in this scenario?

Scenario micro-behaviors:

- Both Joe and David cut off Laila when she is trying to speak. This sends the message that Laila's input is not valued.

- Laila's expressions and tone of voice convey irritation. This sends the message that she does not respect her coworkers' statements.
- Joe dismisses Laila's comment about Cynthia's PhD in Computer Engineering. This behavior devalues both Laila and Cynthia.
- David comments that Gerry reminds him of a hip hop artist who is laid back. David may be fitting Gerry into a mental map he has that clashes with his image of a good project leader.

Micro-behaviors (2 of 2)

Micro-behaviors come in a variety of forms. Here are a few examples:

Facial expressions

"He never returns my smile and almost frowns when I voice my opinion in a meeting. I rarely bother voicing my opinion anymore."

Tone of voice

"The way he talks to me makes me feel like he sees me as incompetent—if that's how he feels, there's no point in me trying my best as nothing will be good enough."

Body language

"She always sits as far away from me as possible, she clearly has no interest in getting to know me."

Choice of behaviors

"She was on her computer throughout our meeting which made me feel like I was unimportant."

Questions and interactions

"As someone who works remotely and always dials in to our team meetings, it's hard for me to get a word into the conversation. No one gives me an opening."

Eye contact

"In team meetings, she only seems to make eye contact with a couple of people. It seems like she values their input and disregards everyone else."

<p>Micro-behaviors can be manifestations of unconscious biases. To remedy our own non-inclusive micro-behaviors, we must examine our own biases and actively work to behave more inclusively. We'll see more how this can be done as the course continues.</p>	
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What This Means to Me

Think back to the different types of micro-behaviors we just looked at:

- Facial expressions
- Tone of voice
- Body language
- Choice of behaviors
- Questions and interactions
- Eye contact

Can you identify any times when you might have displayed micro-behaviors in these ways?

Have you experienced others' micro-behaviors in these ways? How did it feel?

Scenario: "The Team Meets"

Video 2

Cynthia: Hey.

Mark: All set for your first meeting with the team?

Cynthia: Yep.

Mark: Joe will be in the meeting. He shepherded the original application

<p>through the planning phases. Joe knows he's not the right person to lead this project going forward. But he still thinks of this as his baby.</p> <p>Cynthia: Understood. I just hope he doesn't resent me.</p> <p>Mark: Make it clear that you're in charge. Strong leadership ... that's what this project needs.</p> <p>Cynthia: Okay ... I'll do my best.</p> <p>Joe: So you get the new specs? Oh good, yeah. Did you have a chance to look at them?</p> <p>Mark: Good morning.</p> <p>Laila: Good morning.</p> <p>Mark: And good evening to you, Ravi! I'm very pleased to officially introduce you to Cynthia Marshall, your new project lead. And I'd just like to say, "Finally, it's great to have a female lead!"</p> <p>Team: Hi, Cynthia.</p> <p>Mark: I know you have a lot to cover, so I'll turn it over to you, Cynthia. Good luck!</p> <p>Cynthia: Thank you. Okay, I'd like to just jump right in and see where we are on this project. I'll be meeting one-on-one with each of you later today and tomorrow, so we can get to know each other a little better then.</p> <p><i>(Pause ... everyone looks at Joe, who is focused on his phone.)</i></p> <p>Joe: Sorry, I'm here.</p> <p>Cynthia: Oh, OK I was just saying that I'll be arranging times to meet with each of you later today or tomorrow, so we can get to know each other a little better then.</p> <p>Joe: Uh, I'm not going to be available.</p> <p>Cynthia: OK. Well, I'm sure we could find a different time that will be mutually convenient. OK?</p> <p>Joe: Now that Mark has me on the Zero Base project, my schedule is totally</p>	
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packed.

Cynthia: I'm sure we will work it out. So, one of the drivers in this redesign is customer dissatisfaction. Which doesn't surprise me. I tried accessing the application from a lot of different devices, and I had all kinds of trouble.

Joe: What are you talking about?

Cynthia: Customers aren't satisfied with the application. They're running into all kinds of problems.

Joe: Some of the best engineers in this company built that application, including Ravi.

Cynthia: Sorry, I didn't mean to step on anyone's toes. I'm sure that when it was originally designed it was cutting edge. We need to respond to customers' complaints.

Joe: I haven't heard anything about complaints.

Cynthia: From what I understand there were a lot of complaints in the consumer engagement data. You know, actually, I'd like to see that data. I think it will help me ... us ... determine our project plan.

Joe: You need to start with the basic architecture. Then determine what to focus on. That might help us — you.

Cynthia: And I look forward to getting that information as well. But right now, I'm asking for the customer feedback.

David: Users aren't engineers. They wouldn't know what they want. That's the issue.

Cynthia: Nonetheless, I'd like to see the customer data, if that's not too much trouble. So when can I expect that?

Laila: Can I make a suggestion?

Cynthia: Yes, Laila, of course.

Laila: Well, Ravi worked on the template for data feedback, didn't you, Ravi?

Ravi: Yes.

Cynthia: Wonderful. Can you send me the template, Ravi?

Ravi: Sure, yes.

Cynthia: Thank you. Well, I think this might be about as much as we can cover right now. I'll be sending you some meeting times for one-on-ones. Oh, and I need to connect with Mickey, right? He wasn't able to make it today?

David: I'm not sure - I thought he would be here.

Cynthia: OK, well I'll follow up with him. Oh, and what about Samuel?

Laila: Oh, I think it's like midnight for him right now, so ...

Cynthia: Oh, of course. Well, I'll follow up with him later too.

Laila: Welcome to the project, Cynthia.

Cynthia: Thank you.

Question: What Went Wrong?

Which of the following may have contributed to the apparent tensions in this meeting? **Select all that apply.**

- A. Mark started with advice to Cynthia to "make it clear who is in charge".
- B. Cynthia directs the conversation back to the customer data and away from Joe and David's concerns.
- C. Joe keeps looking at his phone, and his tone of voice conveys resistance.

Feedback:

All of these could potentially be contributing factors.

Mark's advice, while well-meaning, might be driven by an assumption that Cynthia will have trouble leading effectively.

Joe and David raised several concerns, but Cynthia firmly steered the

meeting away from that discussion, sending a message suggesting that she does not value their input.

Joe seems to be unwilling to hear out Cynthia's ideas. That could be due to personal reasons, his own biases, or both.

All of these characters could probably benefit from taking a closer look at their micro-behaviors, assumptions, and what biases, if any, may be underlying them. Recognizing non-inclusive micro-behaviors is a first step toward beginning to behave more inclusively. Recognizing assumptions is a first step toward reconsidering whether they are true.

Explore: Micro-behaviors

What other micro-behaviors did you notice in this scenario?

Scenario micro-behaviors:

- Mark calls out how great it is to have a female lead. In doing so, he highlights her difference in a way that appears to make her uncomfortable.
- Joe is unresponsive to Cynthia's requests for consumer engagement data and tells her what she ought to be concerned with instead. This sends a message that he does not respect her ideas and leadership.
- Mickey and Samuel were not in the meeting and no one noted it until the end of the meeting. This sends the message that their input is not considered essential.

Question: What Would Be Better? (Part 1)

After Cynthia says, "I'd like to see the consumer engagement data," Joe says "You need to start with the basic architecture and determine what to focus

<p>on." What could Joe do to be more inclusive? Select an answer.</p> <ul style="list-style-type: none"> A. Soften his words by saying, "In my opinion..." B. Express willingness to explore the consumer engagement data, and ask if the team would be willing to take a moment to discuss the basic architecture. C. Keep quiet about his opinion because it undermines Cynthia's leadership. <p>Feedback:</p> <p>Option B is the most inclusive option.</p> <p>It demonstrates value for Cynthia's approach and regard for what she and the team would like to discuss in the meeting, while not suppressing Joe's own views and recommendations.</p> <p>Option A still redirects the conversation without having heard and acknowledged Cynthia's concerns.</p> <p>Option C misses out on the opportunity to leverage Joe's and Cynthia's diverse viewpoints for the project's success.</p>	
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Question: What Would Be Better? (Part 2)	
<p>After David asserts that "Users aren't engineers" and wouldn't know what they want, Cynthia says "Nonetheless, I would like to see the customer data, if that's not too much trouble." What could Cynthia do instead to be more inclusive? Select an answer.</p> <ul style="list-style-type: none"> A. Don't say, "if that's not too much trouble". B. Advise David that users are very important and explain to him why. C. Say, "Let's talk about that. But before we move on, I do just want to make sure that we can get the customer data. Can someone take ownership of getting that data?" 	

Feedback:**Option C is the most inclusive option.**

It shows Cynthia's willingness to discuss David's concern and take it seriously—while also keeping the meeting focused and productive.

Option A is an improvement on the original, but doesn't acknowledge David's concern.

Option B addresses David's concern by directly countering it and could be taken as condescending.

What Would Be Better? (Part 3)

One last note—this team meeting was scheduled at a time that Samuel would be unlikely to be able to attend. When you're working with people in widely dispersed time zones, be conscious of what time it is for others on the team. Scheduling a middle-of-the-night meeting for someone sends a signal that their input is not considered essential to the conversation.

Ask people what range of times would work well for them. Some people may have no problem scheduling an early morning or evening meeting, while for others, meeting outside of normal business hours might be an inconvenience or impossible.

Video 3

Cynthia: I'm really glad you could join me for lunch, Laila. You know, I know you've only been with the team for a couple of months. How do you like it?

Laila: Well, it's sort of a boys' club. I just ... I feel like with you here, I've got a chance to be heard for once.

Cynthia: Well, I'm sure there are ways that we can open up communication within the team. And I'd like to work on that.

Laila: Well, if anyone can get them to listen to me, it's you. I mean, wow! You really took charge in that meeting.

Cynthia: I really like to build consensus. It's not really my style to push so hard. But Mark said the team needed strong leadership. And, unfortunately, Joe and I have gotten off to a rocky start.

Laila: Yeah, that's for sure.

Cynthia: It seems like he doesn't want to listen to anything I have to say.

Laila: I can relate to that. But, maybe he's just unhappy about being taken off the project.

Cynthia: You know, you're probably right. I should just sit down with Joe and start over. We are a team, after all. I just ... I really want this project to be great and have all of us be heard.

Laila: Yeah, I'd like that too. You know, I'm really glad you're here.

Explore: Micro-behaviors

Did you notice the micro-behaviors in this scenario?

Laila and Cynthia's body language indicates that they are open and engaged with each other. They lean in toward each other, make eye contact frequently, and sometimes nod in agreement when the other person is speaking. This contributes to the feeling that they can speak openly with one another.

Notice your own body language when you are interacting with people at work. If you are having difficulty with a specific person or interaction, consider whether you might be able to change the tone of the conversation by purposefully sending more inclusive signals with your body language.

The Value of Asking Questions

Best practice: Make a habit of asking questions rather than making assumptions.

Cynthia wants to start over with Joe and figure out how they can work together effectively as a team. One way to figure this out is to sit down with him and ask him how he thinks they can work together more effectively. This focuses the conversation in a positive way, and shows him that she is listening to what he has to say.

Asking questions is a great way to undermine assumptions based on bias—and it shows people that you value them enough to want their input:

- Ask people for feedback
- Ask people how you can work together more effectively
- Ask people when you aren't sure what their thoughts, feelings, or motivations are
- Ask yourself what assumptions you have made, and examine whether they are valid.

Address Misunderstandings and Resolve Disagreements

Best practice: Address misunderstandings and resolve disagreements.

Don't let an unpleasant interaction, misunderstanding, or disagreement fester and turn into an enduring spot of conflict on your team.

If you have a simple misunderstanding, clear it up right away so everyone can be more productive.

If you have a more substantial disagreement, that can actually be a **benefit** by offering the opportunity to explore a meaningful difference of perspectives. That can help you come to the best, most thoughtful solutions. To reap the value of the disagreement, you do need to fully explore the diverse perspectives at issue.

If a disagreement seems difficult to get past, you can seek a third party to mediate.	
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What This Means to Me

Make a habit of asking questions rather than making assumptions.

- Can you think of a time when someone has made an incorrect assumption about your preferences, capabilities, or background?
- Would your interaction have been improved if that person had asked a question instead?

In this video, Laila makes a comment about the team having felt like "a boys' club" until Cynthia joined.

- Are there any work experiences where you feel excluded, or notice someone else being excluded?
- What actions or changes could help to create a more inclusive experience for everyone?

Scenario: "Failure to Connect"

Video 4

Ravi: I realize this is very early your time, so thanks for meeting. This is very awkward, and I'm worried. Cynthia's timeline is too aggressive. I mean ... We just finished the beta test ... and we still haven't fixed the problems from the integrated version of our application.

Joe: I told Cynthia she was starting from the wrong direction. I've done all I can. You're going to have to tell her that it won't be ready.

Ravi: I don't know how I can do that. She's the project lead.

Joe: Yeah, and she was pretty aggressive at that kick off meeting. I don't think she's interested in listening to anyone at all, especially me.

Ravi: Look, I believe it may be useful for the team to see the test results from some of our earlier versions. But I would not do that without your permission, of course.

Joe: If she hasn't asked to see them, I wouldn't show them to her. She'll just think you're trying to tell her what to do. This project is headed for disaster, and it all comes down to poor leadership on her part.

Ravi: Okay, Joe. But could you just talk to her?

Joe: I'm sorry, Ravi. She'll just think I'm undermining her authority. You'll have to push for what you need. Good luck, buddy. Bye.

Explore: Micro-behaviors

What micro-behaviors did you notice in this conversation?

Scenario micro-behaviors:

Ravi speaks hesitantly. He may be uncertain how his concerns will be received. If Joe had offered any kind of affirmation, this might have reassured Ravi and opened up the conversation.

Joe cuts off the conversation abruptly. This may send a message that he doesn't have time for Ravi or doesn't respect him.

Examine Strong Reactions

Best practice: Whenever you have a strong reaction to someone (positive or negative), ask yourself why.

In this conversation, Joe is openly critical of Cynthia's leadership. Noticing his own strong reaction should be a cue to him to examine his reactions more closely and ask himself what's behind them.

Why am I having a reaction?	→	I put a lot of time and effort into this project. I'm afraid it's going to fail!
Why do I feel so skeptical?	→	Cynthia just doesn't fit my picture of a leader.
<p>Joe is probably genuinely concerned for the project's success, but his resistance to Cynthia may be based in hard-to-see biases and not entirely in an objective assessment of her capabilities. If he recognizes this as a possibility, that's a reason for him to take another look and see if Cynthia has something to offer that he is not seeing clearly.</p>		

Studies on Bias	
<p>Bias may have a serious impact on many people's ability to succeed professionally and have their talents appreciated. People are often unaware of the degree to which this is still true in today's world.</p> <p>Here are brief synopses of recent data:</p> <p>Implicit Association Test</p> <p>According to a global online research study with over 200,000 participants, 76% of participants are biased toward associating men with careers.</p> <p>68% of participants are biased toward white skin over dark skin.</p> <p>Source: Project Implicit Website. (2015). (Note that current global results may change over time. Current results are displayed if you choose to take an Implicit Association test and appear at the conclusion of the test.)</p> <p>Names on Resumes</p> <p>A name on a resume can imply one's race/ethnicity, nationality and characteristics associated with these groups. Research by the US National Bureau of Economic Research, as well as a Canadian study, found that ethnic names can have a significant influence on the evaluation of resumes. The studies found significant differences in the number of callbacks for</p>	

interviews between Asian, Hispanic, Black, and White-sounding names, when used on identical resumes.

Sources:

Immen, Wallace (2011). [How an ethnic name may affect the job hunt](#). *The Globe and Mail*.

Bertrand, M. and Mullainathan, S. (2004). "[Bertrand, M. and Mullainathan, S. \(2004\). "Are Emily And Greg More Employable Than Lakisha And Jamal? A Field Experiment On Labor Market Discrimination."](#) *American Economic Review*, 2004, v94(4,Sep), 991-1013.

Gender

Students at Columbia University were presented with a business case study for Heidi Roizen, a real-world CEO, and asked to rate their impressions of her. A separate section of the class received the same case study, but with the name changed to a man's name—Howard. The group that received the case study with the male name judged "Howard" more positively than the same identical study with Heidi's actual name on it. Students judged Heidi as more power hungry and self-promoting and less likable than Howard.

Source:

Routson, Joyce (2009). [Heidi Roizen: Networking Is More Than Collecting Lots of Names](#). *Stanford Graduate School of Business*.

Disabilities

A 2014 report showed that 67% of the British public feel uncomfortable talking to disabled people and 36% tend to think of disabled people as not as productive as others.

Source:

Aiden, H. and McCarthy, A. (2014). [Current attitudes towards disabled people](#). Scope report.

What This Means to Me

Think of a time when you've had a strong reaction to someone—positive or negative:

- What do you think was behind your reaction?
- How did your reaction impact that person?

- | | |
|---|--|
| <ul style="list-style-type: none"> ▪ How did it impact your work? ▪ Did it impact anyone else on your team? ▪ Is there anything you'd do differently if you had the opportunity? | |
|---|--|

Scenario: "The Test Launch"

Video 5

Cynthia: Okay, team. Well, I haven't heard from Joe, so I'm guessing he won't be joining us. Let's start with the obvious: the beta testing did not go well.

Mickey: That's the understatement of the year.

Cynthia: The good news is we gathered some good information and data.

Mickey: If I was included in the first place, I could have told you what we were going to find.

Cynthia: Your name was left off the invite, and I've apologized for that – so, please let it go.

Mickey: Some of those glitches have been there since the get go. Ask Ravi.

Ravi: I'm sorry?

Mickey: You're still letting consumer preferences drive our decisions.

Laila: Mickey, if we don't satisfy the customer, they won't buy. Some of our worst consumer feedback data is about our dashboard. I think we can make the app compatible across multiple platforms if we simplify it.

Mickey: This all started with the customer data, that was a red flag. Now we're between a rock and a hard place.

Samuel: Excuse me, I did not understand.

Mickey: Never mind, Samuel - no one cares what I say, anyway.

Laila: So you missed a meeting, Mickey. It happens.

Cynthia: I know that you're frustrated. But let's not get defeated. We've seen the test results. So, what stands out?

Ravi: They don't like our dashboard. What about simplifying it?

Mickey: Good idea, Ravi.

Samuel: I agree.

Laila: Whoa, wait a minute. That's what I said.

Mickey: Who cares who said it?

Samuel: One question: I don't remember seeing results about tests across different screen configs.

Laila: What was that, Samuel?

Cynthia: He was just saying he hasn't seen the results from the screen configs test. Ravi, that was due last Thursday. Could you send that over?

Ravi: Oh, I'm sorry. I did not know that was a fixed deadline.

Cynthia: But you have completed the testing?

Ravi: I'm going to have to check on that.

Cynthia: Okay. Maybe you could help me understand this. Is this a thing where it's hard in your culture to say no? Just ping me by the end of the day tomorrow with the status and projected delivery date.

Samuel: Ravi, did you include the new Xiaomi configs in your tests?

Mickey: What was that, Samuel?

Samuel: Xiaomi. They launched some new specs two weeks ago.

Laila: Yeah, David's husband has worked with that company before.

Samuel: Excuse me? David's husband.

<p>Laila: Yeah. John. He's a developer too.</p> <p>Samuel: Um ... And maybe you can look at this web interface that I'm using to test for other projects? It could help you with testing.</p> <p>Mickey: So, back to Ravi's idea. I say we reduce the items on the dashboard. Then we need a new hard deadline for finishing the integration testing. There has got to be a better way to do that than we've been doing.</p> <p>Cynthia: I agree, and I can talk to Samuel more about that. Oh – uh ... [sound of Cynthia's phone vibrating] Listen, I just got an urgent message from Mark, he is not happy with the beta testing. Could you all keep brainstorming while I call him?</p> <p>Leila and Mickey: OK, so ... Well ... (at the same time)</p> <p>Mickey: I don't think there's more we can do here. I'm gonna read the emails I never got about this project until this morning. I'm sure you've got other things you could be working on.</p> <p>Laila: Well, I think there's more to discuss based on the feedback we've just gotten.</p> <p>Mickey: May as well do that later when Cynthia comes back. Ping me when she does ... OK, folks.</p> <p>Ravi: Take care.</p> <p>Samuel: OK. Bye.</p>	
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Explore: Micro-behaviors	
<p>What micro-behaviors did you notice in this scenario?</p> <p>Scenario micro-behaviors:</p> <ul style="list-style-type: none"> ▪ Cynthia's body language expresses frustration with Ravi. This sends a message that she is not open to his contributions. ▪ Mickey and Laila do not understand Samuel's accent and decide not 	

<p>to seek clarification. This sends a message that they do not value his input.</p> <ul style="list-style-type: none"> ▪ Samuel pauses and questions Laila when she mentions David's husband. This reaction may send a message of disapproval. ▪ Mickey gives credit to Ravi for the idea Laila originally proposed. This sends the message that he is not listening to her. 	
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Take Action to Reduce Stressful Situations	
<p>Cynthia made an insensitive comment about Ravi's culture, probably in part because she was under a lot of stress. It would be appropriate for her to apologize to Ravi for this comment.</p> <p>Remember that bias is a shortcut our brains use to draw rapid conclusions. Our brains are particularly likely to resort to biased thinking when we are under stress.</p> <p>Best practice: To reduce the possibility of acting or speaking from a biased stance, make a conscious effort to reduce stressful situations.</p> <p>For instance:</p> <ul style="list-style-type: none"> ▪ Keep a calm demeanor ▪ Don't speak loudly or interrupt ▪ Pause before you speak ▪ Eliminate distractions ▪ Relieve time pressures when possible 	

Listen Fully

In this scenario, several people expressed themselves without being fully acknowledged:

- Laila suggested simplifying the dashboard, and no one seemed to have heard her.
- Samuel suggested a testing approach, and no one said what they thought of it or whether they intended to incorporate it
- Mickey expressed frustration, and Cynthia told him to drop it

If people had listened to each other more fully, what do you think the impact would be?

Best practice: Listen carefully to the person speaking until she or he feels understood.

Learning Activity: Ensuring All Voices Are Heard

Everyone on a team has a part to play in ensuring people's voices are heard. Match each recommended action with the situation it most applies to.

A	If you tend to express your ideas frequently and assertively...	Be sure to spend time listening too. Solicit others' input and consider their viewpoints fully.
B	If you notice another person struggling to be heard...	If you have insights or concerns you didn't get a chance to share in a meeting, send a follow up email.
C	If you frequently feel unheard...	Solicit help in making yourself heard; a manager or trusted co-worker can be your ally in meetings.
D	If you notice one person receiving credit for another person's ideas or work...	Call attention to the person trying to speak and ask others to give them their attention for a moment.
E	If you spend more time listening and thinking than speaking in meetings...	When someone deserves credit and praise for a good idea, be sure to give it to them and ensure others are aware.

Correct matches:

A	If you tend to express your ideas frequently and assertively...	Be sure to spend time listening too. Solicit others' input and consider their viewpoints fully.
E	If you spend more time listening and thinking than speaking in meetings...	If you have insights or concerns you didn't get a chance to share in a meeting, send a follow up email.

C	If you frequently feel unheard...	Solicit help in making yourself heard; a manager or trusted co-worker can be your ally in meetings.
B	If you notice another person struggling to be heard...	Call attention to the person trying to speak and ask others to give them their attention for a moment.
D	If you notice one person receiving credit for another person's ideas or work...	When someone deserves credit and praise for a good idea, be sure to give it to them and ensure others are aware.
All of these tips could help the people on this team.		

What This Means to Me	
<p>Take a moment to reflect on the tip "ensure each person is heard":</p> <ul style="list-style-type: none"> ▪ Who gets heard on your team? ▪ Who may not always be heard? <p>Is there any action you can take to encourage contribution and ensure different viewpoints are heard?</p>	

Scenario: "Making a Change"

Video 6

Leanne: I hear really good things about the work you have been doing. You should be proud of yourself.

Mark: Really? Because I've got this one project which is just a disaster.

Leanne: Maybe it's not as bad as you think.

Mark: I don't know about that. We've just done a limited release — which was late to market, bad reviews, people are at each other's throats, and I don't see it improving anytime soon.

Leanne: Hmmm. What do you think is going on?

Mark: I think it started with the project lead. Maybe it was a bad decision to assign her to the project. Or maybe I didn't handle something right. I wanted to talk to my mentor ... and since you're a woman ...

Leanne: I hope I can help.

Mark: I didn't want to undermine her by implying that she needed my help - or anyone else's - to do the work. I kind of let her kick off the project herself, and now I'm hearing about issues with team dynamics.

Leanne: What kind of issues?

Mark: Well, Cynthia – that's the project lead – she's having trouble with Joe.

Leanne: Joe Hanson?

Mark: Yeah.

Leanne: Oh. Was he withholding information? Not coming to meetings? Ignoring emails ...

Mark: How did you know?

Leanne: He's done this before, Mark, remember?

Mark: Oh yeah. The Mercury Project. Leanne, I don't know if he's doing it out of malice, or to test her, or whether he's angry because he was taken off

the project ...

Leanne: Have you asked Cynthia what's going on?

Mark: No. And, well, I canceled our last one-on-one.

Leanne: Why?

Mark: Because I had a deadline to meet. If I'd remembered Joe's track record, I would have talked to Cynthia about it. But – if I help her out, when I hadn't helped out any of her male predecessors, wouldn't I be saying, "You can't do this on your own, so let me rescue you?"

Leanne: Do you think she faces the same challenges that her male predecessors have faced?

Mark: I don't know. Maybe she's had to work a little harder to earn their respect and establish her credibility. In fact, when she started, I told her she'd have to be tougher.

Leanne: Why?

Mark: Because they would have eaten her alive. She was too soft.

Leanne: How do you think she heard that?

Mark: Maybe she took it differently—that I didn't have confidence in her abilities.

Leanne: If you'd given me that advice, that's how I would have taken it.

Mark: I didn't think of it that way. I really was trying to be helpful. Let me ask you something else ...

Leanne: Sure.

Explore: Micro-behaviors

What micro-behaviors did you notice in this scenario?

Scenario micro-behaviors:

- Mark realizes there is an issue, but has not spoken with Cynthia about it directly. This behavior, and his conversation now, indicate that he has not felt at ease working with Cynthia to solve the issues.
- Leanne tends to ask Mark questions rather than provide him with her own solutions. As his mentor, she is showing him her confidence in his ability to come to his own conclusions.
- Mark and Leanne face each other, make eye contact, and give each other their full attention. This sends the message that they value each other's input.

Question: What Would Be Better?

Before the team's initial meeting, Mark advised Cynthia to "make it clear who is in charge". What approach might be better? **Select an answer.**

- A. "I'm excited to have you leading this project. If there's anything I can do to support you, just let me know."
- B. "You're going to want to establish yourself as a leader immediately, because you have a tough audience here."
- C. "Everyone here knows that I believe you're the best lead for this project, so if anyone gives you any trouble, just let me know."

Feedback:

Our recommendation would be A.

Option A expresses confidence and willingness to help without implying

that Cynthia might not be up to the task.

Options B and C both imply on some level that Mark doubts Cynthia's ability to lead.

Video 7

Cynthia: Thank you for taking the time to meet with me today, Joe.

Joe: Sure.

Cynthia: I noticed that you weren't at the meeting yesterday.

Joe: Yeah, I've been really busy. And ... it seems like we have completely different ideas about how this project should go, and I'm fine with that. It's your project now.

Cynthia: I wanted to touch base with you today because I'd like to start over. Before kicking off this project, I should have sat down with you and gotten a deep dive.

Joe: Yeah, it's been a bumpy ride.

Cynthia: So, how can I create an environment where we can get the best from each other?

Joe: What do you mean?

Cynthia: Well, for one thing, it would be great if you would attend the meetings to contribute. I mean you have a wealth of knowledge. And ... our interactions haven't been smooth, and I don't why. Is there something I can do to improve that?

Joe: Well, to be honest, I haven't really felt like you wanted my perspective. When I brought up my concerns or issues, you just pushed them aside.

Cynthia: Wow. I'm sorry that that's been your experience. Would you be willing to meet at this point and dig into the issues with the project? I want to hear your ideas. And, well, I'm hopeful that you'll be willing to explore my

<p>ideas also?</p> <p>Joe: Sure. That sounds fair.</p> <p>Cynthia: Thank you. Well, I'd like your feedback on some of the ideas we had in the last meeting about simplifying the dashboard. Do you have time to do that now?</p> <p>Joe: Yeah. I've got 30 minutes before my next meeting.</p> <p>Cynthia: OK. The redesign really interesting. Laila brought in some great ideas for the UI and the team was able to work out some of the glitches.</p>	
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Explore: Micro-behaviors	
<p>What micro-behaviors did you notice in this conversation?</p> <p>Scenario micro-behaviors:</p> <ul style="list-style-type: none"> ▪ Joe's body language and tone conveys resistance and distrust at the start of this conversation. ▪ By the end of the conversation, Joe's body language says he's more engaged. It looks like Cynthia has helped to change the direction of their interactions by showing Joe that she does value his input. 	

Building an Inclusive Culture	
<p>In these last videos, Mark, Cynthia, and Joe have taken positive steps toward changing the negative dynamics in their group, moving past bias, and building more inclusive work relationships.</p> <p>What does an inclusive culture look like?</p> <ul style="list-style-type: none"> ▪ People are respected, valued, and seen. ▪ People can be their authentic selves. There's no need to hide 	

<p>elements of one's identity to fit in.</p> <ul style="list-style-type: none"> ▪ People are heard and feel safe sharing their ideas. ▪ Each person is able to bring leadership, influence, and knowledge. <p>An inclusive environment allows everyone to bring their ideas and contribute their best work.</p>	
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Appreciate Each Person's Contribution

<p>Best practice: Appreciate each person's contribution</p> <p>At its core, an inclusive organization creates an environment in which all people have an opportunity to add value. People can work together more effectively when everyone understands how each person's role is essential for your team to achieve its goals and serve your organization's mission.</p> <p>If you aren't clear on your own role or that of others on your team, you can discuss this with your manager and others on your team.</p> <p>When you understand how you contribute and how others contribute, you gain clarity on how you are all working toward the same goals with your diverse points of view and contributions.</p>	
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When Diverse Teams Work Together

<p>When we look at performance over time, teams that ignore differences accelerate early, but soon hit a sameness barrier.</p> <p>When diverse teams work together inclusively, they may initially need some time to get used to working together, but they soon surpass the less diverse teams in performance. Diverse and inclusive teams are the highest performing teams in the end.</p>	
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When leaders and team members commit to valuing, cultivating, and utilizing differences, we achieve better results.	
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Closing Remarks

Actions You Can Take


In this course, you've learned some best practices and background to understand unconscious bias, counter it, and support a diverse and inclusive culture where people are empowered to contribute fully.

You can read more about Microsoft's approach to diversity and inclusion [here](#).

Download the "Make It Real" worksheet to take another step in countering bias in your workplace. [Download Worksheet](#)

Thank you for taking time to learn about unconscious bias.

D.2 – Screenshot of Completed Unconscious Gender Bias Test

**Microsoft**

eLesson: Unconscious Bias
Closing Remarks/Completion | Actions You Can Take

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EXIT

Actions You Can Take

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You can read more about Microsoft's approach to diversity and inclusion [here](#).


Download the "Make It Real" worksheet to take another step in countering bias in your workplace.


[Download Worksheet](#)

When the popup appears, we recommend clicking "Save As" and saving the document to a location you will remember.

Thank you for taking time to learn about unconscious bias.

Note: If you have completed all pages and activities in this course, a feedback form will appear when the audio on this page finishes playing. If the form does not appear and you wish to leave feedback, ensure that all menu items appear with a checkmark showing completion. We appreciate your feedback on this course.





Appendix E

E.1 – Confidentiality Agreement

1. Confidentiality Agreement

Do you agree to take part in the following questionnaire as part of a psychological research study on the effects of unconscious bias in the IT Field using online professional networking sites.

If you choose to participate fully you will be required to complete in a questionnaire below and then if selected you will be asked to participate further in the study by reviewing and selecting sample professional profiles for IT recruitment recommendation.

You will have the opportunity to ask questions regarding the full nature of the study and will have the opportunity to withdraw from the study at any point.

It is understood and agreed to that the below identified discloser of confidential information may provide certain information that is and must be kept confidential.

To ensure the protection of such information, and to preserve any confidentiality necessary, It is agreed that the Confidential Information to be disclosed can be described as and includes:

1. Personal description(s), technical, financial and business information relating to any individual person or organisation.
2. The Recipient agrees not to disclose the confidential information obtained from the discloser to anyone.

WHEREFORE, the parties acknowledge that they have read and understand this Agreement and voluntarily accept the duties and obligations set forth herein.

*

☐ I agree to participate in the study, I understand I can withdraw at any point in the study

☐ No thank you I would not like to participate in this study