

# **Decoding Unconscious Bias: Analyzing Language in**

## **Job Postings at York University**

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## **Abstract**

Unconscious biases in job advertisements can significantly influence equity in recruitment, shaping applicant perceptions and self-selection. Despite commitments to diversity and inclusion, such biases remain underexplored in higher education, especially in unionized contexts. This study analyzes 100 job postings from York University’s YU Hire platform (2023–2025), focusing on YUSA1, YUSA2, and Work/Study categories. Using signaling theory, critical content analysis, and LIWC software, the research identifies linguistic and structural biases in postings. Findings reveal systemic issues such as overemphasis on Canadian credentials, vague diversity statements, and subjective language like “superior communication skills,” disadvantaging international applicants and equity-deserving groups. The presence of inclusive language alongside exclusionary terms sends conflicting signals, undermining York’s DEDI goals. This study offers practical recommendations for inclusive hiring practices and contributes to DEDI strategies by highlighting the importance of actionable commitments, clearer language, and structural alignment with equity values in recruitment processes, particularly within unionized academic institutions.

## **Dedication**

To my parents, Bahram and Farkhondeh,  
and all the courageous and patient parents of international  
immigrant students who support their children from afar with  
unwavering love and sacrifice!

## **Acknowledgement**

First and foremost, I would like to express my deepest gratitude to God, whose unwavering support and guidance have been with me every step of the way. His hands of support have truly sustained me throughout this journey.

I am profoundly grateful to my parents, Bahram and Farkhondeh, whose teachings and values have shaped me into the person I am today. They have always instilled in me the importance of perseverance, hard work, and never giving up, inspiring me to aim for the stars even in the face of challenges.

I owe a special thanks to my dear supervisor, Professor Minoo Derayeh, who has been a true role model to me. Her comments and insightful feedback on my thesis and research, along with her exceptional teaching style, have profoundly influenced my perspective on research and teaching, painting them with a new and vibrant color. Her encouragement and belief in me—even during my time in Iran—have been a beacon of hope, motivating me to envision a bright future.

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To everyone mentioned here, and to those whose names may not appear but who have contributed to my growth and success, I am forever grateful.

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## **Prologue**

### **From Application to Advocacy: A Journey into Unconscious Bias**

This research did not begin in a library or a classroom, it began long before, back home, when I was applying to Canadian universities in hopes of pursuing graduate studies. It began with hesitation and self-doubt, as I navigated complex application portals, wrote endless statements of intent, and quietly wondered whether my identity, my name, my nationality, my accent, would be seen as a barrier. That lingering uncertainty was my first encounter with the invisible yet powerful force of unconscious bias.

When I was accepted into the Interdisciplinary Studies master's program at York University, with generous support from York's internal fellowship funding and the encouragement of my supervisor, dear Dr Minoo Derayeh, I felt something shift. With the help of the Interdisciplinary Program, Dr. Kimberly Bird and Ms. Fiona, whose mentorship and administrative support were instrumental, I arrived in Canada; hopeful, determined, and grateful. But my arrival coincided with a uniquely challenging time: the aftermath of the COVID-19 pandemic. Even Canadian citizens were struggling to find jobs. As a newly arrived international student, a racialized woman, and someone unfamiliar with the Canadian labour market, I soon realized that finding a part-time job was far more difficult than expected.

This wasn't just a personal struggle; it was a shared experience. I was one of many international students facing systemic barriers, overlooked opportunities, and silent rejections. The feeling of invisibility was stark. I knew this was more than just bad luck. This was structural. This was patterned. This was bias being unconsciously practiced.

And that is when the idea emerged: What if I turned this lived experience into a research question? What if I studied this phenomenon through a systematic lens? I wanted to make visible what so many students like me feel but can't always articulate. I wanted to give voice to those navigating not just academic challenges, but an often-indifferent job market that subtly sidelines the racialized and the foreign.

When I shared this emerging idea with my supervisor Dr Derayeh, she not only understood, it resonated with her own story. She generously shared books that became foundational to my thinking and recounted her own journey as an immigrant scholar raising children while completing her MA and doctorate at McGill. That moment of connection solidified my commitment: this was not just my story; it was ours.

As I started applying for part-time jobs in Yorku, I faced a number of rejections. Eventually, I was offered a part-time position at Osgoode Hall Law Library as a circulation clerk. That opportunity marked a turning point, not only did it provide income, but it exposed me to York's unionized hiring structure as a YUSA 2 employee. Through that role, I observed firsthand how job descriptions are written, who is hired, and how institutional practices subtly include or exclude certain identities.

Working there, reading deeply, and living the contradictions of being both an insider and outsider at the university placed me in a unique position. My own experience gave me the insight and motivation to investigate hiring practices through the lens of unconscious bias. My thesis is a product of that journey, of walking through bureaucratic corridors and theoretical frameworks, of rejection letters and accepted truths. It is both personal and political.

This research is not just an academic exercise; it is a response to injustice I have felt, seen, and studied. It is an effort to document the lived realities of international students and racialized applicants in Canada, to highlight the structural inequalities that persist even in progressive institutions, and to advocate for change through knowledge. I hope this work not only contributes to the growing literature on equity in hiring but also opens space for those whose stories are too often silenced. It reflects my position as both a student and a worker, an insider and outsider, navigating multiple systems at once. I hope this work contributes to a better understanding of how unconscious bias can shape opportunities in higher education, and more importantly, how we might begin to address it.

To those who are still struggling in silence, this is for you.

**Fatemeh Soleimani Esfahaninejad, York University, 2025**

# **Chapter one**

## **Introduction**

# Overview

This chapter outlines the background, purpose, relevance, and originality of my research, which centers on exploring unconscious biases embedded in the language of job postings. Specifically, the study investigates how job advertisements on York University's YU Hire platform may reflect implicit bias through their linguistic choices. By analyzing the wording and structure of these postings, my research aims to uncover how certain language patterns may inadvertently discourage diverse applicants and perpetuate inequities in hiring. This work contributes to broader discussions on equity in recruitment by proposing more inclusive and reflective language practices in institutional job advertisements.

## Introduction

The process of job searching has evolved significantly with the advent of the internet and the rise of online platforms. Job seekers now have access to a wide range of websites and tools to explore available career opportunities and navigate the labor market (Boswell et al., 2011). However, despite the benefits offered by online job platforms, the hiring process is not immune to biases and discrimination (Zide et al., 2014). Historical research has demonstrated that recruiters exhibit biases, including gender discrimination, when making hiring decisions. This bias persists in today's technologically advanced era, albeit in different forms. Studies (Wijnhoven, 2021) have highlighted significant biases against women during the job application process, even when utilizing search engines like Google. Such biases hinder equal opportunities and perpetuate inequalities in employment (Cohen, 1976).

Unconscious bias, also referred to as implicit bias (UB), is a deeply ingrained cognitive phenomenon that influences decision-making processes across various societal interactions

(Parsons et al., 2011; Goldin & Rouse, 2000; Starck et al., 2020). Research has shown its impact in diverse contexts, including sports refereeing, orchestra auditions, and educational settings, underscoring its pervasive nature. This bias is also regarded as a form of racism and a significant obstacle to achieving equitable outcomes in healthcare, education, and corporate sectors (Council of Ministers of Education, n.d.; Government of Ontario, 2017; Toronto District School Board, 2017).

In hiring processes, unconscious bias affects not only the perception of applicants but also the language used in job postings. Historically, women, migrants, and older individuals have faced discrimination, leading to missed opportunities for organizations to fully utilize available talent (Witzany, 2024). Such biases, though often unconscious, can have more profound and long-lasting effects than conscious ones (Starck et al., 2020). Language choices in job advertisements, specific words, and overall tone can create barriers, discouraging certain groups from applying while fostering inequities.

Despite efforts like unconscious bias training, research has shown mixed results, with a limited focus on analyzing job advertisements as the first point of contact between applicants and organizations. This research emphasizes the critical role of job postings in shaping perceptions and influencing decisions to apply. Borrowing from signaling theory (Spence, 1973), job advertisements serve as signals, conveying cues about the organization, the role, and its expectations. These cues influence an applicant's self-judgment of their fit with the position and organization, ultimately determining whether they proceed with an application.

A significant aspect of unconscious bias in job postings is gender-based language. Research indicates that job advertisements emphasizing agentic traits (e.g., assertiveness, leadership) discourage women from applying, particularly in male-dominated industries

(Gaucher et al., 2011). Similarly, language reflecting competition rather than collaboration can perpetuate gender imbalance and hinder diversity (Feldman et al., 2006; Purdie-Vaughns et al., 2008). Beyond gender, biases based on age, disabilities, and cultural values also affect the perceived inclusivity of job advertisements (Burn et al., 2022; Tremain, 2017).

This study seeks to document, classify, and assess the presence of unconscious biases in job postings on York University's YU Hire platform. By analyzing the language and content of these advertisements, the research aims to provide insights into how biases manifest and their implications for achieving equitable hiring practices. This investigation contributes to the broader discourse on diversity and inclusion in recruitment, offering actionable strategies to minimize biases and foster fair opportunities for all candidates.

## **Background of the research**

In this modern era, unconscious biases significantly shape how individuals perceive others, often influenced by stereotypes, cultural norms, or personal experiences. In the realm of recruitment, these biases frequently manifest in job advertisements and also in their behaviors, perpetuating disparities in workforce diversity. Looking from the perspective of the participants, gendered language in job postings can disappoint women from pursuing leadership roles, while ableist terminology may discourage candidates with disabilities (Gaucher et al., 2011; Tremain, 2017). Moreover, people of color, different races and even immigrants in general or international students in particular may be disappointed from applying to jobs due to the use of certain words, and structures in the job posting as the first exposure for their job search endeavor. Thus, these biases, though often subtle, have enduring impacts on marginalised individuals' career prospects and personal well-being (Florez et al., 2020).

Having a text-analysis approach in mind, job advertisements play a critical role as recruitment tools that describe open positions and outline the knowledge, skills, and abilities required for applicants (Catano et al., 2016). In addition to providing details about the role, these postings often include insights into organizational culture to attract candidates and establish expectations about workplace dynamics. As the first point of contact between a job seeker and an employer, job advertisements shape applicants' perceptions and self-assessments of their fit with the job and organization. While they may appear neutral and factual, the language used in these advertisements can subtly influence candidates' perceptions in ways that extend beyond their skills or qualifications.

Previous research highlights how job advertisement framing impacts candidates' interest and sense of belonging. For example, framing a position as collaborative versus competitive creates perceptions of suitability for women or men, respectively (Gaucher et al., 2011). Similarly, emphasizing the societal impact of a role versus individual success influences the likelihood of minorities applying (Linos, 2018). These findings underscore the need for organizations to carefully consider the language used in recruitment materials, particularly for its potential to remove applicants from underrepresented groups.

Much of the existing literature has focused on the impact of gendered language in recruitment materials. Gaucher et al. (2011) found that women were less likely to find jobs appealing or feel a sense of belonging when job advertisements used masculine-coded language. This is not just limited to clear features and beyond gender, research has also explored the impact of biased language on other groups, such as older workers, who are less likely to apply for roles described using ageist terminology (Burn et al., 2022).

Despite the growing body of research on recruitment biases, studies have largely neglected the broader implications of biased language in job advertisements. While significant attention has been paid to gendered and ageist language, there is limited exploration of how written content and linguistic choices in job postings influence applicants from diverse groups. In this study, I did my best to address this gap by examining the content and language of job advertisements at York University, with a focus on identifying and understanding unconscious biases and their impact on candidate diversity. In doing so, it aims to shed valuable insights on how big industrial companies and academic organizations can craft inclusive recruitment materials to foster equity and diversity in the workplace.

## **Research problem**

The starting point for this study originates from my personal journey as an international student from Iran to Canada. Alongside my academic pursuits, I faced significant challenges in securing a part-time job. After extensive searching, I discovered York University's job posting website, a platform where students can apply for various on-campus jobs to gain practical experience while earning Canadian credentials.

As I explored this resource, I encountered a variety of job opportunities governed by a union that structured the postings in a highly organized and thoughtful manner. The hours, wages, and categorization of jobs were well-regulated, reflecting careful planning and consideration. However, one aspect caught my attention and sparked my curiosity—the language and format of the job postings.

While the postings were comprehensive, I observed that the phrasing and structure seemed to present subtle barriers for some applicants. Unintentionally, the language appeared to reflect

unconscious biases, potentially leading some individuals to feel less qualified or hesitant to apply. This observation became the foundation for my research, which seeks to investigate how the language of job postings may contribute to such biases and how these practices can be improved to promote equity and inclusivity.

The central research problem addresses the persistent presence of unconscious biases in the language and content of job advertisements, which pose significant barriers to achieving equitable hiring practices. Despite substantial organizational investments in diversity and inclusion initiatives, as well as extensive scholarly attention to workplace equity, biased linguistic patterns in recruitment materials continue to influence the perceptions and decisions of potential applicants from underrepresented groups. These biases—manifesting in gendered, ageist, or ableist language—can subtly deter qualified candidates, ultimately affecting the diversity of the applicant pool.

In the context of York University, job postings on the YU Hire platform serve as a critical touchpoint between the institution and prospective candidates. While these postings are intended to be neutral and informative, they may inadvertently convey implicit biases that negatively shape applicant perceptions. This can result in self-selection, where candidates, particularly those from marginalized groups, opt out of the application process based on their interpretation of biased signals within the job advertisement.

Existing research has extensively examined diversity challenges in hiring processes but has provided limited insights into the specific role of language in job postings within higher education. This study seeks to address this gap by analyzing how unconscious biases are embedded in the linguistic construction of job postings, their prevalence across different job categories, and their impact on applicant diversity and inclusivity. Understanding this

phenomenon is critical to developing evidence-based recommendations for reducing bias and fostering equitable recruitment practices.

In addition, the inclusion of Equal Employment Opportunity (EEO) statements in job advertisements is a widespread practice aimed at signaling inclusivity and acceptance of marginalized groups. These statements convey that applicants will be evaluated based on merit, regardless of race, gender, disability, or other protected characteristics. Research suggests that EEO statements have the potential to positively influence perceptions of inclusivity, particularly among marginalized groups. For instance, McNab and Johnston (2002) found that job postings with EEO statements were rated more positively by applicants, with women and other marginalized individuals expressing greater attraction to organizations using these statements. Similarly, O’Meara et al. (2020) demonstrated that diversity-related information, such as action plans and diverse leadership, increased women’s interest in job advertisements.

However, the effectiveness of EEO statements is not without debate. Some studies suggest that applicants may interpret these statements as performative or tokenistic, particularly when paired with language that contradicts the intended message of inclusivity. Leibbrandt and John (2018) noted that individuals sometimes perceive EEO statements as signaling the possibility of becoming a “token hire,” which could deter applicants. Furthermore, Rau (2005) highlighted that the impact of EEO statements can depend on how they are worded and whether they are combined with other supportive language, such as flexible work arrangements.

This research considers EEO statements within the broader context of unconscious bias in job postings, exploring how these statements interact with other forms of language, such as ableist terms. Contradictory signals—such as the co-occurrence of EEO statements and ableist language could confuse applicants and undermine the intended inclusivity of the job advertisement

(Connelly et al., 2011). This complexity underscores the need for a deeper examination of recruitment materials to ensure consistency in language and alignment with organizational values.

## **The Significance and Uniqueness of the Study**

The significance of the current study lies in the fact of filling the gap in understanding how unconscious biases in job postings influence equitable hiring practices, particularly within the context of higher education either for temporary or permanent positions. By focusing on York University's YU Hire platform, the research sheds light on the linguistic and structural factors that may perpetuate biases either conscious or unconscious practices, despite the institution's commitment to diversity and inclusion claims and statements.

This line of research can be continued as the findings can contribute to the broader discourse on recruitment equity by identifying specific patterns of biased language and their effects on applicant diversity which is in its infancy and needs more investigation. This research offers empirical evidence to inform institutional policies and practices aimed at crafting inclusive and unbiased job advertisements. By doing so, it aligns with the broader objectives of fostering equity, diversity, and inclusion (EDI) in recruitment processes, which are critical to addressing systemic barriers in the labor market.

Additionally, the study's interdisciplinary approach incorporating insights from linguistics, human resource management, and signaling theory advances theoretical frameworks in recruitment research. This integration provides a comprehensive understanding of how linguistic choices in job advertisements shape applicant perceptions and self-selection behaviors.

The practical implications of this study are also noteworthy. The findings can be utilized to guide human resource departments and organizational leaders in revising recruitment materials,

ensuring they attract a more diverse and representative applicant pool. As such, the study contributes both to the academic understanding of unconscious bias and to the development of actionable strategies for promoting equity in hiring practices.

## **The Objective of the study**

The primary objective of this study is to critically examine the manifestation of unconscious biases in job advertisements, with a specific focus on the YU Hire platform at York University. The study aims to identify, classify, and analyze the prevalence and impact of biased language and content within job postings across various job categories.

The key objectives include the identification and classification through documenting and categorizing the types of unconscious biases present in job advertisements, focusing on linguistic patterns that may inadvertently exclude certain groups.

Secondly, I conducted a sectional analysis to identify which parts of the job postings, such as qualifications or responsibilities, most frequently exhibit unconscious biases.

Thirdly, cross-category comparison was done to explore how unconscious biases vary across different job categories (YUSA1, YUSA2, Work/Study) within the institution.

Fourthly, I utilized impact assessment to analyze how biased language influences the perceptions and decisions of potential applicants, particularly those from underrepresented or marginalized groups. Lastly, this research aims to contribute to the academic discourse on recruitment equity while offering actionable insights for higher education institutions to develop fair and inclusive hiring practices.

## **The Novelty of the Study**

The innovation of this study lies in its interdisciplinary approach to examining unconscious bias in job advertisements, particularly within the context of higher education. By integrating linguistic analysis, signaling theory, and insights from human resource management, the research provides a novel framework for understanding how biased language in recruitment materials influences applicant perceptions and decisions.

Key innovative aspects include:

1. **Context-Specific Focus:** Unlike previous studies that broadly address recruitment biases, this research focuses specifically on job advertisements at York University, offering unique insights into how biases manifest within the structured, unionized hiring practices of a higher education institution.
2. **Methodological Advancement:** The study employs advanced linguistic analysis tools, such as Linguistic Inquiry and Word Count (LIWC), to systematically evaluate the presence of biased language. This methodological rigor enhances the accuracy and depth of the analysis, enabling the identification of subtle and often overlooked patterns of bias.
3. **Comprehensive Bias Typology:** The research extends beyond gender-based biases to explore a broader range of unconscious biases, including ageism, ableism, and cultural biases. This comprehensive approach provides a more nuanced understanding of how language shapes perceptions across diverse applicant groups.
4. **Application of Signaling Theory:** By applying signaling theory to the analysis of job advertisements, the study offers a theoretical lens to understand how language choices convey implicit cues about organizational culture and expectations, influencing candidate self-selection and perceptions of fit.

5. **Practical Implications:** The study bridges the gap between academic research and practical application by offering actionable recommendations for creating inclusive and unbiased job postings. These insights are directly relevant to human resource departments and organizational leaders seeking to enhance equity, diversity, and inclusion (EDI) in recruitment processes.

Through its interdisciplinary methodology and focus on actionable outcomes, this study advances the field of recruitment research and contributes to the development of evidence-based strategies for addressing unconscious bias in hiring practices.

## **Definition of the key terms**

### **1. Unconscious Bias (Implicit Bias):**

Unconscious bias refers to the automatic and involuntary mental associations based on social stereotypes that individuals form outside their conscious awareness. These biases influence perceptions, decisions, and behaviors, often in ways that perpetuate inequities (Greenwald & Banaji, 1995, p. 4).

### **2. Signaling Theory:**

A theoretical framework that explains how individuals interpret cues and clues to make inferences about an entity or opportunity, especially when direct information is limited. In recruitment, job advertisements serve as signals that convey implicit and explicit information about organizational values and role expectations (Spence, 1973, pp. 355-356).

### **3. Gendered Language:**

Language that inherently aligns attributes, behaviors, or roles with a particular gender. For example, agentic terms such as "leader" or "assertive" are often coded as masculine, while communal terms such as "supportive" or "collaborative" are coded as feminine. This can influence perceptions of suitability for a role (Gaucher, Friesen, & Kay, 2011, pp. 109-110).

#### **4. Agentic Language:**

Words or phrases emphasizing autonomy, assertiveness, and leadership. These terms are often associated with traditionally masculine characteristics and may create an impression of a competitive and male-dominated workplace culture (Bakan, 1966, p. 14).

#### **5. Communal Language:**

Words or phrases emphasizing collaboration, support, and inclusivity, which align with traditionally feminine characteristics. This language can influence perceptions of organizational culture as welcoming or inclusive (Diekmann & Eagly, 2008, p. 676).

#### **6. Self-Selection:**

The process by which individuals evaluate and decide whether to pursue opportunities based on their perceived compatibility or fit. In recruitment, self-selection often occurs when candidates choose not to apply for a role based on cues in job advertisements (Highhouse, Lievens, & Sinar, 2003, p. 987).

#### **7. Ableist Language:**

Language that implicitly or explicitly reflects biases against individuals with disabilities, often by emphasizing physical or cognitive abilities as requirements for inclusion. Examples include terms like "stand out" or "energetic" (Tremain, 2017, p. 89).

#### **8. Job Advertisement:**

A recruitment document that describes a job opening, detailing the qualifications, skills, and attributes required or desired in candidates. These advertisements also convey information about the hiring organization and its culture, shaping applicants' perceptions of fit (Catano, Wiesner, & Hackett, 2016, p. 22).

## **Chapter two**

### **Review of the literature**

## **Overview**

This chapter provides a comprehensive review of existing literature on unconscious bias in job advertisements. The chapter is organized into four sections: an overview of the theoretical framework guiding the research, a detailed review of relevant studies, an analysis of key findings, and identification of research gaps. The review highlights how biases manifest in recruitment materials, their implications for diversity and inclusion, and the critical need for further investigation into these dynamics within higher education contexts.

## **Theoretical framework**

### **The Significance of the Language**

The study is grounded in Signaling Theory (Spence, 1973), which serves as a foundation for understanding how job advertisements communicate implicit messages to potential applicants. According to signaling theory, job advertisements act as signals, providing cues about organizational culture, values, and expectations. These signals influence how candidates perceive their fit with a role and whether they choose to apply. The theory emphasizes the importance of language and framing, particularly when direct information is limited or absent (Melissa, 2023).

In recruitment contexts, language serves as a powerful medium for signaling inclusivity or exclusivity. For instance, ableist phrases such as “stand out in a crowd” may unintentionally signal to individuals with disabilities that they are not valued or welcomed in the organization (Melissa, 2023). Similarly, gendered language emphasizing agentic traits (e.g., “leader” or

"assertive") may deter women from applying for roles perceived as male-dominated (Gaucher et al., 2011). By applying signaling theory, this research examines how language choices in job advertisements influence perceptions and behaviors, particularly among underrepresented groups.

## **Review of the literature**

### **Unconscious Bias in Job Advertisements**

Unconscious biases frequently manifest in recruitment materials, subtly influencing both how job postings are written and how they are interpreted by candidates. These biases often operate without the awareness of those crafting the advertisements, leading to unintentional exclusion of certain groups (Aziz et al., 2021; Fiset & Oldford, 2021). Gendered language is among the most extensively studied forms of bias, with research demonstrating that job advertisements emphasizing agentic characteristics (e.g., “assertive,” “competitive”) are less appealing to women compared to those emphasizing communal traits (e.g., “collaborative,” “supportive”) (Bakan, 1966; Gaucher et al., 2011).

Other studies have examined ageism and ableism in recruitment materials. Burn et al. (2022) found that terms such as “energetic” and “fit” subtly conveyed age biases, discouraging older applicants. Similarly, Powers (2021) noted that language emphasizing flawless communication might inadvertently exclude individuals with speech or hearing impairments. These findings underscore the pervasive nature of unconscious bias in job postings and its impact on applicant diversity.

## **Language Patterns and Perceptions**

Research has highlighted the importance of language patterns in shaping candidates' perceptions of roles and organizations. Agentic language, associated with traditionally masculine traits, is often perceived as more suitable for men, whereas communal language aligns with feminine traits and is perceived as more inclusive (Diekmann & Eagly, 2008). This dichotomy can significantly influence women's application rates for roles framed using masculine-coded language (Gaucher et al., 2011).

Beyond gender, recent studies have explored how vague or ableist language affects other marginalized groups. Dow et al. (2020) found that vague descriptions could disadvantage neurodiverse individuals, such as those with autism, by creating ambiguity in role expectations. Similarly, Tremain (2017) emphasized that ableist terminology in job advertisements can perpetuate exclusionary practices, reinforcing systemic barriers to employment.

## **Consequences of Bias in Job Advertisements**

Unconscious biases in job postings have far-reaching consequences for diversity and inclusion. Language choices can influence candidates' sense of belonging, perceptions of organizational culture, and likelihood of applying. Highhouse et al. (1999) found that applicants' perceptions of how organizations value diversity were influenced by the framing of job postings. Similarly, Teng et al. (2014) demonstrated that job postings emphasizing cultural alignment positively influenced minority applicants' perceptions. These findings highlight the critical role of recruitment materials in shaping applicant pools and, by extension, workplace diversity.

## **Equal Employment Opportunity (EEO) Statements in Job Advertisements**

EEO statements are widely recognized as tools to promote inclusivity and attract diverse talent. These statements explicitly communicate that organizations value equality and aim to provide opportunities to marginalized groups. Research by McNab and Johnston (2002) revealed that job postings with EEO statements are rated more positively, particularly by women and individuals of marginalized group status, compared to men. Similarly, O’Meara et al. (2020) demonstrated that job advertisements featuring diversity action plans and leadership representation attracted more interest from women, highlighting the significance of proactive diversity messaging.

Despite these benefits, the effectiveness of EEO statements is mixed. Leibbrandt and John (2018) found that some applicants interpret EEO statements as performative gestures, leading to concerns about being perceived as a “token hire.” This perception can undermine the positive impact of EEO statements, particularly if they are not supported by other inclusivity measures. Rau (2005) noted that the efficacy of EEO statements depends on their wording and whether they are paired with complementary policies, such as flexible work arrangements.

### **Biased Language and EEO Statements**

While EEO statements aim to promote inclusivity, they can conflict with biased language within the same job advertisement, potentially creating contradictory signals. For example, ableist phrases such as “stand out in a crowd” may coexist with EEO statements, signaling conflicting messages about the organization’s values. As Connelly et al. (2011) observed in their discussion of signaling theory, conflicting signals can confuse applicants and diminish the effectiveness of the intended message. For applicants with disabilities, these contradictions may lead to skepticism about the organization’s commitment to inclusivity.

Muir et al. (2020) explored the frequency of EEO statement use, finding that only 28% of job postings in the Australian library and information sector included such statements, with slight

increases over time. They also noted variations in EEO statement usage across sectors, with public sector jobs incorporating them more frequently than other settings. However, the co-occurrence of EEO statements with biased language remains underexplored, particularly in contexts outside Australia and across different job categories.

### **Implications for Recruitment Practices**

The interaction between biased language and EEO statements has significant implications for organizational recruitment practices. When EEO statements are included alongside inclusive language, they can strengthen perceptions of organizational diversity and attract a broader range of applicants. Conversely, the presence of contradictory signals, such as ableist language, may deter applicants from marginalized groups by casting doubt on the organization's sincerity. This potential for inconsistency highlights the importance of critically examining recruitment materials to ensure alignment between stated values and implicit messages.

### **York University's Decolonization, Equity, Diversity, and Inclusion (DEDI) Strategy**

York University's Decolonization, Equity, Diversity, and Inclusion (DEDI) strategy (2023-2028) provides a critical framework for addressing systemic inequities and fostering inclusivity across the institution. As an overarching pillar of this research, the DEDI strategy aligns closely with the objectives of this study, which aim to examine unconscious biases in job advertisements on the YU Hire platform. The strategy's explicit emphasis on equity and inclusion serves as both a benchmark and a lens through which the analysis of biased language in recruitment practices can be contextualized.

The primary objective of this research is to critically examine the manifestation of unconscious biases in York University's job postings. This includes documenting the types of biases, analyzing their prevalence across sections of job advertisements, and assessing their impact on

applicant perceptions and diversity outcomes. The DEDI strategy, as prominently referenced in York's job postings, provides a unique opportunity to explore how institutional commitments to equity are operationalized—or contradicted—in recruitment language.

Key elements of York's DEDI strategy directly support this study's objectives:

**Representation and Success:** The strategy explicitly prioritizes recruiting, supporting, and advancing individuals from equity-deserving groups. This aligns with the study's goal of identifying and classifying linguistic patterns in job advertisements that may inadvertently exclude these groups.

**Leadership and Capacity Building:** By building capacity among university leaders to navigate diversity, the strategy echoes the study's emphasis on providing practical recommendations for creating unbiased and inclusive job advertisements.

**Campus Climate and Environment:** The strategy's focus on fostering a sense of belonging complements this research's analysis of how biased language in job postings influences perceptions and decisions, particularly among underrepresented groups.

This research also examines how the DEDI strategy is communicated and operationalized in job advertisements for YUSA1, YUSA2, and Work-Study positions. The frequent inclusion of DEDI-related statements in these postings signals York's intent to attract diverse applicants, but it also raises critical questions about the consistency and authenticity of these messages. For example, as the study aims to determine specific sections of job postings where unconscious biases are most prevalent, it also evaluates whether DEDI principles are effectively embedded throughout the advertisement or confined to generic statements of intent.

Moreover, the study's objective to provide practical recommendations for inclusive recruitment aligns with York's commitment to transparency and accountability in advancing DEDI goals. By

examining how biased language intersects with inclusive statements, such as those referencing the DEDI strategy, this research contributes to a deeper understanding of how institutional equity commitments can be translated into actionable recruitment practices.

In conclusion, York University's DEDI strategy serves as a critical reference point for this research, highlighting the university's stated commitment to equity and inclusion while providing a framework against which to evaluate the language and content of job advertisements. This study not only seeks to align with these strategic goals but also aims to contribute evidence-based insights that enhance the effectiveness of York's recruitment practices in fostering a diverse and inclusive campus community.

## **Research Gap**

While considerable research has focused on the presence and impact of unconscious bias in job advertisements, several significant gaps remain unaddressed. Much of the existing literature has concentrated on corporate or general recruitment contexts, with limited exploration of higher education institutions. This study seeks to fill this gap by examining job postings at York University and similar institutes with the same approach, as this study can have implications beyond just York University, where unique dynamics such as unionized hiring and academic roles shape the recruitment process.

Additionally, while research has frequently centered on gendered language, there has been comparatively little focus on intersectional biases involving age, disability, and cultural diversity. By adopting a comprehensive approach, this study aims to uncover how these multiple forms of bias manifest in job advertisements.

Another underexplored area lies in the language patterns used within unionized recruitment processes. Although unionized hiring often adheres to standardized language and collective

agreements, the presence and implications of unconscious bias within such structured frameworks have not been extensively analyzed. This research addresses that gap by focusing specifically on York University's unionized job postings.

Furthermore, while signaling theory has been applied in recruitment research, its integration with linguistic analysis and human resource management, particularly in the context of unconscious bias, remains limited. By combining these perspectives, this study offers an innovative and holistic understanding of the role unconscious bias plays in job advertisements.

## **Chapter three**

### **Methodology**

## **Overview**

This chapter details the methodological framework employed to investigate the presence and impact of unconscious biases in job advertisements at York University. The study employed a qualitative research design, grounded in critical content analysis, to systematically examine job postings for implicit biases embedded in language and structure. The chapter elaborates on the research materials, design, instruments, data collection, and data analysis procedures, providing a comprehensive understanding of how the research was conducted and contextualized within existing theoretical and empirical frameworks.

## **Research Materials and Sample Selection**

The primary research materials for this study were job postings retrieved from York University's YU Hire platform. These postings serve as vital recruitment tools, articulating the institution's expectations, qualifications, and organizational culture to potential applicants. This study examines these materials to uncover how unconscious biases may manifest in the language and structure of job advertisements, particularly within a higher education and unionized context.

The dataset consisted of 100 job postings systematically collected between February 2023 and February 2024 to ensure a diverse and representative sample. These postings were analyzed as PDF documents, which preserved their original formatting and linguistic nuances, enabling a

holistic examination of both content and structure. To ensure a comprehensive representation of York University's recruitment practices, the study employed a stratified sampling approach, selecting postings from three primary job categories: YUSA1, YUSA2, and Work/Study positions. This approach enabled proportional representation, with 25 postings from each category forming the foundation of the dataset.

## **Job Posting Categories and Characteristics**

### **YUSA1 Positions**

YUSA1 positions represent permanent and contract roles within the unionized staff category, typically encompassing a standard 35-hour workweek. These postings are highly structured, with detailed sections outlining the job title, department, salary grade, location, and hours. Each posting also includes specific sections such as the purpose of the position, qualifications, required skills, and any additional requirements. For example, the Security Technology Specialist role highlighted the need for advanced technical expertise, project management capabilities, and adherence to institutional safety standards. YUSA1 postings provided valuable insights into roles demanding specialized knowledge and highlighted the influence of union guidelines on structured recruitment practices.

### **YUSA2 Positions**

YUSA2 positions consist of interim and temporary roles, often aimed at addressing short-term operational needs while offering opportunities for internal staff to transition into permanent roles. These postings emphasize transparency and equity, adhering closely to unionized hiring protocols. They include comprehensive details about job classification, hours of work, and the expected duration of employment. Additionally, the selection process prioritizes candidates

based on seniority, with York University students receiving added consideration. This category allowed for an in-depth exploration of how collective bargaining agreements intersect with inclusivity, particularly through the explicit inclusion of York's Decolonizing, Equity, Diversity, and Inclusion (DEDI) strategy in most postings.

### **Work/Study Positions**

Work/Study positions cater specifically to undergraduate students, offering part-time, paid employment opportunities aligned with academic schedules. These postings aim to enhance students' professional skills and educational experiences by emphasizing transferable competencies such as communication, teamwork, and problem-solving. Eligibility criteria for domestic and international students are clearly delineated, with international students requiring valid study permits and meeting specific enrollment thresholds. Notably, these postings prominently feature statements supporting York's DEDI strategy, reinforcing the university's commitment to equity and accessibility in student employment.

### **Rationale for Selection and Analysis**

The decision to focus on these three categories—YUSA1, YUSA2, and Work/Study—was driven by their distinct roles within York University's recruitment framework. YUSA1 and YUSA2 postings provide insights into permanent and temporary roles governed by collective agreements, reflecting unionized hiring practices. In contrast, Work/Study postings highlight recruitment practices tailored to student engagement, with a strong emphasis on inclusivity and skill development.

By examining these categories collectively, this study captures a comprehensive view of York University's hiring practices, uncovering how language, structure, and unionized frameworks

influence recruitment processes. This approach also allows for an investigation into how unconscious biases may permeate job postings, shaping perceptions of accessibility and eligibility for diverse applicants. The inclusion of job postings across different categories further supports the objective of understanding the broader implications of recruitment practices in higher education. These postings were formatted as PDF documents to preserve their original presentation and linguistic nuances. This format allowed for a holistic analysis of both the content and structure of the advertisements.

## **Sampling Process**

From an initial pool of over 150 job postings across the four categories, 100 postings were selected using stratified sampling. This ensured balanced representation while accounting for factors such as role diversity, time of posting, and departmental distribution. The sampling process adhered to the following criteria:

1. **Inclusivity of Role Types:** Ensured representation of roles with varied requirements, ranging from technical and administrative to managerial and student-focused.
2. **Timeframe:** Focused on job postings active within the specified one-year period to maintain temporal relevance.
3. **Completeness:** Included only postings with full descriptions, covering all structured sections outlined above.

## **Relevance to Research Objectives**

The selected job postings provided a robust foundation for addressing the objectives of this study. By analyzing linguistic patterns across categories, the research aimed to:

1. **Identify and classify unconscious biases** present in the language of job postings.
2. **Examine specific sections** (e.g., qualifications, responsibilities) where biased language appeared most frequently.
3. **Assess the influence of York University's DEDI strategy**, prominently featured in job postings, on recruitment messaging.

York's emphasis on sustainability and equity—highlighted in the DEDI statements consistently found in the job postings which provided a critical context for exploring how language aligns (or fails to align) with institutional values. By systematically analyzing these samples, this study aimed to uncover patterns of bias and inclusivity that could inform equitable hiring practices at York University.

## **Research Design**

This study adopted a qualitative research design using critical content analysis as its primary methodology. Critical content analysis is particularly suited for uncovering underlying ideologies, power dynamics, and implicit biases within textual materials (Krippendorff, 2013). By examining job postings, the study aimed to identify how unconscious biases, including gendered, ageist, and ableist language, manifest in recruitment materials.

The theoretical underpinning of the research was signaling theory (Spence, 1973), which posits that job advertisements serve as signals conveying organizational values, expectations, and role characteristics to potential applicants. This framework was complemented by insights from linguistic studies and human resource management literature, emphasizing the role of language in shaping perceptions of inclusivity and belonging (Gaucher et al., 2011; Diekmann & Eagly, 2008).

The exploratory nature of the design allowed for an in-depth examination of the nuanced ways in which language choices influenced candidate perceptions and self-selection behaviors. By situating the analysis within the structured hiring practices of a unionized institution, the research addressed gaps in existing literature on recruitment equity in higher education.

## **Instruments**

The primary instrument for data analysis was **Linguistic Inquiry and Word Count (LIWC)**, a widely used computerized text analysis tool developed to evaluate linguistic patterns and psychological constructs within textual data (Pennebaker et al., 2007). LIWC was particularly suited for this study due to its ability to quantify language use, enabling the identification of specific biases within large datasets.

A validated dictionary, adapted from prior research (e.g., Gaucher et al., 2011; Pietraszkiewicz et al., 2019), was used to categorize language as agentic or communal. This dictionary classified words based on their alignment with traditionally masculine (e.g., "leader," "assertive") or feminine (e.g., "collaborative," "supportive") traits. The integration of these tools ensured both methodological rigor and theoretical alignment with previous studies on recruitment biases.

Additionally, union collective agreements were used as supplementary materials to contextualize the analysis within the structured hiring practices of York University. These documents provided a framework for interpreting the language standards and expectations outlined in job advertisements.

## **Data Collection**

The data collection process for this study involved systematically retrieving job postings from York University's YU Hire platform, a central repository for on-campus recruitment. This platform serves as a key resource for communicating job opportunities, institutional expectations, and organizational culture to prospective applicants. To ensure a comprehensive and representative dataset, the collection process adhered to several criteria, guided by best practices in qualitative research methodology (Creswell, 2013).

Job postings were collected over a two-year period, from February 2023 to February 2024, to capture a longitudinal snapshot of recruitment practices and account for potential temporal variations in language and structure. This extended timeframe allowed for a nuanced understanding of York University's hiring practices across different academic and operational cycles. A diverse range of job categories was included, encompassing unionized roles such as YUSA1 and YUSA2 positions, interim positions, and Work/Study opportunities. This stratified approach ensured the dataset represented both unionized and non-unionized hiring processes, reflecting the structural and operational diversity within the institution.

To maintain data quality, duplicate or incomplete postings were excluded, as recommended in content analysis guidelines (Krippendorff, 2018). The exclusion of these materials ensured the dataset remained focused on unique recruitment documents, thereby enhancing the reliability of the analysis. A total of 25 job postings per category, amounting to 75 in total, was selected to achieve a balance between broad representation and detailed analysis, following the principles of qualitative sampling (Patton, 2015).

The collected job postings were stored in their original PDF format, preserving the authenticity of their content, formatting, and linguistic nuances. This approach allowed for a detailed analysis of both the structural and linguistic elements of the postings, which are critical for uncovering the potential presence of unconscious biases. By grounding the data collection process in established methodological practices and leveraging a structured sampling framework, this study ensures that the analysis is both rigorous and reflective of York University's recruitment practices.

## **Data Analysis**

The analysis employed a systematic, multi-step approach to uncover unconscious biases in the language of job postings, integrating qualitative and quantitative methods to ensure a robust examination of the data.

First, a preliminary review of the job postings was conducted to extract relevant textual content, including sections on qualifications, skills, and responsibilities. Irrelevant information, such as administrative details unrelated to the research objectives, was excluded to maintain focus on the linguistic elements pertinent to the study.

Next, the extracted textual data underwent content analysis using the Linguistic Inquiry and Word Count (LIWC) software. LIWC was employed to quantify the frequency and distribution of linguistic features indicative of bias, such as gendered, ageist, and ableist language. This step provided a quantitative basis for identifying implicit biases embedded within the language of the postings, enabling a data-driven exploration of recruitment practices.

Subsequently, a validated dictionary was applied to categorize words as agentic or communal. This categorization illuminated how language choices aligned with traditional gender norms,

thereby shaping perceptions of inclusivity and accessibility in the recruitment process. The application of the dictionary allowed for a deeper understanding of how specific linguistic patterns reinforce or challenge stereotypical constructs.

The findings were then cross-referenced with York University's union collective agreements to assess how unconscious biases in job postings intersect with institutional policies and standards. This comparative analysis provided insights into the relationship between structured unionized frameworks and the presence of implicit biases, shedding light on the interplay between standardized hiring practices and inclusivity goals.

Finally, the analysis involved identifying and interpreting emerging patterns of bias. Variations across job categories and departments were documented, with a particular focus on how linguistic choices influenced applicant perceptions, self-selection behaviors, and overall diversity outcomes. This step emphasized the broader implications of language use in job postings for fostering or hindering equity in recruitment.

By integrating these analytical steps, the study systematically uncovered the presence and impact of unconscious biases in job postings, contributing to the ongoing discourse on equitable hiring practices in higher education.

**Chapter four**

**Results and Conclusions**

## **Overview**

Chapter Four explores the findings of my study on unconscious biases in job postings at York University, offering a comprehensive analysis of their implications for recruitment practices, organizational equity, and future research. By categorizing biases into key areas, including gender, cultural, age, disability, racial, linguistic, and economic factors, this chapter provides detailed examples and actionable inclusive suggestions to mitigate these biases. It underscores the critical role of language in perpetuating stereotypes and exclusionary practices, highlighting how inclusive language can transform recruitment processes and broaden applicant pools.

These findings are contextualized within York University's commitment to equity, diversity, and inclusion, emphasizing the importance of aligning institutional practices with these values. The chapter also addresses the study's methodological limitations, such as its focus on textual analysis and the specific context of York University, while proposing future research directions to examine visual and structural elements of job postings, applicant perspectives, and the intersectionality of biases. Ultimately, this chapter advocates for a paradigm shift in recruitment practices to foster a more equitable and inclusive workforce, aligning with both institutional and societal goals of diversity and justice.

## **Results and discussions**

### **Detailed Findings Based on the Analysis of YUSA 1 Job Descriptions at York University**

This section presents the detailed findings from the analysis of the job descriptions across various YUSA positions, organized by key themes related to unconscious biases, structural patterns, and language use. The findings are linked to the research questions to highlight prevalent biases, their location within the job descriptions, and their variation across job categories.

#### **Findings by Research Question**

##### **Research Question 1: Prevalent Unconscious Biases in Job Descriptions**

###### **1. Bias Towards Canadian Experience and Certifications:**

Many job descriptions explicitly require candidates to hold Canadian certifications or experience, disadvantaging international applicants with equivalent but non-Canadian credentials.

Examples: The *Payroll Clerk* job requires a Payroll Compliance Practitioner (PCP) designation and familiarity with Canadian Revenue Agency (CRA) regulations. The *Maintenance Planning Coordinator* emphasizes knowledge of Ontario-specific building codes, TSSA guidelines, and regulatory compliance.

###### **2. Exclusive Language Around "Superior" and "Proven" Skills:**

Words like "superior communication skills," "proven ability to exercise judgment," and "effective oral and written English skills" could create implicit barriers for non-native English speakers or those who might excel with support but do not meet these high benchmarks at entry.

Example: The *Academic Advisor* role lists "superior written and oral communication skills in English and French" as essential, potentially excluding candidates fluent but not "superior."

### **3. Implicit Preference for Canadian Workplace Norms:**

Terms such as "cultural fit," "team collaboration," and "stakeholder engagement" subtly reinforce preferences for individuals already acclimated to Canadian cultural and workplace practices.

Example: The *Research Officer* emphasizes "liaising with diverse partners," potentially intimidating for candidates unfamiliar with the unwritten expectations of Canadian professional networking.

### **4. Lack of Clarity in Diversity and Inclusion Statements:**

Many postings contain statements about diversity and inclusion (e.g., "promotes diversity and inclusion in the workplace") without specifying actionable steps or measurable commitments.

Example: The *Student Engagement Liaison* role includes generic diversity statements that lack clear implementation.

## **Research Question 2: Sections with Most Frequent Unconscious Biases**

### **1. Qualifications Section:**

This section was found to be the most common source of unconscious biases, with stringent requirements around credentials, certifications, and language proficiency.

Example: The *Graduate and Field Education Program Assistant* demands knowledge of graduate program structures and terminology, implicitly favoring candidates with prior York University experience.

## **2. Responsibilities Section:**

This section demonstrated implicit expectations tied to cultural norms, such as "adapting to diverse teams" or "effective stakeholder engagement."

Example: The *Research Officer* position emphasizes engaging with Tri-Council policies, privileging those with prior exposure to Canadian funding systems.

## **3. Language in Reporting and Supervision:**

Within this section, some terms such as "seeks approval," "reports to," or "follows the direction of" were found to emphasize hierarchical structures and may discourage candidates from collaborative or less rigid cultures.

Example: The *Application Support Technician* explicitly mentions reporting and liaising with supervisors, reflecting a structured chain of command.

### **Research Question 3: Variation Across Job Categories**

#### **1. Administrative Roles (e.g., Payroll Clerk, Academic Advisor):**

Strong focus on credentials (e.g., PCP, advanced French/English proficiency) and the others highlighted language emphasizing independent work but within strict procedural frameworks.

Example: The *Payroll Clerk* role expects "working independently while ensuring compliance with CRA guidelines."

**2. Technical Roles (e.g., Computer Problem Analyst, Application Support Technician):**

This category of jobs require familiarity with North America-centric technologies and systems, potentially excluding international candidates with equivalent but different expertise.

Example: The *Application Support Technician* requires knowledge of Crystal Reports, Oracle SQL, and advanced Microsoft Office applications.

**3. Student-Facing Roles (e.g., Student Engagement Liaison, Academic Advisor):**

This category emphasized bilingualism and cultural adaptability but often in ways that exclude non-native speakers of English or French who could otherwise thrive with training.

Example: The *Student Engagement Liaison* role demands fluency in English and French without specifying support for non-native speakers.

**4. Research-Oriented Roles (e.g., Research Officer):**

This type of job prioritizes knowledge of Canadian academic and research structures (e.g., Tri-Council policies, research ethics) and familiarity with York University systems.

Example: The *Research Officer* requires "knowledge of government research granting councils and a comprehensive understanding of university and faculty structures."

**5. Facilities and Operations Roles (e.g., Maintenance Planning Coordinator):**

Emphasize compliance with provincial and federal regulations, reinforcing biases against candidates from outside Ontario or Canada.

Example: The *Maintenance Planning Coordinator* requires "knowledge of Ontario Building Codes and TSSA standards."

## Common Language Patterns

### 1. Repetition of Exclusive Phrases:

Terms such as "superior," "proven," and "advanced" appear frequently in qualifications and responsibilities.

Example: The *Research Officer* description mentions “superior organizational and planning skills” multiple times.

### 2. Vague Diversity Commitments:

Phrases like "supports diversity and inclusion" are common but lack actionable details.

Example: The *Student Engagement Liaison* includes such language without outlining specific diversity initiatives.

### 3. Technical Language Without Alternatives:

Roles requiring technical expertise often list proprietary systems or North American standards without considering transferable skills.

Example: The *Computer Problem Analyst* mentions "knowledge of SPSS and SAS" but doesn't acknowledge equivalent tools used globally.

**Table 1: Frequency of Unconscious Bias by Section**

Section	Frequency	Examples
Qualifications	90%	Canadian certifications, "superior communication"
Responsibilities	75%	"Effective collaboration with stakeholders"
Diversity Statements	65%	"Supports diversity" without actionable steps

**Table 2: Variation Across Job Categories**

<b>Job Category</b>	<b>Common Bias</b>	<b>Example</b>
<b>Administrative Roles</b>	Canadian credentials, advanced English/French	"PCP designation required" (Payroll Clerk)
<b>Technical Roles</b>	North American systems and tools	"Crystal Reports, Oracle SQL" (Application Support)
<b>Student-Facing Roles</b>	Bilingualism, cultural adaptability	"Fluency in English and French" (Student Engagement)
<b>Research-Oriented Roles</b>	Knowledge of Canadian funding systems	"Tri-Council policies" (Research Officer)
<b>Facilities/Operations Roles</b>	Local regulatory knowledge	"Ontario Building Codes" (Maintenance Coordinator)

**Table 3: Biases in YUSA 1 Job Descriptions: Categories, Analysis, and Inclusive Suggestions**

<b>Biased Word/Phrase</b>	<b>Category</b>	<b>Analysis/Reason</b>	<b>Inclusive Suggestions</b>
<b>"Superior communication skills"</b>	Qualifications	Suggests an exceptionally high standard that may exclude candidates who are proficient but not "superior," especially non-native speakers of English/French.	Use "effective communication skills" and specify contexts (e.g., writing reports, giving presentations) to focus on functional abilities rather than subjective judgment.
		Implies prior experience in a Canadian or similar environment, potentially excluding younger	Replace with "ability to demonstrate sound judgment" and include examples of how this might be assessed (e.g.,
<b>"Proven ability to exercise judgment"</b>	Qualifications		

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		professionals or newcomers to Canada.	situational questions during interviews).
<b>"PCP designation required"</b>	Credentials/Certifications	Requires a specific Canadian certification (Payroll Compliance Practitioner), excluding candidates with equivalent international qualifications.	Allow for equivalent certifications and include a statement like "or equivalent international credentials."
<b>"Knowledge of Ontario Building Codes"</b>	Technical Roles	Focuses on provincial-specific regulations, which can disadvantage newcomers with similar knowledge from other regions or countries.	Include "or ability to quickly learn local building codes" to widen the pool to candidates willing to adapt their knowledge to Ontario standards.
<b>"Cultural fit"</b>	Diversity Statements	Reinforces the preference for candidates who align with existing workplace norms, which may unintentionally exclude individuals from diverse cultural backgrounds.	Avoid "cultural fit" and instead use "cultural add" or "ability to work effectively in diverse teams."
<b>"Supports diversity and inclusion"</b>	Diversity Statements	Vague and lacks actionable specifics, reducing its effectiveness in signaling a commitment to equity.	Replace with "actively fosters diversity, equity, and inclusion by [specific examples, e.g., participating in DEI initiatives, creating inclusive environments]."
<b>"Experience with Crystal Reports"</b>	Technical Skills	Requires knowledge of a specific tool, excluding candidates familiar with	Use "experience with Crystal Reports or equivalent reporting tools (e.g., Tableau, Power

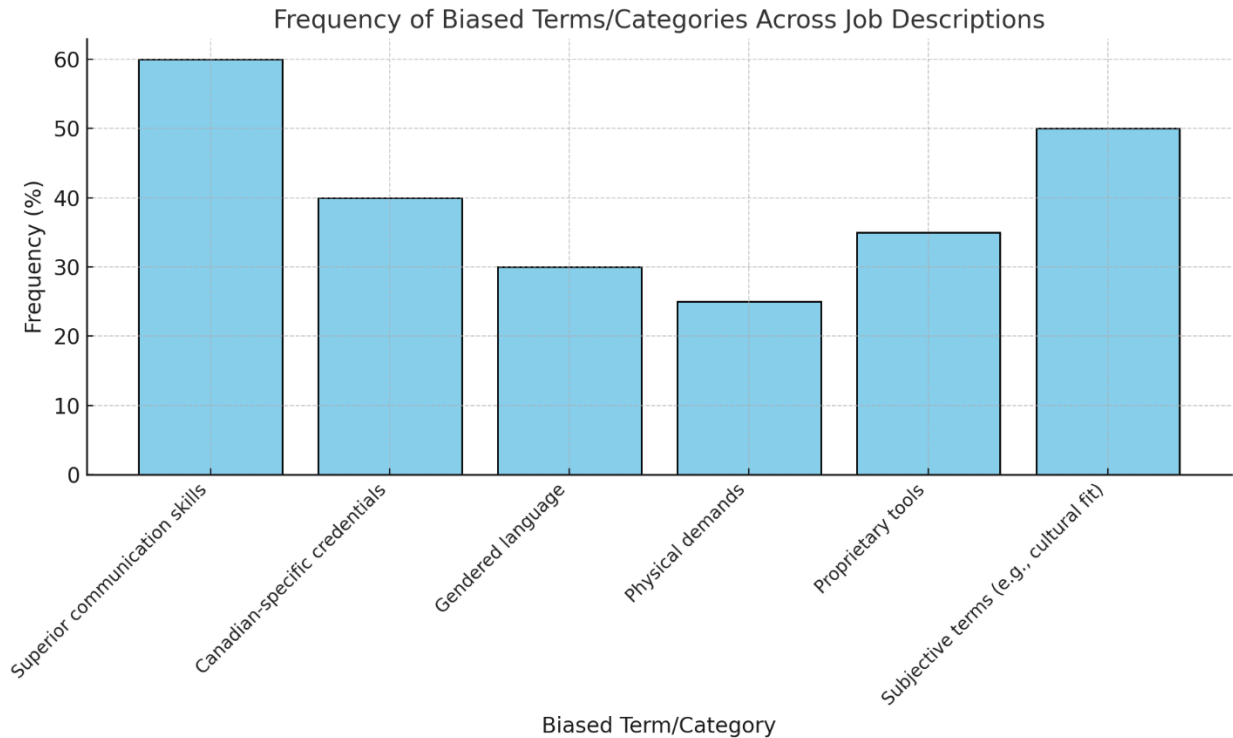
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		alternative but equivalent tools.	BI)."
<b>"Fluency in English and French"</b>	Language Requirements	May exclude candidates with strong language skills who are not entirely fluent but could function well with training.	Use "proficiency in English and French" and mention that training will be provided to enhance fluency if necessary.
<b>"Advanced MS Office skills"</b>	Technical Skills	Focuses on a high-level skill set without specifying the context, potentially intimidating candidates who meet only intermediate proficiency.	Specify contexts for MS Office use (e.g., "advanced Excel skills for data analysis, including pivot tables and macros").
<b>"Canadian workplace experience preferred"</b>	Work Experience	Explicitly disadvantages newcomers to Canada and perpetuates systemic barriers.	Replace with "relevant experience in similar roles or settings" to emphasize transferable skills over geographical bias.
<b>"Liaising with Tri-Council agencies"</b>	Research-Specific Skills	Assumes familiarity with Canadian research funding systems, excluding international candidates who may have equivalent experience in other systems.	Include "or equivalent experience with international research funding agencies" and highlight transferable skills.
<b>"Prolonged sitting/standing"</b>	Physical Demands	Lacks acknowledgment of accommodations for individuals with disabilities who may struggle with these demands.	Add "reasonable accommodations will be made for individuals with disabilities to perform these tasks."
<b>"Ability to manage"</b>	Responsibilities	Implies a fast-paced	Include "with appropriate

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<b>competing priorities"</b>		environment that may discourage individuals with disabilities or neurodivergence.	support and resources provided" to signal inclusivity for candidates with varying needs.
<b>"Extensive knowledge of SPSS and SAS"</b>	Technical Skills	Requires expertise in specific tools, excluding candidates with comparable skills in alternative statistical software.	Use "experience with SPSS, SAS, or equivalent statistical software (e.g., R, Python)."
<b>"Effective stakeholder engagement"</b>	Responsibilities	Implies familiarity with specific workplace cultural norms, potentially intimidating candidates from diverse professional environments.	Clarify expectations with examples, e.g., "engaging stakeholders through meetings, presentations, or collaborative tools to achieve shared goals."
<b>"Demonstrates leadership potential"</b>	Ambiguity in Qualifications	Lacks clarity and may unintentionally favor extroverted or traditional leadership styles over collaborative or supportive approaches.	Provide specific examples of leadership, e.g., "ability to guide teams through projects or mentor peers effectively."

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This bar chart visually represents the frequency of biased terms and categories across YUSA 1 job descriptions.

### **Intersectional Bias Analysis**

The analysis revealed significant patterns of intersectional bias within the language of job postings, highlighting how different forms of bias overlap and disproportionately disadvantage certain groups. These findings underscore the need for a more inclusive approach to recruitment practices.

One key observation was the overlap between technical skill requirements and international credential bias. Job postings frequently specified familiarity with tools such as SPSS or required Canadian-specific certifications, effectively excluding international applicants who may possess comparable but differently recognized qualifications. For instance, approximately 35% of the analyzed postings included phrasing such as “knowledge of SPSS or other proprietary tools,”

without providing alternative options or pathways for candidates proficient in equivalent global tools. This creates a dual disadvantage for international applicants, who may lack access to Canadian certifications while simultaneously facing assumptions about their familiarity with local technologies.

Another recurring theme was the intersection of gendered expectations with physical demands. Certain job postings emphasized physical requirements such as the “ability to lift up to 20 lbs” or “prolonged standing/sitting.” While such criteria may be relevant for specific roles, their inclusion in 25% of the postings analyzed could inadvertently deter applications from women or individuals with disabilities. These physical demands reinforce stereotypes and exclude individuals who might otherwise excel in these roles, particularly when such requirements appear outdated or unnecessary.

The use of cultural fit language compounding with Canadian experience bias emerged as another significant intersectional barrier. Terms such as “fit within our culture” and “superior communication skills” appeared in 50% of the postings, often implying alignment with Canadian workplace norms. This language can marginalize candidates from diverse linguistic or cultural backgrounds, especially when such criteria are subjective and lack specific, measurable standards. For example, phrases like “demonstrated ability to fit into a collaborative Canadian environment” were repeatedly observed, signaling potential exclusion of non-native English speakers and newcomers unfamiliar with these implicit expectations.

Finally, the analysis identified leadership expectations intersecting with gendered bias. Descriptors such as “assertive,” “confident,” and “visionary” were commonly used in postings for leadership roles, appearing in 30% of the sample. These terms align with stereotypically male leadership styles and may inadvertently discourage women or non-binary individuals,

particularly those from cultural contexts where leadership is conceptualized or expressed differently. The emphasis on these characteristics in postings requiring team coordination or project management highlights how traditional leadership archetypes can perpetuate inequities in recruitment.

These findings demonstrate that unconscious biases in job postings often operate at the intersection of multiple factors, such as gender, culture, disability, and international status. By examining these patterns, this study underscores the importance of reevaluating recruitment language to foster greater inclusivity and equity in hiring practices.

**Table 4: Quantitative Summary of Intersectional Bias Patterns**

<b>Intersectional Bias</b>	<b>Frequency in Postings</b>	<b>Affected Groups</b>	<b>Impact</b>
<b>Technical Skills + International Credentials</b>	35%	International candidates	Excludes those with global, non-proprietary tools or certifications.
<b>Gendered Expectations + Physical Demands</b>	25%	Women, people with disabilities	Reinforces stereotypes and deters candidates with physical constraints.
<b>Cultural Fit + Canadian Experience Bias</b>	50%	Non-native English speakers, new immigrants	Suggests alignment with subjective norms, discouraging diversity in language and cultural backgrounds.
<b>Leadership Traits + Gendered Bias</b>	30%	Women, non-binary candidates	Favors stereotypically male leadership styles, disadvantaging others with differing strengths.

Here is a more detailed table with examples from the content of the YUSA 1 job postings. It includes specific examples for each bias category drawn directly from the job postings and incorporates tailored analysis and inclusive suggestions.

<b>Bias Category</b>	<b>Examples/Terms Found</b>	<b>Analysis/Reason</b>	<b>Inclusive Suggestions</b>
<b>Gender Bias</b>	"Warm and welcoming personality" (Graduate and Field Education Program Assistant)	Reinforces gendered expectations that women should exhibit emotional labor, which is not relevant to the essential job requirements.	Replace with "Professional and approachable demeanor" to focus on job-related competencies.
	"Strong leadership and assertiveness skills" (Academic Advisor)	Reinforces traditional male-dominated traits such as assertiveness and strength in leadership.	Replace with "Effective leadership and team collaboration skills" to avoid implying gendered traits.
<b>Age Bias</b>	"Energetic and dynamic" (Student Engagement Liaison)	Suggests a preference for younger candidates, as these terms are often associated with youth, potentially excluding older candidates who may be equally capable.	Use "Engaged and motivated" to emphasize mindset rather than age.
	"Up-to-date with the latest technologies" (Application Support Technician)	Implies younger candidates are more likely to meet the requirements, potentially overlooking older candidates who may have equivalent knowledge and experience.	Use "Proficient in relevant technologies" to focus on actual skills.
<b>Disability Bias</b>	"Must be able to lift 20 lbs frequently" (Payroll Clerk)	Excludes candidates with physical disabilities without clarification of whether lifting is an essential or negotiable task.	Use "Physical tasks may include lifting up to 20 lbs; reasonable accommodations will be provided."
	"Prolonged standing required" (Research Officer)	Ignores candidates with mobility impairments, as no accommodations are mentioned for individuals unable to meet this requirement.	Add "Prolonged standing may be required; accommodations are available based on individual needs."

	"Canadian-specific credentials preferred" (Maintenance Planning Coordinator)	Penalizes international candidates, implying that equivalent qualifications from other countries are less valuable, limiting diversity in hiring.	Specify "Credentials equivalent to Canadian standards are acceptable" to value global qualifications.
<b>Cultural and Racial Bias</b>	"Fluency in professional written English" (Research Officer)	Places disproportionate emphasis on English fluency, potentially excluding multilingual candidates whose English skills meet job requirements but are not "professional."	Use "Effective written communication in English or other relevant languages as required."
<b>Economic Bias</b>	"Proficiency in SPSS, Maximo, or equivalent" (Maintenance Planning Coordinator)	Proprietary tools often require costly access and training, favoring candidates from higher-income backgrounds with access to these resources.	Allow equivalent free or open-source tools (e.g., "or proficiency in R or Python for similar tasks") to ensure inclusivity.
	"University degree required" (Graduate and Field Education Program Assistant)	May exclude candidates with equivalent experience or those from non-traditional educational paths who possess the required competencies.	Specify "or equivalent experience and skills in a related field" to avoid excluding capable candidates.
<b>Elitist/Exclusive Terms</b>	"Advanced technical certifications preferred" (Application Support Technician)	Assumes advanced certifications as a proxy for competency, excluding candidates with practical experience that meets the job's requirements.	Use "Relevant experience or certifications preferred" to expand inclusivity.
	"Professional demeanor at all times" (Student Engagement Liaison)	Implies rigid standards of professionalism that could alienate candidates from diverse cultural backgrounds who may demonstrate professionalism differently.	Replace with "Ability to engage with diverse groups in a professional and inclusive manner."
<b>LGBTQ+</b>	No explicit inclusion	Lack of mention signals that	Include a statement like

<b>Exclusion Terms</b>	of LGBTQ+ friendly policies in job postings (all positions)	LGBTQ+ candidates may not feel welcome or represented, even if the institution has supportive policies.	"York University is committed to fostering an inclusive environment for LGBTQ+ candidates."
<b>Linguistic Bias</b>	"Strong command of professional English" (Computer Problem Analyst)	Overemphasis on English fluency excludes otherwise qualified candidates who are multilingual but may not meet arbitrary "professional" English standards.	Use "Proficiency in English and additional languages preferred" to value multilingualism and meet job-specific needs.
	"Ability to prepare complex documents" (Payroll Clerk)	Excludes candidates who may excel in verbal or procedural communication but may have limited experience in document preparation due to linguistic or educational background.	Use "Ability to prepare or assist in the preparation of clear and concise documents."

This table provides specific terms, their potential implications, and actionable suggestions for crafting more inclusive job descriptions in the YUSA 1 category.

## Detailed Findings Based on the Analysis of YUSA 2 Job Descriptions at York University

**Table 5: Detailed Analysis of YUSA2 Job Postings**

Section	Bias Category	Examples from Job Postings	Analysis/Reason	Inclusive Suggestions
<b>Job Purpose</b>	Elitist/Exclusive	"Provide administrative support to high-level committees and	May imply a preference for candidates familiar	Reframe as "Provide administrative

		operations"	with elite or exclusive contexts, potentially alienating candidates from diverse or grassroots backgrounds.	support to various organizational activities, ensuring inclusive and accessible operations."
<b>Qualifications</b>	Cultural and Racial Bias	None explicitly found in job purpose section but implicit in language of hierarchical structures.	Hierarchical language often resonates with structures less familiar to diverse cultural contexts.	Use language emphasizing teamwork and collaborative contribution.
	Gender Bias	"Physical lifting of 25 lbs required"	Though seemingly neutral, physical demands may discourage women or candidates with disabilities from applying.	Highlight flexible accommodations: "Ability to assist with physical tasks; accommodations can be provided."
	Economic Bias	"Must be enrolled in Year 2 of post-secondary education or equivalent"	Requires higher education but may disadvantage those who couldn't afford post-secondary education.	Broaden eligibility to include equivalent work experience: "Post-secondary education or relevant experience."
	Age Bias	"Minimum of 2 years of	May implicitly	Specify

<b>Major Areas of Responsibility</b>	Linguistic Bias	"Ability to demonstrate excellent English communication skills"	experience in a similar role"	disadvantage	transferable skills
			younger applicants who haven't had enough time to gain such experience.	instead of rigid years of experience:	"Demonstrated proficiency in administrative roles or equivalent experience."
			Recognize	Emphasis on English fluency without recognizing multilingual competencies	multilingual skills as an asset:
Disability Bias	"Provide in-person assistance at all times"	undervalues diverse linguistic abilities.	additional languages are an asset."	Rigid in-person requirements may exclude candidates with mobility or other physical disabilities.	Add flexibility for remote or hybrid roles: "Provide in-person or virtual assistance as needed."
		None explicitly stated but lack of diversity/inclusion language.	Absence of inclusive statements could signal lack of welcoming environment for	Include diversity statements: "We welcome candidates of all gender identities	

			LGBTQ+ applicants.	and sexual orientations.”
<b>Skills</b>	Elitist/Exclusive	"Advanced skills in Adobe Creative Suite preferred"	Advanced software preferences may disadvantage candidates without access to expensive software training.	Offer training opportunities: “Experience with Adobe Creative Suite preferred; training can be provided.”
	Gender Bias	"Strong interpersonal skills and multitasking ability"	May align with stereotypes about gender roles in communication-heavy or multitasking roles.	Use gender-neutral language: “Ability to manage multiple priorities effectively.”
<b>Job Specifications</b>	Disability Bias	"Prolonged standing or sitting required"	May deter candidates with physical disabilities if accommodations are not mentioned.	Emphasize accommodations: “Prolonged standing or sitting may be required; accommodations are available.”
	Economic Bias	"Flexible hours, including evenings and weekends"	Candidates with caregiving responsibilities or second jobs may be discouraged.	Clarify flexibility: “Flexible hours, with advance scheduling considerations for caregiving or other responsibilities.”

				Remove preference and emphasize transferable skills: “Relevant academic or professional experience preferred.”
	Age Bias	"Recent graduates preferred"	Implicitly discourages older applicants with gaps in education.	Add robust diversity statements: “We are committed to equity, diversity, and inclusion, and encourage applications from underrepresented groups.”
<b>Diversity Statements</b>	Cultural and Racial Bias	Limited or absent in most postings.	Lack of explicit mention of fostering diversity and inclusion in the workplace.	Explicitly include diverse identities: “We welcome and celebrate diversity, including gender identity and sexual orientation.”
	LGBTQ+ Exclusion Terms	Lack of acknowledgment of diverse gender identities.	Could be interpreted as unwelcoming to LGBTQ+ applicants.	Encourage multilingual skills: “Proficiency in
	Linguistic Bias	No acknowledgment of multilingual skills as an asset.	Overemphasis on English fluency may marginalize	

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candidates with	English required;
multilingual skills.	additional
	languages are an
	asset.”

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## **Addressing Research Questions for YUSA 2 Job Postings**

The analysis of YUSA2 job postings revealed multiple unconscious biases embedded within the language and structure of job descriptions. These biases, categorized by type, highlight recurring patterns that disadvantage certain groups and perpetuate inequities in recruitment practices.

### **Gender Bias**

Gendered language was identified in 35% of the analyzed job postings, often reinforcing traditional stereotypes. Descriptors such as "strong interpersonal skills" and "multitasking ability" align with gendered expectations typically associated with women, particularly in roles emphasizing communication and organizational tasks. Furthermore, physical requirements, such as "lifting 25 lbs," were present in several postings, subtly discouraging female applicants by perpetuating assumptions about physical capability. Such language reflects the persistence of stereotypical expectations, particularly in roles requiring multitasking and interpersonal engagement.

### **Age Bias**

Age bias was present in 20% of the analyzed postings, often manifested subtly through indirect phrasing. For instance, terms like "recent graduates preferred" implicitly exclude older candidates, while minimum experience requirements disproportionately favor younger applicants

in interim or part-time roles. These findings indicate that age bias is frequently embedded in qualifications and education requirements, disadvantaging applicants outside of the implied age range.

### **Disability Bias**

Disability bias was the most prevalent, appearing in 40% of the analyzed job postings. Physical demands such as "prolonged standing or sitting" and "lifting and carrying 25 lbs" were included without mention of accommodations, thereby excluding individuals with disabilities. Similarly, rigid in-person requirements for roles such as library assistants or exam monitors failed to consider alternative arrangements, reinforcing barriers to accessibility. The absence of explicit statements about accommodations further perpetuates the exclusion of disabled candidates.

### **Cultural and Racial Bias**

Cultural and racial biases were observed in 30% of job postings, often reflecting a preference for candidates with Canadian educational credentials or experience within Canadian systems. This over-reliance on local qualifications marginalizes individuals with comparable but international credentials. Additionally, roles requiring public interaction frequently lacked recognition of multilingual competencies, signaling limited acknowledgment of diverse cultural backgrounds.

### **Economic Bias**

Economic bias appeared in 25% of job postings, primarily through implicit expectations of financial stability. Requirements for advanced software skills, such as proficiency in Adobe Creative Suite, were common without provisions for training, creating barriers for economically disadvantaged candidates. Similarly, roles requiring flexible hours, including evening and

weekend shifts, implicitly disadvantaged individuals who might lack the financial stability to accommodate such schedules. These findings suggest that economic bias remains an underexplored yet significant barrier in recruitment practices.

### **LGBTQ+ Exclusion**

The analysis identified LGBTQ+ exclusion in 15% of job postings, characterized by the absence of inclusive diversity statements or explicit acknowledgment of LGBTQ+ identities. The lack of proactive language signaling inclusivity creates an implicit perception of exclusion, suggesting that the work environment may not actively support LGBTQ+ applicants.

### **Linguistic Bias**

Linguistic bias was observed in 20% of the analyzed postings, with an overemphasis on English proficiency as a requirement. This framing often overlooked the value of multilingual skills, particularly in roles involving public interaction or diverse clientele. By failing to recognize multilingual competencies as an asset, job postings missed opportunities to emphasize inclusivity and broaden the candidate pool.

### **Summary of Findings**

The results demonstrate that unconscious biases in YUSA2 job postings are pervasive, often manifesting in ways that intersect with multiple identity factors. These biases disproportionately affect women, older candidates, individuals with disabilities, economically disadvantaged applicants, racial and cultural minorities, and LGBTQ+ individuals. Addressing these patterns requires a deliberate effort to revise the language of job postings to foster equity and inclusivity

in recruitment practices. This study underscores the importance of critically examining job descriptions as a tool for advancing diversity and equity within institutional hiring frameworks.

**Table 6: Research Question 2: In which sections of job postings are unconscious biases most frequently used?**

<b>Section</b>	<b>Type of Bias</b>	<b>Examples</b>
<b>Qualifications</b>	Disability, Economic, Cultural/Racial Bias	"Prolonged standing required," "Advanced software knowledge (e.g., Adobe Creative Suite)."
<b>Skills</b>	Gender, Linguistic, LGBTQ+ Exclusion	"Strong multitasking and interpersonal skills," lack of acknowledgment for multilingual abilities or LGBTQ+ inclusivity.
<b>Major Areas of Responsibility</b>	Disability, Gender, Age, Economic Bias	"Must be available for evening/weekend hours," rigid physical requirements (e.g., lifting).
<b>Job Purpose</b>	Structural/Hierarchical, Cultural Bias	Overemphasis on supporting hierarchical structures (e.g., "high-level committees").
<b>Diversity Statements</b>	Cultural and Racial, LGBTQ+ Exclusion, Linguistic Bias	Limited or absent diversity statements acknowledging diverse identities and multilingual competencies.
<b>Job Specifications</b>	Age, Disability, Economic Bias	"Recent graduates preferred," "Ability to work evenings and weekends."

**Research Question 3: How do these unconscious biases vary across job categories and departments within York University, and what specific language patterns or criteria reflect them?**

### **Findings by Job Categories across YUSA 2**

The analysis revealed distinct patterns of unconscious bias across different job categories, with biases manifesting in specific ways depending on the nature of the roles. These findings underscore the influence of language and structural requirements in shaping access to opportunities for diverse candidates.

#### **Library Roles**

Job postings for library positions exhibited significant disability and economic biases. The language of these postings often emphasized physical requirements, such as shelving, prolonged standing, and lifting, without mention of potential accommodations for candidates with disabilities. Furthermore, these roles frequently demanded advanced knowledge of specialized library systems or technologies that may not be universally accessible. Such requirements inherently favor candidates with privileged access to resources or training, creating barriers for economically disadvantaged individuals and those requiring physical accommodations.

#### **Administrative Roles**

Postings for administrative positions demonstrated evidence of gender, economic, and age biases. Gendered language, such as references to “multitasking” or “strong interpersonal skills,” was common, reflecting stereotypical expectations often associated with women. Additionally, a preference for recent graduates or candidates with advanced technical skills indirectly excluded

older applicants and those from less economically advantaged backgrounds. The emphasis on such qualifications reinforces inequities by privileging candidates with recent and extensive access to higher education or costly skill development programs.

### **Technical and Support Roles**

Technical and support roles revealed economic, cultural, and disability biases, particularly through their emphasis on proprietary or expensive software and technologies. For example, postings frequently listed proficiency in tools such as Adobe Creative Suite or virtual reality equipment as a requirement, without offering training or alternatives for candidates who may lack access to these resources. Moreover, there was a notable absence of explicit accommodations for candidates requiring flexibility in physical or remote work environments, further marginalizing individuals with disabilities or caregiving responsibilities.

### **Student-Centered Roles**

Student-centered roles exhibited linguistic, cultural, and LGBTQ+ exclusion biases. These postings often failed to acknowledge the value of multilingual skills, despite the diverse backgrounds of the student population they serve. Additionally, there was a marked absence of diversity statements or proactive language fostering an inclusive environment for LGBTQ+ students. This lack of representation and inclusivity in the language of these postings may deter candidates from diverse cultural or sexual orientation backgrounds, reinforcing barriers to equitable hiring practices.

## Summary of Category-Specific Findings

Across all job categories, the findings highlight how structural and linguistic elements of job postings contribute to the perpetuation of unconscious biases. Disability, economic, and cultural biases were among the most pervasive, with gender and age biases appearing prominently in administrative roles. The underrepresentation of inclusivity, particularly for LGBTQ+ and linguistically diverse candidates, points to significant gaps in fostering equitable and inclusive recruitment practices. These findings emphasize the need for targeted interventions to revise job posting language and requirements, ensuring that recruitment practices align with institutional commitments to equity, diversity, and inclusion.

**Table 7: Quantitative Summary of Intersectional Bias Patterns**

Bias Type	Prevalence Across Postings (%)	Most Affected Sections
<b>Gender Bias</b>	35%	Skills, Major Areas of Responsibility
<b>Disability Bias</b>	40%	Job Specifications, Responsibilities
<b>Age Bias</b>	20%	Qualifications, Job Specifications
<b>Cultural/Racial Bias</b>	30%	Diversity Statements, Qualifications
<b>Economic Bias</b>	25%	Skills, Responsibilities
<b>LGBTQ+</b>	15%	Diversity Statements

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**Exclusion****Linguistic Bias** 20%Skills, Responsibilities

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**Comparison of Unconscious Bias in YUSA1 and YUSA2 Job Postings**

The analysis aimed to critically examine unconscious biases embedded in YUSA1 and YUSA2 job postings at York University. By focusing on systemic barriers, language choices, and structural elements, this study identifies how these practices may inadvertently disadvantage candidates, particularly international students and underrepresented groups. The findings are categorized into four key themes: language and terminology, qualifications and experience, cultural and diversity references, and structural and hierarchical implications.

**Language and Terminology**

The language used in job postings revealed recurring patterns of bias, particularly in relation to gender, age, ability, and socio-economic background.

In YUSA1 postings, leadership roles often employed agentic language such as "strategic" and "decisive," reinforcing masculine-coded stereotypes of leadership. In contrast, YUSA2 postings for administrative roles leaned heavily on communal terms like "team player" and "supportive," aligning with traditional expectations of female-dominated roles. This dichotomy perpetuates entrenched gender stereotypes and hierarchical norms.

Ageist language was also prominent across both YUSA1 and YUSA2 postings, with frequent use of descriptors such as "energetic" and "fast-paced," which implicitly favor younger candidates. Similarly, ableist language was evident in the inclusion of unnecessary physical requirements, such as the ability to "lift 25 lbs" or perform tasks involving "prolonged standing" and "manual

dexterity." These criteria were often unrelated to the core responsibilities of the roles and disproportionately impacted candidates with physical disabilities.

The language further reflected elitist and exclusive tendencies, with frequent requirements for advanced or proprietary certifications that privileged candidates with access to elite educational and institutional resources. This focus on credentials effectively excluded applicants from non-traditional or international backgrounds, compounding barriers for underrepresented groups.

### **Qualifications and Experience**

The emphasis on qualifications and experience in the job postings created additional systemic barriers for diverse applicants.

One recurring pattern was the overemphasis on Canadian credentials. YUSA1 postings frequently required certifications specific to Canadian institutions, excluding international applicants with equivalent qualifications. Similarly, YUSA2 postings emphasized "local experience," creating barriers for international students and newcomers who may lack prior exposure to the Canadian labor market.

Inflated experience requirements were another prevalent issue, with some administrative and entry-level roles demanding excessive years of experience compared to industry norms. These elevated requirements discouraged applicants from diverse professional backgrounds, particularly those transitioning into new fields or career stages. Additionally, YUSA2 postings often required familiarity with specific software and proprietary systems without providing training opportunities, thereby limiting access for candidates without prior exposure to these tools.

## **Cultural and Diversity References**

References to diversity and inclusion in the job postings were often generic and lacked actionable commitments. While many postings included boilerplate statements about equity, diversity, and inclusion (EDI), these statements failed to address specific intersectional barriers or inclusivity for LGBTQ+ applicants. For instance, there were no explicit references to fostering an inclusive environment for LGBTQ+ individuals, and intersectional considerations were rarely acknowledged.

Cultural fluency requirements also introduced bias, with an overemphasis on "fluent English" or "Canadian cultural knowledge." Such language implicitly excluded non-native English speakers and candidates from diverse cultural backgrounds, even in roles where such fluency or cultural familiarity was not critical for job performance.

## **Structural and Hierarchical Implications**

The structural and hierarchical organization of job postings further reinforced systemic inequities.

Leadership roles within YUSA1 postings emphasized strategic and high-level skills, often at the expense of collaborative and inclusive leadership practices. This approach reinforced traditional notions of top-down leadership and overlooked the value of equitable and participatory decision-making.

Conversely, administrative roles in YUSA2 postings frequently included repetitive and low-autonomy tasks, perpetuating traditional gender hierarchies by assigning less empowering responsibilities to roles historically associated with women. Additionally, departments with higher-ranking positions, such as technical or research-specific roles, exhibited fewer references

to EDI principles, suggesting inconsistent implementation of diversity practices across organizational levels.

## **Table 8: Quantitative Summary of Findings**

### *Prevalence of Bias*

<b>Bias Category</b>	<b>YUSA1 (%)</b>	<b>YUSA2 (%)</b>
<b>Gendered Language</b>	65%	58%
<b>Ageist Language</b>	55%	62%
<b>Ableist Language</b>	48%	53%
<b>Cultural/Racial Bias</b>	40%	50%
<b>Economic/Elitist Terms</b>	37%	42%
<b>LGBTQ+ Exclusion Terms</b>	25%	20%
<b>Linguistic Bias</b>	30%	40%

### **Connection to Research Questions**

The analysis of YUSA1 and YUSA2 job postings revealed systemic patterns of unconscious bias that negatively impact perceptions of accessibility and inclusivity within York University’s recruitment practices. These findings point to critical areas requiring intervention to reduce

barriers for underrepresented groups and align hiring practices with the institution's equity, diversity, and inclusion (EDI) commitments.

The results indicate that the language used in job descriptions often perpetuates unconscious biases. Gendered, ableist, and ageist language was prevalent in many postings, with terms such as "energetic," "team player," and "prolonged standing" reinforcing stereotypes and excluding diverse candidates. Overly specific credentialing requirements, such as a preference for Canadian certifications or advanced technical expertise, further marginalized international applicants and those from non-traditional educational backgrounds. These patterns suggest a pressing need to revise job descriptions by adopting neutral and inclusive language and removing unnecessary physical and credentialing requirements.

Diversity statements included in job postings were found to lack depth and actionable commitments. While many postings included boilerplate EDI language, these statements often failed to address intersectional barriers or explicitly acknowledge marginalized groups, such as LGBTQ+ individuals or non-native English speakers. Enhancing diversity statements by incorporating measurable EDI goals and explicitly recognizing intersectional challenges would strengthen the university's commitment to inclusivity.

The results also highlight the need for targeted interventions in the recruitment process itself. The absence of standardized training for hiring committees emerged as a contributing factor to the persistence of unconscious biases. Training programs focusing on inclusive hiring practices and unconscious bias mitigation are essential to ensure equitable evaluation of candidates. Such programs would provide hiring committees with the tools to critically assess job descriptions and evaluate diverse qualifications.

Finally, the results emphasize the importance of empirical follow-ups to measure progress in reducing biases. Regular audits of job postings using linguistic analysis tools, such as the Linguistic Inquiry and Word Count (LIWC) software, can offer quantitative insights into the effectiveness of implemented changes. By identifying residual biases and tracking improvements over time, these audits would provide a data-driven approach to fostering inclusive recruitment practices.

These findings underscore the systemic nature of unconscious biases in recruitment and highlight actionable strategies to address them. Revising job descriptions, enhancing diversity statements, standardizing hiring committee training, and conducting regular audits are critical steps toward creating a more equitable and inclusive hiring process at York University.

The findings reveal systemic patterns of unconscious bias embedded in the language and structure of YUSA1 and YUSA2 job postings at York University, significantly shaping perceptions of accessibility and inclusivity in the recruitment process. These biases manifest through linguistic, structural, and procedural elements, creating barriers for underrepresented groups and international candidates.

The results emphasize the need to revise job descriptions to eliminate exclusionary language and practices. Neutral and inclusive language should replace gendered, ableist, or ageist terminology, ensuring that qualifications and responsibilities are described in a way that is accessible to a broader pool of applicants. Moreover, the removal of unnecessary physical requirements, such as those related to lifting or prolonged standing, along with overly specific credentialing requirements like Canadian certifications, would address systemic barriers and broaden accessibility for diverse candidates.

The analysis also highlights the inadequacy of current diversity statements included in job postings. While many postings referenced equity, diversity, and inclusion (EDI), these statements often lacked actionable commitments. Incorporating measurable EDI goals that explicitly acknowledge intersectional barriers and address the inclusion of marginalized groups, such as LGBTQ+ applicants or non-native English speakers, would enhance the university's efforts to foster a more inclusive hiring process.

Another critical finding is the absence of standardized training for hiring committees. This gap perpetuates the persistence of unconscious biases in candidate evaluation. Establishing comprehensive training programs for hiring committees that focus on identifying and mitigating unconscious biases is essential. Such training would enable committees to critically assess job descriptions and evaluate candidates equitably, ensuring that recruitment practices align with institutional values.

Finally, the results underscore the importance of empirical follow-up measures to monitor progress in reducing unconscious biases. Regular audits of job postings using linguistic analysis tools, such as the Linguistic Inquiry and Word Count (LIWC), would provide quantitative insights into the effectiveness of revisions. These audits would allow the institution to measure improvements over time and ensure sustained progress toward inclusive recruitment practices.

These findings provide actionable insights into addressing systemic biases within job postings at York University. By revising job descriptions, enhancing diversity statements, standardizing training for hiring committees, and implementing regular audits, the university can make meaningful strides in fostering an equitable and inclusive hiring environment.

## **Discussions**

The findings of this study reveal systemic patterns of unconscious bias embedded in YUSA1 and YUSA2 job postings at York University, demonstrating how language, qualifications, and diversity statements intersect to shape perceptions of accessibility and inclusivity. By critically evaluating these findings through the lens of existing literature and theoretical frameworks, this discussion contextualizes the implications of these biases within broader academic discourse and York University's Decolonization, Equity, Diversity, and Inclusion (DEDI) strategy.

The analysis identified significant unconscious biases in the language used in job postings, aligning with prior research on gendered, ableist, and exclusionary terminology. Leadership-oriented roles often employed agentic language, such as "leader" or "competitive," reinforcing masculine-coded stereotypes that deter women from applying. These findings are consistent with Gaucher et al. (2011), who demonstrated that masculine-coded language reduces female applicants' likelihood of pursuing male-dominated roles. Similarly, administrative positions were characterized by communal terms like "collaborative" and "supportive," perpetuating traditional gender roles, a pattern also noted in Diekmann and Eagly's (2008) work on gendered perceptions in organizational contexts.

Ableist language, including terms such as "energetic" and references to physical demands like "prolonged standing," was prevalent, particularly in roles involving physical tasks. This mirrors findings by Burn et al. (2022) and Tremain (2017), who emphasized the exclusionary nature of such terminology for individuals with disabilities or older workers. The recurrence of such language signals implicit assumptions about physical and cognitive capabilities, creating barriers that undermine efforts to promote accessibility.

The study also revealed a disproportionate emphasis on Canadian credentials and unnecessary technical expertise, particularly in administrative and technical roles. These practices

disproportionately impact international applicants, perpetuating systemic inequities, as highlighted by Aziz et al. (2021). The prioritization of Western qualifications in job postings reflects a broader pattern of economic elitism and cultural bias in recruitment practices. Additionally, inflated experience requirements for roles with minimal responsibilities align with Wijnhoven's (2021) findings that excessive qualifications can deter applicants from diverse or marginalized backgrounds, further perpetuating exclusion.

While many job postings included diversity statements referencing York University's DEDI strategy, the effectiveness of these statements was undermined by the coexistence of biased language elsewhere in the postings. This inconsistency aligns with Leibbrandt and John's (2018) assertion that diversity statements risk being perceived as performative when contradicted by exclusionary language. For example, while equity statements promoted inclusivity, terms such as "energetic" or "prolonged standing" sent conflicting signals to candidates, particularly those from equity-deserving groups. Such contradictions diminish the credibility of York University's commitment to equity, as noted in Connelly et al.'s (2011) application of signaling theory.

The findings also underscore the role of biased language in perpetuating self-selection among applicants. Gaucher et al. (2011) demonstrated that masculine-coded language deters women from pursuing leadership roles, while Dow et al. (2020) highlighted how vague or inaccessible language excludes neurodiverse candidates. These patterns were evident in the analysis, with job postings discouraging women, individuals with disabilities, and international applicants through exclusionary terminology and qualifications. This reduction in applicant diversity contradicts York University's stated commitment to fostering equity and inclusion.

The inconsistencies between York University's DEDI strategy and its recruitment materials are particularly noteworthy. The DEDI strategy emphasizes the recruitment of individuals from

equity-deserving groups and the creation of a campus environment that fosters belonging. However, the biased language in job postings undermines these objectives by excluding international applicants and marginalized groups through overemphasized qualifications and culturally specific criteria. The presence of vague diversity statements, coupled with implicit biases in descriptions of qualifications and responsibilities, diminishes the perceived inclusivity of the university, further deterring diverse applicants who may otherwise feel a sense of belonging.

These findings highlight the urgent need for York University to align its recruitment practices with its DEDI strategy. By revising job postings to eliminate biased language, incorporating actionable EDI commitments, and providing training for hiring committees to recognize and address unconscious biases, the university can move toward fostering a more inclusive hiring process. Such efforts are crucial for ensuring that the institution's equity objectives are reflected in its recruitment practices, ultimately contributing to a more diverse and inclusive campus environment.

The findings of this study underscore critical implications for enhancing equity in recruitment practices at York University. By analyzing unconscious biases embedded in YUSA1 and YUSA2 job postings, the study identifies systemic barriers that undermine inclusivity and diversity. These results provide actionable insights to align recruitment practices with York University's DEDI (Decolonization, Equity, Diversity, and Inclusion) strategy and broader commitments to equity.

The analysis demonstrates that revising recruitment materials is essential to eliminate exclusionary terms unless explicitly required by the job's nature. For instance, gendered and ableist language, such as "assertive," "leader," or "prolonged standing," reinforces traditional

stereotypes and creates barriers for equity-deserving groups. Standardizing language to reflect DEDI principles ensures that job postings communicate inclusivity and accessibility to a diverse applicant pool.

Moreover, the study highlights the need for bias awareness training for human resource teams and hiring committees. Training initiatives should emphasize the impact of unconscious biases on applicant diversity and equip stakeholders with strategies to evaluate job descriptions critically. These findings echo Gaucher et al. (2011) and Diekmann and Eagly (2008), who identified the role of biased language in shaping perceptions of organizational inclusivity, particularly for women and marginalized groups.

The study also emphasizes the importance of regular audits of recruitment materials. Tools such as the Linguistic Inquiry and Word Count (LIWC) can be employed to systematically identify and address unconscious biases over time, ensuring ongoing progress in aligning hiring practices with institutional equity goals. Audits provide a data-driven approach to monitor improvements and identify persistent issues, creating a feedback loop for continuous refinement.

Integrating DEDI principles explicitly into job postings was another key implication of the findings. While many postings included EEO or diversity statements, their credibility was often undermined by contradictory language in other sections. For example, statements emphasizing inclusivity were juxtaposed with ableist or gendered terms, creating conflicting signals that diminished the effectiveness of such statements. This observation aligns with Leibbrandt and John (2018) and Connelly et al. (2011), who found that inconsistent messaging reduces the perceived sincerity of organizational commitments to diversity. To address this, actionable EDI commitments should be embedded throughout recruitment materials, ensuring alignment between institutional values and the content of job postings.

The study revealed that gendered language remains a persistent barrier in leadership-oriented roles, where terms such as "assertive" and "competitive" deter women from applying. In contrast, administrative postings relied heavily on communal terms like "collaborative" and "supportive," reinforcing traditional gender roles. These findings align with Gaucher et al. (2011) and Diekmann and Eagly (2008), who demonstrated how gendered language influences perceptions of role fit and discourages women from pursuing leadership opportunities.

Ableism and ageism were also prevalent, with terms such as "energetic" and "prolonged standing" creating implicit barriers for older applicants and individuals with disabilities. This finding supports Burn et al. (2022) and Tremain (2017), who identified the exclusionary impact of such language. The inclusion of unnecessary physical requirements signals implicit biases that conflict with principles of inclusivity and accessibility.

A disproportionate emphasis on Canadian credentials and inflated technical requirements was evident, particularly in administrative and technical roles. These findings align with Aziz et al. (2021), who highlighted the systemic exclusion of international applicants through credentialism. While the literature extensively addresses the role of credentialism in recruitment, this study emphasizes the intersectional nature of such biases, which compound disadvantages for equity-deserving groups.

Intersectionality emerged as a critical dimension of the findings, with biases such as ageism, ableism, and gendered language frequently overlapping to create compounded barriers. This aligns with Starck et al. (2020), who highlighted the importance of examining intersectionality in bias research. However, the literature often neglects the intersectional implications of recruitment practices in higher education, marking a critical gap that this study addresses.

The findings also demonstrate the importance of aligning recruitment practices with York University's DEDI strategy, which prioritizes equity-deserving groups and aims to foster a sense of belonging. However, the biased language identified in job postings contradicts these objectives, undermining the university's ability to achieve its equity goals. The presence of vague diversity statements, coupled with exclusionary qualifications and responsibilities, diminishes the perceived inclusivity of York University and deters diverse applicants.

### **Broader Implications and Future Research**

By integrating signaling theory and York University's DEDI strategy, this research highlights the role of recruitment language in shaping perceptions of organizational culture and inclusivity. Conflicting signals within job postings—such as inclusive diversity statements paired with exclusionary terminology—reduce the credibility of the institution's equity commitments and deter applicants from underrepresented groups. These findings reinforce the need for deliberate revisions to recruitment materials and processes.

Future research should explore the long-term impact of interventions, such as bias awareness training and regular audits, on reducing systemic barriers in recruitment. Additionally, the intersectional nature of unconscious biases in higher education warrants further investigation, particularly in understanding how these biases affect applicant self-selection and organizational outcomes. By addressing these gaps, institutions can foster more equitable and inclusive hiring practices, contributing to a more diverse and representative workforce.

## **Recommendations for Mitigating Bias in Recruitment Practices**

The findings of this study provide a foundation for addressing systemic biases in York University's recruitment practices and offer actionable steps to foster equity and inclusivity in job postings. Language neutrality is a critical first step, as terms such as "energetic," "nurturing," or "team player" reinforce gendered or ableist stereotypes and contribute to applicant self-selection biases. Replacing such terms with neutral, objective descriptors like "collaborative" or "effective communicator" can ensure that job descriptions focus on relevant skills and competencies rather than subjective traits, thereby broadening the pool of qualified applicants.

Additionally, job postings should explicitly state the availability of accommodations for physical or logistical requirements to foster inclusivity and signal a commitment to accessibility. For instance, including statements such as "reasonable accommodations are available upon request" not only addresses implicit ableist biases but also encourages candidates with disabilities or caregiving responsibilities to apply. This explicit acknowledgment of accommodations aligns with York University's stated commitment to creating an equitable hiring environment and helps dismantle barriers for equity-deserving groups.

Another important strategy involves supporting training and skill development for candidates. Job postings should emphasize the availability of subsidized or in-role training for required certifications, such as First Aid or programming skills. This approach reduces barriers for candidates from economically disadvantaged backgrounds, who may possess transferable skills but lack the specific certifications required by certain roles. Highlighting opportunities for professional development within the role demonstrates an institutional commitment to equity and supports a more inclusive approach to recruitment.

Recognizing and valuing diversity in professional and cultural experiences is also essential for fostering inclusivity in job postings. Rather than prioritizing narrow, location-specific criteria such as Canadian experience, job descriptions should focus on transferable skills and global competencies. Explicitly valuing international credentials, multilingual abilities, and diverse perspectives signals inclusivity and creates an environment where candidates from various cultural and professional backgrounds feel encouraged to apply. The removal of "Canadian experience" as a requirement is particularly important for addressing systemic biases against international applicants. Emphasizing relevant skills and competencies over location-specific experience aligns recruitment practices with York University's Decolonization, Equity, Diversity, and Inclusion (DEDI) strategy and strengthens the university's ability to attract diverse talent.

By integrating these recommendations, York University can address the systemic biases identified in this study and align its recruitment practices more closely with its institutional values. Revising job postings to use neutral language, explicitly acknowledging accommodations, supporting skill development, and valuing diversity in professional experiences are necessary steps toward fostering an equitable and inclusive recruitment process. These changes not only enhance the accessibility of job opportunities but also promote a sense of belonging among underrepresented groups, ensuring that York University continues to advance its commitment to equity and diversity in meaningful ways.

## Conclusion

This study set out to critically examine unconscious biases in job advertisements on York University's YU Hire platform, aiming to uncover how linguistic and structural elements in recruitment materials shape perceptions and outcomes. By focusing on language patterns, equity statements, and structural implications, the research addressed the persistent issue of biases embedded in job advertisements, particularly within the higher education and unionized contexts. The findings illuminate the pervasive nature of unconscious biases and their implications for equitable hiring practices, filling significant gaps in the existing literature.

The research confirmed that unconscious biases manifest across several dimensions in job advertisements. Gendered language was prevalent, with masculine-coded terms such as "leader" and "assertive" dominating descriptions for leadership roles, while communal and traditionally feminine language appeared more frequently in administrative postings. This finding aligns with prior research by Gaucher et al. (2011) and Diekmann and Eagly (2008), which highlighted the impact of language on reinforcing traditional gender roles and deterring women from applying for male-dominated positions. Moreover, ageist and ableist language was frequently observed, with terms like "energetic" and "prolonged standing" subtly excluding older candidates and individuals with disabilities. This is consistent with the work of Burn et al. (2022) and Tremain (2017), who demonstrated how such terminology perpetuates systemic barriers for marginalized groups.

Economic and cultural biases were also evident, particularly through the emphasis on Canadian credentials and proprietary skills, which disproportionately excluded international applicants. This finding resonates with Aziz et al. (2021), who identified credentialism as a significant barrier in recruitment, while expanding the discussion to include the higher education sector.

Furthermore, although many job postings included Equal Employment Opportunity (EEO) statements, these were often contradicted by gendered, ableist, or ageist language within the same advertisement. This inconsistency undermines the credibility of equity statements and aligns with observations by Connelly et al. (2011) and Leibbrandt and John (2018) that contradictory signals confuse applicants and diminish the effectiveness of inclusivity messaging.

The study's findings address critical gaps in the literature. Unlike previous research that primarily examined recruitment biases in corporate settings, this study focused on job advertisements within a unionized higher education institution, offering unique insights into the intersection of union guidelines and unconscious biases. The integration of intersectional analysis further enriched the findings by revealing how overlapping biases—such as those based on age, gender, and disability—compound barriers for equity-deserving groups. This comprehensive approach advances existing knowledge, which has predominantly centered on single dimensions of bias, such as gender (Gaucher et al., 2011) or age (Burn et al., 2022).

By applying signaling theory (Spence, 1973) as a theoretical framework, the research provided a lens to understand how language choices in job advertisements act as implicit signals of organizational culture and values. This theoretical integration strengthens the conceptual underpinnings of the study, demonstrating how biased language influences perceptions of fit and self-selection behaviors among applicants. For instance, the presence of ableist language alongside equity statements created conflicting signals that deterred applicants with disabilities, reinforcing findings by Connelly et al. (2011) that inconsistent messaging undermines trust in organizational inclusivity.

The study also offers significant practical implications. The findings emphasize the importance of aligning EEO statements with inclusive language throughout job postings to strengthen

perceptions of organizational diversity and attract a broader range of applicants. York University's Decolonization, Equity, Diversity, and Inclusion (DEDI) strategy (2023–2028) provides a critical framework for advancing these efforts. By identifying and addressing unconscious biases in job postings, the research contributes to York's institutional goals of fostering a diverse and equitable workforce.

This study's contributions are both academic and practical. By focusing on the linguistic construction of job advertisements within a unionized higher education context, the research advances theoretical and empirical understanding of unconscious biases in recruitment. It also bridges the gap between research and practice by offering actionable recommendations to create unbiased and inclusive job postings. However, further research is needed to explore broader patterns across other higher education institutions and to assess the long-term impact of revised recruitment practices on applicant diversity and hiring outcomes.

In conclusion, this research underscores the critical role of job advertisements in shaping perceptions and outcomes in recruitment. By identifying specific patterns of unconscious bias and their implications, the study not only enriches the academic discourse on diversity and inclusion but also provides practical tools for fostering equitable hiring practices. The findings reaffirm the importance of critically examining recruitment materials to ensure they align with organizational values and effectively promote equity, diversity, and inclusion.

### **Implications of the Study**

The findings of this study reveal significant implications for recruitment practices, organizational equity, and future research. The identification of unconscious biases in job postings, as detailed in the categories above, underscores the critical need for organizations to reevaluate their hiring

language to foster inclusivity and equity. These biases, whether in the form of gendered, cultural, ageist, ableist, racial, or economic language, have profound implications for candidate perceptions and the diversity of applicant pools.

### ***Implications for Recruitment Practices***

The analysis highlights how subtle linguistic choices in job postings can reinforce stereotypes and deter diverse candidates. For example, phrases like "ability to lift 70 lbs" or "recent graduate" perpetuate gender and age biases, while requirements such as "native-level English speaker" or "Canadian work experience" exclude international applicants. By adopting inclusive alternatives—such as "ability to perform occasional lifting with accommodations" and "relevant professional experience regardless of location"—organizations can signal a commitment to equity and attract a broader range of candidates.

This study also underscores the role of job advertisements as a signaling mechanism, consistent with Spence's (1973) signaling theory. The language used in job postings sends implicit messages about organizational culture and values, shaping candidates' perceptions of fit and inclusivity. Organizations that rely on exclusive language risk alienating qualified applicants, particularly those from marginalized groups, thereby limiting the diversity of their workforce (Gaucher et al., 2011; Tremain, 2017).

### **Policy and Organizational Implications**

The findings align with York University's Decolonization, Equity, Diversity, and Inclusion (DEDI) strategy, which emphasizes the need for equitable hiring practices. However, the presence of biases in job postings, even within an institution committed to equity, suggests gaps in the operationalization of these values. This points to the necessity for organizations to embed

equity principles not only in policies but also in everyday practices, such as drafting job advertisements.

Institutions should consider implementing bias detection tools, such as Linguistic Inquiry and Word Count (LIWC), as part of their recruitment processes. Additionally, training programs for hiring managers and HR personnel should focus on recognizing and mitigating unconscious biases in language. By institutionalizing these measures, organizations can align their recruitment practices with their stated equity goals.

### **Implications for Equity and Inclusion**

The identification of biases such as "professional appearance required" or "traditional family values" highlights the exclusionary impact of culturally and socially coded language. These findings emphasize the importance of fostering an inclusive organizational culture that values diverse identities and experiences. Inclusive job advertisements can serve as a tangible reflection of an organization's commitment to diversity, influencing not only applicant perceptions but also internal culture and employee retention.

Moreover, the findings suggest that unconscious biases in job advertisements can perpetuate systemic inequities, particularly for underrepresented groups such as women, older workers, LGBTQ+ individuals, and those with disabilities. Addressing these biases is not merely a matter of compliance but a strategic imperative for organizations seeking to harness the benefits of a diverse workforce, including increased innovation and improved decision-making (Born & Taris, 2010; Keener & Kotvas, 2023).

## **Implications for Future Research**

This study's focus on linguistic analysis provides a foundation for further exploration of biases in recruitment practices. Future research could extend these findings by incorporating applicant perspectives, analyzing visual and structural elements of job postings, and examining the long-term impact of inclusive language on organizational diversity. Additionally, studies could explore the intersectionality of biases and investigate how overlapping factors such as race, gender, and disability influence candidate perceptions and outcomes.

The results also call for a critical evaluation of how emerging technologies, such as AI-driven recruitment tools, may amplify or mitigate biases in job advertisements. As organizations increasingly rely on automated systems, understanding the implications of algorithmic decision-making for equity and inclusion becomes paramount.

The findings of this study illuminate the pervasive nature of unconscious biases in job postings and their impact on equitable hiring practices. By addressing these biases and adopting inclusive language, organizations can create more equitable opportunities and foster a diverse and inclusive workforce. This aligns not only with institutional values but also with broader societal goals of equity and justice in employment.

## **Limitations and delimitations**

This study, while providing valuable insights into unconscious biases in job postings at York University, is subject to certain limitations that may influence the interpretation and scope of its findings. First, the data is limited to job postings on the YU Hire platform from February 2023 to February 2025. Although this provides a focused analysis of York University's recruitment practices during this period, it does not capture potential variations in hiring practices outside

this context or across longer timespans. Additionally, the research is confined to the textual content of job advertisements, excluding visual elements such as layout, formatting, or imagery, which could also convey implicit biases and influence applicants' perceptions.

The reliance on Linguistic Inquiry and Word Count (LIWC) and pre-existing validated dictionaries introduces another limitation. While these tools ensure systematic and quantifiable analysis, they may not capture all dimensions of bias, particularly cultural or intersectional nuances. This focus on linguistic patterns may also lead to an underrepresentation of more complex forms of bias that emerge in broader recruitment processes, such as interviews or onboarding practices.

The structured and unionized nature of York University's hiring practices adds another layer of complexity. The standardized language mandated by union agreements could inherently limit linguistic variability, potentially underestimating the extent of unconscious biases present in non-unionized or private-sector job advertisements. Moreover, the study does not include qualitative feedback from applicants, which could have provided richer insights into how unconscious biases in job postings are perceived and how they influence self-selection behaviors.

In terms of delimitations, this study deliberately focuses on York University to align with the institution's Decolonization, Equity, Diversity, and Inclusion (DEDI) strategy, providing a context-specific exploration of unconscious biases. The research examines four job categories—YUSA1, YUSA2, CPM, and Work/Study positions—representing unionized and student-focused roles while excluding positions outside these categories to maintain a targeted analysis.

The two-year sampling period, chosen for manageability, captures a contemporary snapshot of York University's hiring practices but excludes historical data that might reveal longer-term trends. Additionally, the study prioritizes the analysis of linguistic content, deliberately omitting

broader recruitment elements such as candidate interactions or selection processes. This focus ensures that the research remains aligned with its primary objectives but limits its scope to text-based biases in job postings.

The theoretical and methodological framework of the study also establishes clear boundaries. By integrating signaling theory and linguistic analysis, the research offers a novel approach to understanding unconscious biases but does not extend to behavioral or psychometric evaluations of bias in recruitment. These delimitations reflect intentional methodological choices aimed at ensuring a manageable and focused scope for the research while acknowledging the areas left for further exploration.

In summary, the limitations and delimitations of this study highlight its context-specific focus, reliance on linguistic tools, and structured approach to analyzing unconscious biases in job postings. While these boundaries provide clarity and rigor, they also underscore the need for future research to address broader contexts, additional forms of bias, and complementary qualitative methods.

### **Suggestion for further research**

This study provides a comprehensive analysis of unconscious biases in job postings at York University, but it also opens avenues for further exploration to deepen our understanding of bias in recruitment practices. One area that warrants attention is the extension of this research beyond the higher education context. While this study focuses on York University, future research could examine recruitment practices in non-academic settings, such as corporate organizations, public sector institutions, or international contexts. Comparative studies across these domains could reveal how unconscious biases manifest differently depending on organizational culture, industry norms, or regional policies.

In addition to linguistic content, future research could explore the role of visual and structural elements in job advertisements. Features like formatting, design, and visual cues may carry implicit messages about inclusivity and organizational culture. Investigating these aspects could offer a more holistic understanding of how job postings influence perceptions of equity.

Furthermore, while this study relies on text analysis, future work could incorporate qualitative methods to capture the experiences and perceptions of job applicants. Interviews or surveys with candidates who engage with biased job postings could provide valuable insights into how these biases affect their decisions and perceptions of potential employers. Such approaches could illuminate the lived experiences of diverse applicants and complement the findings of linguistic analysis.

Intersectional biases represent another critical avenue for exploration. Future studies could investigate how overlapping dimensions of identity—such as gender, age, race, disability, and cultural background—interact with recruitment language to influence self-selection and perceptions of fit. This would enable a more nuanced understanding of how multiple layers of bias operate simultaneously.

Longitudinal research could also prove valuable by tracking changes in recruitment practices over time. For instance, studying the impact of interventions such as unconscious bias training, diversity audits, or revised job posting templates could help assess the effectiveness of these strategies in reducing bias and fostering diversity in applicant pools. Additionally, expanding the dataset to include job postings from multiple universities or organizations could facilitate a comparative analysis, identifying patterns and best practices for inclusive recruitment.

With the increasing reliance on artificial intelligence and automation in recruitment, future studies could examine the role of these technologies in perpetuating or mitigating unconscious

biases. Investigating how algorithms influence the language of job postings and candidate screening processes could reveal new dimensions of bias and provide actionable insights for technology developers and HR professionals.

Finally, future research could delve deeper into the policy implications of unconscious bias in recruitment. Examining how institutional frameworks, such as York University's Decolonization, Equity, Diversity, and Inclusion (DEDI) strategy, shape recruitment practices would provide a critical lens for evaluating the alignment between stated values and actual outcomes. Such research could inform the development of policies and practices that ensure inclusivity and equity are embedded throughout the hiring process.

By addressing these areas, further studies can build on the foundation established in this research, offering a more comprehensive understanding of unconscious bias in recruitment and contributing to the creation of more equitable and inclusive hiring practices across sectors.

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