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Together We Fly

Seeing Unseen Risks to Aviation Safety and its Workforce

Inclusive Skies Conference 2021 Special Issue - Supported by chorus aviation inc.

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Overview

Marshall McLuhan is credited with the saying - We don't know who discovered water, but we know it wasn't a fish. This statement shows us that when we are immersed in an environment we may not be cognizant of it. This white paper represents a body of work by an expert panel of aviation industry professionals who are reexamining the industry of aviation by considering the experiences of the workforce in order to support the future development of aviation safety in Canada. The research presented in this paper has received academic ethics committee approval from the researcher's respective institutions. The data specific to challenges faced by Canadian aviation professionals with 61 respondents is extracted from a larger international survey conducted in 2021. Although critics consider the experiences of 61 participants insignificant because the number is small, we challenge this vein of thinking. To date little, if any data specific to Canadian aviation investigates the experiences between ethnic minorities and non-minorities or asks questions about bullying, discrimination and racism. With 28% of participants identifying as ethnic minorities, this data may be the largest representation of people who are underrepresented in Canadian aviation. We position ourselves with the rationale that no one should experience bullying, violence, racism or discrimination of any kind in the workplace. Ironically, this data shows its existence in the field of Canadian aviation and introduces you to how discrimination affects the people who are responsible for ensuring aviation safety.

We hope that the industry will utilize the research and perspectives in this paper to first consider the role of the workforce as it relates to aviation safety. Then see the workforce as people with unique identities with differing experiences because of those identities. Finally, we hope that the industry will develop policies and the culture to enact the policies combined with practices such as continuous human-centred safety improvements, training development and workforce management methods that align with Canada's national values of diversity and inclusion. Ultimately, this will support attracting and retaining people within the field of aviation.

We hope that this work brings Canadians of all backgrounds together to make the industry a place for all to thrive while creating a future where everyone feels a sense of belonging so that together we will fly.

Contributors

To date, little academic research on diversity and inclusion has been conducted from a Canadian aviation perspective. To support an aviation culture that aligns with the Canadian values of belonging and acceptance and possibly reduce the aviation professional skill drain to emerging markets post-pandemic, this white paper was created by combing the research of other Canadian aviation researchers and input from industry leaders.

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This white paper has not been funded by any agency or government. It serves to support knowledge translation between aviation academics and Canadian aviation.

*Findings from 61 Respondents

Findings of Interest

Fairness & Equality

In general, Canadian aviation professionals disagree that everyone is treated fairly, respectfully, and equally in the workplace.

Disagree ▼44.5 Agree

1 in 61 People

Experience physical violence due to identity. 47% of ethnic minorities report experiencing verbal violence

Discrimination & Racism

Almost half of the respondents are unsure if they feel comfortable reporting discriminatory acts in the workplace.

Will report ▼49% Will not report

50% experience discrimination by management

Half of the respondents face racism and/or discrimination by their manager or a person in a higher level of authority,

Facts About Canada

Population & Demographics

- The estimated population as of Apr 11, 2021, is 38,022,387.
- The Greater Toronto Area (GTA) population is 6.2 million, the most densely populated region in the country.
- 52% of the inhabitants in the city of Toronto are visible minorities
- 40.9% of Canada's population are classified as males, and 43.5% females

Air Transportation

- 53,479 licensed pilots
- 18,098 aircraft maintenance engineers
- In 2019, 50% of the aircraft maintenance engineers were over the age of 50 years.
- Toronto airport is Canada's largest and busiest airport.
- In 2018, Toronto's Pearson airport facilitated travel for over 47 million passengers and handled over 312,000 tons of cargo.

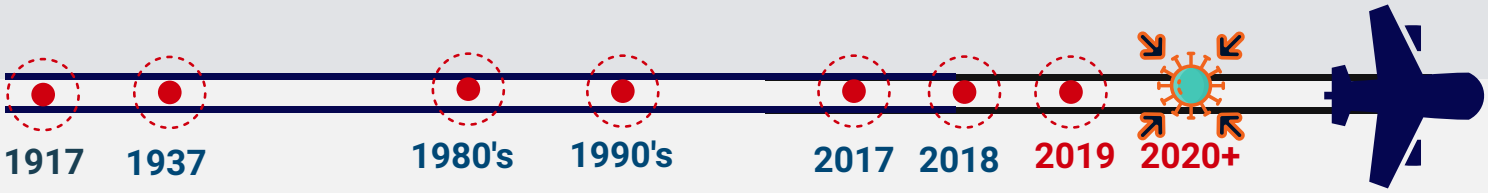
The Change is Here, Is Canadian Aviation Ready?

-John Murphy

Throughout my 28-year career in Canadian aviation, I have witnessed the exclusion of some people, while as a white, Canadian-born male, I fit in seamlessly. Over the years, there have been many challenges and changes to our industry. Even bigger changes are coming. The next generation of aviation professionals will include many from diverse and underrepresented groups. Many companies now recognize the need for a workforce that reflects Canada's diverse population. With this shift, Canadian aviation has an opportunity to acknowledge and understand the workforce's differences. The industry must examine its history to create a culture that provides safe working spaces, where people feel safe speaking up and sharing concerns.

> As a Safety Manager, I know that speaking up leads to uncomfortable conversations. These messy conversations must occur, to help identify and mitigate potential risks to the people who ensure and maintain aviation safety.

Aviation is changing. Will we say we welcome diversity through the door or are we deliberately creating an inclusive culture that proactively identifies risks like bullying and manages them?



1917 Pilots recruited by Royal Air Force (RAF) to create the Royal Canadian Air Force (RCAF)

1937 Commercial aviation formed in Canada - military-trained pilots recruited

1938 Elsie MacGill becomes the first female member of the Engineering Institute

1973 Rosella Bjornson is the first female commercial airline pilot hired

1980's Academic research supporting crew resource management (CRM) emerges based on the western military influence

1990's CRM training was mandated for flight and cabin crew in Canada to counteract command and control attitudes
and improve communication

2017 The skilled labour shortage in Canadian aviation is becoming a developing issue.

2018 Bloomberg reports that less than 3% of women in aviation are in executive leadership positions

2019 The skilled labour shortage reaches critical levels globally, resulting in aggressive awareness campaigns by interest groups

- The aviation industry mainstreams diversity recruitment campaigns encouraging gender and racial diversity.
- Aviation recruitment programs focus on women and, to a lesser degree, racialized peoples.
- IATA starts the voluntary program to increase women in aviation leadership by 25% by 2025

2020+ Aviation grounded due to pandemic bringing with it an opportunity to re-imagine, align and reconstruct

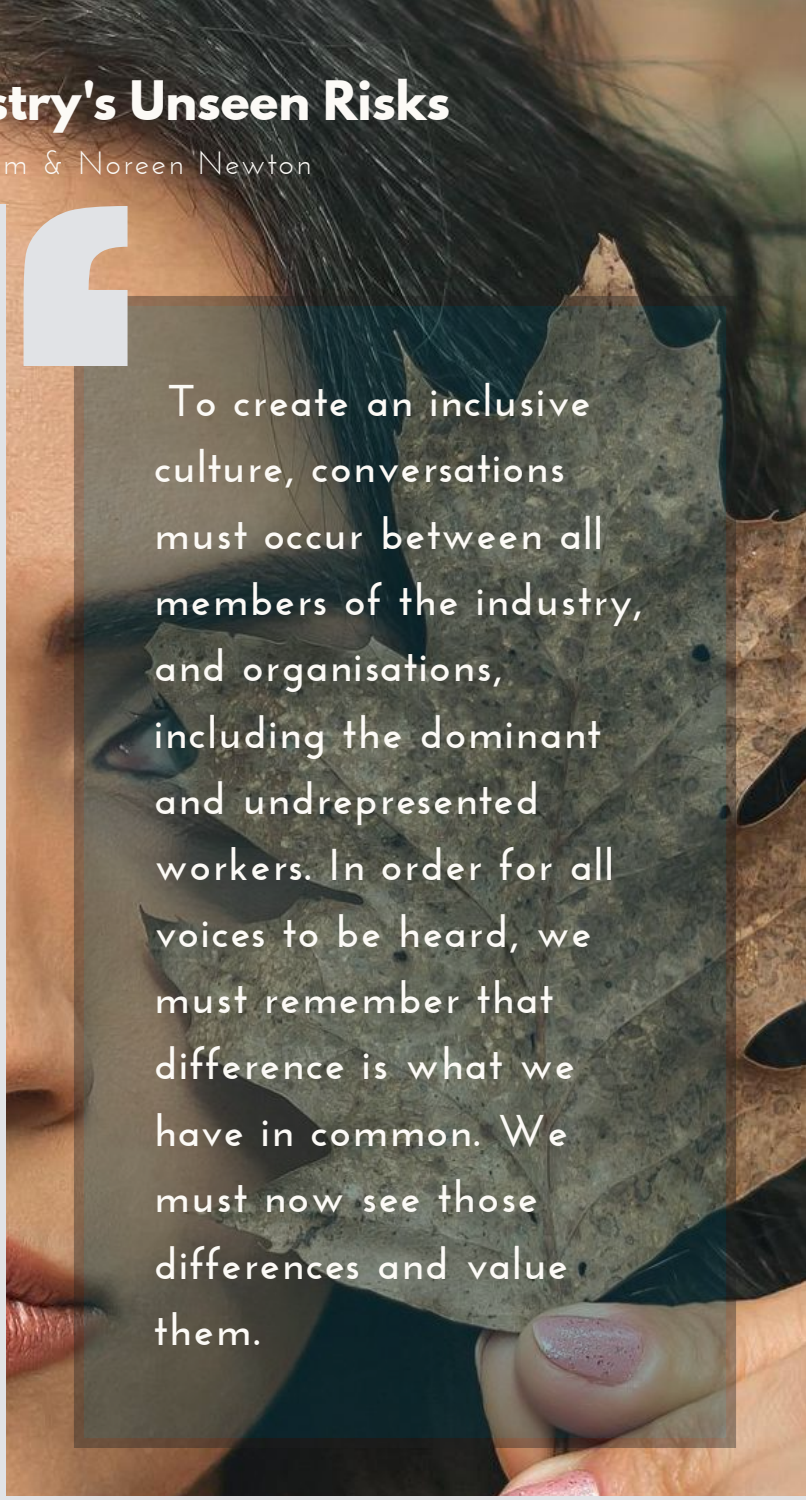
The Aviation Industry's Unseen Risks

-Angeline Ram & Noreen Newton

Although the industry has advanced over the last 90 years, the aviation industry has been slow to attract, retain, and promote women and racialized minorities. Twenty years of research into aviation organisations shows that discrimination in aviation is a part of the industry culture and continues to be considered a "right of passage."[1,2]

Although barriers to women pilots in the industry have been studied, little data is available about the diversity of other occupations. As a result, pilot research is used as a baseline for all aviation masculinized occupations, despite differences in occupational culture and the variation of race, gender, sexual orientation, and ethnic origin that embody these different occupations.

Commercial aviation in Canada has come a long way since its inception in 1937. However, despite promoting equality and acceptance, the present research (see next page) shows that those employed in Canadian aviation experience sexism, sexual harassment, microaggressions, and/or physical violence in the workplace. Respondents who identify as ethnic minorities in Canada experience a greater frequency of racism and discrimination than those who identify as non-ethnic minorities. The data shows that non-ethnic minorities are also more adversely affected.



> To create an inclusive culture, conversations must occur between all members of the industry, and organisations, including the dominant and undrepresented workers. In order for all voices to be heard, we must remember that difference is what we have in common. We must now see those differences and value them.

To move forward, we must first acknowledge divisive influences still alive and well in aviation. Conversations must occur between *all* industry members and organisations to create an inclusive culture, including the dominant and underrepresented workers. For all voices to be heard, we must remember that difference is what we have in common. We must now see those differences and value them.

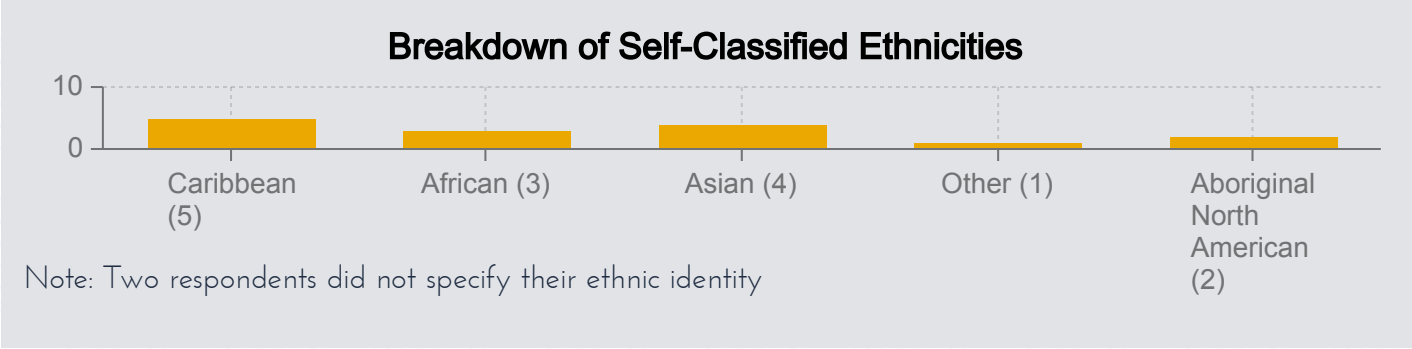
[1]Davey, Caroline L., and Marilyn J. Davidson. "The right of passage? The experiences of female pilots in commercial aviation." Feminism & Psychology 10.2 (2000): 195-225.
[2]Neal-Smith, Sarah, and Tom Cockburn. "Cultural sexism in the UK airline industry." Gender in Management: An International Journal (2009).

Why Some Workers Are at Greater Risk

-Angeline Ram

A survey was conducted in April 2021 to understand the perception of lived experiences of Canadian aviation professionals and their impact on aviation safety. The findings from 61 respondents mirror social science research on intersectionality, which shows that people have different experiences based on their unique characteristics. Some people must contend with increasing degrees of discrimination on multiple levels because of who they are.

This research shows 17 respondents who self-classified as ethnic minorities disclosed their ethnic profiles and biological sex,nine (9) are males and eight (8) females. Their ethnic profiles are as follows:



Some respondents identified their occupations: Pilots (5), TC Inspector, IT (2), Investigator (1), Learning and Development (2), Cabin Crew Training (1), Aircraft Maintenance Engineer (1).

Five (5) of the ethnic-minority respondents who experienced racism and discrimination are in management or executive leadership roles.

This data shows that the perception of combinations of racism and discrimination are as varied as the diverse workforce.

A one-size-fits-all approach to managing the workforce does not consider the compounded effect of racism and discrimination on their wellbeing or safety behaviour. Self-classified ethnic minorities report experiences in the workplace from the following list, including Racism (discrimination based on ethnicity or race), Sexism (discrimination based on gender), Homophobia (discrimination based on sexual orientation), and Xenophobia (discrimination based on national origin).

Diversity of experiences of discrimination of ethnic minorities

- Racism
- Sexism
- Homophobia
- Sexism, Homophobia
- Racism, Xenophobia
- Racism,Sexism,Homophobia, Xenophobia
- Racism , Homophobia
- Racism, Sexism, Xenophobia
- Sexism , Xenophobia
- Racism , Sexism

Seeing the Unseen Risks

-Angeline Ram

The current findings show that the perception of experiences of racism and discrimination are as varied as the workforce. Not surprisingly, experiences of discrimination and exclusion depend on the respondents' self-selected ethnic backgrounds. Ethnic minorities report in greater numbers negative experiences in the workplace.

Perceptions of experiences in the workplace	Non-Ethnic Minority (n=44)	Ethnic Minority (n=17)
Exclusion, microaggression* dismissal of concerns due to rac	2.3%	41.2%
Racism in their workplace	18.2%	58.3%
Verbal violence due to race	4.5%	47.1%

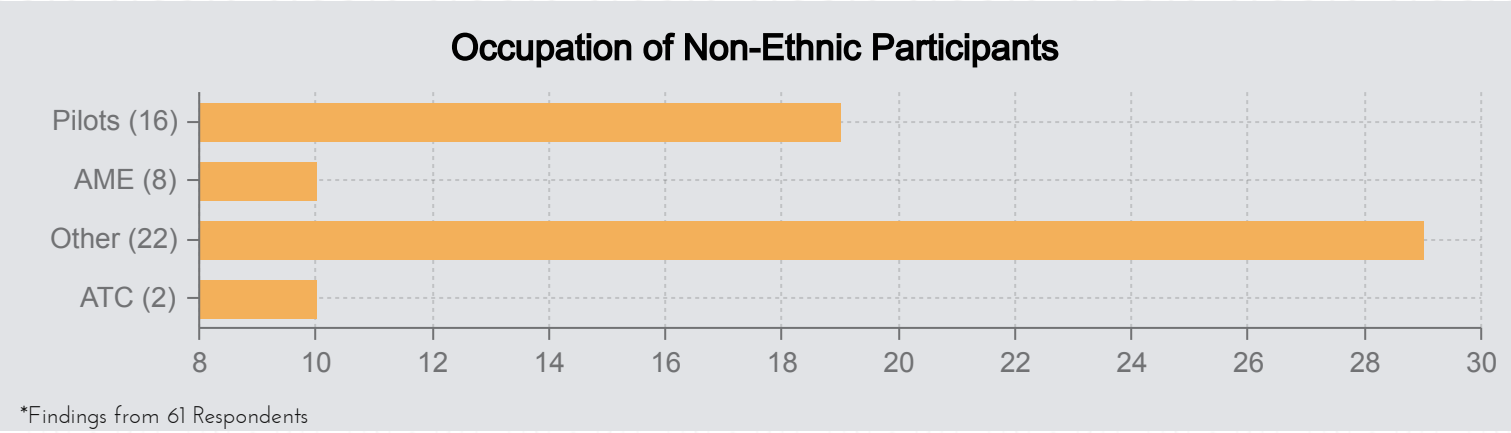
*Findings from 61 Respondents

For the above percentage of respondents who have experienced discriminatory acts against identity, race, gender, sexual orientation, and/or xenophobia, these acts have an alarming consequential effect on the well-being of the workforce.

Statement - Acts against my identity affect my...	Non-Ethnic Minority (n=44)	Ethnic Minority (n=17)
Need to seek mental health support	47%	88.2%
Social life- I keep to myself	25.9%	52.9%
Physical Health	11.4%	11.8%

*Findings from 61 Respondents

The table above confirms that acts against one's identity impact the health and wellbeing of non-ethnic minorities and ethnic minorities in Canada.

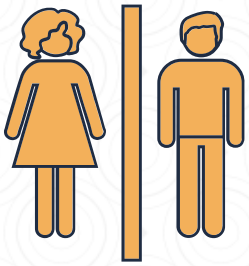


Participants who selected the "other" occupation category were asked to specify their occupation, which consisted of:

- SMS Safety Professional (5)
- Human resources (2)
- Admin professional
- Airport consultant
- Airport employee
- Airside operations
- Cabin crew training design
- Compliance
- Duty officer
- Emergency manager
- Engineer at an airport
- Executive management
- Flight operations
- Flight service specialist
- Marketing & communications
- Operations
- Ramp attendant

25 of the non-ethnic minority respondents are in management or executive leadership roles

11 of those respondents have faced racism or some form of discrimination in the workplace



8 Females and 2 Males in management occupations report facing racism and discrimination in the workplace

Men employed in feminine coded work, in this instance, Cabin Crew, face sexism in the workplace

The self-classified non-ethnic respondents reported facing the following in the workplace:

Sexism
Homophobia
Racism, Sexism, Xenophobia
Racism, Sexism, Homophobia

Multiculturalism & Safety Culture

Pilot attitudes, behaviours & training needs

-Wesley Chan

The Diversity of the Aviation Industry

The multi-national nature of the aviation industry makes it difficult to devise one-size-fits-all solutions that can suit all users. Even in the case of a domestic flight conducted by a Canadian airline between two Canadian cities, the Canadian pilots on-board will likely have to interface with the U.S. or French-designed hardware, contact U.S. air traffic control, and manage passengers from all corners of the world. Which "culture" can we attempt to change or cater to? The plurality of cultures within Canada also makes it impossible to pinpoint pilots' "national" norms, attitudes, and values from the Canadian perspective.

Understanding Culture to Improve Safety

Research conducted in an international airline assessing the flight management attitudes and work values of pilots found that individuals brought up in East-meets-West multicultural environments had Western-leaning characteristics of high individualism, preference for shallow command gradients, pragmatism in their self-evaluation of performance under stress, and had a lesser dependency for rules & procedures. On the other hand, the multicultural pilots' attitudes towards power distance, uncertainty avoidance, and preference towards automation were found to be at a cultural mid-point between Eastern and Western norms (Chan & Harris 2019).

CULTURAL ASSUMPTIONS?

Can we assume that the first-generation immigrant Asian-Canadian pilot will share an identical set of "Canadian" safety concerns with their First Nations colleagues?

The 'Canadian' Aviation Culture

It is widely accepted in aviation human factors that there are three "cultures" shaping the actions and attitudes of pilots (Helmreich, 1999). These are national, organisational, and professional cultures. Whilst the 'Canadian' national culture is obviously diverse and therefore hard to define, the comparative influence of the organisational and professional cultures is equally difficult to define in the Canadian context. There is a wide range of Canadian aviation organisations, each with its own organisational culture, which makes its effect on individual employees' experiences infinitely variable. However, the professional culture of Canadian pilots can be considered as generally similar as these are developed from standardised pilot training requirements following Transport Canada regulations.

How do these organisational and professional experiences, in balance, affect pilots' safety-related attitudes?

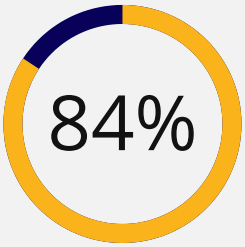
A study conducted in 2020 found that organisational and professional exposure had the potential to change pilots' attitudes towards hierarchical relations, levels of concern towards automation usage, and the desire for high earnings and career advancement (Chan & Li, 2020). This shows that managerial and training changes can indeed influence pilots' behaviours, but the key question for the future is:

How can we make future training changes most suited to the demographic of Canadian aviation professionals?

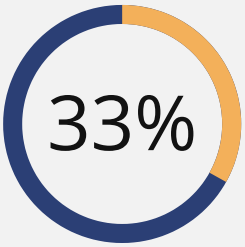
[1] Chan, W. T.-K. & Harris, D. (2019) 'Third-Culture Kid Pilots and Multi-Cultural Identity Effects on Pilots' Attitudes'. Aerospace Medicine and Human Performance 90(12), pp.1026-1033
[2] Helmreich, R.L. 'Building Safety on the Three Cultures of Aviation', Proceedings of the IATA Human Factors Seminar (1998)
[3] Chan, W. T-K. & Li, W.-C. 'Assessing Professional Cultural Differences Between Airline Pilots and Air Traffic Controllers'. In Proceedings of the 22nd HCI International Conference (2020).

Percentage of pilots surveyed who were of the opinion that discriminatory acts can harm (yellow shows the level of agreeance)**:**

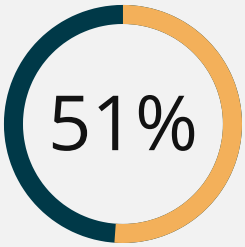
Communications



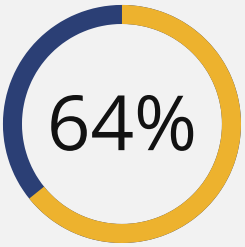
Flight Path Management



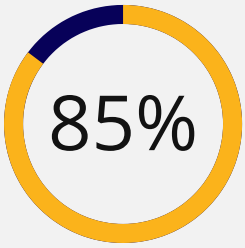
Application of Procedures



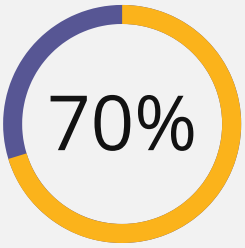
Workload Management



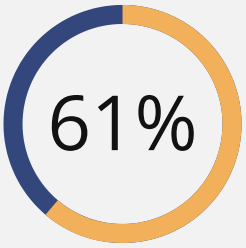
Leadership & Teamwork



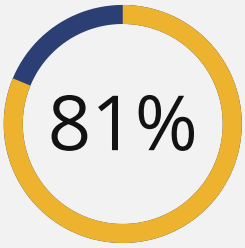
Decision Making



Situational Awareness

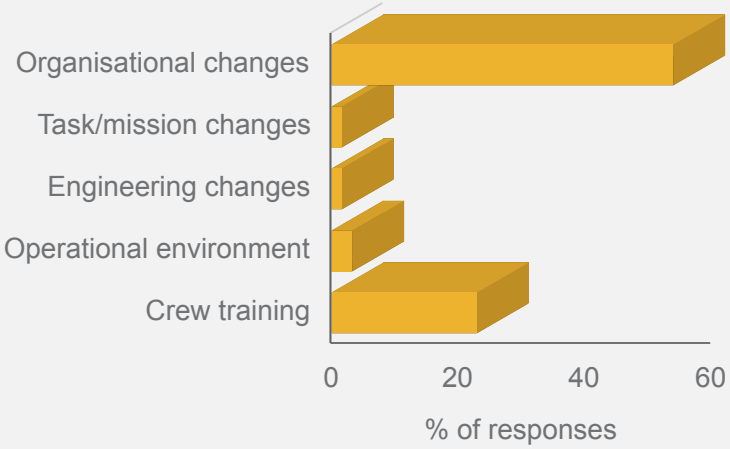


Organisational Culture



For this white paper, we surveyed 61 current Canadian aviation and aerospace professionals to highlight aspects of safety culture that are unduly influenced by discriminatory acts and policies encountered in the present workplace. As the ultimate goal of identifying these issues is to create solutions, we also asked the respondents what strategies or changes they considered to be the most effective in solving diversity and safety challenges. A selection of the results is presented diagrammatically on this page.

What strategies or changes do you consider to be the most effective in improving cultural diversity and safety?



Locating the Expertise in Navigating Cultural Differences

The prolonged viability of Canadian aviation will benefit if future training and workforce management strategies can take into account differences in values and attitudes amongst an increasingly diverse workforce. A collective awareness of interpersonal differences can be created by encouraging collaborations between different groups, as well as by developing a greater understanding on leadership strategies for diverse teams.

In Canada, we are fortunate to have a large pool of multicultural expertise, many of whom have wide ranging overseas experiences. These individuals are best suited to direct future collaborative endeavours and to lead diversity research, as they can rely on their own experiences to interpret the detected differences. With hope, these activieis can assist in generating a clearer picture of the diverse characteristics of the workforce, and enable targeted cultural shifts that can enhance future safety and job satisfaction.

The Fight-or-Flight Response in the Workplace

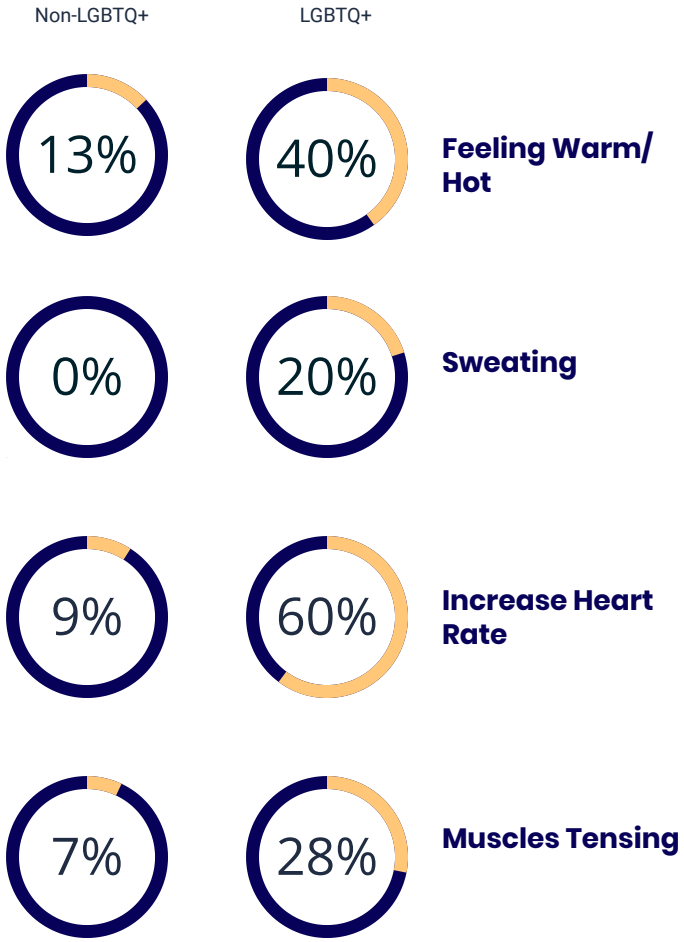
- Braeden Lavigne, Michael Cho & Angeline Ram

Although Crew Resource Management (CRM) has historically focused on various flight management and teamwork elements, Lavigne and Cho's (2021) study on anti-LGBTQ+ language in Canadian flight decks confirms that communication between pilots can affect how the pilots manage threats and effectively uphold crew resource management principles. In short, language affects how people work with one another.

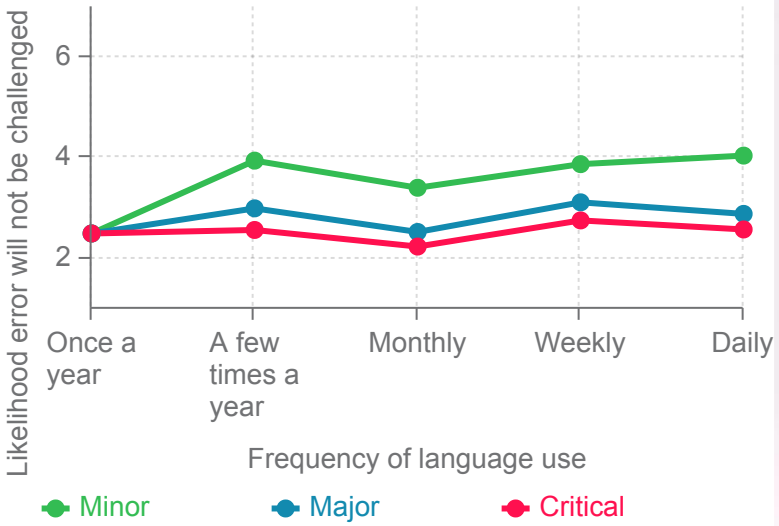
Lavigne and Cho's (2021) survey of 176 pilots shows that anti-LGBTQ+ language results in physical responses. These responses are similar to symptoms of stress associated with the flight or fight responses for short-term survival, including increased heart rate, muscles tensing, sweating and feeling warm. People who identify as LGBTQ+ are three times more likely to experience the physical responses associated with the body's fight or flight response.

Undue stress to pilots shifts their focus from flight safety to survival and inadvertently degrades communication, decision making, workload management, and overall CRM within the flight deck.

Affects of Anti-LGBTQ+ Language on Pilots
(yellow shows the level of agreeance)



Challenging safety concerns versus the frequency of language



The study also shows that a pilot who experiences anti-LGBTQ+ language is more likely to remain silent and allow an error or deviation to pass unchallenged (refer to graph). Although pilots are less likely to speak up and challenge what they perceive as minor errors, small things that remain unchallenged can ultimately lead to compromised aircraft safety. Most concerning is the frequency of use and normalisation of anti-LGBTQ+ language.

Showing the connection between language and flight safety examines how anti-LGBTQ+ language impacts pilots within the flight deck and how it affects crew resource management.

Braeden Lavigne & Michael Cho, That's So Gay: A Mixed-Method Study of Anti-LGBTQ+ Language Effects on Flight Safety in Canada, 2021, Seneca College School of Aviation

The Priority of Safety in Canadian Aviation

-Angeline Ram

A mixed-method study of the Canadian aviation industry was conducted to investigate how safety is situated with competing priorities and financial pressures, despite being advertised as the stated priority. The data from 164 respondents show that although safety is communicated as a priority, there is a disconnect between what is said and what is done.

Organisations in Canada communicate to their workforce reducing cost and increasing sales two times more than a company safety focus.

Undeniably, profitability is paramount to the industry. Investments in safety programs are unseen and hard to measure; yet, safety programs support accident prevention, ultimately increasing profits and creating a culture of organizational safety in management and the workforce.

Competing priorities show

27% of Canadian aviation's workforce believe the Canadian air carriers should prioritize employee and passenger welfare

Investments in safety and promotion of an organisational safety culture rarely consider the risks of employee wellbeing or risks to the workforce beyond physical safety. A key value of Canadian aviation is safety; however, there is a misalignment between beliefs, values, and behaviour within organisations.

Some would argue that organisations invest in their workforce by paying into the Canadian pension plan, employment insurance, workplace safety insurance, technology to support jobs, and pension plans, in addition to a salary. However, the exchange of labour for a salary should not make allowances for the degradation of workers. Continuous improvements reconsider how profits can be maximized by fostering a culture of workforce wellbeing, thus reprioritizing operational safety through the workforce as a foundation for profitability.

Ram, Angeline, et al. "How safe is safe? A Canadian air carriers (CAC) safety behavior investigation." Journal of Air Transport Studies 10.2 (2019): 1-31.

Silence Among the Safety Focused Workforce

- Angeline Ram, Braeden Lavigne & Michael Cho

Lavigne and Cho (2021) and Chan and Ram's research draws attention to the impacts of work environments, culture and aviation safety. With only five percent of pilots willing to speak up when faced with anti-LGBTQ+ language, Lavigne and Cho's study demonstrates that social interaction with coworkers silences people trained in-flight safety. Twenty percent prefer instead to laugh off the exchange.

Canadian aviation professionals ignore acts against their identity because the risk to the interpersonal relationship is greater than the benefit of speaking up or because they did not want to give "power or satisfaction in a reaction." Some said they were shocked by the remarks. One professional commented that they "felt uncomfortable addressing the issue, and that some events took place years ago when that sort of behaviour was more acceptable." This comment confirms a culture of normalization of discrimination.

Responses from Chan and Ram's study also show that many have never experienced acts against their identity. A safety professional communicated that they had never been the target of discrimination but witnessed it. They stated:

"The events I witnessed made me very uncomfortable. In some cases, I was able to take action to address the issue; in others, things were out of my control, and I loathed how that made me feel."

Not everyone in the industry experiences challenges based on their identity, yet those who do, prefer to remain silent.

Barriers to reporting acts against one's identity

CANADIAN AVIATION 'S WORKFORCE'S RESPONSE TO BARRIERS

Treatment by others

43.2% Non-Ethnic Minority

64.7% Ethnic Minority

Effect on career progression

38.6% Non-Ethnic Minority

58.8% Ethnic Minority

Fear of job loss

22.7% Non-Ethnic Minority

52.9% Ethnic Minority

An Employer's
Diversity, Equity & Inclusion Perspective

- Erica Fuhr

Since 2009, Chorus Aviation has been on a journey to move beyond compliance to a more holistic approach to diversity, equity and inclusion (DEI). Over the past decade, I have excitedly witnessed a change in the industry from meeting basic requirements to realizing that DEI is critical to organizational success, requiring intentional actions beyond regulatory requirements.

Chorus has encouraged and accelerated growth from grassroots, employee-led initiatives to executive leadership training and strategic business plans for DEI sustainability. Underpinning Chorus Aviation's continuous commitment to sustaining and improving DEI efforts is a genuine understanding that embedding DEI requires awareness, commitment and action from people at all levels of organizations.

Aviation succeeds in prioritizing operational safety, but psychological safety has not been included in that focus for far too long or has been quietly acknowledged. It is paramount that, going forward, inclusion is prioritized and considered as another aspect of safety.

Inclusion and psychological safety are necessary for all employees to truly thrive.

> **Without inclusion as a baseline, psychological safety won't be maximized. To be innovative and an employer of choice for top talent, employers must intentionally and mindfully foster inclusion in their spaces, policies and actions.**

As the industry evolves, Canadian aviation's leadership can choose to lead the way by collectively re-evaluating the way we have always done things to create greater diversity, equity, inclusion and psychological safety.

Together we can work towards an aspirational future for our industry that genuinely values diversity and intentionally fosters psychologically safe spaces..

Psychological Safety and Leadership Style

-Noreen Newton

Psychological safety is the latest buzzword in organisational development, but what does it mean? First coined in 1965, Edgar Schein and Warren Bennis said that "psychological safety was essential for making people feel secure and capable of changing their behaviour in response to shifting organisational challenges." As issues of diversity and inclusivity move to the forefront in organisations that "aspire to excellence," psychological safety plays a pivotal role in ensuring all members of an organisation feel a sense of belonging.

My own research on women's experience in the aviation industry, including interviews of nine of the first wave of women who worked as professional pilots in Canada, showed that, in the past, it was common to hear, "we will never hire a woman" or "we will never have a woman captain," a sentiment guaranteed to silence voices, as these women reckoned with that sentiment. These women did what they do best -- they persisted and created opportunity because of their capabilities and their expertise. Perhaps it is because these women were told they didn't belong, perhaps because they felt their voices silenced, they ensured other's voices were heard.

Although women are increasingly overcoming barriers and gaining access to the flight deck, a culture shift is required if women are going to go beyond adapting, to belonging, in a culture that values constructs of heroic leadership. The women I interviewed demonstrated a leadership style based on building relationships -- the key to constructing diversity in organisations.

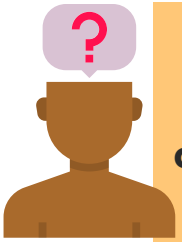
Most workers are acutely aware of their hierarchical role in an organization, and how this affects their ability to take interpersonal risks. This creates vulnerability in those of lower status, feeling unsure and less likely to speak up about issues -- less certain about their values. Speaking up is critical to interpersonal relationships, to grasping new concepts, to asking questions, and to conversing about experiences.

Organisations must also consider that other lived experiences – values, beliefs and assumptions, must be understood in the context of creating a safety culture. To do that, leaders must create a cultural shift.

Leaders can create a workplace characterized by inclusion and belonging, where those with subordinate roles are comfortable adding their voice. To do this, leaders must proactively invite input from others, and acknowledge their own fallibility.

One 787 Captain interviewed said, "I like to make people think they are making the decisions...give them a chance to come up with something, so they feel they are part of the team. I value respect and differences, you won't get anyone to do anything for you if they don't feel respected, if they don't feel their opinion matters, and they don't feel valued in their knowledge and abilities."

We can learn from those pilots who participated in the research, who happen to be women. We can learn how, through their preferred leadership style, they have demonstrated the way to lead with humility, and create the diverse aviation organisation of the twenty-first century.

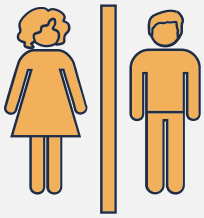


" Psychological safety is the latest buzzword in organisational development, but what does it mean? "

Newton, N. (2020). Equal Space on the Flight Deck: Challenging the Myth of the Professional Pilot https://viurrspace.ca/handle/10613/23151,

What Example Do We Want to Set for the Future?

-Angeline Ram



65% **of the workforce experience racism or some form of discrimination at the hands of management**

*Findings from 61 Respondents

A 2017 study investigated the priority of safety for Canadian air carriers. Despite the quantitative data gathered, it was through interviews and open questions that the duality of safety as a stated priority and safety culture became visible. Studies have shown that

> "the importance of safety within an organization is determined by the implementation of a Safety Management System (SMS), organizational culture, management commitment and behaviour, the activity of staff themselves, and to what degree safety reporting is upheld."[1]

The focus, however, remains on the workforce, with less attention given to management's influence. Acknowledging that managers and supervisors are sandwiched between the workforce, their executive leadership, and accountable managers, perhaps it is time for the accountable executives to deliberately design support of aviation safety through their management.

According to industry experts. thee challenges of SMS implementation continue to be:

- management commitment in maintaining continuous SMS momentum,
- accountable executive support of their management's safety commitment

One unexpected theme that emerged from that study highlighted the punitive nature of management.

#1

Top Theme About Canadian Air Carriers

Management is punitive to those who disagree with them.

[1]Angeline Ram, An investigation of Canadian air carriers' safety priority: A Mixed Methods Study, October 2017, Cranfield University, School of Aerospace, Transport and Manufacturing,Air Transport Management
[2]Ram, Angeline, et al. "How safe is safe? A Canadian air carriers (CAC) safety behavior investigation." Journal of Air Transport Studies 10.2 (2019): 1-31.

What example do we want... Cont'd

It is time to deliberately look for the invisible risks that continue to influence authoritative practices in Canada's non-military aviation sector. Management determines how people view their company's safety policy, how to act through acceptable behaviour in the workplace, and what safety reportable events should be documented. In 2017, Ram et. al's research on Canadian air carriers, developed the Management in the Middle (M in M) model. The M in M model leverages data from the safety system, such as threats to the organisation, and receives support and resources from the Accountable Executive, who then empowers middle management and the workforce to establish departmental goals and safety targets using SMS data. The overall objective of this model is to create a united safety culture between the workforce, the management and the Executive by creating realistic and achievable safety goals and departmental buy-in.

Ram, in her capacity as a Safety Manager, tested this model through a three-month foreign object debris (FOD) collection campaign which included aircraft mechanic engineers (AMEs) and their direct managers. and supervisors. During this time, and for years to follow, the AME team worked together with management to meet targets to clear all FOD. This model can be adapted to support well-being and inclusion in the workplace.

In 2021 threats to employees' well-being by management have been identified. Despite policies and occupational health and safety laws, this treatment continues to exist within the industry's culture. By first understanding how the treatment of people affects safety, middle management and frontline staff, while supported by senior leadership, can drive the change to an inclusive aviation industry.

Management In The Middle

Empowered To Create A Culture Of Belonging

- Senior Management Commitment to safety & employee wellbeing as an objective
- Resources provided to support operational safety target & working culture that supports employee and aviation safety
- Middle management empowered to create a culture with the workforce to support employees and safety
- The workforce provided a safe system or space to share threats that compromise their human factors
- Middle management and the workforce establish department goals and targets together.
- The department promotes its goals and targets informed by data, and develops a culture of trust and support between all middle management and the workforce.
- All people are included and heard in creating a safety culture that considers wellbeing and profitability

Angeline Ram, An investigation of Canadian air carriers' safety priority: A Mixed Methods Study, October 2017, Cranfield University, School of Aerospace, Transport and Manufacturing, Air Transport Management

Recommendations for Canadian Aviation

Aviation Educational Culture

Before people become aviation professionals they are students. The training curriculum must be revisited for progress and innovation to produce competence rather than compliance. Next, attitudes, culture, and Team Resource Management must now become a central focus of what behaviour is considered acceptable in the industry. Finally, the balancing of technical occupations' teamwork can be enabled through pilot and maintenance integrated learning programs to create a team rather than rienfrocing silos.

Safety

Organisations must acknowledge that despite current policies and produces, people face racism and discrimination in Canadian aviation. As a result, people unconsciously prioritize their own survival in the workplace - fight or flight. Currently, due to the design of operational safety, events affecting the workforce are never viewed through the investigative lens of operational safety. The workforce, their psychological safety, and a culture that nurtures it must be connected to operational safety.

Collective Collaboration

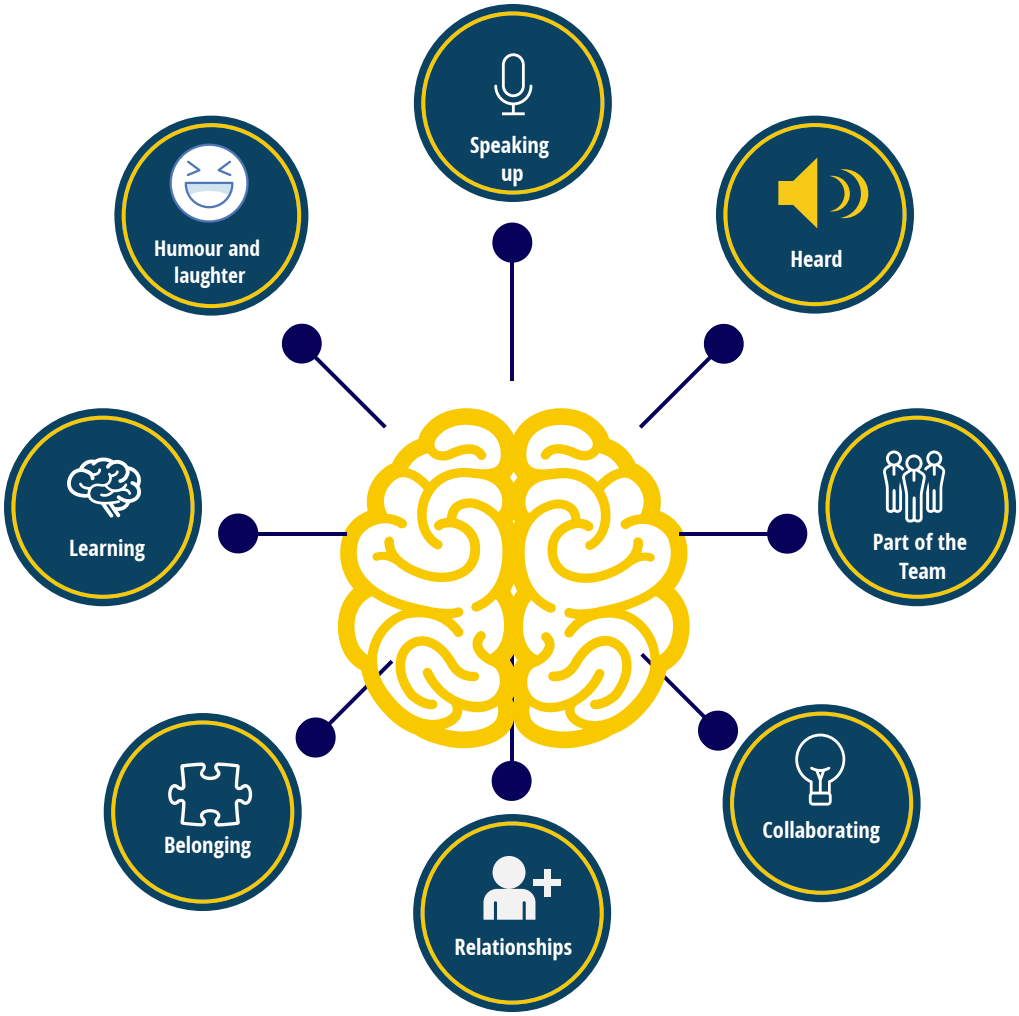
Canadian aviation veterans have contributed to the industry's growth and continue to support it throughout its cyclical downturn. Their contribution is necessary once again as people who have lived through decades of change and are moving towards retirement; their input from intersectional groups' input is necessary to re-imagine psychologically safe working environments as the norm in Canadian aviation culture.

1. Start conversations with all levels of industry leaders who understand that people and profit are essential to sustaining the industry.
2. Provide access to information and action to take for people who face discrimination and racism in the Canadian aviation workplace and remain unsupported by their organizations.
3. Move past comparing the past to the present - the good old days were only good for those who got away with behaviours we now hold people accountable for.

Leadership

Safety in the aviation industry requires an understanding that the workforce needs to feel policies like the non-punitive policy are upheld. Leadership must promote safety more effectively by modelling behaviour and actions that promote speaking up and reporting mistakes. Leaders must also reflect on their own biases and their privilege from their position of power. Despite this position, leadership must acknowledge feedback from the workforce rather than dismissing or diminishing it.

Eight tips to creating a working environment where ALL people feel safe in the workplace require leadership who encourage the creation of a culture where the workforce feel comfortable: speaking up, feel heard and acknowledged, feel that they are a part of a team, invited to collaborate, or considered and connected with to build organisational relationships, have a sense of belonging, can collectively learn and most importantly laugh with one another, not at one another.



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