

AGAINST THE PREVAILING WINDS:  
HOW CANADIAN RACIALIZED WOMEN WEATHERCASTERS REPRESENT  
THEMSELVES AND ADVOCATE FOR DIVERSITY ON TWITTER

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A Major Research Paper

Submitted to the Department of Communication Studies and Media Arts

In Partial Fulfillment of the Requirements

For the Degree

Master of Arts

In Communication and New Media

McMaster University

## Introduction

In 1982, the band, The Weather Girls released the hit song *It's Raining Men*. The song, performed by two Black women, Martha Wash and Izora Armstead, earned international praise for its catchy disco melody and provocative lyrics. The song, *It's Raining Men*, advocates for female empowerment by confronting the objectification of women. The song suggests that instead of sexualizing women, men should instead “feel the heat.” *It's Raining Men* challenges the ‘weather girl’ stereotype with comedic confidence, detailing the significance of embracing identity through the reversal of ‘weather girl’ expectations and representations. While The Weather Girls utilized a musical format to self-represent themselves and advocate for diversity, many modern racialized women weathercasters champion equality and identity in a different way; they do so on social media.

Social media, as a form of communication and method of connection, enables users to generate content, consume information, express themselves, establish their identity and socially interact in a digital setting (Velasquez & Larose, 2015). According to the business and statistical website Oberlo, 3.96 billion people use social media worldwide and the number is expected to increase over time (Gaubys, 2022, para. 1-3). Datareportal, another website that offers social media data insights, reported that Twitter has over 450 million active users worldwide, including almost 8 million accounts based in Canada (Kemp, 2022). Largely, social media empowers and engages with individuals, advocating for “social justice for underserved or marginalized communities” (Al’Uqdah, Jenkins & Ajaa, 2017, p. 137). Social media also offers a space for self-representation, personal expression, and storytelling. Despite the mobilization of online discrimination, “social media can shape and transform people’s attitudes, beliefs, and behaviours about diversity and inclusion” (Hanasono, 2017, p. 27). Hashtags like #BlackLivesMatter and

#MeToo raise awareness about racism and sexism respectively, supporting and collectively encouraging members of communities to become visible and voice their experiences. The death of George Floyd in May 2020 triggered and dramatically incited a much larger discussion on social media regarding systemic oppression and targeted violence against minority populations in the United States, spurring protests and advocacy in support of the Black Lives Matter Movement (Toraman, Şahinuç & Yilmaz, 2021). Outside the use of social media platforms by the abovementioned popular movements, racialized women weathercasters in Canada also use social media platforms to articulate their experiences, advocate for diversity and control how they self-represent themselves online.

Despite the recent visibility of racialized women weathercasters on social media, the weathercasting industry is dominated by men. Older American reports indicate a strong male preference for weathercasting in local radio and television news programming, (Robinson, 1985; Wulfemeyer, 1983) while a more recent study observed that nine times out of ten, weather information is presented by men (Lont, 2012). Women who are weathercasters grapple with sexist stereotypes and biases based on physical appearance, encountering the term ‘weather girl’ in media environments (Perryman, 2020; Hallows, 2020; Rainear, 2019; Cranford, 2018; Perryman & Theiss, 2014). In *Weather On the Air* (2010), a book that provides a historical overview of weathercasting, prominent meteorologist, author, and science journalist Robert Henson discussed the history of women's sexualization in weather. Women were expected to be sexual objects of desire, “delivering the weather in states of undress” (p. 113). According to Perryman (2020), the ‘weather girl’ stereotype assumes “beauty over brains” (p. 21). Film and television reinforce the ‘weather girl’ stereotype, where women are often portrayed as subordinate to and dependent on men, less intelligent, and noticeably sexualized (Perryman &

Theiss, 2014). Da Silva et. al acknowledged the stigma associated with women weathercasters as well as the ways weathercasters are associated with fashion and sexual appeal rather than “knowledgeable/science-based forecasting” (p. 5). Scholars argue the infantilization of ‘weather girls’ relegates women to the margins of juvenility and the ‘antithesis of ‘weatherman’” (Perryman, 2020, p. 5).

Da Silva et. al also analyzed global representations of ‘weather girls’ and recognized “countries with different backgrounds have reproduced the same pattern on weather news: a young lady wearing sexy dress provides an entertainment performance rather than information delivery” (p. 18). Chouinard (2016) commented on the different and “rigorous” atmosphere of weather reporting compared to other STEM fields, where there is a larger focus and reliance on the physical body to present meteorological information, including the application of “the male gaze” onto women’s bodies (p. 36-37). This fixation on appearance and conventional attractiveness proves detrimental as stereotyping and discrimination can manifest against racialized women weathercasters for not existing as the norm. It is necessary to examine how racialized women weathercasters choose to self-represent themselves and their physical appearance on social media, to better understand their interactions with the ‘weather girl’ stereotype.

In terms of race, audiences and weathercasters alike expect ‘weather girls’ to be white women with blonde hair and blue eyes (Perryman, 2020, p. ii). In a survey with American broadcast meteorologists, 100% of women and 71% of men reported that their “race/ethnicity had impacted their career” (Perryman, 2020, p. 90). According to Perryman, “more Black, Latina, and biracial women experience negative effects from race/ethnicity than men...also experiencing both implicit and overt racism from viewers” (p. 90). After completing interviews

with American racialized women weathercasters, Perryman suggested that “Black women don’t fully identify with the ‘dumb blonde’ image evoked by the ‘weather girl’ stereotype,” (p. 91) where racialized women reject the internalization of the ‘weather girl’ stigma. However, this separation leads to potential feelings of outsidership among Black and Hispanic women weathercasters (p. 91). Perryman also discussed the discrimination toward Black hairstyles and how natural hair is considered unprofessional, noting how suppressive messaging “has real negative impacts for Black women’s confidence and self-esteem, and potentially shapes their perspective of the ‘weather girl’ stereotype” (p. 109). In one of the few studies examining research on weathercasters online, Boling and Walker (2021) addressed how intersectional identities of gender and race add a layer of complexity to social media experiences. Boling and Walker contended that in the digital space, “women of colour broadcasters are subject to more online harassment than their male counterparts” (p. 2). In our digital world, there is a clear need to examine racialized women weathercaster representations on social media, unpacking their intersectional identities and how they navigate and represent their experiences ‘against the prevailing winds.’

### **Literature Review**

Research exists on gendered representations and positions of weathercasters in the U.S. context (Hallows, 2020; Rainear, 2019; Cranford, 2018; Endfield & Morris, 2012). This research recognizes that the few women, employed in the weathercasting industry, are still ‘left out in the cold.’ Women make up “8% of chief meteorologist positions and less than 11% of evening shifts” (Cranford, 2018, p. 284). Further, women weathercasters are reduced to fewer anchoring time slots and unpopular weekend broadcasts with lower ratings (Wilson, 2008). While the above literature paints a comprehensive picture of the roles of women in this industry, what

remains unexplored are the voices and online self-representations and social media activism of women weathercasters. Given the importance of storytelling in providing disenfranchised people spaces to voice their accounts of marginalization (Hiraldo, 2010), this project will analyze the tweets of racialized women weathercasters in the Canadian media, exploring how they represent themselves as racialized women, broadcasters and weathercasters in an online Canadian context.

While research abounds on gendered stereotypes of women in weathercasting, there are fewer studies that recognize race. Literature on the positions, representations and experiences of both racialized women and men weathercasters in the U.S. remain sparse in comparison (Hallows, 2020; Rainear, 2019; Da Silva et. al, 2016; Robinson, 1985; Bacon-Bercey, 1978). Rainear (2019) noted that despite receiving the highest values of message credibility, “black forecasters only make up approximately 10% of the workforce in broadcasting” (p. 63). Statistically lower employment rates indicate a disregard for diversity, lack of gender representation and racial visibility in weathercasting. Gayles and Smith (2019) also recognized how intersectional oppression disadvantages women in STEM and meteorology, noting that women may “ultimately make the decision to leave STEM disciplines for reasons that have nothing to do with their capabilities in math and science,” (p. 30) rather the discrimination they confront in school, the workplace and online.

Bacon-Bercey, (1978) the first Black woman to earn meteorological qualifications in the United States, (Henson, p.120) commented on the need for an increase of Black meteorologists and how “a larger percentage of blacks with scientific potential need to be identified, assisted, recruited and finally brought into the active labour force” (Bacon-Bercey, 1978, p. 580). Hallows (2020) agreed, studying the modern disparities of minority underrepresentation in weathercasting and finding that still “the local broadcast television industry under-performs in attracting

minorities into the workforce” (p. 4). Interestingly, Hallows reported a “disproportionally low” (p. 23) number of Asian-Pacific Islander weathercasters in their racial data analysis and statistical research, ascertaining that “there was a concerning and complete absence... in the data” (p. 22) in part due to a “distaste for careers in the ‘arts’ among this minority” (p. 23). My research illustrated this racialized need for data by exploring the meaningful intersections of science and communication within weathercaster identities.

In research outside the U.S., Da Silva et. al (2016) interviewed the owner of the Pakistan weather forecast channel on the experiences and representations of racialized women weathercasters. In this Muslim context, the owner discussed that despite their minority status, the women believe “they are [intellectually] equal to men” (p. 15). Given that a majority of racial research remains quantitative, no detailed narratives accompany these statistics to better understand the ways race and ethnicity have impacted the careers of these weathercasters. In all the above research, only Perryman (2020) attempted to understand the intersectional experiences of racialized women weathercasters in an American context, focusing solely on the ‘weather girl’ stereotype. The limited research on racialized women in weather examined cultural censorship, where women felt the need to “mask their true hairstyles because of the ‘unwritten’ rules of the [broadcasting] industry” (Shepherd, 2020, p. 49). Researchers explained that this suppression of ethnicity and subjugation to white broadcasting norms restricts freedom of expression for racialized women (Harris, 2022; Perryman, 2020; Shepherd, 2020). This suppression has resulted in empowered hashtags like #NaturalHairOnAir, where Black women journalists and meteorologists were encouraged to “upload photos of themselves at work, in afros, cornrows, Bantu knots, braids and more” (Castillo, 2022). Analyzing the ways in which racialized women

weathercasters represent themselves despite potential conflict online can provide insight on ways to reduce or mitigate discrimination.

Studies explored the branding, identity and self-representations of journalists (Molyneux, 2019; Van Hove, Asdourian & Bourgeois, 2018; Brems et. al, 2017; Bossio & Sacco, 2017; Hanusch & Bruns, 2017). Using quantitative content analysis, Brems et. al (2017) analyzed the personal branding of journalists on Twitter, exploring through a theatrical lens the ways in which journalists engage with personal and professional representations. The authors acknowledged the importance of aesthetics, self-promotion and timing in tweets, noting how adding details such as links and pictures “give the virtual performance of the journalist multiple layers... [creating] the illusion of giving their audience a glimpse of their private activities,” while establishing a type of journalist-audience intimacy (p. 453). Bossio and Sacco (2017) examined the presence of journalists on social media, noticing how some journalists choose to privatize accounts and separate their personal lives from their public identity (p. 527). The findings of Molyneux’s study (2019) on gender and self-identity in journalistic branding suggested that “female journalists take a more personalized approach by speaking about themselves in their profiles and their tweets... focusing more resources and attention on their individual brands” (p. 1). This information informed my work, helping outline the various ways racialized women weathercasters chose to represent themselves online.

North American studies examined the importance of journalists covering advocacy stories in the news media, yet largely neglected to research how journalists use social media for advocacy purposes. In a 2016 research survey, Weaver and Willnat discovered that women journalists found social media to be a very important asset to their work, using Twitter for gathering information and reporting (pp. 850-851). However, one study by Winarnita et. al

(2020) discussed how women journalists from Indonesia participated in digital activism online, discovering that the women were able to “creatively express and contest gendered ideals, as well as mobilize activism around political and social causes” (p. 621). Interactions in digital environments, like on social media platforms, are faster than other mediums, leading to stronger engagements and a wider spread of information (p. 628). The authors also noted the importance of collaborative approaches to activism that focus on intersectionality, where the women “use journalistic practices to advocate for diversity, equity of access [and] inclusion” (p. 634). This study contributes to this project, exemplifying the influential position of journalists in the digital world and their ability to mobilize information via social media.

Exploring advocacy and self-representation of racialized women weathercasters in an online context amplifies “the voices and experiences of individuals who hold marginalized identities and experience multiple forms of oppression” (Gayles & Smith, year, p. 27). Analyzing their forms of advocacy provided clearer insight into how they exert agency over their identities and frame their representation on social media. Maniou and Veglis (2016) discussed the impact of visual self-representation in the journalism industry, explaining how journalists use selfies and digital photos as new media tools to broadcast themselves and personalize their messages (p. 112). Lopez-Ortega and Noronha (2021) studied social media identity construction and the representation of women journalists in Brazil and Spain, discovering that women controlled targeted experiences of discrimination online by utilizing empowerment and moderating their professional and private life (p. 168). Completing a qualitative content analysis, the authors examined visual self-representations of feminist activism on social media, learning about journalism gender-related issues (p. 168).

Steinberg (2016) discussed the power of social media activism and advocacy in transforming law in the United States, adding that the dissemination of information and augmentation of marginalized voices contributes to and revolutionizes how laws are “created and enforced in all aspects of society” (p. 414). Cosby (2018) used a qualitative mixed methodology to investigate the impact of social media and hashtags on racialized social movements, discovering that “discourse via social media affords movements and activists the opportunity for organization, mobilization and free expression of a movement’s people, purpose and plans” (p. iv). Therefore, racialized women weathercasters have the ability to contribute to transformative change in their communities by publicly advocating for diversity in science communication fields. Despite research on the transformative power of social media in enacting change, there is a significant gap in research on how women journalists and weathercasters talk about their identity and use their social media for advocacy/self-representational purposes in a Canadian context.

Given the gaps mentioned above, this project responds to the following questions:

1. *How do racialized women weathercasters use their online platforms to advocate for intersectional representation and diversity?*
2. *How do racialized women weathercasters talk about their race and other intersecting identities?*
3. *How do racialized women weathercasters talk about and represent their intersectional experiences online and in the workplace?*

## **Theoretical Frameworks**

### **Critical Race Theory**

Critical Race Theory (CRT) was developed in the 1970s by American legal scholars, lawyers and activists (Delgado and Stefancic, 2001). Key theorists of CRT include Derrick Bell, Alan Freeman, Richard Delgado and Kimberle Crenshaw. Critical race theorists make several propositions that will be useful in understanding the racialized experiences in this study. CRT recognizes the endemic nature of racism and views race as a social construct where “racism is not merely the product of individual bias or prejudice, but also something embedded in legal systems and policies.” (Sawchuk, 2021). In addition, critical race theorists argue that “race is a social construction, not a biological reality” (Delgado and Stefancic, 2001, p. 17). Critical race scholars also assert that racism is ordinary and is something that is embedded in “the usual way society does business, the common, everyday experience of most people of colour in [the United States]” (Delgado and Stefancic, 2001, p. 7).

Further, theorists critique liberalism and oppose ideas of meritocracy, colour-blindness and neutrality. Colour-blindness further dismisses racial identity, disregarding the harsh realities of systemic racism on Black individuals (Delgado & Stefancic, 2001). Another important tenet supported by critical race theorists acknowledges the importance of storytelling and counter-storytelling. Storytelling provides racialized people with the space to articulate their experiences of marginalization (Hiraldo, 2010) while counter-storytelling challenges myths about subordinated groups that dominate the culture (Delgado & Stefancic, 2000). Storytelling by marginalized people forms a central part of this project as this thesis analyzed how racialized women weathercasters articulated and represented their diverse experiences on social media. Overall, using CRT in this project helped emphasize the lives and experiences of racialized women weathercasters in Canada, demonstrating the prevalence of racism and how the women confront and dismantle discrimination online.

## **Intersectionality**

Coined by Kimberle Crenshaw in the 1990s, the concept of intersectionality refers to “the examination of race, sex, class, national origin, and sexual orientation, and how their combination plays out in various settings.” (Delgado and Stefancic, 2001, p. 51). Racialized women weathercasters occupy space in at least two of the aforementioned categories and “exist at an intersection of recognized sites of oppression” (Delgado and Stefancic, 2001, p. 51).

Understanding how the identities of marginalized groups coalesce ensures their oppression is noticed and validated. Intersectionality theory suggests that everyone has several identities, these identities intersect in qualitatively unique ways, and that the effects of each identity vary in importance based on social situation. (Biefeld, Stone and Brown, 2021; Hancock, 2007).

Crenshaw analyzed violence against Black women, claiming that “any analysis that does not take intersectionality into account cannot sufficiently address the particular manner in which Black women are subordinated” (Crenshaw, 2021, p. 140). According to Crenshaw (1991), modern feminist and antiracist discourses in academic literature “failed to consider intersectional identities such as women of colour,” (p. 1242) calling for more research on the experiences and representations of racialized individuals.

In an attempt to lessen the negative consequences of misunderstood intersectionality, Delgado and Stefancic argue for perspectivalism, to “understand the predicament of intersectional individuals,” (p. 55) by examining life from their perspective and representations. By altering viewpoints, one is able to interpret and frame the life of another intersectional person, acknowledging barriers and the multiplicity of the human experience. Perspectivalism acts as a tool to prevent injustice and accept differences. In this project, understanding the

complexity of representation and perspective aids in supporting future initiatives to end racial and sexual discrimination.

Studies that apply intersectional analyses provide a holistic view of a person by isolating different parts of their identity, further advocating for a more nuanced understanding of their representations. For example, Azhar et. al (2021) applied CRT's concept of intersectionality to examine the experiences and representations of racial and gendered discrimination against Asian Americans and Pacific Islanders in the United States, confirming that stereotypes based on race and gender persist where racialized women are believed to be exotic and "are expected to be passive," (p. 282) despite contradictory, personal representations. Applying intersectionality to my project facilitated a multidimensional and textured understanding of the ways racialized women weathercasters represent themselves and manage discrimination online.

### **Methodology**

This project takes a qualitative methodological approach to understand the ways racialized Canadian women weathercasters advocate for diversity, talk about race and represent their intersectional experiences. Qualitative methodological approaches discover the 'why' and 'how' of research questions, examining "why events occur, what happens, and what those events mean to the participants studied" (Teherani et. al, 2015). Qualitative methodological approaches allow for increased flexibility, the facilitation of meaningful insights and the generation of new ideas (Bhandari, 2020).

Purposive sampling was used in this project. Purposive sampling refers to "identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest" (Palinkas et. al, 2015, p. 534). The Twitter accounts of 12 Canadian racialized women weathercasters who were active on the social media platform

were included in the study. All 12 Twitter accounts contained content that was visible to the public and could be accessed by anyone. In this study, I analyzed Canadian weathercasters who identified as women and as racialized minorities (Black, Latinx, Asian, and biracial) between the ages of 20 to 60 years old on Twitter. The women have experience working in the weathercasting industry as weather specialists/presenters, weather anchors, or meteorologists. The tweets that were sampled referenced or discussed identity construction, self-representation, racial or gendered advocacy, EDI practices or ‘weather girl’ sexualization. According to Lasorsa, Lewis and Holton, (2012) “journalists more freely express opinions” (p. 19) and write about their personal lives on Twitter than other social media platforms. Also, due to its political nature and international prominence, choosing Twitter as the sole platform was an effective choice (Weller et. al, 2014).

This project utilized the online research service Netlytic as a data-gathering method. Netlytic generates accurate social media data by filtering through texts, analyzing social networks to “summarize and visualize public online conversations on social media sites” (Gruzd, 2022). I inputted various keywords into the Netlytic platform that subsequently searched Twitter for tweets that pertained to my project. I then attached the Twitter handles of the weathercasters to make sure I only collected information from those women. These keywords garnered results that strongly connected to this project, locating tweets that contribute to conversations on diversity and self-representation. The keywords included representation, diversity, Black, inclusion, weather girl, woman, girls, identity, race, racism, sexism, advocacy, BIPOC, discrimination, weather, and day. The keywords that demonstrated viable results included representation, diversity, racism, Black, girls, woman, weather girl, BIPOC, weather and day. In

the context of this research project, Netlytic assisted in streamlining information, collecting the most relevant tweets posted by the racialized women weathercasters.

Research exists on social media content in the public domain, analyzing Twitter posts, conversations and practices related to journalism (Shepherd et. al, 2015; Barnard, 2014). Since the racialized women weathercasters did not consent to the analysis of their personal representations despite them being public, their identities will not be revealed in this project nor in subsequent publications linked to the project. The racialized women weathercasters were analyzed under pseudonyms to protect their identities. I replaced their original names with new names such as Danielle, Rebecca, Chelsea, Jennifer, Victoria and Hannah. Danielle and Rebecca tweeted more often about diversity and their intersectional experiences than the other women. The tweets were paraphrased and also quoted in their entirety due to their powerful messaging and existing visibility.

### **Thematic Analysis**

This research used a thematic analysis to understand and analyze the tweets. Maguire and Delahunt (2017) explained that a thematic analysis identifies “themes, i.e. patterns in the data that are important or interesting, and use these themes to address the research or say something about an issue” (p. 3353). Braun and Clarke (2006) acknowledged the flexibility and theoretical freedom of thematic analyses, where the methodology is responsible for “identifying, analyzing, and reporting patterns (themes) with data” (p. 6). Braun and Clarke identified six iterative steps to completing a thematic analysis, including familiarization, coding, generating themes, reviewing themes, defining and naming themes, and lastly writing the analysis. The application of these steps to my research proved useful in discovering the main themes of tweets composed by racialized women weathercasters in the Canadian media.

The tweets were categorized under specific overarching themes that encapsulated the overall ideas/concept of each tweet. Predominantly, the tweets that were analyzed were posted after May 2020, issuing a relevant and timely analysis that considered the new political/racial climate surrounding George Floyd's death. The main themes include "Weathercasters' Advocacy for Representation and Diversity," "Weathercasters' Talk About Racism and Identity" and "Intersectional Experiences of Weathercasters." Each of these themes have sub-themes that will be discussed in the findings. While themes will be discussed separately, the themes easily overlapped and blended in this thesis.

### **Positionality**

My interest in weathercasters stems from my great love for weather, natural hazards, and the environmental world. My previous experience working in newsrooms and in front of meteorological green screens affords me the ability to witness the pressures and attitudes embedded within journalistic workplaces. As a woman myself, I understand the sexism, gendered stereotypes, and the sexualization of women in a broadcast environment.

While I understand the climate of working in media organizations inside a female body, there is no way I can know or claim to understand the unique experiences of racialized women. This is the reason why analyzing the self-representations of racialized women is invaluable. Due to their intersectionality, racialized women are likely to experience more discrimination than White women and men. Unpacking and validating these documented experiences can provide greater insight into how problems of discrimination begin and how racialized women mobilize advocacy online in an effort to mitigate and end discrimination.

The voices and messages of racialized women weathercasters matter because they contend with racial and sexual discrimination, navigate intricate identities and remain outspoken

on diverse issues in the broadcast industry. I chose to analyze their tweets because weathercasters are often overlooked or deemed replaceable in the media environment, since ‘anyone can present/talk about the weather.’ The skills required to effectively connect with audiences and relay meteorological information are invaluable and there is no research on the self-representations of women weathercasters. Precisely because weathercasting falls under STEM, a field dominated by White males in Canada, (Frank, 2019; Ruel, 2017) it is urgent to understand how racialized women are faring in this specialized area of journalism. Analyzing how they present themselves on social media invites audiences to better understand the importance and worth of their position, the discriminatory struggles they have endured and the way they transform their broadcast role into a social activist position.

I recognize my positionality and privilege as a White, cisgender, young woman in academia. Reflexivity is crucial in this project, as my positionality as a White woman impacts and affects my thematic analysis and subjective interpretation of the data. I navigated this position by being vigilant and aware of the nuanced representations of racialized women, attempting to understand the meanings behind their messages as authentically and accurately as possible.

### **Findings / Discussion**

Before discussing the tweets, I will first explain the differences between and characteristics of meteorologists and weather specialists, two positions that simultaneously fall under the weathercaster title. In the context of this project, I define STEM (Science, Technology, Engineering and Mathematics) as a strictly epistemological principle, a profession void of artistic connection, subjective expression and communicative necessity. I will then explain the two intersectional identities of the weathercasters, illustrating the basic intersections of their personal

and epistemological identities. The women navigate and prioritize these identities in unique ways, demonstrating their subjective, qualitative and flexible nature. I advocate for a stronger linkage of all intersections and identities within the tweets of racialized woman weathercasters, urging them to establish cohesion and unity between their personal and epistemological identities online. This unity could help elevate marginalized voices and mobilize information in their tweets to inspire and educate audiences on diversity.

Some of the racialized women weathercasters whose tweets were analyzed have an educational background in meteorology or atmospheric science and are certified “meteorologists.” These women have a large passion for weather and environmental processes and predominately have concrete training in forecasting, weather modelling and atmospheric observation, applying physics and mathematics to better predict environmental and climate processes (Pondent, 2017). However, some of the racialized women weathercasters analyzed do not have an educational background in meteorology or atmospheric science and, for the purposes of this study, will be referred to as “weather specialists.” These women have a large passion for weather and environmental processes but predominately have concrete talent/training in journalistic presentation. Weather specialists are able to deconstruct scientific terminology and disseminate information in engaging and insightful ways to public audiences. Meteorologists are not required to broadcast or communicate atmospheric information using media outlets, while weather specialists are not required to create original forecasts applying STEM foundations. Many established and successful women in the weather industry lack the academic scientific credentials or experience, rather using their broadcast skills to rectify and replace this absence. More research into this niche area of science communication could provide clarity on the

dynamics between meteorologists and weather specialists and how racialized women in these roles cultivate their online identities.

### **Navigation of Identities**

From the tweets analyzed in this project, women weathercasters navigate two clear identities, occupying basic intersections of race and gender within their personal identity and intersections of science and communication within their epistemological identity. I also recognize that there are other identities that are undisclosed, unknown and personal to each woman. I do not mean to privilege one identity over the other or assert that there are only two identities. The women themselves may also live with more intersections within their personal and epistemological identities. In spite of these factors, racialized women weathercasters experience a multi-faceted and complex position in both life and in their careers. These weathercasters not only navigate their personal identity but also must maintain and master this combined intersection of scientific knowledge and broadcast performance in a professional, epistemological identity, making it a much different and more nuanced experience than that of a White woman weathercaster or racialized male weathercaster.

Racialized women weathercasters are forced to confront and interact with stereotypes, infantilization (weather girl) and discriminatory dynamics in their visible broadcast role. The women try to combat racial and sexual prejudice while balancing skills in science and communicative media arts. Although some racialized women weathercasters lack the official meteorological credentials, they utilize meteorological tools every day and must understand scientific terminology to present the weather effectively. Although some racialized women weathercasters lack communication or journalism degrees, they acquire broadcast presence by practicing their speech and retelling forecasts to ensure they accurately express environmental

conditions. Despite their educational background, racialized women weathercasters still require both atmospheric knowledge and the right theatrical presence to communicate and engage with audiences in a broadcast environment. Recognizing the combination and intersections between personal and epistemological identities online emphasizes the racialized woman weathercaster experience and acknowledges the contrasting and discriminatory challenges the women face in the workplace. Therefore, for the purposes of this project, based on the aforementioned information, I assert that broadcast meteorology and the practice of engaging with meteorological information every day in a weather specialist position places a weathercaster in a STEM communication role.

Although racialized women weathercasters exist within this STEM communication role, the women largely address and connect their personal identity to half of their epistemological identity on social media. The women link together their racial and gendered intersections with their communication intersection, neglecting their science intersection in public tweets. For example, the weathercasters acknowledge the significance of being a BIPOC woman in the broadcast news industry but neglect to attach their science/STEM intersection with advocacy posts on Twitter. Maybe this is due to a belief that they are not a part of the STEM industry because of their communication education and lack of meteorological certifications. Racialized women weathercasters are members of the STEM communication community and by blending, recognizing and integrating their intersectional identities, could reach newer and more audiences with online representational advocacy.

### **Thematic Analysis**

#### **Weathercasters' Advocacy for Representation and Diversity**

This section articulates how racialized women weathercasters use their platforms to advocate for diversity and inclusion. In their tweets, racialized women weathercasters called for diverse representation in the broadcast industry, while also describing their pride and privilege in being current examples of diverse representation in the industry.

***Calls for Diverse Representation:***

Racialized women weathercasters powerfully articulated the importance of diverse representation in society. The women connected with their followers and reached new audiences by using relevant and strategic hashtags, emojis and vocabulary choices. The women advocated for change by describing the need to ‘keep the conversation going,’ pulling on the significance of storytelling in contributing to effective representation.

Danielle shared that she believed representation is important in every industry, describing how she wanted to see more ‘diversity on every level.’ Danielle tweeted: Representation in every industry is important, and for me especially in the media industry. I’m here for it, I want to see more diversity on every level, [it’s] what we need in every industry!” She encouraged her followers to continue taking positive steps forward and support leaders that advocate for diversity in their communities, noting the existence of challenges and that transformative ‘change won’t happen overnight.’ She posted: “Let’s continue to make positive steps forward and keep the conversation going,” and “The type of change needed is hard, messy and won’t happen overnight. Keep amplifying the positive change makers.”

Danielle advocated for everyone to work together collectively in the fight for equality, where everyone has a unique role to play in combatting discrimination, posing questions on how to end both major and minor acts of racism. Danielle tweeted: “We all have a part to play in putting an end to it. We as a collective human race, working together, are the only way real

equality can happen. How do we stop the major acts of racism when these little one seem ‘so harmless?’” Racialized women weathercasters also said it is never too late to learn and apply equity, diversity and inclusion practices, refusing to accept that racism will remain the norm in society. Danielle echoed these sentiments, stating “The opportunity to learn is everywhere, for everyone. But I refuse to accept that as the norm.” This comment aligns with Delgado and Stefancic’s approach to CRT (Delgado and Stefancic 2001) and an activist dimension to that theory that pushes for not only comprehending the status quo but altering it. Racialized women weathercasters used their social media platforms to understand experiences of discrimination and advocate for diversity and equality.

There are clear links between the advocacy of racialized women weathercasters online, weathercaster literature, and the tenets of CRT (Delgado & Stefancic, 2001). In this project, the weathercasters commented on the endemic and ordinary nature of racism by addressing the continuous and collective fight against racism while also sharing their views on blatant and subtle acts of discrimination. The ordinariness of racism in society “means that racism is difficult to cure or address” (p. 7). By choosing to acknowledge these challenges publicly on social media, racialized women weathercasters took the first step in disrupting and reversing the normalcy of embedded racism through the sharing of advocacy, experience and representation. Within the calls for representation, the racialized women weathercasters advocated for diversity and celebration by attaching popular hashtags to their posts like #EndRacism, #RepresentationMatters, #BLM and #BHM when tweeting about the Black Lives Matter Movement and Black History Month. Hashtags increase levels of engagement and help categorize information, further linking together communities and movements (Zote, 2021). Racialized women weathercasters effectively applied hashtags to their posts in an effort to stay

connected and integrated within the larger conversation of diversity while also aiming to spread their own personalized messages.

Rebecca acknowledged the importance of recognizing and celebrating the achievements of the Black community during Black History Month, explaining how it is the time to honour ‘Black empowerment.’ Rebecca tweeted: “Black History Month is an annual celebration of achievements by African Americans and the black community as a whole! It’s a time to recognize and celebrate black empowerment! TOGETHER WE RISE!” Rebecca also used curated emojis alongside her posts, using fists to symbolize strength, action and unity while using black hearts to represent her love for the Black community. Emojis, images and other visual elements capture the attention of audiences and shift the tone of a post from serious to casual depending on their application and prevalence. Emojis also evolve over time and can have multiple connotations reflective of intent and desired effect (Pancer and McShane, 2021). The women weathercasters used emojis at the beginning and end of tweets to make their opinions and advocacy stand out, meeting Twitter’s restrictive word count by alternatively conveying emotion and influencing action without text.

On Blackout Tuesday in 2020, the social media campaign in response to police brutality against Black lives, Rebecca shared and supported the initiative with more emojis, urging her followers to disconnect as a show of solidarity and letting ‘silence speak volumes.’ She said: “May our silence speak volumes. BLACK OUT your social media TODAY, TUESDAY, JUNE 2ND, as a show of solidarity. Disconnect TODAY from social media to RECONNECT with the community!” Connecting this idea to Cosby’s (2018) study on social justice movements, “social media has become a preferred medium giving voice to the marginalized” (p. iv). Racialized women weathercasters harnessed and took advantage of social media to spread information on

the racialized issues and celebrations that mattered to them, influencing a greater exposure of opinion and transforming the landscape of Twitter to include marginalized perspectives.

During the inauguration ceremony of US president Joe Biden and vice-president Kamala Harris in January 2021, Canadian racialized women weathercasters discussed the importance of diverse representation and visibility in governmental structures. Danielle expressed an emotional response, explaining how the inauguration ceremony prompted joyful tears while another weathercaster Victoria described feelings of pride and new beginnings. Danielle explained: “The amount of diversity and inclusion in this #InaugurationDay ceremony is bringing me to tears,” while Victoria tweeted: “This is a great moment for women. Brown and Black females feeling that extra [joy].” Victoria also shared the significance of seeing Black and Brown women in representational roles, citing a historical victory for all women due to the vice-presidential success of Kamala Harris.

Rebecca chose to tweet about the American election as well, using capital letters to convey excitement and urgency, celebrating the gendered and racial intersectional identity of Kamala Harris. Rebecca posted: “Kama Harris makes history TWICE as America’s first female VICE PRESIDENT-ELECT AND first BLACK VICE-PRESIDENT ELECT #PresidentialElection.” Political events spur public commentary on social media. Brock (2009) clarified the importance of the Internet serving as a ‘third place’ for racialized communities, where “Black web users are often interested in the political process and its effect on their daily lives” (p. 16). This interest converges personal opinion with political ideology, facilitating a space where marginalized people can collectively unite to share their individual experiences and reconstitute themselves as people apart from their communal networks (p. 16). Focusing on Kamala Harris’ intersectional identity offered racialized women weathercasters the opportunity

to continue the conversation on diversity in this third place, collectively reiterating the importance of intersectional representation.

Rebecca's advocacy continued to reach beyond politicized tweets on racial representation as she wrote in support of gendered representation on International Women's Day. Rebecca complimented the strength and bravery of women around the world, exclaiming to her followers that there is nothing they cannot accomplish. Another racialized woman weathercaster Chelsea also advocated for women's rights on International Women's Day, explaining her pride to stand with other strong women who fight for equality. Chelsea tweeted: "Today I stand proud with all the women out there who have fought for equality. We are strong ladies who deserve the world! #InternationalWomensDay." By using political, historical and social movements as anchors for tweets, weathercasters mobilized their intentions and messages online, helping to combat ordinary racism and embrace diversity. When tweeting about various identity-based topics and movements like International Women's Day and Black Lives Matter, the weathercasters separated and isolated the intersections of their identity, only focusing on either gender or race. Finding ways to link together these intersections could amplify their messages and engagement, curating intersectional advocacy in a digital environment.

Lastly, Jennifer called for representation and advocacy from a weather perspective, posting a link to solely support television meteorologists / 'scientists' on the air, with brackets excluding weather specialists. She tweeted: "The TV meteorologist is sometimes the only scientist that people see on a regular. Here is a snapshot of 30 TV meteorologists (not weather presenters) in Canada currently on the air in 2020." The separation of bracketed (weather specialists) places focus on weathercasters with meteorological credentials, potentially suggesting either an insider-outsider binary between the two positions or a pure celebration of

STEM achievements. Considering the lack of Black women weathercasters in the American media, (Perryman, 2020; Hallows, 2020; Rainear, 2019; Bacon-Bercey, 1978) Canadian women in these few positions exude confidence online and fight for equality, facilitating an environment of empowerment and dismantling the conventional expectations and stereotypes of weathercasters. Advocating for equal representation, from a diverse perspective, creates an atmosphere of understanding and the ability to initiate tangible change. Racialized women weathercasters advocate for and inspire the masses to care about intricate intersectional experiences, issues and representations through visibility and being in prominent broadcast positions. Overall, the racialized women weathercasters called for representation in a variety of ways, utilizing emojis and hashtags to connect with audiences and advocate for racialized diversity and celebration online and in the workplace.

***Being the Role Models:***

Next to generalized calls for equal representation in the broadcast environment, the racialized women weathercasters discussed the importance of being role models to diverse audiences, injecting tones of both pride and privilege into their tweets. The women were grateful to be included in the conversation. The women were also proud to be role models/prominent figures within the broadcast BIPOC community, contributing to diverse representation in the media. In many tweets, Danielle repeatedly expressed her belief in ‘being the change you want to see’ in the world, explaining how despite racial identity and appearance, she is determined to continue illuminating the stories of BIPOC people and their efforts to ‘uplift communities.’ Danielle posted: “I believe in being the change you want to see. I’m a firm believe in being a part of the change you want to see. I can’t stop/won’t stop sharing the stories specifically of the BIPOC helping their communities.”

When tailoring their tweets, racialized women weathercasters used language that collectively connected individuals and built a wider community, using pronouns like ‘we’ and ‘you’ to speak directly to people online. ‘We’ demonstrates solidarity and inclusivity, “[evoking] a sense of commonality and rapport between a speaker or writer and his or her audience” (Nordquist, 2020). By writing these pronouns into their tweets, racialized women weathercasters created a sense of unity, belonging and understanding online, facilitating a safe space for discussion and relatability on Twitter. Whether describing negative/isolating experiences or the difficulties of enacting representational change, the women ended their tweets with optimism and hope, sharing methods and tips to overcome adversity and reach equality in the future. The short structure of their sentences and overall tweets made their posts dynamic, direct and engaging, using their voice and platform to make a difference. Danielle took it upon herself to speak up and continue/contribute to the conversation of diversity, promising to use her voice to battle racist micro-aggressions. She tweeted to her followers: “I am doing what I can to keep the conversation going, to speak up and speak when I see or experience racism, and to be a part of the change I want to see. If I don’t use my voice, how will micro-aggressions ever stop.” Danielle explained the importance of visibility in the media, sharing her experiences of being a role model to racialized youth who have similar broadcast goals and encouraging them to pursue their dreams. Short but unifying statements like “if you can see it, you can be it,” and “be the change you want to see” evoke emotions of strength and bravery, recognizing the power of intersectional people in broadcast positions and encouraging others with a passion for diversity to join the industry.

The few racialized women weathercasters that posted about representation used their platform to advocate for the normalization of diversity and connect their personal identity (intersections of race and gender) to their broadcast positions. They largely discussed the

importance and normalization of audiences seeing racialized women on screens and the impact of representation on future generations. Rebecca reflected on the significance of breaking down barriers and glass ceilings in the broadcast industry, being ‘proud to be a positive representation of Black power.’ Rebecca tweeted: “I am so proud to be BLACK, I am so proud to be a positive representation of BLACK power!!!” She also shared this post: “I’m breaking down those barriers, breaking glass ceilings and I will BREAKTHROUGH - that’s a PROMISE, to viewers like you.” Rebecca assured her followers that she would continue representing people of colour in broadcasting, finishing the tweet with relevant hashtags like #BIPOC, #BlackBroadcasters and #BlackLivesMatter. These inclusive and popular hashtags offered opportunities for more engagement and connection online (Zote, 2021). Echoing Molyneux’s work, (2019) Rebecca posted personalized and identifiable tweets, suggesting that racialized women weathercasters communicate and brand themselves in engaging, personal ways.

Rebecca also introduced a religious intersection to her tweets and attributes her success as a weathercaster to a higher power. She tweeted: “He chose ME to use my voice, position, influence and POWER to continue to break down barriers and DREAM BIG!!!” Adding religious affiliations to tweets amplifies the intersectionality of the racialized woman weathercaster identities. Using her faith, Rebecca referenced the unusualness of racialized women being in broadcast positions. Rebecca does not reflect the common archetype of a ‘weather girl’ and uses her voice to assert agency and represent herself on Twitter. By emphasizing the rarity of racialized women weathercasters through religious undertones, Rebecca advocated for more representation in the broadcast industry. Racialized women weathercasters championed equality by identifying the power of their own individual

prominence, their visible broadcast position, and their influence on public platforms, supporting tangible change by existing as an example of diverse representation.

### **How Weathercasters Talk About Racism and Identity**

The section that follows focuses on how racialized women weathercasters talk about their race and other intersecting identities. Racialized women weathercasters chose to address their racialized appearance and the context of racism.

#### ***Racialized Appearance***

Firstly, racialized women weathercasters represented themselves in tweets by associating their racial identity and appearance with their broadcast roles. The women tweeted about appearance and embracing ‘what makes you different.’ For example, Danielle commented on the lack of diversity in the broadcast industry, alluding to how White people occupied a majority of reporting roles. Danielle said: “Growing up, there was never really anyone who looked like me in the news.” Historical neglect towards inclusion affected current racialized women weathercasters, where Danielle recognized the lack of racialized people in prominent broadcast roles, also noting how some women of colour broadcasters don’t wear their natural hair. Danielle added: “There were very few men or women of colour in prominent roles, and none of the women had natural hair.” In connection with the prior theme of racialized advocacy, Danielle shared her experience of growing up and not seeing any women wear curly hair on television, articulating how privileged she feels to be a ‘source of inspiration’ and representation of diversity. Similarly, Shepherd (2020) commented on the importance of dismantling implicit biases and hair stereotypes, explaining how “there are a variety of standards of beauty and grooming, not just the ones centered on your own worldview” (para. 8). This sentiment connects

strongly with the aforementioned advocacy theme, demonstrating the versatility of conversations on race and diversity.

Danielle repeated ideas in her tweets to strengthen her argument and message, exclaiming: “Growing up I NEVER saw any women of colour wearing natural hair on the news. I’m not the first to do it, but I’m happy to be a source of inspiration for a little girl out there learning to love her hair.” In another tweet, Danielle wrote directly to curly-haired girls and boys, empowering youth to keep their natural hair and not change to fit into society or try to get a job. She wrote to her young followers: “To all my curly girls (and boys), you don’t have to change your hair to fit in. You don’t have to change your hair to get the job. Embrace what makes you different. It is your superpower.” Castillo (2020) advocated for the awareness of Black hair texture and disruption of hair discrimination, where journalistic audiences need to recognize “what Black women have to grapple with” (para. 19) and how they are pressured to change their appearance to suit white broadcasting standards. Together, Danielle and Castillo reiterated the importance of acceptance, raising awareness and encouraging change by staying the same: through authentic representation.

Danielle also acknowledged the challenges of ‘making it’ in the mainstream media with natural hair, claiming she would need to straighten her hair. Castillo (2020) continued to assert that “Black women with natural hairstyles like braids or twists are often perceived as less professional than Black women with straightened hair” (para. 15). This erasure of natural styles indicates racialized women feel they need to assimilate to white broadcasting standards, suppressing themselves and their authentic representation to ‘fit in’ and keep their employment. By continuously pointing out this lack of natural hair on air in tweets, Danielle contributes to the ongoing conversation of diversity and visibility, advocating for the normalization of natural hair

styles. Racialized women weathercasters also shared tips on natural hair care and offered styling advice to their Black followers, using their platforms to educate audiences and celebrate natural hair.

Some women weathercasters, including Rebecca, also recognized the importance of embracing appearances and various body types, not needing to be ashamed of one's racialized identity and energy. Rebecca said: "I embrace my body, I have curves, CONFIDENCE! My Nubian energy is something I cannot and will not contain." As Chouinard (2016) expressed earlier, there is a large focus on the physical bodies of weathercasters, translating into a constant sexualization of appearance and desire of thinness and Whiteness to correspond with Western beauty standards. Biefeld, Stone and Brown (2021) explained how the bodies of racialized women are inherently sexualized, stating that "Black women are particularly at risk for being hypersexualized compared to their white counterparts" (p. 288) based on historical and racist representations. This sexualization leads to a double marginalization of racialized women weathercasters due to their race and gender. Berdhal and Moore (2006) explained how racialized women journalists experience a "double jeopardy" of harassment based on their gender and race (p. 426). Despite negative comments, the women are proud to be role models and representations of diversity in the news, not apologizing or changing how they look to suit white broadcast standards.

Danielle commented on her biracial identity and the beauty of having a blended, Black and white family. Racialized women weathercasters prove they have agency over their public identities by controlling the types of information they share in tweets and how they represent themselves. The women talked about their physical appearances in empowering and celebratory

ways, illustrating the lack of natural hair in the broadcast industry and the beauty of embracing their racialized identity.

### ***Racism and Discrimination***

Racialized women weathercasters confronted racism in public tweets, reinforcing the ordinariness of discrimination and how they overcome racism. Danielle called racism ‘ugly’ and ‘real,’ boldly refusing to accept the constant and normalized nature of racism. In the Canadian context, research broadly explored racism and sexism in media organizations (Somani & Tyree, 2021; Finneman & Jenkins, 2018; Duke, 2009; Owens, 2007; Shafer, 1993). In 2021, the Black Canadian National Survey found that “70 percent of Black people experience racism in Canada on a regular basis” (Francis, 2021). This regularity impacts the daily life of racialized women weathercasters, where they contend with racist comments and interactions in the media workplace and online.

Danielle recognized the existence of racism in Canada, stating how despite their resilience, POC individuals face racism daily and tirelessly endure pain. By recognizing the brutality of reality without filter, Danielle can connect with a wider online audience who understand racism while continuing to mobilize awareness. Despite her racialized identity, Danielle prioritizes her journalistic identity first, focusing on telling the positive stories of people in her community ‘regardless of race’. In this tweet, Danielle dismissed her personal identity and focused solely on the communication intersection of her epistemological identity. By only acknowledging this communication intersection, Danielle transformed and controlled how she self-represented her identity. A bold acknowledgment and removal of personal identity might demonstrate the agency of racialized women weathercasters in choosing how they represent themselves and talk about race online.

Racialized women weathercasters talked about how the larger and more blatant examples of racism are easier to spot than smaller acts, noting how racism lingers and lasts even if it is not obvious. Danielle articulated that “racism doesn’t have to be out loud to be a part of the equation. The bigger examples of racism are easier to spot.” This discussion of ordinary racism and colour-blindness links to the analysis of Delgado and Stefancic (2001) where the authors expressed that a lack of awareness and action against racism “will keep minorities in subordinate positions” (p. 22). The women also explained that each individual experience and racist encounter is different, pointing out that every racialized person has a story and uniquely connects/relates to the Black Lives Matter movement. Racist experiences are universal but do not present in the same ways. By choosing to acknowledge and talk about the variance of racist experience, racialized women weathercasters advocated for intersectional storytelling and used their agency to talk openly and freely about racism.

Another example of agency can be seen when Danielle expressed that racist comments and micro-aggressions impact her, choosing to not let hate affect her life and self-representation online. Danielle declared: “I’m not impermeable. Comments like this hurt. But I will not bear their hate as my burden.” By speaking out publicly on racism, Danielle remains vulnerable and open to her followers, proving that racialized women experience pain even if they do not always vocalize/articulate these experiences. According to Okolosie, (2014) social media permits and allows women “who once would have been assigned to the margins...a platform from which to speak” (p. 90). Racialized women weathercasters choose to speak about race and discrimination not only because they can, but because they *want* to contribute to discussions and work to resolve racism. Even though the women are aware they will be hurt by negativity online due to their visible positions, the women find that the benefit of talking about race outweighs the

detriment of personalized discrimination. Racialized women weathercasters choose to sacrifice elements of their privacy by divulging racist experiences and talking about the significance of understanding racism. Racialized women weathercasters talk about racism and discrimination in realistic and straightforward ways, detailing the objective persistence of racism in society while declaring the subjectivity of racist interaction and experience.

### **Intersectional Experiences of Weathercasters**

This section illustrates how racialized women weathercasters talk about and represent their intersectional experiences online and in the workplace.

#### ***Broadcasting Experiences***

Racialized women weathercasters shared their intersectional experiences in the broadcasting industry, explaining what they experienced, how they felt and how they handled/managed negative experiences. Due to the historical silencing and oppression of racialized women, it is more challenging for racialized women to safely articulate their experiences of racism and sexism (Crenshaw, 1991). Social media introduces a controlled space for women to share these experiences and educate their audiences, advocating on a platform that supports their individual agency and the divulgence of intersectional experience.

The women shared experiences of racism and exclusion, including the importance of being Black women in representative positions on television. Danielle was told she was only in a prominent broadcast position because of their race and gender, or because she added value to her company by being a diverse minority. Danielle tweeted: “More times than I’d like to count I have heard/read comments online/had it said to my face that I am where I am because I’m Black. Or because I check a diversity box. Naw. I have put in the work. The blood, sweat and tears.” In response to these claims, Danielle denied that her race played any role in her career, sacrificing

and working hard for the position. By acknowledging these assumptions, Danielle disputes the notion that her personal identity contributed to her becoming a weathercaster, rather recognizing the strength of her epistemological identity. Also, the weathercasters acknowledged moments of larger diverse and intersectional representation, grateful when they shared their screen time with other racialized journalists on news shows. Danielle commented and tagged other Black broadcasters/anchors in a tweet, detailing her pride in contributing to diversity in the broadcast industry. By including other BIPOC journalists in the conversation, Danielle further mobilized representation and used her platform as a tool to advocate for change. Tagging racialized and women journalists also strategically invited them to contribute to the conversation on diversity in the broadcast industry.

Racialized women weathercasters used storytelling to their advantage. They continued to articulate their experiences with racism and the ‘traumatizing’ discrimination they encountered ‘their whole life’ online and in the workplace. Danielle wrote this tweet: “It has been traumatizing to encounter racism my whole life. While working. While out living my life minding my own business.” These vocabulary choices stressed the urgency and importance of raising awareness on the intersectional experiences of racialized women. By using this language, the women integrate perspectivalism into their tweets, sharing their intersectional perspectives and helping others to immerse themselves and understand their points of view (Delgado and Stefancic, 2001). Racialized women weathercasters also talked about their safety in relation to discriminatory, intersectional experiences. The women explored their intersectional identity and the dangers or discrimination that impacts them as journalists, remaining vigilant of their surroundings and staying safe when out in the field. Danielle said that as a female journalist and woman of colour, “I am always hyper aware of my surroundings, and my safety is my priority.”

Storytelling helps describe “the reality of black and brown lives... [helping] readers bridge the gap between their worlds and those of others” (Delgado and Stefancic, 2001, p. 41). Racialized women weathercasters chose to tell their stories to help others or those in privileged positions to understand what their lives are like (p. 41). For example, Danielle shared an experience where someone had touched her hair without her consent, addressing the subtle and constant existence of racism. She confided in her followers that someone had compared their tan to her natural skin colour, citing the ‘suffocating’ feeling of racist experiences. Similarly, Jamil (2020) analyzed the resilience of female journalists who combat harassment, threats and discrimination, detailing that due to their intersectional identities, the women “suffer from psychological stress due to being constantly harassed, verbally abused and targeted” (p. 161). By sharing her experiences on Twitter, Danielle illustrated the lived discrimination of BIPOC communities across Canada, offering support and facilitating a safe environment for people to share their own stories. Through the storytelling of experiences, yet individual in nature, Danielle unifies her followers since “many victims of racial discrimination suffer in silence or blame themselves for their predicament” (p. 43). Utilizing Critical Race Theory (CRT), Zoledziowski (2018) interviewed Canadian racialized women journalists, affirming that “many of the women have experienced racism in the form of microaggressions and tokenization in newsrooms” (p. iii). Racialized women weathercasters choose to tell their stories so that other women feel validated in their real intersectional experiences.

In an attempt to control discrimination and racism, racialized women weathercasters choose who has access to their content online, reporting and blocking accounts that engage in direct hate speech. Danielle told her followers how she manages discrimination: “I reported and blocked the account. BYYYYEEEEEE! #EndRacism #RepresentationMatters.” This removal

demonstrates the agency of the weathercasters, elevating voices that encourage diverse representation and silencing negative voices that disrupt the fight for equality. Racialized women weathercasters tweet about and use their intersectional experiences to mobilize awareness, connect with their followers and help stop racial discrimination.

### *Weathercasters' Experiences*

Racialized women weathercasters represented their intersectional weathercasting experiences in a variety of ways, addressing the sexualization of the weather girl stereotype and utilizing their science intersection within their epistemological identity to talk about their career. However, they do not link their race intersection with any weather-related tweets.

Jennifer tweeted the names of the first female weather specialist and first female broadcast meteorologist, claiming that even seven decades later women in weather are still being sexualized and judged for their physical appearance rather than their ability. Jennifer tweeted: “Carol Reed: 1st female weather presenter on TV (1950). Dr. June Bacon-Bercey: 1st female broadcast meteorologist (1970). Over 70 years later, still getting judged for clothing rather than ability. This ‘sexualizing women’ crap offends more coming from another woman.” Jennifer acknowledged that targeted comments, concerning the clothing of broadcast meteorologists and weather specialists, negatively affect women weathercasters and that women can also actively participate in sexism and the sexualization of ‘weather girls.’ Jennifer experienced and also confronted gender-based discrimination, tagging a company that doublechecked a weather forecast with a weather man after initially confirming the conditions with a female meteorologist. Jennifer boldly tweeted: “Good thing you checked with the ‘weather man’ after the ‘female meteorologist’ also said it was going to rain.” This call-out by Jennifer implied a lack of credibility and trust associated with women in weather, suggesting that men are more

knowledgeable and meteorologically competent (Perryman, 2020; Lont, 2012; Robinson, 1985; Wulfemeyer, 1983). Jennifer's defiance strongly reflected the advocacy theme, demonstrating that racialized women weathercasters challenge and oppose discrimination online.

Rebecca advocated against the 'weather girl' stereotype when responding to comments from viewers online, reminding them of her weather specialist title and asking for respect. She tweeted/replied several times to followers: "BTW, I'm not a 'weather girl,' I'm a weather specialist and TV personality," and "P.S. I'm not a 'weekend weather girl.' Have some respect!" Calling out the behaviour of audiences places Rebecca in a powerful position where she moderated her online environment and reshaped sexist perceptions of her weathercasting role. She refused to be negated to a title that historically subjugates and minimizes her work. In the context of racialized women weathercasters and CRT, counter-storytelling deconstructs the societal assumptions and stereotypes around 'weather girls' and intersectional discrimination, adding nuance and depth to experiences/representations while illuminating reality (Delgado and Stefancic, 2001, p. 42). By clarifying her position, Rebecca countered the dominant perception that it is okay to call women weathercasters 'weather girls' and articulated the importance of being respectful toward women. Interestingly, in older tweets from Rebecca, she referred to herself as a 'weather girl' in a positive context and was proud to be called a 'weather girl.' This change in language signals a shift in perception and acceptance of the sexist term, suggesting that racialized women weathercasters are aware of the modern negativity and juvenility associated with 'weather girls.' Therefore, the weathercasters create distance between themselves and the stereotype.

Many women weathercasters talked about their job and meteorological credentials in positive ways, wishing a happy #WorldMeteorologicalDay and #NationalWeatherpersonsDay to

their colleagues. For example, a racialized woman weathercaster named Hannah noted her pride in being able to do what she loves, sharing that being a meteorologist does not feel like work. Hannah posted: “I am so grateful to be doing what I love. Work just doesn’t feel like work!” Sharing this positive perspective demonstrates that racialized women weathercasters enjoy their work and relish in their epistemological identity. Speaking objectively on Hannah’s successful career isolated her epistemological identity from her personal identity, focusing on intersections of science and communication. Racialized women weathercasters chose how to represent and talk about their experiences, not needing to always mention their personal intersectionality in tweets. By choosing which identity to address, the weathercasters exert agency over their messages and control online representations in ways that suit them.

Additionally, Chelsea discussed her STEM background and the difficulties of reaching meteorologist status, explaining how the academic stressors of math and physics ‘paid off’ and culminated into a rewarding atmospheric career. Chelsea chose to acknowledge the challenges of meteorological education but prides herself in being a trained meteorologist. She also chose to separate her identities in this tweet, not linking her personal identity to her academic achievements.

Weather specialists Danielle and Rebecca also celebrated National Weatherpersons Day, acknowledging the connective nature of weather and their love of marrying ‘facts with function.’ Danielle said: “I love [how] I get to marry facts with function. It’s more than just telling you it’s fixin’ to snow, it’s about helping you plan your day. It doesn’t matter who you are or what you do, the weather connects us all!” Rebecca used a quote to grab the attention of audiences and integrated capital letters within her tweet, emphasizing linguistic choices and using vocabulary to exemplify excitement. Rebecca shared this quote ahead of her tweet: “Wherever you go, no

matter what the WEATHER, ALWAYS bring your OWN SUNSHINE.” Again, the racialized women weathercasters do not connect their race or gender to tweets that are weather-related. Whether it remains a strategic choice or not, the women choose to include or exclude information. According to Ireland and colleagues, “Black women represent approximately 7% of the United States (noninstitutionalized) population, yet they remain underrepresented in the majority of STEM fields” (p. 227). In an effort to advance the conversation on racialized women in STEM, the weathercasters could link their personal identity to their epistemological identity on Twitter, inspiring and encouraging BIPOC women and girls to follow their meteorological dreams. These links could further amplify and mobilize the industry to continue the recruitment of scientific and journalistic diverse individuals.

In the tweets analyzed in this research, agency and the significance of choice materialized within tweets centred on advocacy, race and intersectional experience. Racialized women weathercasters chose to be diverse role models of representation in the broadcast industry and chose to speak out publicly in support of social movements that mattered to them. Racialized women weathercasters chose to speak about race and discrimination, detailing the normalization of natural hair and the importance of raising awareness around ordinary racism. Lastly, racialized women weathercasters chose to share their personal and intersectional experiences in the broadcast industry and the weathercasting industry, discussing sexualization and highlighting intersections of their identities. Some racialized women weathercasters even chose to not post about diversity, racism or their intersectional experiences, using their accounts to only post meteorological information (Bossio & Sacco, 2017). By choosing to not tweet about their identities, the weathercasters were able to exert agency over their self-representations online, authentically separating their personal and professional lives in the social media environment.

Overall, racialized women weathercasters were proud to be role models and diverse representations in the broadcast industry, were proud to speak on intersectional experiences and racial discrimination and were proud to be weather specialists and meteorologists. The three themes blended and bled into each other, examining the relationships and interactions between advocacy, race and intersectional experience. Most racialized women weathercasters injected elements of advocacy into every tweet on race and intersectional experiences. The women merged discussions on racism within their tweets on intersectional experiences, raising awareness on workplace and online discrimination. The weathercasters also prioritized certain intersections of their personal and epistemological identities when talking about social movements and science, catering toward specific audiences and choosing how to self-represent themselves. The women represented themselves boldly and authentically, controlling their messages by championing equality in every tweet.

### **Conclusion**

Despite stereotypes and societal perceptions of ‘weather girls,’ racialized women weathercasters pushed on ‘against the prevailing winds.’ The women self-represented themselves through advocacy, discussed the ordinariness of racism, and shared their intersectional experiences in the broadcasting industry. This thesis utilized critical race theory and intersectionality theory to better understand how women weathercasters mobilized social media platforms to inspire change. The findings in this project strongly aligned with the constructs of the two theories, emphasizing the importance of understanding and evaluating the impact of intersectionality and race in the broadcast industry. The results added texture and nuance to the existing theories, confirming that racialized women contend with racism and navigate multiple intersectional identities online and in the workplace. By using a qualitative methodology and thematic analysis,

this project clarified the significance of subjectivity and storytelling, illustrating the volume of marginalized voices.

The racialized women weathercasters used their experiences to raise awareness on racial and sexual discrimination in the workplace and online, confronting the ‘weather girl’ stereotype and describing the challenges of occupying an intersectional identity in the broadcast industry. Weathercasters exerted agency over their posts, moderating negativity and combatting prejudice with education. This project urges women weathercasters to continue linking their identities together in representational posts, connecting their science intersection with their race and gender to empower audiences.

For this major research project, I originally planned on conducting in-depth interviews speaking with racialized women weathercasters across Canada on their experiences of discrimination online and in their workplaces. Unfortunately, due to a lack of participant involvement and overall interest, many interviews did not take place. Interesting results were discovered after speaking with one Asian woman meteorologist, learning of workplace favouritism/cliques, a lack of training in broadcast environments, restricted employment opportunities (including losing out to White, male, external applicants) and a limited representation of minorities on screen and behind the scenes. Many women came forward and expressed initial interest and excitement in participating in the study, while some women did not respond or follow up with the research team. Despite rigorous ethics clearance, the research team believes the women either may have felt intimidated and worried that due to their intersectional identity, their confidentiality would have been compromised, or that the women were not ready to share their experiences/lacked confidence in creating change. I propose that in the future, an interview methodology must be carried out when Canadian racialized women

weathercasters are ready and willing to discuss the discrimination they have faced and the EDI recommendations they have to improve workplace conditions.

In future, racialized women weathercasters should continue verbalizing their intersectional experiences. More studies could examine the discrimination they have endured on a deeper level, understanding how/if racialized women weathercasters ‘weather a storm’ of discrimination in the workplace or online. Researching Indigenous weathercasters and their perspectives could reflect/reveal how they interpret nature and culture, exploring discrimination and a unique relationship between weather presentation and Indigenous tradition. Overall, more research into the experiences, representations, and opinions of weathercasters around the world could better illustrate their agency, advocacy, and power in the broadcasting industry.

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