From avoiding risk to nurturing resilience: Shifting our upstream approach to youth substance use

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l'usage de substances

Our current policy context provides an opportunity to rethink how we understand and talk about psychoactive substances in Canada. It also offers us a chance to develop policies designed to promote the health and well-being of all Canadians, in particular our young people.

In writing this paper, we set out to offer a broad picture of what is needed in terms of policy and action in the "upstream" context to address the needs of young Canadians (from birth to 24 years) related to psychoactive substance use. In the process, we have reviewed a wide array of literature on child and youth development, education, public health and philosophy.

What we present here does not align with what our systems have focused on in the past individuals and the drugs they choose to use or not use. We call for a new focus, a new way of thinking, a new language, a new metaphor. The call itself is not new. We build on, draw from and restate much of what has been said repeatedly going back to the 1986 Ottawa Charter (World Health Organization, 1986) and beyond.

"Thirty-five years of developing knowledge in the health promotion field has unequivocally shown that taking action on the broad conditions that affect people's lives offers the greatest improvement in the health of the population." (Health Council of Canada, 2010, p. 4)

We know that promoting health relative to alcohol, cannabis and other drugs involves far more than encouraging healthy lifestyle choices. Yet, our policies and actions still focus on rescuing people from their choices—from themselves.

This paper explores some of the assumptions on which our current policies and actions rest. We seek to identify opportunities to shift toward policies and actions that take the focus away from individual decisions about substance use and onto the swirl of circumstances, choices and chances in which individuals and groups are expected to survive and thrive.

Rethinking the metaphor

The term "upstream" comes from the classic public health parable credited to medical sociologist, Irving Zola (National Collaborating Centre for Determinants of Health, 2014b). In the parable, a Good Samaritan, after pulling several drowning people from a river, goes upstream to find out why so many people are falling into the river. The story helps us understand the tensions between the public health mandates to protect, prevent and promote. Not only must public health respond to emergencies (help the people at risk of drowning); it must also take action to prevent the emergencies (by building bridges and barriers that stop people from falling into the river).

However, the model, like all models, has built-in limitations. In order to rethink our approach to substances and young people, we need to question two assumptions within the model. First, as applied to substance use, it tends to focus on a simple causal story: substance use leads to health harms, which, in turn, lead to negative economic and social consequences. The model encourages us to intervene at various points along this causal chain to impact health outcomes. Second, this river model is a story about risk—avoidance,

mitigation, rescue. This tends to lead to a binary system focused on staying clear of the causes and dealing with the consequences. These two assumptions underpin most of our current policies and actions relative to the use of psychoactive substances by young people, and both are problematic.

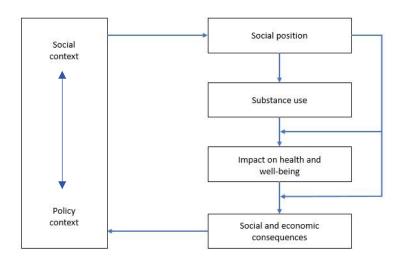
Challenging the accepted causal story

The simple causal story underlying our approaches to psychoactive substances is pervasive and permeates our thinking and language. The evidence, however, suggests a more complex account. We live in an ecosystem in which multiple factors interact in complex ways to influence actions and outcomes. Consider this analogy: if the frogs in a pond suddenly started to behave in ways that caused harm to themselves or other frogs, we would not likely try to educate, punish or treat the frogs. We would ask ourselves, "What has happened to the pond?"

When it comes to understanding substance use by young people, we tend to concentrate on the behaviour of individuals and the inherent risks related to the substances they use. We ignore the implications of the fact that people from disadvantaged social groups who drink moderately experience more alcohol-related harm than those who drink heavily but come from more advantaged areas. How can we explain this? The available evidence suggests this difference cannot simply be the result of other individual lifestyle factors (Katikireddi et al., 2017; Loring, 2014; Williams, 2003). That means the simple causal story is inadequate. Substance *use* does not determine the outcome.

"In general, lower socioeconomic groups consume less alcohol overall and are more likely to be abstainers, but they experience higher levels of alcohol-related harm than wealthier groups with the same level of consumption." (Loring, 2014, p. 4)

The image on the right, adapted from Diderichsen and colleagues (2001), presents a more complex story. The simple causal story (see the three boxes on bottom-right) needs to be supplemented with an awareness of social stratification as a consequence of the social and policy contexts. Not only does social position appear to influence substance use behaviour, it also introduces differential vulnerability and differential consequences, which in turn lead to further social stratification. Insofar as these negative influences are



related to modifiable social arrangements and policy initiatives, they may be considered unjust (Diderichsen et al., 2001). This more complex story opens up a broad range of intervention points beyond the current emphasis on individual lifestyle choices.

De-centring risk

The simple story is about risk as the source of problems. Risk, as we will explore in more depth later, is a regular aspect of life within the ecosystems in which we live, develop, work and play. Risk is a part of life. We cannot avoid it. Risk taking is essential to human growth and development. It pushes us beyond our current horizons. It has been fundamental to human development since our beginnings.

A risk-focused story narrows our vision. We focus too much on potential dangers and not enough on opportunities and capacities. Going "upstream" involves more than identifying where the risks are and trying to prevent them. Helping people at risk of drowning or at risk of falling into the river may be useful strategies, but ultimately we all need to learn to swim. Our current risk-focused strategies keep us looking for ways to control people's behaviour (keep them on a safe path) and often fail to address the structural processes that generate the risks or promote particular risk taking in the first place (Bryant et al., 2007; Fraser, 1997). Nor does this risk avoidance approach help prepare us for facing the inevitable challenges in life (Sandseter & Kennair, 2011).

Modifying the metaphor

Going "upstream" is therefore more than a spatial and temporal concept. It involves looking at the broader picture. This means taking an ecological perspective. We must pay attention to the social and structural conditions that generate the health inequalities that concern us those structures that distribute wealth, power, opportunities, and decision-making (National Collaborating Centre for Determinants of Health, 2014b). "Upstream action includes interventions and strategies that focus on improving the structural determinants to allow people to achieve their full health potential" (National Collaborating Centre for Determinants of Health, 2014a, p. 6). Working upstream also shifts the epidemiological gaze from risk at the individual level (the causes of cases) to the population level (the causes of incidence) (Rose, 2001, p. 428). Rose notes that though both levels need to be addressed, the priority should remain on the population level as this is where there is the potential for the greatest impact on health (2001, p. 432). Though Rose was referring to the relative distribution of disease risk, his comments both underlie and support the importance of upstream action on the determinants of health.

We must also pay attention to nurturing the capacities of young people not only to make good health decisions but also to participate in political processes that affect their lives. The challenge is both creating a world in which *health for all* is possible and helping young people develop the capacity to deal with challenges and make the most of opportunities (Epp, 1986; Ungar, 2004b).

We need to modify the metaphor. The river is life. We are all in the river. What it takes to survive and thrive depends on where one is in the river. Critical to the healthy ecology of the river is that individuals have the opportunity to direct their course through the stream and the capacity to face challenges. Yet, equally critical is attention to the underlying structural factors of the river, particularly those features created by factions of river people. The need for this dual focus is seen in the vision of *Achieving Health for All* with its emphasis on reducing inequalities related to social and economic status and enhancing individual capacity through both participation and policy (Epp, 1986). This entails developing policies and actions that ensure everyone in Canada has a chance to learn how to swim and that the swirl of circumstances, choices and chances in which we swim is not made more dangerous by social and structural conditions we create together.

What do we know about youth substance use and its impacts on health?

When it comes to the impact of psychoactive substances on the health of young people, we tend to over-simplify the issue. Young people are not a homogenous group. They vary by age, gender, race, cultural background, social position and personal identity.

"The failure of policy-makers to see young people in all their diversity ... paves the way for inadequate and inappropriate responses to preventing substance use and to reducing harm and treating use when it does occur." (Gruskin et al., 2001, p. 1955)

Likewise, psychoactive substances are incredibly diverse. Too often we lump them together (or distinguish them) in ways that are arbitrary and unhelpful. Cannabis is not the same as alcohol. Just because a drug is legal does not mean it is less harmful. Smoking a cigarette is not the same as vaping. This is not to argue, in any of these cases, that one is harmful and one is not. It is instead to say that we must pay attention to this complexity in order to address the range of issues involved in substance use by young people.

One helpful entry point is to consider the reasons why young people choose to use psychoactive substances. People have been using a wide variety of drugs for thousands of years and in almost every human culture. Drugs have been used to celebrate successes, deal with grief and sadness, mark rites of passage and pursue spiritual insight. Drug use is deeply embedded in our cultural fabric. Like food, sex, and other feel good things in life, psychoactive substances can be a real source of pleasure and enjoyment for people in our society. Most people use psychoactive substances in some way, whether it is enjoying a cup of coffee at breakfast, relaxing with a beer while watching the game, or seeking the relief of a Tylenol 3 after a root canal. Young people are no different.

In order to successfully address the complex issues related to psychoactive substance use among young people, we need to listen to them carefully when they talk about their motivations for using and their understanding of the world in which they live (Bryant et al., 2007; Kairouz et al., 2002). Many motives young people have for substance use are, in fact, functional: facilitating social bonding, satisfying curiosity, providing pleasure or gaining peer status (Antin et al., 2018). Young people are very clear—they use because of perceived benefits. Our current discourse about psychoactive drugs, however, tends to avoid any mention of the benefits (Peele & Brodsky, 2000), particularly when talking about young

To feel good Stimulants may lead to feelings of power, selfconfidence and increased energy. Depressants tend to provide feelings of relaxation and satisfaction.

To do better The increasing pressure to improve performance leads many people to use chemicals to "get going" or "keep going" or "make it to the next level."

To feel better

People may use substances to reduce social anxiety or stress when building connections with others or to reduce symptoms associated with trauma or depression.

To explore

Some people have a higher need for novelty and a higher tolerance for risk. These people may use drugs to discover new experiences, feelings or insights. people. Adults tend to underestimate the degree to which young people understand the structural workings of their world. In the discussion that follows, we seek to understand substance use by Canadian young people by paying attention to what they say.¹

Young people use substances in order to feel good

"To have fun and to get away from the responsibilities of school." (Smith et al., 2014, p. 41)

In their own words, the most common reason young people use psychoactive substances is to have a good time. When surveyed, 65% of youth in British Columbia who had used psychoactive substances said they did so to have fun (Smith et al., 2014, p. 40). Similarly, a Canadian study found that college students attribute their drinking to several reasons: because they enjoy the taste (25%), to celebrate (21%), to be social (17%), or to relax (8%). Less common reasons for using substances included forgetting worries or to feel less shy (each about 2%). The desire to get drunk was given as a reason for using substances on 8% of occasions (Kairouz et al., 2002). This fits with a review of the international literature that found "most young people reported drinking for social motives, some indicated enhancement motives and only a few reported coping motives" (Kuntsche et al., 2005).

"My parents and their friends all drink together. They immigrated to Canada from Eastern Europe. There is always alcohol when we all come together – for as long as I can remember. My parents even make wine!" ~an author of this paper

Using substances to feel good or to be sociable is associated with moderate use. Youth who use substances "to have fun" are less likely to use excessively (Kuntsche et al., 2005). This is not to deny the potential impacts associated with moderate substance use or "feel good" use. All substance use has some degree of risk—the potential for both positive and negative outcomes. Young people do seem to be aware of this and, when asked, tend to have relatively realistic expectations as to the long-term impacts of their drinking (L. Feldman et al., 1999). Helping young people build capacity to manage their lives is the responsibility of every community.

"Sometimes I see people maybe drinking too much, like drinking every day or drinking before school or stuff, which is not good, but I would say that mostly the drinking culture is at the weekends, at parties." (Friese et al., 2013, p. 11)

Young people use substances in order to satisfy curiosity

"I wanted to see what it was like." (Smith et al., 2014, p. 41)

According to the BC Adolescent Health Survey, almost 30% of young people who have used substances said they were simply curious and wanted to try them (Smith et al., 2014, p. 40). The journey into adulthood is an important and often challenging process. As bodies and minds mature, young people experience a range of physical changes, new thoughts, and feelings. The journey from middle school to high school, college, university or the working

¹Most of the citations in the following sections are from Canadian young people. A few quotes from young people in the USA and Australia have been included because they seemed relevant and provided added insight.

world brings young people increasing levels of freedom from adult supervision. As they move out into the world, young people explore new things, wonder about who they are and imagine the kind of life they want. Experimenting with psychoactive substances is often one of those explorations. Most young people arrive at adulthood with few apparent effects from experimenting with or using substances.

> "I liked the experience of being on these drugs. Music sounded better. It gave me energy. It was as if I had been awakened." ~an author of this paper

When considering all reasons why young people might use, we need to understand the symbolic value that using substances might bring to someone's life. As Robin Room puts it, "Youthful drinking, and for that matter smoking and drug use, is often a performance in front of an audience of associates and others, staking a claim to a valued identity, and expressing solidarity in a group or marking off social boundaries" (Room, 2012, p. 937; cf. Antin et al., 2018). This suggests that substance use can be a significant cultural symbol.

"When we were thirteen, the coolest things to do were things your parents wouldn't let you do. Things like have sex, smoke cigarettes, nick off from school, go to the drive-in, take drugs and go to the beach." (Room, 2012, p. 936)

"Like, we as teenagers, we want to grow up and we feel that coffee kind of seems like a more mature adult beverage, so we want to drink it." (Turton et al., 2016, p. 184)

Some young people use substances because they perceive it as enhancing their creativity. This perception has been well documented throughout history, though it is poorly examined. Using substances such as alcohol, cannabis or other drugs plays a large role in literature, art and music, both as inspiration and as cultural markers of a particular "scene."

"It [cannabis] makes you way more open minded like, honestly like, if I'd never have tried it for the first time whatever like I had, I never would've got to this moment, like I never would've won \$2,000. I never would have believed in myself, like to actually build a [participant describes an invention he built]. Anyway it just ended up that I actually won and it's like, I just couldn't believe it." (Porath-Waller et al., 2013, p. 14)

There is always risk. Some explorers do not return. The catalogue of great artists is full of those who used drugs to seek new experiences, support creative expression or cope with life experiences and paid a price in life and well-being. This includes writers like Edgar Allan Poe and F. Scott Fitzgerald, musicians like Tchaikovsky and Kurt Cobain, actors like Marilyn Monroe and painters like Vincent van Gogh – the list goes on. However, it is critical to recognize that risks cannot be completely removed without trivializing the goal. A culture and its symbolic markers cannot be attacked from outside without reinforcing the cultural significance of those markers within the group. A more respectful dialogue is required to address risks, benefits, and the essential links between.

Young people use substances to enhance their performance

The use of substances for performance enhancement is common in our society, notably athletics. Substance use also plays a role in high-pressure and mundane work environments,

in academic pursuits, and in war. Our society is competitive and pressure to perform can be intense. It doesn't help that citizens are constantly being advised by governments to manage their health in highly specific ways (Lindsay, 2010). Healthy-living guidelines include prescriptions on diet, exercise, alcohol consumption and more, with a tone that often suggests a responsibility to perform and meet specific expectations that may or may not benefit overall health. People use chemicals to "get going" or "keep going" or "make it to the next level." While the use of specific "performance enhancing drugs" is rare among Canadian youth, there are many other substances used by young people to enhance their performance (Challinor & Covens, 2014; Turton et al., 2016).

> "When I smoke, I can concentrate myself to really be doing what I want to be doing." (Porath-Waller et al., 2013, p. 13)

"A man like me, with ADHD and bipolar, that stuff [cannabis] keeps my mind at an ease and I could just think normally. I can go on with my day." (Porath-Waller et al., 2013, p. 13)

The most common psychoactive substance used by Canadian youth is caffeine (Reid et al., 2017). We often do not think of caffeine as a drug since it is ubiquitous and widely accepted in our society. Similar to adults, many young people use caffeine as a performance enhancing substance: to become alert, to perform better or to keep focused.

"For coffee and energy drinks, it's more like the energy boost in the morning or through the day kind of deal." (Turton et al., 2016, p. 184)

"You can purchase it, like basically anywhere. So it's not really anything bad like alcohol. You don't have restrictions to buying it or using it." (Turton et al., 2016, p. 184)

As with any psychoactive substance, social acceptability does not mean harm free. Consuming caffeine, especially in excess, is associated with adverse cardiac, neurological, and gastrointestinal symptoms, all of which, in some cases, can be serious (Reid et al., 2017; Turton et al., 2016). However, social factors may be more significant than biological health impacts. Individualized responsibility for health and performance coupled with easy access to performance enhancing substances coupled with business interests can lead to a passive acceptance of a constant drive to do better and to unthinking use of chemical aids.

> "It's in so much stuff that it gets to a point where you don't exactly care what it's in." (Turton et al., 2016, p. 184)

Young people use substances to cope or feel better

"When I smoke, I feel like I can focus on what I want, and don't feel overwhelmed" (Smith et al., 2016, p. 34)

In the BC Adolescent Health Survey, 21% of young people who used substances cited stress as a reason for their substance use. Girls were more likely to report use due to stress (25%) than boys (16%). Girls were also more likely to report using substances when they felt down or sad (21%) compared to boys (11%) (Smith et al., 2014, p. 40). "It [cannabis] helps me relieve stress, manage anger, it acts as my anti-depressant AND anxiety reliever, it calms me down, helps me make it through the day." (Smith et al., 2016,

p. 22)

When the reason for using substances is a chronic or ongoing situation or condition, more long-lasting and intense substance use may occur increasing the likelihood of experiencing adverse harms (Kuntsche et al., 2005). It is also important, however, to acknowledge that this "feel better" motive may be associated with various benefits for the young person. For example, substances may be perceived as helping with challenges related to "peer bonding, autonomy, self-definition or adult role transitions" (Braverman, 1999, p. 70) as well as pain and symptom management.

A variety of factors including biology, physical and social environments and life events influence our behaviours and choices as do community culture, institutions we interact with, and family and societal values. Historical and situational factors along with positive and negative incentives for substance use (e.g., availability or exposure to people who use) are also a part of this complex story. These factors interact to create the unique socioeconomic context and social location we each live in—that is, our swirl of circumstances, choices and chances that contributes to the way we use or do not use substances.

Substance use among Canadian youth

According to the 2015 Canadian Tobacco Alcohol and Drugs Survey (CTADS) (Statistics Canada, 2017), the most commonly used psychoactive substance among Canadian youth and young adults is alcohol (because they do not track caffeine). Although rates of use are much lower for cannabis, it is the next most commonly used psychoactive substance followed by tobacco. The use of illicit substances such as hallucinogens, ecstasy and cocaine is much lower. Rates of use have generally decreased in recent years.

Substance use among Canadian young people, CTADS, 2015		
Substance	Use by 15-19 year olds	Use by 20-24 year olds
Alcohol (use in past year)	59%	83%
Cannabis (use in past year)	21%	30%
Tobacco (current users)	10%	19%
Other illicit drugs (use in past year)	5%	9%
Psychoactive medications (use to get high in past year)	2%	3%

According to the BC Adolescent Health Survey, about half of all young people who report having used psychoactive substances say they have experienced a negative consequence from substance use. In many cases, the negative consequence was doing something they did not remember, or passing out. About 20% of young people got hurt (a physical injury) while they were using substances or had some kind of relationship issue (a fight with someone they care about) related to their substance use. Slightly less than 10% of young people reported that using substances affected their schoolwork, or resulted in property damage, unwanted physical or sexual encounters, or troubles with the law (Smith et al., 2014, p. 39).

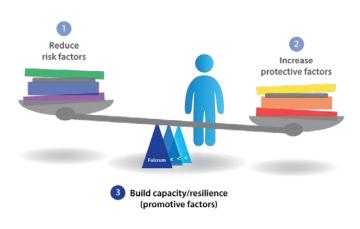
Prevalence rates and negative consequences can only tell us so much. A more complete picture requires that we consider young people's reasons for using, the benefits they receive from that use, and the contexts in which they use. Dialogue, listening and understanding their perspectives is key to helping us support youth in the pursuit of well-being (Ungar, 2004a). Unfortunately, youth perspectives are not well captured in most provincial and national substance use surveys. Most often, youth are asked to report how much and how often they use and any negative consequences they experienced.

"You did not ask how drugs/alcohol has affected me in a positive way. I'm not suicidal anymore because of pot." (Smith et al., 2016, p. 22)

Responding to youth substance use – alternative orientations

In this section, we offer a critique of the dominant risk and protection paradigm through which we tend to talk about substance use and that directs our policy and action responses. We go on to suggest a more complete, alternative orientation for understanding and

responding to substance use among young people. This resilience orientation incorporates elements from the risk and protection paradigm but reinterprets and repositions them by focusing attention on developing the ability to adjust the fulcrum to create a balance in a simple teetertotter metaphor. We argue that this expanded focus best serves to guide broad "upstream" policies and actions to help young people address substance use.



The risk and protection paradigm

Currently, a risk orientation dominates public health discussions of substance use. This is particularly true for substance use among youth. This orientation results in a narrow focus on identifying and reducing risk.

Numerous studies have identified varying lists of risk factors that predict substance use by youth (Hawkins et al., 1992) and young adults (Stone et al., 2012). The risk factors are often classified as either contextual (e.g., societal norms, availability, economic deprivation and neighbourhood disorganization) or individual and interpersonal factors (including biological,

family, other social and individual factors). Repeated studies point to risks associated with childhood maltreatment or adverse childhood experiences (Afifi et al., 2012; Mersky et al., 2013; Strine, 2012).

Counterbalancing this risk focus, an emphasis on protective factors has more recently emerged. This starts with the assumption that while certain factors put children at risk, others mitigate that risk. This opens up two opportunities to promote health: reducing negative risk factors or enhancing the positive, rather than focussing only on the negative (Rutter, 2012).

Consideration of risk is an important element in a public health approach (Canadian Public Health Association, 2017). Consequently, we need to address risk factors in order to reduce their negative impact on the health and well-being of young people. Enhancing those factors that mitigate risk also seems intuitively obvious. However, there are a number of reasons to question the dominant risk and protection paradigm.

A key challenge is that researchers are unable to identify those risk factors most critical to address (Ungar, 2004a; Werner & Smith, 2001). As Ungar has pointed out, "there is no universal set of conditions that can be said to protect all children ... because no one set of causal risk factors has been found, or is likely to exist" (Ungar, 2004a, p. 350). Additionally, it appears that having multiple risk factors does not always result in negative outcomes. Longitudinal studies demonstrate that even among the most "high-risk" children, only a minority develop serious problems (Werner & Smith, 2001). These challenges, when taken together, suggest we reconsider the value of looking for factors labelled "high risk." What is more, we need to be cautious in applying the "high risk" designation to young people since the act of labelling can result in negative stigma. Seeing and treating a person as "high risk" may cause more harm than good (Link & Phelan, 2001).

A second issue with the risk and protection construct is a shift in the meaning of "risk." In current public health discourse, risk no longer has its original neutral meaning (i.e., the probability of a loss or a gain). Rather than describing a potential harm or benefit, risk has come to be understood as harm. In other words, risk has slipped from "chance" to "danger" (Douglas, 1990; Keane, 2009; Lindsay, 2010). Given that this rhetorical meaning now dominates most discourse on substance use, it may not be a surprise that substance *use* is now immediately associated with risk (i.e., danger). The focus is no longer on factors that influence the outcome of substance use, but instead on the individual behaviour itself. Substance use and other "delinquent" behaviours have become major risk factors for poor health outcomes. In this context, it is difficult to discuss the probability of potential *benefits* and harms related to drug use (Loring, 2014; Wood & Bellis, 2015). Almost all substance use talk focuses on harms. Very little attention is given to why a young person may be using a drug, or ways the drug may be helping them (Ungar, 2004a).

The risk and protection paradigm has become tied to a biomedical or pathogenic focus in which the goal is to intervene to inoculate young people against threats and prevent disease. There is often a lack of clarity about what is pathogen and what is disease, with drug use behaviour often standing in for both (Tupper, 2012). In this case, the emphasis becomes

individual behaviour change (Eriksson & Lindstrom, 2008; Raphael, 2000; Rhodes, 2002). In this pathogenic construct, we tend to ignore social and structural factors. Yet, these factors influence the probability of benefits and harms related to various patterns of use in any given context. The greatest structural determinants of adolescent health worldwide are national wealth, income inequality, and access to education (Viner et al., 2012, p. 1641). Additionally, proximal determinants, factors of everyday life found to most impact adolescent substance use, include family connectedness and strong positive peer supports (Viner et al., 2012, p. 1647). These factors also influence the individual behaviours targeted in a risk avoidance approach (Antonovsky, 1996; Petersen, 1997; Rhodes, 2002).

"On empirical grounds, there can be no question that people who exercise the greatest degree of individual autonomy also enjoy the best health. Conversely, people with the least amount of autonomy—the least amount of control over their work conditions or other major life circumstances—have the poorest health." (Buchanan, 2008, p. 17)

Perhaps the greatest challenge for the risk and protection paradigm rests in its failure to take into account the nature of human existence. Risk is ubiquitous, and risk-taking is a human phenomenon. Studies have placed the prevalence of childhood trauma, often cited as a major risk for maladjustment, at between 25% and 88% (B. J. Feldman et al., 2004). With such high prevalence rates for "exceptional" risk factors, not to mention all the other more common risk factors (Ungar et al., 2014), it is not enough to focus on risk reduction (in the original metaphor, keeping people from falling into the river). People have to learn to swim (Antonovsky, 1996; Eriksson & Lindstrom, 2008). While human beings appear to have evolved to be risk averse (Hintze et al., 2015), risk-taking behaviour has, nonetheless, been an inevitable part of human behaviour from the earliest days of recorded history. It is essential to evolution and to maturation (Sandseter & Kennair, 2011). At least in part, risk-taking is genetically influenced, though different ways of expressing risk-taking behaviour are environmentally determined (Trimpop, 1994). This suggests the need to develop learning strategies related to risk management rather than just trying to reduce risk as a negative factor.

Finally, a risk and protection orientation fails to consider the human desire for pleasure. While public health discourse focuses on risk and harm, the fact is that most people, including young people, choose to use drugs because of the pleasures they produce (Coveney & Bunton, 2003; Duff, 2008; Keane, 2009; Moore, 2008; Pienaar & Dilkes-Frayne, 2017). Our definitions of health and well-being are context specific. A risk orientation ultimately casts drug use as irrational and unhealthy. Yet, people use drugs to enhance their sense of well-being.

"vast sums of federal research dollars are committed to developing more-effective behavioral interventions based on the tacit assumption that unhealthy behaviors must be irrational and driven by pathological factors (peer pressure, dysfunctional family dynamics, internalized oppression, etc.) because they are self-evidently so contrary to one's self-interest ... this assumption is questionable; people may simply place a higher value on the pursuit of [other] goals" (Buchanan, 2008, p. 17) Public health discourse tends to assume that good health is length of life and absence of disease. Real people, however, often have other goals (Antin et al., 2018). They may believe that a shorter and pleasurable existence is preferable to a longer existence in misery. We need a public health discourse that allows us to acknowledge the human pursuit of pleasure. We need to become open and honest with ourselves around substance use. Finding sources of pleasure and avoiding pain are driving forces in many of the things we do in our lives. They are part of human nature.

"Pleasure is so integral to the challenges of public health, it is surprising that there is not more empirical or theoretical literature on the topic. In its attempt to transform pleasures, public health always runs the risk of introducing new and unanticipated elements that may run counter to the goals of health enhancement." (Coveney & Bunton, 2003, p. 174)

A risk and protection paradigm is understandable. We all begin life dependent on parents and community. However, a form of paternalism underpins much of the protective orientation in public health (Luik, 1994). This paternalism justifies interventions to control individuals' behaviour by assuming a defect or lack of maturity on the part of any who are seen as harming themselves (Buchanan, 2008). A less morally tenuous focus for a protective orientation would be to concentrate on protecting young people by removing structural risk factors—such as poverty and discrimination—and mitigating the impact of risks that cannot be avoided.

Poverty, an extreme form of social inequity, results from policies that differentially distribute wealth and societal benefits among a population. Inequity is a gradient, with those on the lowest ends of the scale experiencing the greatest differences in health status (Baum, 2007). Though there is much evidence that addressing these differences results in significant health gains, such changes have not been generally adopted (Baum, 2007, p. 91). Further, many of the social determinants of health, such as affordable housing and ensuring adequate income lie outside the health sector, make addressing these issues challenging (Baum, 2007, p. 91). Nevertheless, amelioration of inequities, notably here poverty and its impacts, sits squarely within the responsibilities of policymakers at all levels (Raphael, 2011).

Within the perspective of the Ottawa Charter, the goal of health promotion is ultimately to enable people to take increased control of their own well-being (World Health Organization, 1986). This requires more than providing young people with information and facts about substances and the risks of using them, and more than controlling or manipulating their behaviour. Moving "upstream" means ensuring that young people have access "to the psychological, social, cultural, and physical resources that sustain their wellbeing" (Ungar, 2011, p. 10). This involves "both the capacity of individuals to navigate their way to health-sustaining resources ... and a condition of the individual's family, community and culture to provide these health resources and experiences in culturally meaningful ways" (Ungar, 2008, p. 225).

A resilience orientation to health promotion

Considering the limitations of the risk and protection paradigm, we suggest that going

"upstream" involves incorporating a third element, the capacity and resilience of systems (individuals, groups, communities, institutions, etc.). Health is achieved not simply by eliminating risks or maximizing protections but by having the capacity to maintain or regain balance. In the teeter-totter model this is portrayed as the ability to adjust the fulcrum. This resilience-focused orientation differs from the risk and protection paradigm in a number of significant ways.

Complexity: The resilience orientation rejects a binary classification (disease vs health) in favour of a more complex multi-dimensional map (Antonovsky, 1987/2002). By focusing on flourishing and languishing as dimensions separate from a disease continuum, Cory Keyes speaks of human development as a multi-dimensional, multidirectional and multi-determined life-long process (Keyes, 2004). Recognizing this complexity will help avoid many of the simplistic and biased conclusions in some of the research (Ungar, 2013). This more complex, resilience orientation for health promotion seems more fitting with the World Health Organization definition of health: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (Constitution of the World Health Organization, 1946).

Humanistic perspective: When we conceptualize problematic substance use as a disease, our health care systems tend to reflect a binary arrangement with treatment as one end of a continuum and prevention at the other, with prevention thought of as "upstream." This conceptualization does not provide an adequate frame for addressing complex issues. First, the continuum is one-dimensional. These enforced binaries can engender false equivalencies, implying connections that do not necessarily exist – upstream allied with health, downstream with disease. There is also space here for drawing incorrect conclusions about specific issues or physical states in pursuit of having all instances fit into one of two conditions, health or disease. Second, the focus is on pathology rather than human beings. There are many spaces between disease and health, even as each is dynamic, coexisting, and fluctuating within each of us. Human diversity, life situations, and status as political and ethical beings tend to be inadequately considered (Buchanan, 2000). And, tellingly, the definition of health they are judged against is controlled by "those with the most power to control social discourse" (Ungar, 2004a). This definition, however, may not match individual values (Antin et al., 2018; Luik, 1994; Ungar et al., 2014).

"Although the individual may insist he or she has no sufficiently dark motive for his or her actions beyond seeking pleasure, assuaging boredom, social experimentation or making himself or herself feel more mature, we dismiss these alternate constructions as unworthy of study and lacking in insight." (Ungar, 2004b, p. 14)

In seeking to exercise *control*, the disease orientation fails to recognize the contribution each person can make to the community, whatever their situation, and denies them status as a full member of society (Fraser, 2000). Thus, a focus on human beings also implies that our notion of prevention may need to be revisited. Prevention will need to include understandings of individual and collective agency and experience that reflect the range of human needs, rather than a focus on avoiding illness as defined in the disease model. In this

view, prevention may exist along a continuum and, perhaps more usefully, anywhere within the matrix of human experience of health and well-being.

Resilience may be defined as the ability to manage life challenges and make decisions that reflect an individual's preferred life goals and outcomes. Resilience oriented health promotion sees power and control as belonging to individuals and the human community. As a result, it focuses more on human experience than on the etiology of a given disease they may have or are at risk of developing. This requires accepting and supporting the autonomy of young people and working with them to critically reflect upon, and then accept or change, their reasons, values, and desires (Solar & Irwin, 2010). To be clear, autonomy is not the freedom to do whatever one wants; rather it is based on the integration of freedom and responsibility in the process of constructing one's place in the community (Dworkin, 1988). With this in mind, the resilience orientation seeks to nurture a broad network of caring across structural, social and personal levels (Khanlou & Wray, 2014). Caring emerges from a social ethic in which we engage the other with respect and empathy that allows us to enter into meaningful dialogue (Buber, 1923/1970; Buchanan, 2000; Gadamer, 1960/2013; Taylor, 1989).

A positive focus on health: A resilience orientation focuses on factors that promote health. Instead of looking at substance use through the lens of the simple causal story discussed above, this orientation focuses on building the capacity of young people to manage their lives. It also pays attention to structural risks and protective factors. At the individual system level, the emphasis should be on health capacity rather than a narrow focus on health behaviour.

This means building resilience and supporting agency and types of participation that promote health (Buchanan, 2008). At the environmental level, we need to focus on policies that eliminate the inequities that contribute to health inequality. Ultimately, it is about empowering people to create strong *and* fair communities and society.

In a resilience orientation, risk is recognized as potentially beneficial, not inevitably pathogenic. Rather than seeing all risk as danger, health promotion acknowledges the ubiquity of risk in life and that it is not possible, or even desirable, to avoid all risk. Indeed, risk is essential to pushing the boundaries that allow for growth and development (Sandseter & Kennair, 2011). Recognizing this allows us to look beyond approaches that seek to eliminate or mitigate risk by protecting or inoculating young people (or worse, control behaviour). It allows us to work with young people in the difficult task of sorting out what risks are worth taking and how we can achieve our goals most effectively. This change in focus requires a certain trust in the capacity of young people to function as human agents, and that is a risk worth taking.

An emphasis on dynamic incremental adaptation: Looking at the whole story of the young person and seeing them as a human being, rather than an object to be acted upon, the resilience orientation searches for factors that facilitate active adaptation to the inevitable stresses of life. Health promotion deals with life in its dynamic reality. It spends little time

looking for ultimate solutions, "magic bullets" or definitive prevention strategies to "cure" youth substance use (Antonovsky, 1987/2002). Promotive health operates *in* the metaphorical river, encouraging young people to learn from experience (including mistakes), building their capacity and developing skills. Here, one's sense of agency, imagination, play, will, and the social structures that foster them are acknowledged and developed.

Diversity and dialogue: The resilience orientation recognizes differences and respects the diversity that exists among young people in terms of their experiences, values and desires. Too often, our discourse assumes homogeneity and promotes a single normative description of health or well-being. In a multi-cultural environment it is essential we find ways to allow social equality and cultural diversity to coexist in participatory democracy (Fraser, 1990; Habermas, 1984; Taylor, 1994). Charles Taylor discusses this by drawing attention to the fundamentally dialogical character of human existence. We come to understand and define ourselves in conversation with others. This conversation gives rise to recognition of both sameness and difference. These two must be held in tension, and this requires all of us to operate within a context of humility (Taylor, 1994).

Overall, the key point in a resilience orientation is that life is complex, involving interactions among autonomous individuals in social systems (Sanders et al., 2012). For everyone to thrive, we need both respect and care. This means respecting the autonomy of individuals to negotiate their place in the community and on the multi-dimensional map of well-being. This is not just freedom. It involves having the capacity to critically reflect upon, and then accept or change, our story. Health promotion tries to nurture our agency and capacity to live fulfilling lives. But, agency must be understood within the context in which it occurs and the health supporting resources that are both available and accessed (Ungar, 2004b). Health promotion, therefore, also involves caring both in acts of kindness to individuals and by seeking to address the structural inequity in the distribution of resources that produce opportunities and constraints.

Life in the river

Life is full of risk. That is the nature of being, and the world we live in. Though we may wish to protect our children from as many potential harms as we can, forever seeking out and weighing risks does not really help us do that. Living in a place of fear where we try to manage everything teaches our children the world is to be feared, rather than a place to explore, challenge ourselves, learn who we are and live a life of our choosing.

Our task, then, is to provide the building blocks of a vital life. This includes, for example, adequate food, shelter and care while teaching our children how to encounter life's questions, challenges, and experiences. Further, we need to help our children and youth learn how to deal with experiences and challenges in ways that expand and enrich their lives. In this paper, we consider one life issue young people face, psychoactive substance use, and how it may be addressed within an "upstream" resilience model of health promotion.

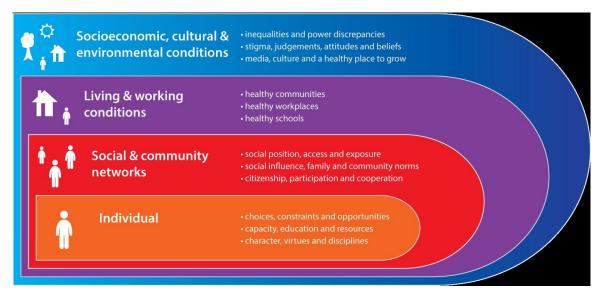
Substance use is embedded in our cultural fabric, a part of the human experience for thousands of years. We know that youth use substances for a number of reasons including

to feel good (pleasure), feel better (stress reduction), to do better (increase performance) and explore (seek novel experiences). We also know that the vast majority of young people who use substances, primarily alcohol and cannabis in Canada, experience few, if any, long term effects from their use.

We seek to shift the frame in addressing substance use and young people from a focus on individual risk and protective factors to one that promotes healthy environments and individual learning and coping skills. We argued that the simple causal risk story often used in health discourse is inadequate to describe the multi-dimensional relationships among people, their communities, socio-political environments, and their lived experiences of those influences. We suggest that a positive focus on health that fosters youth autonomy, capacity and resilience while ensuring equity in access to the determinants of health more adequately addresses the complexity of substance use and daily life. To do this, we reimagined the river metaphor used in public health to understand how issues such as youth substance use may be addressed.

In the original metaphor, the river is understood as flowing one way, from upstream to downstream. Investments made upstream are viewed as preventive in that they address the causes of problems downstream, at the crisis, emergent need or individual levels. While these upstream causes would include various social and structural determinants, the actual focus has most often been on individual lifestyle choices.

We suggest a slightly different view, one where we all live in the river with complex swirls of circumstances, choices and chances affecting us. The image below, adapted from the classic model (Dahlgren & Whitehead, 1991), reminds us of the multiplicity of factors, from micro to macro levels, that interact to influence the effect of substance use on individuals and communities. Because these are all interrelated, rather than focusing on any one place or any one issue, we suggest coordinated investments, supporting multiple elements with an awareness of their interconnectedness.



In light of all the considerations outlined in this paper, we suggest policies and actions to address the needs of young Canadians related to psychoactive substance use might focus on:

- Ensuring young people have equitable access to the resources (individual, community, societal) needed for health and well-being
- Nurturing young people's capacity to make wise choices, that is, choices that fit with *their* goals, values and situations
- Supporting the developing autonomy of young people by removing constraints imposed by unjust social and structural factors, and maximizing their opportunities for choice

"Health is a prerequisite for full individual agency and freedom; yet at the same time, social conditions that provide people with greater agency and control over their work and lives are associated with better health outcomes. One can say that health enables agency, but greater agency and freedom also yield better health. The mutually reinforcing nature of this relationship has important consequences for policy-making." (Solar & Irwin, 2010)

Recommendations for shifting our upstream approach

Ensuring young people have equitable access to the resources needed for health and well-being

- Schools and other youth-serving institutions should be supported in developing responses to substance use and other behaviours that promote social inclusion and keep young people connected and able to access social and material resources (rather than punitive policies and practices that exclude and diminish access to essential resources)
- Investments are needed in nurturing caregivers (parents, teachers, coaches, mentors, etc.), through multiple means, to build capacity in engaging young people in dialogue about their goals, values and reasons and ensuring all young people have such caregivers in their lives (rather than focusing on specific content related to psychoactive substances)

Nurturing young people's capacity to make wise choices, that is, choices that fit with their goals, values and situations

• Investments in educational initiatives related to psychoactive substances should focus on inquiry-based learning that builds social and cognitive competencies (rather than traditional social marketing strategies focused on promoting acceptance of, or compliance to, a particular message)

• Investments in providing and regulating public information should ensure access to basic and balanced information and encourage reflection, dialogue and social responsibility (rather than promoting a particular course of action except in those cases where a pro-social behaviour is broadly endorsed and embedded in law, e.g., sober driving)

Supporting the developing autonomy of young people by removing constraints imposed by unjust social and structural factors, and maximizing their opportunities for choice

- Significant investments are needed to ensure a degree of economic equality that provides all young people with opportunities for involvement in healthy challenges and life experiences (rather than depending on remedial programs that create social distance and stigmatization). This includes policy ensuring access to the basics of life such as affordable housing, adequate incomes, health care and educational opportunities
- Granting programs should require that youth-serving initiatives ensure meaningful participation of young people in the development and implementation of policies and programs that affect their lives and communities (rather than simply implementing professionally developed programs)
- Investments should promote strategies and mechanisms (including staffing levels) that allow and encourage the celebration of diversity within social communities (e.g., classrooms and cohorts) and nurture interconnectedness and mutual care (rather than investing in more resources to identify and target individual differences that, while well-intended, often result in stigmatization and diminished outcomes for all).

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