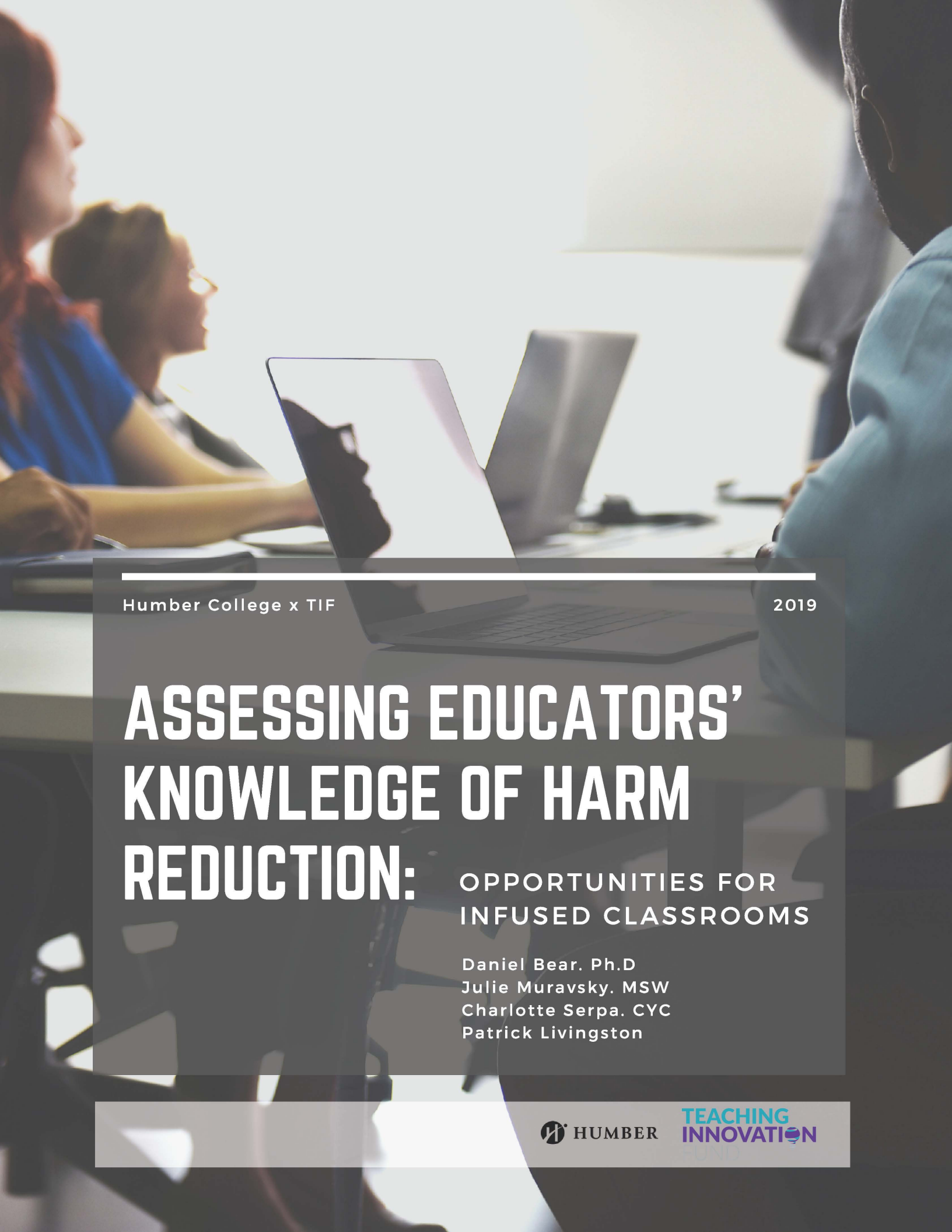

Humber College x TIF

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ASSESSING EDUCATORS' KNOWLEDGE OF HARM REDUCTION:

OPPORTUNITIES FOR INFUSED CLASSROOMS

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HUMBER TEACHING INNOVATION FUND

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Executive Summary

This project sought to assess how much faculty members know about drugs related harm reduction, how they are engaging with the topic in their courses and programs, and identifies what resources or tools they need in order to better incorporate such content into their courses or programs. The inclusion of harm reduction information in post-secondary classrooms is critical as more than 11,500 Canadians have died from an opiate related overdose since 2016, and post-secondary students are part of a group that uses drugs at higher levels than the general population while also being less frequently targeted by traditional harm reduction efforts.

This research employed a mixed methods approach, surveying over 150 Humber faculty across the college, and holding four focus groups with faculty members.

Current classroom engagement with harm reduction is quite low at Humber. Only 25% of survey respondents reported having covered harm related drugs content in the past two years. While more than 80% of faculty surveyed felt their students would benefit from information about harm reduction, 93.6% of those surveyed reported a low level of familiarity with Humber's own harm reduction policies. Such an information gap could be easily addressed by the college with what we believe would be significant results.

Most Humber faculty have a very low level of knowledge about harm reduction, with more than 50% believing a widely reported but completely unsubstantiated assertion that you can die if you accidentally touch Fentanyl on the clothing or body of someone who is currently overdosing. The difference in adherence to these drug myths was not statistically different between those who taught about harm reduction in the past two years and those who did not. In addition, both groups had statistically identical levels of support for basic harm reduction principles.

Neither length of time someone has been teaching, age, or gender correlated with how relevant faculty members felt harm reduction was to their programs. A one-way Anova showed that there was a significant difference based on which faculty one was a member of.

The implications of this research are far reaching. First, the low level of knowledge about an epidemic sweeping across Canada indicates the need to prompt, widespread, and concerted professional development activities to support the health and wellbeing of Humber students. Information about Humber's specific plan of action, materials to dispel drug myths, and broad access to information about harm reduction and drugs are currently not available to Humber faculty members, but providing such information could be accomplished with a concerted but not costly effort. A further implication is the need to develop resources that go beyond educating faculty members and supports their efforts to include harm reduction related content in their programs. These efforts need to be tailored not just to each faculty group, but to each program. While a variety of efforts would provide effective support for faculty, providing opportunities for consultation with experts in small-group settings seems to be a highly desired approach by faculty to ensure they have the confidence to tackle this challenging topic in their classrooms.

Humber has a keen and committed faculty team ready to take on the topic of harm reduction and they are primed to receive information and direction. Our next steps are to develop the resources to support faculty, identify how to engender buy-in from faculty to use the resources, and develop a mechanism by which to make the resources available.

Daniel Bear, PhD

Principle Investigator

1. Introduction:

The concept of harm reduction has been at the forefront of discussions to address the opioid overdose epidemic currently devastating communities across North America. Since 2016 more than 11,500 people have died in Canada from opioid related overdoses. The crisis is so widespread that for the first time in more than 40 years the average life expectancy of Canadians has not seen any growth, and has in fact been decreasing for men between 20 and 44 years of age. Rates of opioid-related death in Ontario doubled between 2007 and 2017 (Public Health Ontario, 2019) with young people 15-24 years of age especially hard hit. During the same period, their overdose death rate rose from 1.6/100k in 2007, to 6.4/100k.

Much of this increase is due to the introduction of Fentanyl and other synthetic opioids into the illicit drug supply. The Ontario provincial government introduced free access to Naloxone for all Ontarians in 2016, public education campaigns have been launched, and the Federal government has expanded the deployment of safe consumption spaces. While harm reduction practices like the provision of the overdose-reversing drug Naloxone and the introduction of safe consumption spaces have had a significant impact on reducing the number of overdoses (Irvine et al., 2019), the potential to expand knowledge of harm reduction concepts and practices into the classroom may provide an opportunity to access post-secondary student populations not accessed by traditional harm reduction activities (Frank et al., 2015). Ontario's post-secondary educators have not been systematically engaged as a part of efforts to introduce harm reduction information and support into the classroom. Additionally, these educators are not provided information about the current crisis that would allow them to incorporate the issue into their classrooms and assignments.

This study engaged faculty at Humber College about their current and potential inclusion of harm reduction and drugs related content in their learning environment. We did so in order to assess what tools, information, or other support faculty require to expand the discussion of this important topic into as many classrooms as possible and in a manner aligned with the different courses.

Before building effective professional development materials and guidance for post-secondary educators we must first come to understand what level of knowledge they possess, how they are currently discussing the topic of harm reduction in their classrooms, and what tools they see as necessary to promoted expanded discussion. Taking a mixed methods approach, this project examined the level of harm reduction knowledge and inclusion in current classroom activities through a quantitative online survey open to all Humber faculty. We then held a series of focus groups to further build on the findings from the survey. This project will provide the knowledge for the research team to create professional development tools and training material in the future.

2. Literature Review:

Canada is currently in the grip of an opioid overdose crisis, attributed in part to a drug supply increasingly contaminated with fentanyl along with other ultra-potent synthetic opioids. Provinces have seen dramatic spikes in their rate of emergency department visits for opioid poisonings, with Ontario seeing a 73% increase between 2016 and 2017 (Strike & Watson, 2019). Though the contaminated drug supply has been pointed to as a significant contributing factor to the overdose crisis, it is important to acknowledge the link between the current crisis and the overprescribing of opioid painkillers in the early 1990's and 2000's. Dr. David Juurlnik of Sunnybrook Health Sciences points to this period of overprescribing as helping lay the foundation for the current crisis (Ireland, 2016). When the medical community began to realize the harms associated with the use of prescription opioids (such as severe

dependence and fatal overdoses), opiate prescriptions dropped significantly, driving dependent individuals who were no longer receiving prescriptions to the streets to stave off withdrawal symptoms (Hempstead & Yildirim, 2014; Ireland, 2016; Rudd, Aleshire, Zibbell, & Gladden, 2016). It is speculated that this increased demand on the streets provides an incentive to street dealers to adulterate or 'cut' their heroin supply with ultra-potent opioids like fentanyl to increase the potency of their product, and in doing so maximize their profits (Hempstead & Yildirim, 2014; Ireland, 2016).

Research indicates that young adults (ages 18-25) have the highest prevalence of nonmedical prescription use (NMPU) of opioids, and are at elevated risk of overdose and exposure to infectious diseases like Hepatitis-C and HIV (Marshall, Green, Yedinak, & Hadland, 2016). Across the United States, the young adult demographic (ages 18-24) has seen the greatest increase in fatal opioid overdoses comparative to other age groups. This is not entirely surprising since young adulthood has been described as a 'peak developmental period' for involvement in and consumption of illegal drugs (Arria, Caldeira, Vincent, O'Grady, & Wish, 2008), but nevertheless is a cause for concern. Adding to the concern is research indicating a substantial gap in knowledge concerning the minimization of risk/harm associated with NMPU of opioids among young adults. A 2015 qualitative study found that young adults who engage in NMPU of opioids were often unsure of how to prevent or respond to an overdose, and even with significant experience of overdose (personal or among their peers), many were unfamiliar with the opioid antagonist Naloxone or how to properly administer it. Many study participants were also unaware of the significant risk associated with polysubstance use (such as the potentially fatal effects of mixing benzodiazepines and opioids) (Frank et al., 2015).

Research has also indicated that young adults often perceive prescription opioids as safer than street drugs like heroin, due in part to their legitimate use in medicine and that they can be prescribed by a medical professional (Arria et al., 2008; Frank et al., 2015). A low perception of harm has been found to

influence whether college-students use opioids non-medically; those with lower perceptions of harm were 9.6 times more likely to engage in NMPU of opioids than those with a higher perception of harmfulness (Arria et al., 2008). The authors of the study stress how educating students about the potential harms of NMPU of opioids and stimulants was a promising strategy for reducing the risks associated with their use (Arria et al., 2008). The use of the classroom (and education) as a starting point for the dissemination of harm-reduction strategies and information was a theme emphasized in a significant amount of the literature surrounding young adults and substance use, especially with research demonstrating that the young adult population often falls outside of the reach of traditional harm-reduction networks (Frank et al., 2015; Merkinaite, Grund, & Frimpong, 2010).

Previous research has identified that post-secondary educators play an important role in developing students' awareness of critical social and health issues in their community. Students exposed to drugs specific topics not only increased their general knowledge about drugs, but also saw changes to their behavior and attitudes towards drugs (Heckman, Dykstra, & Collins, 2011). When medical students worked with faculty who had undergone training on substance abuse issues, the students showed better ability to engage with the issue in their future interactions with patients (Graham, Altpeter, Emmitt-Myers, Parran, & Zyzanski, 1996). Pharmacy students who had instructors well-versed in harm reduction practices and who incorporated service learning around that issue showed not only an improvement in their critical thinking skills and knowledge of harm reduction, but also improved attitudes towards people who use drugs (Kabli, Liu, Seifert, & Arnot, 2013). The effect is not limited to drugs specific discussions. When educators incorporate discussions about LGBT issues into their classroom their students' attitudes towards this population improve and become more accepting and informed. (Sevecke, Rhymer, Almazan, & Jacob, 2015). Indeed, the benefit of intervening with post-secondary students can be seen even in things like information about cardiovascular disease (Goldstein,

Xie, Hawkins, & Hughes, 2015) and efforts to reduce stigma against mental illness (Thornicroft et al., 2016). In short, engaging with a topic, in whatever form is best suited to the course content at hand, may improve the knowledge and attitudes of students who participate. Aiming for small scale changes through exposure, as opposed to large transformative efforts, may work better in this area (Heddy & Pugh, 2015).

In the midst of the overdose crisis, in October of 2018 Canada passed the *Cannabis Act,* legalizing the use of recreational cannabis, allowing those over the age of 18 to possess up to 30 grams of dried cannabis and to grow up to four cannabis plants for personal use (Government of Canada, 2019). The results of the Canadian Center on Substance Use and Addiction (CCSA) 2018 Drug Summary revealed that Canadian college-aged students were among the age group with the highest prevalence of cannabis use, with those aged 15-24 reporting past-year cannabis use at a rate two times higher than the adult population (aged 25+) (Canadian Center on Substance Use and Addiction, 2018). Though the harms associated with cannabis use often pale in comparison to the risks associated with opiate use, they are still significant, including misperceptions concerning the safety of cannabis-use while driving (CUD), respiratory and other physical health issues as well as psychological harm (Fischer, Rodopoulos, Rehm, & Ivsins, 2006; Valleriani et al., 2018). In the context of the opioid crisis and a country navigating the first years of legalized recreational cannabis, higher education can be a valuable space for the incorporation of harm reduction (and drug education) into existing post-secondary curricula. With research revealing that college-aged young adults are engaging in higher rates of cannabis use and NMPU of opioids (Canadian Center on Substance Use and Addiction, 2018; Marshall et al., 2016), post-secondary educators have the unique advantage of being able to interact with a demographic that are typically outside of the range of traditional harm-reduction networks and are in a sense a ‘captive’ audience (Merkinaite et al., 2010; Midford, Mcbride, & Munro, 1998). A study where college faculty

were interviewed on the perceptions of their role in alcohol prevention/education, found that 95% of faculty agreed that higher education should be involved in alcohol education efforts, with 61% of respondents indicating that they would be willing to be involved in these efforts, naming the classroom as the primary environment where these efforts could take place (Walter, Paulo, & Polacek, 2013). When faculty were queried about how they might be able to influence student alcohol consumption as educators, responses included the need for open and honest discussions, talking about responsible consumption with students, and setting a positive example (Walter, Paulo & Polacek, 2013).

Research has shown that faculty are an often 'underutilized resource' when strategizing alcohol and other drug (AOD) prevention efforts, and because of tenure, faculty involvement can lead to increased program stability when compared to relying solely on administrators who come and go more frequently (White, Park, & Cordero, 2010). An evaluation of faculty involvement in AOD prevention on campuses has found that tenured faculty can exercise institutional influence to enhance student health through: curriculum reform, interdisciplinary approaches to drug education and prevention, participating on panels, collaboration with students, and the development of course work that enables students to learn about AOD (and prevention) in the context of standard academic courses (Ryan & Dejong, 1998). If faculty are properly trained in the integration of AOD prevention/education in the classroom, even if funding is reduced (or removed) in the future, opportunities for AOD education and prevention in the classroom can carry on for years to come (DeJong & Davidson, 2000).

2.1 What Does Harm Reduction Look Like in Practice?

Though the term 'harm reduction' can take on many definitions depending on its application, in the context of drug education, harm reduction refers to the minimization of the negative social, health and legal consequences of drug use, drug policies and laws (Harm Reduction International, 2019). This can range anywhere from the establishment of safe injection sites and needle exchanges, to strategies for

reducing stigma, education surrounding strategies for safe drug use, outreach and advocacy (Harm Reduction International, 2019). Kenneth Tupper's article published in *Teaching and Teacher Education* discusses drug education from an educator's perspective, and how the paradigm shift from drug education rooted in abstinence to more innovative approaches like harm-reduction can create a pedagogically challenging environment for teachers. Tupper compares drug education with sex education in terms of how it deals with a subject matter that is often contentious and emotionally charged, and the tension that exists between those who subscribe to the disease model of addiction and those who approach the subject from a conservative, morally-driven perspective (Tupper, 2008).

More recently school-based sex education in the United States has slowly shifted towards a more secular, evidence-informed approach, with the understanding that many students are sexually active (or soon will be). In these contexts, abstinence tends to only be promoted as a 'healthy' option, *not* a moral imperative, and students are provided with information concerning sexuality, contraception, abortion and methods of reducing the harms that can sometimes emanate from sexual activities (Binder & Irvine, 2003; Tupper, 2008). A *New York Times* piece on the role of 'sex education' on post-secondary campuses brings up approaches like 'Sex Week' – a student-run initiative (with faculty involvement) at Yale, Harvard and other campuses, where workshops are offered on everything from safe sex and rape prevention to exploring careers in sexual health and discussions on the ethics of pornography. It is described as 'plain-spoken sex education' offered in a judgement-free environment free from politics – a fry cry from traditional abstinence-based sex education (Quenqua, 2012).

The literature shows that abstinence-based approaches to AOD education/prevention have received heavy criticism, indicating how they do not reflect the realities of substance use in modern society (Slemon, Jenkins, Haines-Saah, Daly & Jiao, 2019;) and that unlike sex education, "The quest for abstinence continues to dominate agendas in drug education and school-based drug use prevention"

(Tupper, 2008, p. 359). Tupper believes that teacher education should include a drug education component so that instructors are prepared to facilitate open classroom discussion and not simply rely on scare tactics and abstinence-based ideologies (Tupper, 2008). This tension between abstinence-based drug education programs and harm-reduction programs is also brought up frequently in the research of Australian clinical psychologist Richard Midford, who suggests that drug-education programs often fail because abstinence and zero-tolerance is seen as the only 'acceptable' outcome, and that harm reduction should instead be seen as the goal for what drug education *should* achieve (Midford, McBride & Munro, 1998). In a later study evaluating a drug-education curriculum drawn from the School Health and Alcohol Harm Reduction Program (SHAHRP) offered to Australian students in Years 8 and 9, Midford et al. identified that those who participated in the course guided by the tenets of harm reduction were more knowledgeable about drugs and alcohol, suffered less alcohol-related harms, got 'drunk' less and were more inclined to communicate with their parents about their alcohol use (Midford et al., 2012). The social costs of harmful alcohol use are significant (let alone the direct health-related consequences), including loss of workplace productivity and criminal activity (such as driving under the influence, assault and property damage) (Anderson, Chisholm, & Fuhr, 2009). With research showing a strong ecological connection between a country's 'per head' alcohol consumption and prevalence of alcohol-related harms (Anderson et al., 2009), reduction in consumption and increased knowledge concerning the harms associated with AOD use (such as the results of those participating SHAHRP harm reduction curriculum in Australia) show a great deal of promise in helping reduce these social costs. Programs such as SHAHRP, if evaluated on an 'abstinence-outcome' model, would be considered a failure – despite the promising results, illustrating the importance of not just designing effective programming, but programming that has the right goal in mind (Midford et al., 2012). A 2019 study found that zero-tolerance or abstinence-based approaches to drug education do not resonate with youth and their

experiences (Slemon, Jenkins, Haines-Saah, Daly, & Jiao, 2019), a sentiment that is also reflected in the recent cannabis education toolkit for educators published by the *Canadian Students for Sensible Drug Policy*, which emphasizes the need for inclusion of harm-reduction strategies in future drug education (Valleriani et al., 2018).

Despite a promising increase in harm-reduction drug education programs in lower-level schooling in Australia, and the creation of a classroom resource for facilitating harm-reduction discussions surrounding cannabis use among high school students in Canada (*CYCLES*) (Moffat, Haines-Saah, & Johnson, 2017), there are a surprisingly small number of post-secondary drug education programs that have harm-reduction as an explicitly stated goal (in either Canada or the United States). At the post-secondary level, a majority of the research concerning drug education focuses on three approaches that have seen some success: Brief Alcohol Screening & Intervention for College Students (B.A.S.I.C.S), Environmental Prevention Strategies and Curriculum Infusion. Though these approaches for the most part have been described as preventative programs; specifically the prevention of binge drinking behaviour, they incorporate aspects of the philosophy of harm reduction, with goals of reducing negative outcomes related to binge drinking (health problems, driving under the influence, property crime etc.) and more recently have been applied to other potentially problematic substance use behaviours, such as heavy cannabis use (Riggs et al., 2018; Weitzman, Nelson, Lee, & Wechsler, 2004; Whiteside, Cronce, Pedersen, & Larimer, 2010). A 2010 evaluation of the B.A.S.I.C.S program praises it as one of the most empirically sound and successful prevention/intervention programs for college students (Whiteside et al., 2010). In its purest form, the program offers two, fifty-minute sessions (assessment and feedback), where a student is provided with personalized feedback based on their self-reported drinking behaviour as it compares to the normal drinking behaviour of other students on campus. Alongside this feedback, students learn about blood alcohol content (BAC), personal risk factors (such as family history and

polysubstance use) and are provided with ham reduction strategies (also referred to as protective behavioural strategies - PBS). Studies have shown that the majority of college students with heavy AOD use tend to overestimate the AOD intake of their peers (Riggs et al., 2018; Whiteside et al., 2010) and the 'social-norms' approach of the B.A.S.I.C.S programs can correct these misperceptions and mitigate harmful behaviours. Participants in B.A.S.I.C.S programs have seen a reduction in their intake of alcohol, reduction in harmful behaviours associated with excessive alcohol use and increased use of PBS (Riggs et al., 2018; Whiteside et al., 2010). More recently a program known as *eCHECKUPTOGO* (modeled on the B.A.S.I.C.S approach) was designed as a web-based intervention for problematic cannabis use on campus, using personalized feedback to correct the misperceptions of the norms surrounding cannabis use and providing PBS (such as avoiding mixing cannabis and other drugs, only purchasing from trusted sources etc.) (Pedersen, Huang, Dvorak, Prince, & Hummer, 2017) to reduce cannabis-related harm (Riggs et al., 2018)

Research evaluating the 'environmental prevention strategies' approach to drug education on campuses, has found that the majority of alcohol-related harm occurred within groups that are *not* traditionally labelled as 'high risk', suggesting the need for prevention strategies that target the entire student population, not simply a small sub-set (Weitzman et al., 2004). An example of an environmental approach is the '*A Matter of Degree'* (AMOD) program which is an initiative spanning across 10 campuses in the United States involving collaboration between students, administrators, business owners, community members and law enforcement to reduce binge drinking behaviour among students. The AMOD program brings stakeholders from the campus and the community together, to create and implement interventions with three levels of outcome: altering alcohol related access (such as alcohol promotions aimed at students and student pricing), altering availability of alcohol and norms, and reducing high-risk drinking and alcohol-related harms (Weitzman et al., 2004). A 2004 evaluation of the

AMOD program found that the campuses which most successfully implemented the AMOD program saw statistically significant reductions in alcohol consumption and alcohol-related harm (Weitzman et al., 2004).

2.2 Curriculum Infusion

This strategy of targeting the student population in its entirety instead of focusing prevention/intervention efforts on traditionally 'high-risk' groups, is taken a step further with a drug-education pedagogy known as Curriculum Infusion (CI), which unlike programs such as AMOD, have faculty playing a prominent role. CI is the integration of information pertaining to college health-related issues (such as AOD use) into the curriculum of standard courses (Riley & McWilliams, 2007). CI is used by a number of post-secondary campuses across the United States to influence student behaviour, often targeting alcohol consumption, but also the integration of other topics such as student mental health and mental well-being into standard curricula (Riley & McWilliams, 2007; White et al., 2010). A 2010 study evaluating the influence of a CI program on college student drinking behaviour emphasizes how CI can reach a wide range of students, as opposed to approaches like B.A.S.I.C.S. which are either voluntary or utilized as a response to student misconduct (White et al., 2010).

With research showing that young adults have high rates of AOD use (Canadian Center on Substance Use and Addiction, 2018; Marshall et al., 2016), and are typically outside of the reach of traditional harm reduction networks (Frank et al., 2015; Merkinaite et al., 2010), the ability to regularly reach large numbers of students makes CI an important tool. The stigma surrounding substance use has been cited as one of the primary barriers that stop young adults from seeking help for substance abuse problems or engaging with traditional harm reduction programs (Marshall et al., 2016). CI delivers harm reduction to

this at-risk population instead of making them seek it out. Research into stigma and substance abuse disorders (SUD) has revealed that SUD carry more stigma than other health issues, and that stigma is often used as a societal tool to discourage or reduce unhealthy behavior (Livingston, Milne, Fang, & Amari, 2012). A 2009 study highlights how those who suffer from drug addiction are seen as more 'blameworthy and dangerous' compared to individuals with mental illness or the physically handicapped, and are seen as 'more responsible' for the onset of their health problem. Disorders that were perceived as being attributed to the individual resulted in the suppression of helping behaviour, and study participants were less likely to provide help to someone with a SUD than they were to someone with a mental illness or physical handicap (Corrigan, Kuwabara, & O'Shaughnessy, 2009).

Dr. John Kelly's research also draws attention to how substance-related conditions or disorders are highly susceptible to stigma due to associations pertaining to personal culpability, with the misattribution of continued behaviour as personal choice, long after the areas of the brain that motivate and regulate impulse control have been altered (Kelly & Westerhoff, 2010). Not only can this stigma act as a barrier for those seeking-help, but it can also explain why some individuals are hesitant to engage with the concept of harm reduction, believing that it is a permissive philosophy and that continued substance abuse is a rational choice that should be discouraged (Livingston et al., 2012; Midford et al., 1998). Not only has CI been found to be useful in reaching a broad range of students (White et al., 2010) who may be outside of traditional harm-reduction networks, it has also shown a great deal of promise in reducing stigma in the classroom. A 2018 study revealed that American students who were enrolled in a psychology course that that infused stigma reduction techniques (concerning mental health) into the curriculum, demonstrated significant changes in their stigma beliefs (Strassle, 2018).

In 2001, Georgetown University implemented a CI program, with the goal of reducing the harms associated with alcohol-use among students. The program emerged from an informal group of students,

faculty and administrators (known as 'Friends') who wanted to take a proactive approach to reducing alcohol-related harm on campus and build a stronger community (Riley, Durbin, & D'Ariano, 2005). An evaluation of the program found that at the end of a CI course students were more knowledgeable about campus resources, with close to half of participants reporting that they modified their drinking behaviour (Riley et al., 2005). This success saw Georgetown create the 'Connecting the Safety Net to the Heart of the Academic Environment' program, a CI initiative with the goal of addressing "Student depression, alcohol and substance abuse, and other student health and wellness issues through various forms of engaged learning, including community-based learning, to reach students on a personal level" (Riley & McWilliams, 2007, p.14). The program created a cross-campus collaboratory team comprised of members of faculty, health professionals, student affairs, curriculum development and community-based learning staff to assist with curriculum infusion. An example of this infusion included a mathematics professor who began to incorporate topics such as blood alcohol content and weight control into course content, with students expressing how the course resulted in changes to their attitudes and consumption behaviours. Another example is a philosophy professor who incorporated community-based learning (CBL) also known as academic service learning to tie course content to real-world experience, encouraging her students to reflect on the moral and psychological challenges they encountered in the community at their CBL placements, and bringing in a facilitator to aid in these discussions (Riley & McWilliams, 2007).

Though curriculum infusion is a promising approach for drug education and the incorporation of harm reduction ideas into standard post-secondary curricula due to its flexibility and reach, it still presents some challenges, including the need for faculty to be properly trained and educated about the material that they are infusing into course content (Flynn & Carter, 2016; Kenney & Grim, 2015).

Kenney and Grim (2015) identify how the sensitive nature of AOD content (and how easy it can be to unintentionally reinforce myths/misperceptions) means that to be successful, CI requires faculty who are self-reflective and open to professional development and training in CI.

Research on successful implementation of CI for alcohol abuse has found that training for instructors was one of the most significant themes that emerged during interviews with faculty – with instructors' competence in delivering infused content a key factor in whether students seriously engage with the content (Kenney & Grim, 2015). Instructors wanted proper training on CI, talking points, and training on how to use empirical data/research to facilitate discussions with students concerning subjects that could be sensitive or contentious. Instructors also pointed to campus-wide consistency as an important element for the success of CI (Kenney & Grim, 2015).

This theme of consistency is important when discussing CI of drug education content, especially with prior research showing concern from educators that straying from traditional abstinence-based narratives could result in professional isolation or unanticipated consequences (Salm, Sevigny, Mulholland, & Greenberg, 2011; Tupper, 2008), and that for any degree of sustained effect, school-based approaches to drug education require school-wide collaboration and interdependence (Salm et al., 2011).This collaboration and interdependence is reflected in successful curriculum infusion programs like those in place at Georgetown University (Riley & McWilliams, 2007), and other successful initiatives have seen faculty operate a curriculum infusion website for interested instructors that offer sample lessons plans, resources, as well as the provision of dates for in-person training and workshops (Walter et al., 2013).

When it is clear that traditional harm reduction networks are not reaching young, college-aged adults (who also tend to be the demographic most at risk from AOD abuse and related harms) (Frank et al., 2015; Merkinaite et al., 2010), it seems a logical step to bring these conversations into the classroom, a place that values learning and the discussion of ideas. If properly implemented, curriculum infusion –

more specifically CI that features service-learning components - has the potential to reach a broad range of students and change preconceived perceptions and misperceptions concerning AOD (Flynn & Carter, 2016; Riley & McWilliams, 2007; White et al., 2010), hopefully reducing harm and preparing students for careers and life in the world outside of the classroom .

3. Methods:

This project utilized a mixed methods approach, engaging 156 faculty members via an online survey, and nine faculty members at four focus groups. Faculty were recruited for the online survey using the daily 'Humber Communique' email, outreach to professional networks, and through announcements at faculty meetings. Inclusion criteria required faculty to be current full or part-time faculty at Humber College. Respondents who indicated they were interested in participating in a focus group were able to submit their email address after completing the survey (For survey see Appendix 1). Survey participants were offered an incentive of entry into a drawing for two $100 gift cards by completing the survey.

Survey participants were between 24 and 72 years of age (m=46). 67% identified as female and 32% identified as male, with 2% choosing not to answer the question. The respondents were 70% white, 12.5% south Asian, 7% black, 2.7% West Asian, 1.8% Chinese, and 1.8% Jewish. 48.2% were full-time faculty, while 51.8% were part-time. Respondents came from all six Humber faculties with the largest group from the Faculty of Social and Community Services (38.2%) and the fewest from the Faculty of Applied Sciences and Technology (4.5%), and all others providing between 11-18% of respondents each.

Four focus groups were completed over the course of two weeks with nine participants. Participants came from The Faculty of Applied Sciences and Technology, The Faculty of Business, The Faculty of Liberal Arts and Sciences and Innovative Learning and The Faculty of Media and Creative Arts. Focus

groups were conducted at both North and Lakeshore campuses and were recorded with digital audio recorders. Transcription was completed automatically by Trint.com, with line by line verification conducted to ensure accuracy.

4. Qualitative Analysis:

We identified four key themes emanating from the nine focus group participants: understanding of harm reduction, the impact of stigma, personal engagement and the need for knowledge and resources. In this section we will explore these themes and accompanying sub-themes.

4.1 Understanding of Harm Reduction:

The focus groups revealed a varied but generally limited knowledge of harm reduction as a philosophy/approach specifically as it applies to substance use and addictions. This is despite an acknowledgement of regular discussions of safe consumption spaces, overdose prevention, and other harm reduction issues regularly appearing in the news in the course of the current overdose epidemic. Focus group participants came into the research with concepts about harm reduction that were well beyond the traditional focus of harm reduction on substance use and addictions. Participants often focused on how to reduce harm in multiple ways, such as workplace safety and self-care, into their understanding of harm reduction:

> *"To me it sounds like how I can avoid not only harming myself but others around me" (Mike) and "Well I think I've gleaned from the context of the original survey of this that we're talking specifically about drug use or exposure to drug use? I could be wrong, but I'm just kind of putting the pieces together so I'm not really that familiar with the specific nature of the term harm reduction. Up until now" (Jay).*

There was only marginal awareness about the overall causes and impacts of the current opioid crisis. Though participants were not well versed in harm reduction knowledge, they spoke of themselves as having more knowledge than the general public, their colleagues at Humber, and Humber's management

team. To our participants, these groups were hesitant to acknowledge the relatively high levels of drug use occurring in our society:

> *"It felt like the message underneath that is – yeah, there is no give, there is no gray area. So, if you are doing these things you better be hiding it" and "People just pretend it doesn't – our students don't do that sort of thing… I get that vibe. Our students wouldn't do that sort of thing" (Jim).*

As such, the limited understanding of harm reduction as it applies to substance use, coupled with the lack of acknowledgement that students may be using substances reinforces the notion that addressing harm reduction in the classroom is not important to many stakeholders at Humber.

4.2 Substance Use and Addictions in the Professions:

Participants agreed that substance use and addictions are present in the professions they came to Humber from. Participants gave anecdotal examples (sometimes historical or stereotypical) of why and how substance use and addictions is present in their field and profession. A few participants referred to the expectation to drink alcohol or use cocaine in some work social settings. A faculty member in a business program, with extensive experience in the private sector identified how their professional culture influenced both the expected behaviour of professionals, but also the need to have mechanisms in place to deal with the harm of such activity. They described the professional environment they'll be sending students into as, "work hard and play hard seems to be the culture" (Participant 3).

A professor in the trades reflected on how when he was a young builder drug consumption was far more prevalent than it is today, and there was almost a sense of normalcy to drug use in certain situations: "So, for example the use of Cannabis in a lot of situations where people were working at heights was almost encouraged at the beginning of the day" (Jay).

4.3 Support for the Incorporation of Harm Reduction into Curriculum:

Despite awareness of professional concerns around drug use, none of the focus group participants had examples of harm reduction being taught or formally incorporated into their program curriculum. Some participants stated they could not envision how to incorporate harm reduction into their classes or curriculum, while the majority of participants stated that it should be regardless of how it should fit:

> *"Do I think that every program should have some space in it to deal [with] the general area of access and wellness which would also include Harm Reduction? Absolutely" (Participant 1) and "I'm saying that Harm Reduction should be a topic that you know just like the strategic plan right now their discussing and stuff, should be something that would be college-wide accepted and instilled into a college, Humber College culture, something that our school teaches" (Jay).*

Participants emphasized the importance of addressing harm reduction with the students in order to prepare them for what they may encounter in their professions. However, the lack of direction/policy relating to harm reduction sends a message to faculty that it's not a priority for the students to be educated about it: "And so what is being lost – not only the opportunity to go into some of these more contentious or uncomfortable or whatever areas, is the opportunity to adequately prepare students for an experience that is reflecting the industry" (Participant 1). Those that do present harm reduction as a topic in their classrooms do so despite the ambiguity: "I think we're doing it because we know it's important, but we don't have a formal strategy because it's never really been put down as a clear priority" (Natalie).

4.4 The Impact of Stigma:

Along with lack of knowledge and apprehension about discussing harm reduction in the classroom is the perceived stigmatizing attitude towards substance use within the Humber community. Many participants spoke of students interpreting harm reduction discussions as enabling or encouraging substance use: "You shouldn't be teaching this unless you're promoting drugs or whatever" (Natalie). The possibility

of reprisals also discouraged faculty from addressing harm reduction: “I don’t feel confident doing it myself, because I’m not – It’s not my background, I’m worried about potential repercussions…” (Natalie).

The legalization of cannabis would have been a good start to a discussion about substance use and how to stay safe while using. Most felt that an opportunity was missed to have these conversations during the transition to legal cannabis: “So, it felt like for three seconds maybe we’re going to have a conversation because one substance was legalized, about substances in general… it felt like that door was just kind of like ‘OK well we’re done’. We fixed it, go somewhere else” (Martha). Furthermore, the poster prohibiting cannabis use on the grounds of the school appeared to be the only acknowledgement of the significant change in legislation that will have an impact on the students. Coupled with NIMBY-ism, this poster was perceived as paternalistic, creating further stigma:

> *“It almost feels like an old-fashioned method of parenting and discipline of just like well you just kind of give them a slap or punish them, and then they’ll learn, I’m not going to teach you a better way. I’m not going to discuss why it’s bad, I’m just going to make it very clear that it’s unacceptable” (Jim).*

There also exists the possibility that a requirement to include harm reduction in curriculums could have negative impacts on students’ understanding of drugs issues if faculty incorporating harm reduction material hold stigmatizing attitudes are a misinformed about substance use and substance users. Faculty from a trades program acknowledged that there needs to be an attitude change towards harm reduction among staff as it is a topic worthy of discussion in the classroom:

> *“…it would have to be supported by the faculty itself in terms of how they view it… faculty could also receive some training about you know what’s gonna happen, or what’s going to be taught to their students and to make sure that they’re on board and they do not sabotage that by sheer attitude or body language” (Jay).*

4.5 Personal Engagement:

Having a personal connection to issues relating to substance use was aligned with a participant holding views of harm reduction as a topic worthy of discussion. A small number of participants who decided to attend the focus groups voluntarily disclosed that they have a personal connection to the topic of harm reduction that drew them to participate in these focus groups; one had a brother who had issues with substance use and addictions, another a sister who runs a supervised injection site and one who expressed concern about accurate information for their own teenaged children. These individuals underscored the necessity and importance of incorporating harm reduction in their curriculums but expressed concern that stigmatizing attitudes would interfere with an objective presentation of harm reduction principles:

> *"But what about those instructors too who were really, you know say 'we're putting this harm reduction unit in and we want you to talk about harm reduction' and they'd be like 'I'm not doing that, drug addicts all deserve to die'. I mean people say it, they think it…" (Natalie)*

Substance use and substance users are stigmatized in the larger social context. While several programs at Humber attempt to reduce the stigmatizing attitudes towards this vulnerable population, the pervasive negative undercurrents of this issue do not encourage discussions about it in the classroom.

4.6 The Need for Knowledge & Resources:

As a possible result of the stigma towards substance use and users, participants reported that there is a lack of information available to faculty about services provided to students who are experiencing substance use issues. In addition, they viewed issues of drug use as subsumed by an overly broad banner of 'mental health' issues that fail to substantially differentiate the drugs from other concerns. Participants saw the lack of readily available information as potentially causing harm. Participants described encountering students misinformed about the dangers of using street drugs, including a belief

that cannabis purchased from illicit sources may be contaminated with Fentanyl. This is not true, and has not occurred in a verifiable context, but the lack of clear information creates opportunities for misguided beliefs to fester. These included students telling their professors that, "They said the only reason why [the government] tell you this is the government wants you to buy from them and not the local drug dealers" (Mike).

Faculty indicated that they are not equipped to identify the signs of substance use or how to handle disclosures or possible overdoses. Several participants highlighted the concern about boundaries with students and worries that discussing drug use could open up the conversation to areas they are not equipped or trained to deal with. There is an understanding that in order to effectively discuss substance use and harm reduction principles, it is imperative to be trauma-informed. Not everyone has a background in trauma-informed teaching practices, thus they avoid discussing the topics as they do not possess the required tools to ensure safe places. Others added that they are reluctant to engage in such conversations as they have questions about legal requirements related to discussing drugs with their students. Key amongst these was a concern about confidentiality requirements as it relates to the disclosure of substance use by students. In addition, there was concern that students may not speak honestly about drugs to their professors for fear of repercussions from the school or the police:

> *"...I feel like if there was a clear policy about what would and wouldn't happen to them if they disclose or ask for help. I mean they're not going to come to me and say "I think I have a problem with opioids because they may be worried they'll get expelled or they may be worried I'll call the police. Where's the information for students to say if you go to an academic advisor they will – you know this is how it will be handled – nothing will happen to you" (Natalie).*

The overall consensus was that offering a mandatory training or workshop would ensure that harm reduction would be included in program maps college-wide, while others did not feel that mandating it was necessary. Some preferred the idea of having an "expert" come to their classrooms to have the discussion: "I keep bringing up lived experience like it's not the job of a person who has no experience

to teach it. And it's really hard to speak from a place of understanding if you don't have lived experience and lived experience is a broad term" (Participant 1).

There is a general sense that harm reduction is an essential topic that needs to be addressed in the classroom. Although discussions ranged from incorporating training, workshops and guest speakers, some advocated for a more dedicated approach by the college that would not only reduce possible harms to the students, but would acknowledge the reality our students are facing today:

> *"I think less of a formal requirement and curriculum and more like an articulated sort of like, like part of a strategy, like a strategic goals, like our goal is to incorporate these things which we all agree are important considerations for all our students. I think anyone can apply harm reduction into any program because we know we are working with a group of people that are at particular risk because of their age and their experience" (Participant 1).*

Finally, the focus groups revealed that there is a need for basic education on substance use and harm reduction that could be delivered via different modalities (mandatory workshops, trainings, online modules, guest speakers). As such, they could gain some of the knowledge and skills required to address these issues effectively and know how to help our students. The stigma surrounding these issues may be preventing faculty from having the confidence to have these discussions. By developing a clear policy on harm reduction, faculty would not fear repercussions.

5. Quantitative Analysis:

Quantitative analysis was conducted using SPSS after a data cleaning process conducted to account for a surprisingly high number of respondents who did not answer all of the survey questions. We developed several composites from five-point Likert questions in the survey. These included the relevancy of harm reduction to a participant's courses and teaching ($\alpha = .818$), how often the faculty member speaks with students, friends, or colleagues about harm reduction issues ($\alpha = .739$), how familiar they are with harm reduction programs, policies, practices in their community ($\alpha = .935$), familiarity with specific policies

about harm reduction in their community and at Humber (α = .745), their desire to educate their own students and the wider Humber student body receive information about harm reduction (α = .876), their support for harm reduction principle (α = .671), and their beliefs in myths about the harm or danger of drugs (α = .468).

We tested four hypotheses:

H_1: Teachers with more teaching experience will report a higher perceived relevance of harm reduction concepts to their work in the classroom.

H_2: Teachers with a higher level of belief in 'drug myths' will have lower support for harm reduction principles.

H_3: Teachers whose courses cover harm reduction related concepts in the past two years will report a higher desire to see the topic discussed regularly at Humber, compared to those whose courses do not include harm reduction concepts.

H_4: There will be a difference in the amount of relevance harm reduction has to different faculties.

In examining H_1 we failed to reject the null hypothesis. There was no identified correlation between the length of time someone has been a teacher, and reported relevance of harm reduction work to their classes (r114) = .030 p = .770. While we did not find a statistically significant correlation, this finding may indicate that we do not need to target harm reduction information to teachers based on their level of experience.

H_2 posits a negative correlation between levels of belief in drugs myths and support for harm reduction principles, and though we reject the null hypothesis the Cronbach's Alfa (α = .468) for the composite of 'drug myths' was just below the minimum threshold for the test.

When using the full composite variables of support for harm reduction principles and drug myths we identified that those with higher levels of beliefs in 'drug myths' showed a moderate negative correlation with their level of belief in harm reduction principles $r(111) = -.425$ $p = .000$. This indicates that those who strongly believed in questions that asked things like, "You can overdose if you touch fentanyl on the body or clothing of someone overdosing" (Q22) were more likely to have low levels of support for the principles of harm reduction (Q16-18). This finding is important as it may indicate that in order to incorporate harm reduction ideas into the classroom we may first need to engage faculty about their misinformed ideas about drugs. Without dealing with these ideas we may not be able to engender an environment suitable for the successful deployment of any tool or resource developed from this project.

In running a Spearman correlation for the individual components of the drug myth composite against the harm reduction principles composite, we identified a statistically significant negative correlation with two drug myths. These included the belief that teaching harm reduction would encourage drug use amongst students $r(111) = -.478$ $p = .000$, and that the use of opiate substitution drugs like methadone keeps people from getting 'clean' $r(111) = -.450$ $p= .000$. We also identified that when examining individual questions from the drug myths composite there was a statistically significant but weak positive correlation between the belief you can die if you touch Fentanyl and that you can become addicted to opiates the first time you use them $r(109) = .236$ $p = .014$).

In examining H_3 we identified that there is a statistically significant difference in the desire to see harm reduction ideas discussed at Humber between those whose courses included harm reduction ideas in the last two years ($M=4.65$ $SD=.56$), versus those whose courses did not ($M=3.9940$ $SD=.69$) $t=4.911$, $p=.000$. Interestingly, while this may show that those who already teach about harm reduction are more inclined to see the topic more widely incorporated at Humber, these individuals did not have a

statistically significant difference in their beliefs about harm reduction principles or their level of belief in ‘drug myths’ to those that did not teach about harm reduction. This may indicate that while current teachers of harm reduction are more keen to bring harm reduction to a wider audience at Humber, we may need to ensure that any tools and resources developed as a result of this project contain information to help reduce the belief in drug myths in addition to supporting harm reduction discussions in the classroom.

In testing H_4 using a one way Anova we identified that different faculties have significantly different levels of how relevant they see harm reduction ($F(5,94) = 11.576$ $p = .000$), how familiar they are with harm reduction ($F(5,94) = 7.166$ $p = .000$), and how much they want to see harm reduction included in curriculum at Humber ($F(5,92) = 4.067$ $p = .002$). Faculty of Business saw the least relevance to their curriculum (mean 1.93) and the lowest familiarity with the topic (mean 1.90). There was not a statistically significant difference when examining different faculty’s harm reduction beliefs or their adherence to drug myths. This finding indicates that targeted approaches and resources for each faculty may be necessary in order engage them in future harm reduction work.

Beyond the inferential statistics we gathered, we were also able to identify important information from our descriptive statistics. 93.6% of those surveyed reported that they had a low level of familiarity with Humber’s own harm reduction policies, with more than 20% saying that had no knowledge whatsoever. This was in contrast to 78.4% of individuals who said they had a low level of knowledge of harm reduction policies in their communities, and only 14.4% who had no knowledge whatsoever. 80% of faculty agree or strongly agree that teaching their students about harm reduction is important, and a slightly higher number believe harm reduction should be taught at Humber College. 62% of respondents believed that there were specific courses in their programs that would benefit from the inclusion of harm reduction information being incorporated. Faculty identified that the most important source of harm

reduction information was the media (36.9% of respondents), followed by online research (27.9%), but very few engaged with friends (2.7%) or family (7.2%). 25.2% of those surveyed had taught harm reduction principles, programs, or policies in their classes in the past two years. Respondents were, on average, looking to spend 3.92 hours learning about harm reduction in order to help incorporate the ideas into their courses, and looking to spend 3.74 hours if the learning was for their own personal benefit. There was a strong correlation between the two previous variables $r(89) = .917$ $p = .000$. In addition, 65% of respondents indicated they would be interested in obtaining a certificate of completion for attending training sessions related to harm reduction. 46% were interested in having an addictions and mental health expert come talk to their class about the support services available on and off-campus, and 42% were interested in having access to videos that would help launch a discussion of harm reduction in their class.

6. Discussion:

This research was fortunate to receive responses from full and part-time instructors across the six faculty groups at Humber College. By engaging in a mixed methods approach we were able to identify statistical differences between faculty groups ideas on how relevant harm reduction is to their courses, but also bring forth information during focus groups about how attitudes towards harm reduction and drugs may obfuscate the path a faculty member might take in bringing that information into their class.

Humber recently release a new strategic plan for 2018-2023 that includes a pillar focused on ‘Healthy and Inclusive Community’. In addition, the Humber was the first college signatory to the Okanagan charter.

> *By adopting the Charter, Humber is committed to embedding health and wellness in all aspects of its campus culture. This commitment to student and staff physical, mental and social well-being is a key way in which Humber is creating a healthy and inclusive community, a pillar of the college's 2018-2023 Strategic Plan.* (Humber College, 2018).

Given harm reduction's focus on improving the wellbeing of drug users and the communities they live in, the issue resonates both with the internal strategic direction of the college and the commitments made externally.

Our research identified a consistent idea between both the qualitative and quantitative findings; Humber faculty are largely uniformed about Humber's approach to harm reduction, see the relevance of the issue to their courses and programs, are interested in bringing the topic into wider prominence at the college, and need help in order to do so.

One of our most significant findings was that those who taught harm reduction related content in their courses in the last two years were not necessarily more supportive of harm reduction principles than teachers who didn't engage in this content in their classrooms, and they often believed similar 'drug myths'. These faculty members actively engaged in teaching harm reduction were more keen to see harm reduction content incorporated across the college, though this is perhaps unsurprising given their direct contact with the concepts fostering familiarity.

Additional testing showed that there is considerable information gaps. More than 50% of survey participants were unable to identify that the statement, "You can overdose and die if you touch Fentanyl on the body or clothing of someone overdosing" (Q22) was not true[1]. That said, they were not concerned that, "Teaching harm reduction principles will encourage the use of drugs amongst students." (Q21), with more than 90% of respondents disagreeing with the statement. We believe the data indicate the

[1] There have been several stories of law enforcement and first responders overdosing after accidentally touching Fentanyl, however these stories have not held up to investigation, and transdermal transmission of the drug is incredibly difficult to achieve and cannot happen with limited accidental contact.

need to provide faculty a standardized base of information to dismantle some of their beliefs about drugs myths in order to build space for the faculty members to accurately bring any harm reduction content into their courses. Given the different feelings towards the relevancy of harm reduction as identified in different faculties, and the different manner in which focus group respondents identified the issue being relevant in their own classrooms, different tools, resources, and opportunities will need to be developed in order suit different classrooms and course content. Thankfully the lack of divergence between adherence to different drug myths in different faculties means that we can potentially rely on a single unified educational tool to dispel these myths. Sharing a common training base simplifies the process of development and ensures consistency of knowledge across the largest polytechnic institution in Canada.

Development of educational materials for faculty members requires a distribution mechanism. Our respondents offered mixed ideas on how to accomplish this. Some identified that mandatory training was the only way to ensure widespread uptake of the knowledge. This idea seems credible, but the inclusion of mandatory training material without a corresponding visible commitment to the concepts of harm reduction across the college may result in a situation where training modules are completed but no increase in use or perceived relevancy of harm reduction in the classroom is achieved.

Less directed opportunities for knowledge dissemination were also identified by our participants. This included having experts available for discussion or holding voluntary workshops. Both of these already exist in the form of the Humber Harm Reduction Partnership (HHaRP), a group of faculty, staff, and administrators working to plan and operationalize harm reduction at Humber College. The HHaRP team act as a central resource of drugs policy and harm reduction knowledge for the school, and delivered two training sessions in the Winter 2019 term for interested faculty. Approximately 28 people attended over the course of the two sessions.

Once educational gaps have been addressed the mechanism by which resources can enter the classroom will require a more individualized approach. There were stark differences in quantitative measures supporting the relevancy of harm reduction between faculties, and the qualitative respondents identified a number of ways in which they would engage with different resources available to them. It appears that faculty members want the opportunities for discussions with an identified 'expert', with the intention of creating a highly tailored classroom activity or talk. They expressed concern that overly broad sessions would not help them sufficiently, and as many were uncomfortable discussing the topic until they had a strong grasp of the issues, such intensive partnerships may be the only pathway to reach a level of confidence sufficient for the deployment of any resources developed by the research team.

7. Conclusion

This project sought to assess how much faculty members know about harm reduction and how they are employing content related to the topic in their classrooms. The findings suggest that there is widespread understanding of the importance and relevancy of the topic to Humber students. At the same time, faculty hold high levels of belief in 'drug myths' related to the ongoing overdose crisis, even if they already include the content in their courses. This points to the requirement for a two-pronged strategy; we need to provide education about the ideas of harm reduction and drugs education, while at the same time developing specific resources and outreach efforts to meet the needs of each individual faculty group. Operating from a consistent base of knowledge but with content developed with and for individual faculty members will give Humber the strongest possible base through which to implement programs designed in concert with the strategic goals and charter ideas driving the college towards the future.

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Appendix 1: Survey Instrument

What are the possible benefits for me or others?

This study will be used to create tools, resources, and other material to support instructors at Humber College who wish to engage with the topic of harm reduction in the classes.

How will you protect the information you collect about me, and how will that information be shared?

Results of this study may be used in publications and presentations. Your survey responses will be anonymous.
Financial Information

Participation in this study will involve no cost to you. If you provide your email address at the end of the survey you will be entered to win one of two $100 Amazon gift certificates.

What are my rights as a research participant?

Participation in this study is voluntary. You do not have to answer any question you do not want to answer. If at any time and for any reason, you would prefer not to participate in this study, please feel free not to. If at any time you would like to stop participating, please feel free to stop completing the survey. You may withdraw from this study at any time, and you will not be penalized in any way for deciding to stop participation.

If you feel uncomfortable, upset, or otherwise want to talk to someone because of how your participation in this research project made you feel, you should reach out to the Student Wellness and Accessibility Centre at (416) 675-6622 ext. 4000. If you identify as indigenous you can reach out to Anishnawbe Health Toronto at AHT.ca or (416) 360-0486.

Who can I contact if I have questions or concerns about this research study?

If you have questions, you may contact the researchers at HarmReductionResearch@Humber.ca. You can also contact the project's Primary Investigator, Dr. Daniel Bear, at Daniel.Bear@Humber.ca. If you have any questions about your rights as a participant in this research, you can contact the Humber College Research Ethics Board Chair Lydia Boyko (Lydia.Boyko@Humber.ca), or extension 79322.

* I have read through and understand the information contained in the Information Letter (the full version can be found here) +regarding the Assessing Educator's Knowledge of Harm Reduction research project conducted by the principle investigator, Dr. Daniel Bear.

By selecting **yes**, I agree to participate in this research study:

- ◯ Yes
- ◯ No

Demographics

Age

Gender

- Female
- Male
- Transgender Male
- Transgender Female
- Gender non-conforming
- Prefer not to answer
- Not listed

Ethnicity

- White
- Aboriginal
- South Asian (e.g. East Indian, Pakistani, Sri Lankan, etc.)
- Chinese
- Black
- Latin American
- Arab
- Southeast Asian (e.g. Vietnamese, Cambodian, Laotian, Thai, etc.)
- West Asian (e.g. Iranian, Afghan, etc.)
- Korean
- Japanese
- Other (please specify)

Full-time/Part-time status

- ◯ Full-time
- ◯ Part-time

Faculty

- ◯ Faculty of Applied Sciences and Technology (FAST)
- ◯ Faculty of Business (FB)
- ◯ Faculty of Health Sciences and Wellness (FHSW)
- ◯ Faculty of Liberal Arts and Sciences and Innovative Learning (FLA)
- ◯ Faculty of Media and Creative Arts (FMCA)
- ◯ Faculty of Social and Community Services (FSCS)

Program

Principle campus I teach at

- ◯ North
- ◯ Lakeshore
- ◯ Carrier
- ◯ Orangeville

Years of teaching experience

Years of professional experience outside of teaching

Relevance of Harm Reduction to Courses

1. Do you teach about Harm reduction principles, programs, or policies in any of the courses you've taught in the last two years at Humber College?

   ◯ Yes

   ◯ No

   If yes, please indicate the course title and course codes here:

   [ ]

2. How relevant are Harm reduction programs, policies, and practices to the**course(s)** you teach?

   ◯ Extremely

   ◯ Very

   ◯ Moderately

   ◯ Slightly◯

   Not at all

3. How relevant are Harm reduction programs, policies, and practices to the**program** in which you teach in?

   ◯ Extremely

   ◯ Very

   ◯ Moderately

   ◯ Slightly◯

   Not at all

4. I talk to my students about harm reduction or the overdose epidemic during office hours or other non-class times.

- ◯ A great deal
- ◯ A lot
- ◯ A moderate amount
- ◯ A little
- ◯ Never

5. I talk to colleagues about harm reduction or the overdose epidemic.

- ◯ A great deal
- ◯ A lot
- ◯ A moderate amount
- ◯ A little
- ◯ Never

6. I talk with friends and family about harm reduction or the overdose epidemic.

- ◯ A great deal
- ◯ A lot
- ◯ A moderate amount
- ◯ A little
- ◯ Never

7. Are there specific courses in your program where you believe that teaching Harm reduction practices, policies and programs would be beneficial?

- ◯ Yes
- ◯ No

If yes, please describe. If no, why not?

8. What currently prevents harm reduction from being taught in the courses or program in which you teach?

9. In what context has drugs or drugs abuse come up in the courses you teach?

Knowledge of Harm Reduction Programs & Policies

10. I am familiar with harm reduction policies at Humber College.

- ◯ Extremely familiar
- ◯ Very familiar
- ◯ Somewhat familiar
- ◯ Not so familiar
- ◯ Not at all familiar

11. I am familiar with harm reduction policies in my community.

- ◯ Extremely familiar
- ◯ Very familiar
- ◯ Somewhat familiar
- ◯ Not so familiar
- ◯ Not at all familiar

12. I am familiar with harm reduction practices in my community. (e.g. Needle exchanges, Safe consumption spaces)

- ◯ Extremely familiar
- ◯ Very familiar
- ◯ Somewhat familiar
- ◯ Not so familiar
- ◯ Not at all familiar

13. I am familiar with harm reduction programs in my community.

- ◯ Extremely familiar
- ◯ Very familiar
- ◯ Somewhat familiar
- ◯ Not so familiar
- ◯ Not at all familiar

14. I see the importance of educating my students about Harm reduction.

- Strongly Agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

15. Harm reduction principles should be taught at Humber college.

- Strongly Agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Sentiment Towards Harm Reduction Principles

Please rate your level of agreement with the statements.

16. Drug use is part of our world and I choose to work to minimize its harmful effects rather than simply ignore or condemn them.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

17. I believe drug users themselves are the primary agents of reducing the harms of their drug use, and we should empower users to share information and support each other in strategies which meet their actual conditions of use.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

18. I recognize that the realities of poverty, class, racism, social isolation, past trauma, sex-based discrimination and other social inequalities affect both people's vulnerability to and capacity for effectively dealing with drug-related harm.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

Sources of Information About Harm Reduction

19. I have received information about harm reduction from the following sources (choose all that apply)

- [ ] Media
- [ ] Colleagues
- [ ] Online research
- [ ] Friends
- [ ] Family
- [ ] I have not received information on harm reduction from any source

20. The most important source of harm reduction information for me has been

- ( ) Media
- ( ) Colleagues
- ( ) Online research
- ( ) Friends
- ( ) Family
- ( ) Not applicable

Attitudes Towards Drug Users

Please rate your level of agreement with the statements.

21. Teaching Harm reduction principles will encourage the use of drugs among students.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

22. You can overdose if you touch fentanyl on the body or clothing of someone overdosing.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

23. You can be addicted to opioids after using it for the first time.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

24. Using things like methadone just lets people stay addicted to drugs instead of getting clean.

- ◯ Strongly Agree
- ◯ Agree
- ◯ Neither agree nor disagree
- ◯ Disagree
- ◯ Strongly disagree

Tools Needed to Bring Harm Reduction Into Your Classroom

25. Which of the following would you find useful in regards to learning more about harm reduction, and including harm reduction in your courses? (Check all that apply)

- [ ] Workshops
- [ ] Online resources
- [ ] Course consultations
- [ ] Faculty group conversations (e.g. lunch and learn event)
- [ ] Readings
- [ ] Other (please specify)

26. How much time (in hours) would you like to spend learning about harm reduction for your own personal knowledge?

27. How much time (in hours) would you like to spend learning about harm reduction as it relates to incorporating that topic into your professional practices at Humber College?

28. Would you be interested in obtaining a certificate of completion for a set of workshops and on harm reduction or drug related issues?

- ◯ Yes
- ◯ No

29. Which of the following activities would consider engaging with to support the discussion of harm reduction in your classroom. (Check all that apply)

- [ ] Have experts in harm reduction and drugs issues work with you to develop course relevant materials
- [ ] Have experts in harm reduction and drugs issues work with you to deliver a course relevant guest lectures
- [ ] Have an addictions and mental health specialist speak to my class about support services available on and off campus
- [ ] Show a short film about harm reduction in my classroom