



Changing Addiction from a “Sin Problem”

Peer Discourse Sessions on Addiction in Alberta

A FRAMEWORKS RESEARCH REPORT

Moira O’Neil • October 2010

ADDICTION REPORT 2 OF 3



About FrameWorks Institute:

The FrameWorks Institute is an independent nonprofit research organization founded in 1999 to advance the nonprofit sector's communications capacity by identifying, translating and modeling relevant scholarly research for framing the public discourse about social problems. It has become known for its development of Strategic Frame Analysis™, which roots communications practice in the cognitive and social sciences. FrameWorks designs, commissions, manages and publishes multi-method, multi-disciplinary communications research to prepare nonprofit organizations to expand their constituency base, to build public will, and to further public understanding of specific social issues. In addition to working closely with scientists and social policy experts familiar with the specific issue, its work is informed by communications scholars and practitioners who are convened to discuss the research problem, and to work together in outlining potential strategies for advancing public understanding of remedial policies. The Institute publishes its research and recommendations at www.frameworksinstitute.org.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of FrameWorks Institute.

Please follow standard APA rules for citation, with FrameWorks Institute as publisher. O'Neil, M. (2010). Changing addiction from a "sin problem": Peer discourse sessions on addiction in Alberta. Washington, DC: FrameWorks Institute.

All FrameWorks research reports are edited by the Institute.

TABLE OF CONTENTS

INTRODUCTION	5
SUMMARY OF FINDINGS	6
METHODS.....	8
Subjects and Data Collection	8
Session Guide and Analysis	9
FINDINGS.....	12
Confirmation	12
Definitions of Addiction	12
Causes of Addiction	15
Treatment.....	19
Image of the Addict.....	21
Experimentation	22
Effectiveness Factors.....	23
Brain Architecture	27
The Gene-Environment Signature Effect.....	30
Ingenuity	32
Interdependence.....	36
Prevention	39
Prosperity.....	42
Negotiation.....	45
Education as Prevention	45
Programmatic Quality	46
Social Causes and Effects of Addiction.....	47
CONCLUSION AND IMPLICATIONS	49
APPENDIX: SUMMARY OF ADDICTION CULTURAL MODELS RESEARCH (BY NATHANIEL KENDALL-TAYLOR)51	
Expert Interviews	51
Cultural Models Interviews	51
Mapping the Gaps.....	53
Communications Implications	54

I watched a movie, and there was some homeless guy in it, and he was sitting in front of the Shell Towers in Calgary ... He's an executive, and he's like, 'yeah my boss sat me down, and said if I stopped drinking he'll send me to all these things, and I can keep my job, and it's like, I just wanted to drink.' And he's sitting right in front of the place, and like he was happy about it, like to him he made the right decision.

Calgary Peer Discourse Session, High School education Group

How about we change the "gene" problem to a "sin" problem?

Edmonton Peer Discourse Session, Rural Group

INTRODUCTION

The image of the addict and his or her loss of self-control is an important symbolic figure in the North American imaginary. Popular television shows, nightly newscasts and everyday conversations often document a person's "fall" into addiction and serve as morality tales about the importance of self-regulation and personal responsibility. Understanding how the issue of addiction is represented in the public discourse — both through how people talk to each other and through media representations — is critical to developing communication strategies, as the public discourse shapes both how people reason about addictions and the range of solutions that are readily seen as appropriate and effective.

The research presented in this report was conducted by the FrameWorks Institute for the Alberta Family Wellness Initiative supported by Norlien Foundation. This report documents findings from a series of eight peer discourse sessions conducted in Alberta with civically engaged Canadians. In the Strategic Frame Analysis™ research process, Frameworks has two methods of mapping public discourses on any given issue: through systemic analyses of news media and through peer discourse sessions that analyze how people talk and think about addiction in small groups.

Earlier cultural models research¹ allows us to bring to light the implicit assumptions and understandings people are using to reason about issues related to addiction, and both peer discourse sessions and media analyses provide data to track what happens when those models are employed in the public sphere. The peer discourse sessions, in which small groups of people engage in a guided conversation about a given topic, allow for a re-creation of how people might discuss social and political issues with family, friends, colleagues and other members of their community.

Peer discourse sessions are used to map and describe the public discourse on addiction, but also to examine whether reframing addiction with the use of particular frame elements — such as values and simplifying models — shifts public conversations to more closely align with expert understandings of the issue. That is, the peer discourse sessions are the bridge between the descriptive and prescriptive phases of Strategic Frame Analysis™.

The report is organized as follows. After a summary of the research findings and a more detailed description of the peer discourse method, we present the full research findings. Discussion of these findings is organized around the three fundamental research questions that FrameWorks addresses through the analysis of peer discourse session data: (1) *confirmation* — do the findings support the cultural models identified in previous research? (2) *experimentation* — can primes informed by earlier qualitative research facilitate an improved understanding of and more robust discussion around the core scientific story of addiction? and (3) *negotiation* — how do people work with both their default cultural models and the primes with which they have been provided in making decisions as individuals and in groups? The report concludes by laying out the implications of the research for both current communications strategies as well as subsequent stages of the research process.

SUMMARY OF FINDINGS

The confirmatory section of the sessions was designed to triangulate the findings from the earlier cultural models interviews.² All of the models identified in that phase of the research were at least mentioned by participants in the peer discourse sessions. However, when definitions of causes and potential methods of addressing addiction were discussed in the peer discourse sessions, some models were employed much more frequently than others. In peer discourse sessions, addiction was most often defined as an irrational need that takes place in the individual. According to participants, addiction was caused by a “void” or “hole” that needed to be filled or an individual’s loss of control over behaviors. While several modes of treatment were brought up by participants, these were often “eaten up” by ideas voiced by other group members about the need for the addict to acknowledge his or her problem, take greater responsibility and assert willpower, as these were viewed by many participants as the most effective ways of treating addiction. In general, the models of thinking that became most dominant in group conversations were those that pinned addiction to pathologies within individuals. In this way, issues of addiction were implicitly divorced from a community or social context and were largely discussed as issues of individual responsibility. This proclivity towards individualist explanations of addiction was further confirmed by the dominant image of the “addict” as homeless, jobless, engaging in criminal behaviors and living on the edges of society. In short, the model of the “addict as social deviant” was strongly prevalent in these peer discourse sessions. Importantly, because the addict was envisioned as radically outside of social norms, reasoning about how social contexts might shape the onset, course and treatment of addiction was either nonexistent or was shut down immediately in group discussions.

To begin to shift conversations about addiction away from these dominant default patterns, FrameWorks tested three simplifying models (Effectiveness Factors, Brain Architecture and the Gene-Environment Signature Effect) and four values (Interdependence, Ingenuity, Pay Now or Pay More Later and Prosperity). These “primes” — or deliberate, researcher-introduced alternative ways of thinking about issues of addiction — were included based on findings from earlier phases of research.³

Of the simplifying models, Effectiveness Factors showed the most promise. It was effective in structuring group conversations around the issue of programmatic *quality*, which was a topic wholly absent from unprimed discussions. This prime also showed the most “sticking power” as it found its way into conversations and presentations occurring in later parts of the peer discourse sessions. While there were positive outcomes from both the Brain Architecture and Signature Effect primes, participants were unable to make connections between early developmental experiences and later vulnerabilities to addiction. In fact, following discussions of these primes, participants were even further entrenched in willpower and personal choice models of addiction.

All of the values primes showed some successes, which indicates the power of values in reframing conversations in this issue area and suggests the considerable need for frame elements to shift the initial individualist orientation in favor of a wider, more social and systemic way of looking at issues of addiction. Among these generally effective values primes, Interdependence was the strongest performer.

It led to discussions about why addiction issues matter to all Canadians, tempered understandings of addictions as personal pathologies, and got participants to think about preventative measures to address addiction.

The success of the primes and the results of the final negotiation section of the peer discourse sessions show that, although ideas about the causes of and solutions to addiction are narrowed when they enter the public sphere, there are ways to broaden public conversations. This report offers initial findings on frame elements that appear promising in creating this expansion and shifting ways of understanding addiction. More significantly, the findings provide invaluable information for subsequent, more prescriptive phases of Strategic Frame Analysis research on addiction by indicating promising tools that need to be more rigorously tested as well as areas that remain problematic and require additional framing strategies.

METHODS

FrameWorks approaches peer discourse sessions with three specific research objectives:

- 1) *Confirm* the presence and application of the dominant cultural models that emerge from cultural models interviews by triangulating results using a different method and *explore* variations in the models when they are used in a group setting.
- 2) *Experiment* with speculative reframes that emerge from other FrameWorks research or from area experts to narrow down the number, and refine the execution, of frame elements that are then taken into quantitative experimental research.
- 3) Engage people in a *negotiation* in which they experience efficacy and agency over a complex problem and have to debate and articulate a position as a group, observing what framing elements prove useful and pervasive in participants' interactions.

Put another way, peer discourse analysis is a way to explore the common patterns of talk — or public discourses — that people use in social settings and how they negotiate among these patterned ways of talking, using both cultural models that they naturally employ in understanding the issue as well as empirically based “cues” or “primes” introduced by the moderator.

FrameWorks' more specific goals in these particular peer discourse sessions were to: observe the specific assumptions that shape group discussions about addiction; begin to see whether the introduction of specific frame elements allows participants to understand the core scientific story of addiction,⁴ overcome individualizing habits of thinking and talking, and imagine public policy solutions that address addiction; and explore how people work with common cultural models and discourses, as well as researcher-introduced primes, in forming positions and making decisions about issues related to addiction.

Subjects and Data Collection

Eight peer discourse sessions were conducted with Canadian citizens in April 2010. Four of these sessions were held in Calgary and four were held in Edmonton.

FrameWorks recruited participants through a professional marketing firm using a screening process developed and employed in past research. At each location, 11 to 13 people were screened, selected and provided with an honorarium for their time and participation. Nine participants were selected from the larger 11 to 13 who were recruited, to form a group representing variation in ethnicity, gender, age, educational background and political ideology (as self-reported during the screening process). FrameWorks purposefully sampled individuals who reported a strong interest in current events and an active involvement in their communities because these people are likely to have and be willing to express opinions on socio-political issues.

Based on previous FrameWorks research, we speculated that participant responses and views would be particularly sensitive to variations in level of education, age, political identification and location (urban versus rural). We formed groups in order to analyze the differences in opinions expressed and responses to primes along these variables. This initial segmentation is more systematically explored in FrameWorks' subsequent survey experiments.⁵ The groups were formed as follows: in Calgary, one College/University education group, one High School education group, one Liberal group and one Conservative group; in Edmonton one youth group, one rural group, two groups mixed by political identification, age and education.

All participants were given descriptions of the research and signed written consent forms. Peer discourse sessions lasted approximately two hours, were audio and video recorded, and were later transcribed. Quotes are provided in the report to illustrate major points and are identified by the location and composition of the group (e.g., Edmonton Youth). Identifying information about individual participants has been excluded to ensure participant anonymity.

Session Guide and Analysis

Peer discourse sessions are directed conversations and, as such, follow a fixed guide and are facilitated by a trained moderator. These sessions begin with open-ended discussion followed by moderator-introduced framed passages or “primes” designed to influence the ensuing discussion in specific ways. The sessions end with a group negotiation exercise in which participants break out into smaller groups tasked with designing a plan to address some part of the target issue.

Based on the three objectives described above, the Peer Discourse guide was divided into three sections: *confirmation*, *experimentation* and *negotiation*. Despite this organization, data from all sections were used to address all three research goals. For example, data from the *negotiation* portion of the session were also used to *confirm* and triangulate the results of previous research, and data from the *experimentation* section were analyzed for patterns of *negotiation*.

Section 1: Confirmation

The first exercise used a word-association task and opened-ended discussion about addiction and the kinds of things people can become addicted to in order to confirm the dominant cultural models and public discourses attached to addiction issues.

Similar to the methods used to analyze data from the cultural models interviews, *social discourses*, or common, patterned, standardized ways of talking, were first identified across the eight groups. These patterns of talk were then analyzed to reveal tacit organizational assumptions, relationships, logical steps and connections that were commonly taken for granted. In short, analysis looked at patterns both in what was said (how things were related, explained and understood) and in what was not said (assumptions and taken-for-granted understandings).

Section 2: Experimentation

In the second exercise, the moderator introduced primes (specific frame elements) that were written to resemble news articles. The content of the primes and the reasoning for inclusion of these primes were based on earlier phases of the research process, namely the cultural models and expert interviews.⁶ The order of the primes was rotated to avoid ordering biases. We tested **Prevention**, **Interdependence**, **Prosperity** and **Ingenuity** as Values primes. Prevention is a value derived from experts' focus on early identification, diagnosis and intervention. Based on our Canadian research thus far, we have hypothesized that Interdependence, Prosperity and Ingenuity are values that are both easy to think for Albertans and can help all Albertans engage with addiction issues, regardless of their first-hand familiarity or lack of familiarity with addiction.⁷

FrameWorks also tested three draft simplifying models in these sessions. All three models have tested well in other relevant issue domains. These models were adapted here to speak specifically to issues of addiction in hopes that they would facilitate thinking about the emerging core story of addiction. **Brain Architecture** was targeted at helping the public understand the underlying brain-based processes of addiction. **Effectiveness Factors** explained that programmatic quality (rather than quantity) is critical for addiction interventions. And finally, the **Signature Effect** translated the science of gene-environment interactions as they pertain to addiction in an effort to overcome individualized thinking and widen the lens to include environments and social conditions.

In addition to testing values and simplifying models as primes, we explored the effect of specific messengers. The following messengers were included in the primes: neuroscientists, policymakers and economists. We documented participant responses to these messengers, and analyzed these data for patterns in participants' sense of messenger credibility, positive and negative comments as well as overall tone associated with specific discussions of messengers.

The primes were also assessed on their ability to meet the following criteria:

User friendliness: We looked at whether primes were “user friendly” — if participants were able to use the language of the primes in subsequent discussions. User-friendliness is also assessed based on participants' use of the prime in other areas of the peer discourse sessions, such as in the discussions of subsequent primes or during the final negotiation exercise.

Shifting away from the dominant models: Another measure of the success of a prime was its relative ability to “loosen the grip” or inoculate against unproductive dominant cultural models and conversational patterns. We looked at whether, after being exposed to successful primes, group discussions were measurably different than both unprimed conversations and discussions following exposure to some of the less successful primes.

Float time: Related to the ability to shift off of the dominant default patterns of thinking and talking, we analyzed “float time.” Float time refers to the time from the introduction of the prime (when the

moderator finished reading the prompt), to the point at which the group conversation makes its inevitable way back to one of the dominant default discourses.

Filling gaps in understanding: We also judged simplifying models primes successful based on their ability to fill what FrameWorks calls “gaps in understanding,” or gaps between the ways that the public understands a concept and the way that experts do. We measured this by referencing previous phases of the research that identified these gaps and analyzing whether discussions that follow the primes engage with elements of the core scientific story of addiction in ways that previous unprimed conversations did not.

Section 3: Negotiation

In the third exercise, each nine-person session was broken into three groups of three participants. Each group was tasked with designing a program that would address alcohol addiction, gambling addiction or work addictions. FrameWorks used small handheld digital recorders to capture the discussions and negotiations within the small groups and, in analysis, examined the arguments that people used to rationalize choices and convince others in the group of specific positions. In this negotiation exercise, we were interested not only in participants’ patterns of talk and negotiation, but also in whether their active engagement in the exercise could diffuse the dominant models that structured unprimed conversation about addiction. We also analyzed whether participants were able to use any of the primes from the previous experimental section. We were, therefore, not as interested in the specific policies that each group proposed as in how they arrived at their solutions, the rationales they employed in constructing arguments for their specific issues and plans, and shifts in the tone and general attitude toward the issue that emerged as a result of inter- and intra-group discussions.

FINDINGS

Confirmation

In general, the peer discourse sessions confirmed the application of the cultural models of addiction identified in the earlier phases of the research process (see Appendix A for a summary of the cultural models report). However, the peer discourse sessions proved extremely useful in demonstrating the *relative* dominance of these models as they are employed in social discourses. That is, while all of the assumptions identified in early cultural models research were identified in the analysis of peer discourse data, certain of these models were more pervasive, viral and relatively more dominant in shaping participant discussions than others. When these more dominant models were invoked in the context of group conversation, they quickly took over and crowded out other ways of thinking about addiction. Participants found these shared ways of thinking reliable in their efforts to communicate across the group. Participants then relied on these *most* dominant models to: define addiction, identify its causes and consider solutions. These models are discussed in turn in the sections that follow.

Definitions of Addiction

The first set of open-ended questions were designed to elicit how participants defined addiction. Half of the groups described addiction as a state in which the body has formed a dependence on a chemical, such as alcohol or nicotine.

Participant: I guess a chemical dependency — what I think of addiction.

Moderator: What do you mean by “chemical dependency”?

Participant: I use coffee for an example. I’ve gone through caffeine withdrawal. And it’s similar to a heroin withdrawal. And it is nasty, and I still drink coffee. I went cold turkey. About 30 cups a day to nothing for four days, and spent two days in the hospital.

Edmonton Rural

Participant 1: For drugs, it’s chemicals, so it’s not even in what they really want. It’s what the chemical is inside them is telling them.

Participant 2: For the pain.

Participant 3: Yeah, it’s inside.

Participant 1: So, the brain — so even if you tell it what to do, I think once you go past a certain point, the chemical that your brain doesn't secrete when you're not using the drugs is part of it, too. I think you get so sad that your brain says, hey fix it, and you know how to fix it by whatever your thing is, whether it's food or, right, drugs, whatever it is.

Calgary Conservative

It should trigger some kind of serotonin, or hormone change in the body. That's how you become addicted to it.

Calgary High School education

Interestingly, the two exchanges quoted above were the only instances when participants talked about the relationship between addiction and the brain during this initial confirmation section of the peer discourse sessions. In fact, the connection between addiction and biological processes was mentioned infrequently in the sessions. While there was the recognition that addictions are connected to a dependency on a chemical or perhaps psychopharmacological property of certain substances, this was not the dominant definition of addiction employed in the sessions.

Instead, participants drew more heavily on addiction as an internal need response model, consistent with findings from the cultural models interviews.⁸ As the following quotes illustrate, “need” was not directly connected to biology, but linked to often vaguely articulated notions of an internalized state.

I think it's more of a compulsion. You need it, or you feel you need it, and I don't think addictions are always bad.

Calgary Liberal

I think it's something when the issue, or the item, has more control over you than you have over it, whatever it is. It affects your life.

Edmonton Rural

Usually it's because we can't get enough of whatever it is. We need to continuously fill that need.

Calgary Conservative

While the difference between a biological dependency and an internalized need seems small, this difference is highly significant because of the tendency of the “internal need” conception to lead to another powerful cultural model about the role of “willpower” and “self-control” in explaining and defining addiction.

I think a lot of it is self control. There are addictions where it is “chemical,” and there’s something inside that they ... that craves that drug, but I think a lot of addictions are just a matter of self control, and if you just inserted a little self control, you could start a new habit, and fix yourself.

Calgary Conservative

I get bothered by people who say addiction ... ’cause I don’t believe it’s — it’s just a choice you’re making, you just want to do it.

Calgary High School education

In the last excerpt, the participant objected even to the word “addiction” because, he/she argued, the term eliminates the role of personal choice from the concept. That is, when addiction is defined as a chemical dependency, attributing responsibility to the individual becomes more difficult — and participant discussions both explicitly and more implicitly recognized this. The “internal need” model allowed participants to discuss addiction in a way that allowed them to employ their assumption about the importance of willpower and control in this issue. The “addiction as internal process” understanding was consonant with the major role that participants attributed to willpower and, as a result, created a powerful and meaningful script. While this perspective was not stated directly in every session, as will be demonstrated in later sections of the report, explanations of addiction that were linked to concepts of internal need and self-control were favored over other etiological explanations.

Participants were asked an open-ended question about the kinds of substances to which people can become addicted. In all of the sessions, the first things participants talked about were drugs (including cigarettes) and alcohol. However, all groups were able to list other kinds of behaviors that might become addictive, such as sex, gambling, video games, television, shopping, texting, exercise, sleeping, cleaning and plastic surgery as well as other substances such as chocolate, coffee, sugar and soda. Participants also debated whether or not these types of needs were always negative and whether or not addiction to “positive” behaviors or substances could actually be classified as an addiction. The following exchange between participants in the conservative group exemplifies how groups grappled with “positive” or “negative” aspects of addiction.

Participant 1: I agree with the compulsion and the uncontrolled desire to do it. I don’t always agree it’s necessarily bad for you.

Participant 2: I think it's an addiction ... is that the bad word for it?

Participant 1: I crave things that I feel I'm addicted to, but [they're] not bad things.

Calgary Conservative

Later on in the discussion, the group reached the consensus that in order for a behavior to be categorized as an addiction, it needed to have negative impacts:

Participant 1: When I just think of it, I think of "in excess," so maybe if going to the gym is naturally a good thing, but if you're at the gym for 12 hours a day, and you don't see your family, and everything, that's an addiction, 'cause it has a negative effect.

Participant 2: I agree. If it's affecting your life, and then you and the people around you, it becomes a negative.

Participant 3: I don't think it's ever — people don't ever call it really "addiction" if it doesn't really affect them in a negative way.

Calgary Conservative

Therefore, central to the participants' definition of addiction was that it had some clearly identifiable negative impact on the individual engaging in the activity. In this way, several groups struggled to understand work or exercise as addiction. This indicates that participants toggled between the idea that people can become addicted to anything, which made addiction seem so boundless that it becomes meaningless, to a very rigid definition of addiction as having a clearly identifiable negative impact. That is, participants' definitions of addiction were at once too broad and too narrow, creating significant communications challenges.

Causes of Addiction

Participants in the peer discourse sessions drew on many of the same causal assumptions that were identified in FrameWorks' cultural models interviews, including the psychopharmacological effects of certain substances and early traumatic experiences.⁹ But again, some assumptions were relatively more dominant when discussed in the group, rather than in one-on-one settings.

The most frequently cited cause of addiction during the confirmation section was that addiction results from the need to fill a void in one's life or to escape reality.

Participant 1: It fills a hole, or fills a gap.

Participant 2: Fills a need, yeah.

Participant 3: I would say the same thing. It fills a void in your life.

Participant 4: It fills that need, yeah. Something stronger than just something wanted.

Calgary Liberal

I like to say the old expression, chasing the dragon. You know, kind of that first high, you're always after that, or you're trying to replace something that's missing, so you're looking for something to fill that void that's in your inner being, I'd say.

Edmonton Mixed Group 2

Participant 1: For smoking, it's usually because a person is depressed, so ... it relaxes their body, so with an antidepressant ... so you can pick it to feel good.

Participant 2: Right, to escape.

Participant 1: Yeah, escape from reality.

Edmonton High School education

Participants indicated that stress creates psychological or social conditions (e.g., depression or job loss) that result in the voids in people's lives or desires to escape and, in turn, this desire to escape is largely the source of addictions.

It could be a way of coping with stress, you know? I think a lot of the vices which have been mentioned already — I mean, eating could be a way of coping with stress, or maybe going to the casino, or maybe go for that run, you know, whatever it is. I know when I'm feeling stressed, I want to go for a run. It helps me, and now that could be a good thing, but there's times where I feel like I have to go for a run. Is that an addiction? I don't know.

Calgary Liberal

Sometimes people can be like the "functioning addict," but when the truth presents itself, and you see it all, I think you can definitely ... can point where it starts, how it starts, why it starts, and if they're honest with themselves, it's usually a great tragedy, or a great loss, or something

extreme that they wanted to bury, and not deal. Or a lot of guilt that they didn't deal with, or a lot of depression that they didn't deal with, and then their need to find something to feel normal, or needing to find something to distract from dealing with it ... so it's a distraction or a coping mechanism ... almost every time.

Edmonton Mixed Group 1

Clearly, participants were able to link the sources of addiction to stress that may result from “great tragedies” or from social circumstances. However, everyday life stresses (cf. joblessness, poverty, peer pressure, social disconnection) were largely naturalized for the participants. That is, several expressed the idea, often implicitly, that life is “just naturally” difficult and that it is up to the individual to deal with stresses. Thinking about interventions that might eliminate or alleviate social stressors was completely missing from these conversations. Rather, participants focused on how individuals choose to deal with the holes or voids in their lives. For example, in the following excerpt, the participant talked about the importance of the addict’s acknowledgement of the sources of stress or trauma in their lives, rather than using a primary prevention approach that would address the source of stress.

I think a person who has the problem has to recognize the source of where it began. Usually addictions are a symptom of something else, and you have to search back to what was the trigger, when did it start, and what was life like then, and learn about that, and deal with that, and once that person can deal with those issues, they can move on, and recognize how to control those triggers, and to shift their mindset and doing something else versus going to what they're comfortable with.

Calgary Conservative

Similar to participant responses in the cultural models interviews, peer discourse participants often focused on a continuum of self-control to explain why people become addicted. Participants classified people as addicts when that person reached a “tipping point” in which they were no longer able to control their actions or life events. The lack of self-control was a very common model used to explain the onset of addiction.

I think it's like a compulsion, like just giving in to a whim, and then I think it gets out of control.

Calgary College/University education

They don't have control over their life any more because things are starting to slip, or change drastically.

Edmonton Mixed Group 1

I think some people just don't have self check mechanisms when they know they're getting into something that could be an addiction, like a gambling alcoholic. I've had a couple of friends that have gone through gambling and alcohol issues before, and it just got out of control before they could stop, and then something negative had to happen, like you know, you get fired, or you go bankrupt or whatever, and then all of a sudden something clicks: I have a problem.

Calgary High School education

Participants frequently debated whether or not a certain behavior or action could be considered an addiction. In these instances, the issue of self-control became central to defining what is an addiction and what is not:

Participant 1: Thinking of the habit of smoking — is it an addiction?

Participant 2: Until you try to quit.

Participant 1: So, I guess, it's a habit — is a habit, and is an addiction. Something that's not any more in your control?

Calgary Liberal

Participant 1: It's like a job, and I'm keeping it under control ... and I'm never late, and I'm making more money, and so ... we can spend this way. We have retirement, and you know? Like, are there "guidelines" that you think it might have, you know, charts about, you know, what are — what are guidelines on ...

Participant 2: I don't think it's guidelines. I'm sorry. I think it's more "signs." It's like when it's taking over your life. And where it's like you can't control your actions, or your behaviors.

Edmonton Mixed Group 2

Finally, participants assumed a genetic component to a person's vulnerability to addiction, and differentiated genetic causes from vulnerability as a result of personality or character.

Participant 1: I'm just wondering; some people have some previous position for certain addictions because ...

Participant 2: Like alcoholism.

Participant 1: For instance, a person can have, I don't know, two beers, and says I've had enough, and go home, and somebody says I need more.

Participant 2: Yeah, it's all like nature versus nurture argument where there's probably a combination of both there.

Calgary Liberal

Participant 1: I think some people have more of an addictive personality than ... genetics.

Participant 2: And then there's the hole — like that hole — doesn't the culture have ... aren't they missing ... I always — this is what I was told; they're missing ... genes.

Edmonton Rural

Group discussions often toggled between “nature” (defined as genetics) and “nurture” (defined as willpower or self-discipline). However, what connected these two ideas was the understanding that vulnerability to addiction was something that was intrinsic to the individual.

Treatment

In the group discussions, participants were asked how addiction might be addressed. Peer discourse discussions evidenced many of the same ideas about interventions that were discussed by participants in the cultural models interviews. One of the more notable findings from this phase of research was that the youth group was the only group that touched on a notion of prevention. The youth group was also the only group to engage in discussion of the role of social context in promoting addictive behaviors, such as the prevalence of advertising.

A lot has come from advertising and stuff like ... for cigarettes, for example. I mean back when my parents smoked, no one really knew the true consequences of it, so I guess education, advertising, letting people know ... can kind of solve some of those issues.

Edmonton Youth

For most of the groups, however, addressing addiction was narrowly interpreted as treating people already identified as addicts.

In many groups, understandings of addiction treatment appeared to be largely derived from popular television shows, including talk shows and reality television. A smaller portion of the participants talked about experiences with a family member or loved one in treatment.

I don't think that playing computers is [addicting], but drinking is, and drugs are, cause I got a brother-in-law, he's been in and out of rehab, and you're right, 15 days they had him in a straitjacket ...; well, human rights and all the goody-two-shoes said, we shouldn't have this, right? That was the most loving thing you could do was put a loved one in there and lock them away for six months or a year because AA is 85 percent failure rate.

Edmonton Rural

There was a show a long time ago called "Brat Camp." It had these kids that would go — they took them to the mountains in Colorado, or something, and basically they made them hike. They were drug addicts, they had serious problems. Serious addictions and things, and usually more than one, and so they'd make them hike, and they'd make them do all these outdoor activities, and usually by mile five, you know, hiking with this massive pack, they would start to break down, and it was a way to really get at what was behind this, the addictions. And I thought that was a really interesting way of dealing with it, right? And they wouldn't just, you know, break them, right? They would do activities, and build their confidence, and show them that they can do things like, they can climb a mountain, and they can build a bridge and cross a big crevasse or whatever.

Calgary High School education

Participants were able to name various types of available interventions, from 12-step programs to counseling, to in-patient detox programs. However, while thinking about the range of possible interventions, conversations frequently found their way back to what was seen as the “ultimate” solution — stronger willpower and more personal responsibility on the part of the addict. Participants almost universally agreed that addicted individuals needed to “want” to get help. Getting out of a situation or removing oneself from a toxic environment was most often discussed as the responsibility of the addicted individual. Success or failure was attributed to the presence or absence of their internal willpower. In fact, the exercise of “willpower” was conceptualized as a necessary first step to address addiction.

Participant 1: Yeah. I imagine it's willpower.

Participant 2: Also remove yourself from the environment maybe that put you there in the first place.

Participant 3: Replace it with something else.

Participant 4: Motivation.

Participant 5: You've got to want to change, want to kick it.

Calgary Liberal

Oh, I definitely agree that it's the toughest part. It's bringing to the point a person to agree that he or she's addicted, yeah. That's the toughest part. Because even with some of those intervention things, where the family gets all involved in that ... that person said, okay fine, I'll go, but they may go, but are they really gonna absorb the help that's there for them, you know?

Edmonton Rural

As far as ways to deal with it, I think, you know, counseling or support system, sometimes drugs for depression if it's the cause. Sometimes that can help the alcoholism if you can take away the depression. I will stick up for a bit for him and say, willpower and wanting to do it plays a part. I'll probably be more harsh on that than some other people. For not taking — get a hold of themselves kind of thing, even though I told you, there's a lot of brain chemistry that's involved, too, but it's still a personal decision, or realization, or whatever you have to make.

Calgary High School education

In the last quote, the participant wrestles with two explanations of treatment that are based on models of causation — “brain chemistry” and personal will and disciplined decision-making. It is evident from the closing comment that personal responsibility is the more convincing of the two explanations of causation and dominates the way this individual thinks about intervention. Most groups recognized some biological causal component of addiction and this realization shaped ideas of treatment, but the strength of will or character as a causal model proved to be the most important factor in shaping ideas about intervention.

As illustrated in the above quotes, several issues were absent or only briefly mentioned when participants talked about ways to address addictions. First, very few participants talked about the quality, fit or effectiveness of interventions but instead assumed that most interventions “work” (with the notable exception of the critiques of the 12-step program). The role of communities, government or society in general were absent in discussions of how to address addiction.

Image of the Addict

Underpinning the group conversations were a set of dominant mental images of “the addict.” These images were often implicit, but shaped the ways participants thought about the causes and treatments of addiction. While several participants voiced the idea that everyone could potentially be vulnerable to addiction, there were clear ideas about the addict being outside of the realm of normal society. Addicts

were conceptualized as fundamentally different from “normal” people.

In the following exchange, one participant discusses her son’s experiences with addiction. In the process, she explains to the rest of the group that addicts were “normal” people, while other members confessed their images of addicts as criminal, violent and untrustworthy.

Participant 1: Well, I’m glad that nobody — because when I went to the first meeting, I didn’t even take a purse, I was so scared I’d get robbed or beat up, and jumped, and all of that, and fell in love with them. With the people.

Participant 2: Yeah, it’s normal people, anyone ... and it’s not like they’re all criminals.

Participant 3: It’s just stereotype.

Participant 4: I know, but that is my picture. It’s so scary, right. Addicts are this scary person that’s gonna do all these drastic, mean, horrible things.

Edmonton Mixed Education Group 1

Money is usually involved at some point. Crime can be involved because they need to be into crime to support their habits ... depending on what they are.

Edmonton Mixed Group 2

As will be shown in subsequent sections, participants’ images of the addict as “other” and outside of normative behavior had profound impacts on the effectiveness of some of the primes. More specifically, and as will be show in greater detail, primes that invoked a sense of collective responsibility were problematic because participants had a difficult time thinking about addicts as members of a community.

In sum, during the confirmation section, participants collectively expressed a very narrow story of addiction. Addiction is defined by a fundamental loss of control, it is caused by the inability to exert any kind of self-discipline in the face of certain substances and behaviors, and it can only be treated when the addict is willing to acknowledge that lack of control and exert the necessary willpower to overcome the addiction. Finally, the person who succumbs to addiction is morally suspect. This narrative is completely confined to the motivations, actions and, significantly, the character of the individual. As will be shown in the following sections, this narrative poses steep communications challenges.

Experimentation

Two primes were relatively effective in shifting conversations from the dominant cultural models described above and documented in FrameWorks’ previous research on addiction. Effectiveness Factors and Interdependence facilitated more productive discussions about addiction relative to both

unprimed discussions and conversations following the other, less promising primes. However, even these relatively successful primes were, in some cases, unable to shift certain participants off of the dominant, sticky and viral cultural models described above. In the following section, we analyze the effectiveness of each prime.

Effectiveness Factors

During the cultural models research, we found that, while people were able to think about programmatic quantity, very few were able to conceptualize the importance of programmatic quality.¹⁰ The Effectiveness Factors model was designed to help participants engage with the issue of quality and how it might be measured as it relates to treatments and interventions for addictions. Effectiveness Factors was conceptualized in the following prime:

Quality is Critical in Addiction Interventions – Recent science points to the fact that all programs that focus on treating addiction are not the same. Scientists report that there are some programs that are dramatically more effective in treating addiction than others. Furthermore, these scientists can now explain why this is — why some programs are of higher quality than others. Scientists point to specific parts of effective treatments that account for their success and explain why other programs are ineffective. Scientists call these specific things Effectiveness Factors. These include things like focusing on early identification and providing long-term care for people with addictions, among other factors. When we focus on and pay attention to these Effectiveness Factors, we can make smart decisions, choosing to use existing resources wisely and replicate programs that have these factors. If we want to address the issue of addiction in our society, we need to pay serious attention to and invest in what science now shows about why some programs work and others don't.

This prime was initially very successful in moving conversations away from discussions of treatment that focused on individual attributes (such as willpower and self-discipline), and toward discussions that centered on the quality of the treatment or intervention. The prime also allowed participants to talk about various tools available to measure the efficacy of certain treatments.

Participant 1: It sounds more like it's talking about whether we want to continue funding organizations that are unable to actually help people with their addictions in the long term and if they were a Catholic charity or something like that has 90 percent recidivism rate or something like that then do we want to keep giving money to it? I mean it's a good organization but they just can't get the job done.

Participant 2: Well, I think you nailed down all these effectiveness factors, then just let them know what they're doing wrong or what they need to improve on and everyone will do a little bit better.

Edmonton Youth

Participant 1: I do agree that “quality” needs to be there. If you’re gonna fix something, you need to have quality. Like, you’re not gonna fix your car with a wooden tire, right? Like, you’re gonna use something equal or better value.

Participant 2: And the research is good. I mean, for them to know why certain [things] work for some people and don’t for others. That’s a good place to start.

Calgary, College/University education

Well, I think if the research is done, or if they are doing the research, and they find different ways that perhaps would help with addictions, then new programs should be put together, because it’s costing our society a fortune anyway, why not streamline it into something that’s going to help those that have those addictions?

Edmonton Rural

In several groups, the prime led to discussions of the accessibility of *quality* treatment programs for everyone, regardless of socioeconomic background. Instead of participants talking about the need for *more* treatment, they were able to discuss how to ensure that interventions in place were optimally effective. These conversations began to touch on the role of government in ensuring accessibility of such high-quality treatments. The following lengthy interchange demonstrates this result of the prime.

Participant 1: I think addiction is addiction. It doesn’t matter ... who you are. Like in Cuba, when I was there, everybody gets treated the same. It doesn’t matter if you’re rich or poor, you still get treated the same. And they have current treatment. It’s free. It’s phenomenal.

Moderator: [Name of participant], what do you think about this one?

Participant 2: Well, yeah I think that’s a really good point about whether this is just really like the kind of — is it Betty Ford clinic type? — as opposed to, like, the public, like what the government would provide, and I think if they actually can figure out these effectiveness factors, then that would be great to create programs with those in place.

Participant 3: I think too it’s what you can afford. Like a lot of people can’t afford to go into these rehabs that are — like you see on TV and stuff, right? So, I mean it gets down to a money factor so maybe if they made these things more accessible to everybody and standardized the type of treatment, it would be more successful. Not all different programs they have a fee or anything like that, some of them are free um ... but they might not be as effective as the ones you have to pay for. But as Ben was saying I think that another way to correct the problem would be for there to be a — like I don’t know, like a patient recovery committee or something like ... that overlooks the different rehabs and they help them correct the things that are not being as effective and replacing them with being totally effective and improve in part that way. And that

way there's opportunity for everybody, even for those that have the funds to cover it and those who don't.

Edmonton Youth

While the prime showed some successes, there was only a short float time before the dominant models began to crowd out these more productive conversations. Participants employed dominant individualist assumptions to argue that individuals are unique and different and therefore that programs need to be tailored to address those differences. To the majority of these groups, the Effectiveness Factors prime was perceived to propose a “one size fits all” solution, which was seen as problematic given these dominant individualist assumptions used to reason about the problem and its solutions.

People are different, so programs need to be different. Different approaches.

Calgary College/University education

Well, I think every addiction, every person is unique, 'cause I don't think you can put everybody into a category and say, this treatment is gonna affect these ones, and this is gonna affect this because everybody — you can get 10 people here, and 10 people here, five may get it here, and these two may not, and the other five are gonna be going over here then. You can bend any stats you want to make it look good, or make it look poor to go this route. So when you get a group of people like us together, we all have different views, so that tells me we've got different situations here, and you can't, unless you're putting one thing, who's to say this is what's gonna help? I think it's too complicated.

Edmonton Rural

A few discussions of the Effectiveness Factors prime returned to the issue of willpower — the belief that programs will not work unless the individual “wants” to be treated. It should be noted that, even though willpower was present in discussions following the prime, the assumption did not have the dominance that it did during the confirmatory section of the sessions. This suggests that the Effectiveness Factors prime had been successful in reframing the conversation by inoculating against the willpower model employed in earlier, unprimed discussions.

What I find with science is that you can manipulate the numbers, or your findings, any way you want to make it look effective, so you look like you're doing something, but the bottom line is that any treatment for any addiction you're gonna have some sort of effectiveness unless someone just absolutely doesn't think they have a problem and doesn't want any treatment, 'cause if someone doesn't want any treatment, nothing you can do or say, or anybody's gonna have any effect on him at all, so ...

Edmonton Mixed Group 1

As the quote demonstrates, part of the skepticism following this prime was the result of participants'

mistrust and/or misunderstanding of “science.” Several discussions veered off to the vested interests of scientists and their research, while others expressed a resentment of experts looking down on “ordinary people.” Other groups questioned the exact mechanisms by which a program could be considered successful.

Well, that one there seems to be putting a lot of emphasis on science. Everything's not just science. In any area, there's all these different factors in areas that you have to look at, as well. What works for one person with an addiction, may not work for another person with the same addiction.

Edmonton Mixed Group 2

Well, no, I just wondered that it's sometimes almost in the eye of the beholder to say whether something works or not. It depends who does the research and who does the statistic, right? Very often, unfortunately, we have companies who have interests.

Calgary Liberal

My wife is now doing research, so she gathers medical statistics, similar to what they'd be doing here. And depending on who's compiling statistics, you can bend them.

Edmonton Rural

Other participants were dissatisfied with the prime because it failed to list concrete solutions or name those specific factors that have shown to be most effective in addressing addiction.

What are the specific examples of the effectiveness factors? What are the programs that they're trying to communicate in this paragraph? It's really general. I guess for me I would just need to see more proof than them just calling it “effectiveness factors.” Like what?

Calgary, College/University education

Finally, Effectiveness Factors is a simplifying model designed to explain a certain specific part of the scientific core story of addiction. Without a value, however, it cannot communicate why Canadians need to be concerned about the issue of addiction. As we have seen, addiction is often attributed to moral or character failings. When reasoning in these terms, it is then difficult for people to think about why the issue should matter *to them*. The following quotes demonstrate the “othering” of addicts and its impact on people’s sense of urgency and engagement in addressing this issue.

Participant 1: Like, you know, am I my brother's keeper? Am I supposed to look out for everybody?

Participant 2: No. [LAUGHTER]

Participant 3: I can't afford to. You know, I've got kids, and am doing the best that I can with them. Sorry that they're addicts. I guess that's as far as I can go.

Edmonton Rural

In sum, the Effectiveness Factors prime encouraged conversations of programmatic quality related to addiction intervention and thus communicated a critical piece of the core story of addiction. However, some of the more unproductive conversations that emerged after exposure to this prime point to other communications implications. First, the participants needed more information as to how quality is measured rather than references to science. Second, the Effectiveness Factors are only part of the core story, and other frame elements are necessary to inoculate against unproductive patterns of thinking.

Brain Architecture

The Brain Architecture simplifying model was adapted from FrameWorks' earlier work on early child development and child mental health,¹¹ and was tested here for its ability to close important gaps between expert and public knowledge about addiction: namely, that addictions are brain-based (rather than character-based) and that early environments play a role in shaping how brains develop a vulnerability to addiction. While the prime allowed participants to bring the brain into discussions of addiction, further adaptation of the prime will be necessary in order for it to successfully fill expert-public gaps.

Brain Architecture Linked to Addiction – Scientists are now saying that vulnerability to addiction is connected to the basic architecture of the human brain. The brain is constructed through an ongoing process that begins before birth and continues into adulthood. Like the construction of a home, the building process begins with laying the foundation, framing the rooms and wiring the electrical system in a specific sequence. In this way, how the brain gets built shapes an individual's vulnerability to addiction, among other things. Positive early experiences provide a strong foundation in the early years and increase the probability of positive outcomes. On the other hand, negative experiences lead to a weak foundation, which increases the odds of later difficulties. Weak foundations can lead to difficulties such as greater risks for developing addictions to all kinds of substances and activities later in life.

In general, participants interpreted this prime as a statement about nature *versus* nurture. Following exposure to the prime, most groups discussed how addiction is a result of either “genetics” *or* environments, but did not see a relationship between biology and social context. The prime was therefore successful in bringing the brain in *or* bringing environments into participant conversations that had previously been dominated by ideas of willpower. The primary problem with the prime was

that participants were unable to talk about the relationship between these two causal factors.

I think it's tricky because it's like the nature-versus-nurture scenario, right? So definitely the environment you grow up in is going to have a strong bearing on experiences later in life and how you react to those experiences. I think it was for both sides of the coin as to if a parent is too over-controlling or if there's other issues — whether it may not even be parental issues, maybe they're external — but still in that environment of that child ... but then there's also the neurological functions of the brain so what happens for example if you have another disease or psychoses or something ... then maybe you're more likely to develop gambling because of that, because it's maybe you're lacking in certain something in your brain, right, or whatever. So I think it's really hard to say. I think this paragraph does have some validity, while it's for sure not 100 percent accurate in all instances, but yeah.

Edmonton Youth

Participant 1: Rich people, poor people, smart people, dumb people, there's no rhyme or reason why people become addicted. There's different circumstances, so I do think, to some point, the brain is involved, but I don't think it's the magic bullet. But I think constant gratification at an early childhood isn't considered a positive experience. That could be destructive, too. I think this seems like very common sense that families that have generally good, you know, good positive experiences ...

Participant 1: What's nature versus nurture, kind of thing, right.

Participant 2: Yeah. I think it's a combination of both.

Mixed Group 2

Many of the participants understood the prime as setting up a debate between the environmental and biological sources of addiction. As such, participants weighed in on what “side” they believed to be more significant in determining addiction outcomes. The majority of the participants argued that environments were the most important factor. However, environments were rather narrowly construed as what happens in a child’s home. The logical extension of this reasoning was that better parenting might be a way to address addiction.

My brother, through fostering, and they got a newborn [with] alcohol fetal syndrome, whatever you say it, and they are churchgoers, and this boy is now 16 years old. Now of course, he still struggles, but they've got a very good secure home for him, so he's turned out all right, but I wonder what would happen had he stayed with the mother in a bad situation? So the “environment” and the good stable home, definitely has influenced him at this point to do right,

and he still struggles, like, every day because he's not mentally all there. So it definitely — a good stable home and environment, definitely.

Edmonton Rural

And doesn't that sort of come from family, though? Family values, and family teachings and connections with family. Like your mom and saying, mom or dad, is this a good idea? And also maybe the family just saying, no that's a stupid idea, you're not doing it. I don't care if you're 21, I don't care if you're 23, it's — it's up to people in the family to teach them ... here's your pros, here's your cons. The consequences, there's always consequences.

Edmonton Mixed Group 2

While the Brain Architecture prime was designed to show how communities and social contexts can literally impact how brains develop, some participants narrowly interpreted this prime as “biology equals destiny.” Mapped on to addiction, participants reasoned that certain people had brain architecture that was “hard-wired” to develop addictions, irrespective of the environments in which they were embedded. In short, the building of brain architecture dropped out of many groups’ interpretation of the prime. The biological determinism expressed by some of the participants was also an unproductive cognitive path.

That “brain architecture” thing, though, that is true, 'cause the friend I said that has the alcohol addiction, his brother has a food addiction, and that is part of their chemistry.

Edmonton Rural

Other participants reacted negatively to what they perceived to be biological determinism embedded in the prime and saw this as threatening the importance they assumed willpower played in the causal story.

I'm thinking it sounds a little too fatalistic for me to agree with. It makes it seem as though, you know, you had a rough start in life or your parents smoked while they were pregnant with you that you're just predisposed to having a screwed-up addictive life ... The individual is still accountable for what they do so I mean maybe there is some predisposition but in the end you can't blame it all on “this is just how I was born.”

Edmonton Youth

Where they're say it's a “weak foundation,” they say that a person actually can go to drug or alcohol, but with a weak foundation you can also build yourself your own strong foundation by looking at it and going, well do I want to end up like that? So the “genetics,” okay yeah, you could say, okay genetically, okay you're going to become a drug addict, right? Kid's like, oh no, I don't want to do that; I want to be president of the United States, so why be a drug and

alcoholic when you can actually be president of the United States? So the kid looks at it, or the person looks at it, whoever, and can actually change their way of life, even if they have a weak foundation.

Calgary, College/University education

The Brain Architecture model as executed in these sessions was unable to dislodge a very powerful model participants employed when reasoning about addiction, namely, that free will is of great importance. Furthermore, it was largely unsuccessful at allowing participants to engage with ideas of addiction as operating at the nexus of biology and environment.

The Gene-Environment Signature Effect

The addiction experts we interviewed in early parts of this research stressed the interaction between genes and environments as important in understanding addictions.¹² The Signature Effect is a simplifying model that proved successful in improving understanding of this essential interaction in other areas of FrameWorks research and we therefore adapted it to the issue of addiction. Like the Brain Architecture model, participants had a very difficult time grasping the interaction between genes and environments and the mechanisms by which these interactions produced addiction outcomes.

Scientists Studying the Connection Between Addiction and the Gene-Environment Signature Effect

– Scientists who study addictions are increasingly interested in the relationship between a person’s genes and their environments. They are now showing that the quality of this interaction can either protect or put a person at greater risk for developing addictions. Scientists talk about how environments leave a signature on our genes. The idea is that our genes have instructions on them that tell our bodies how to work. But the environments that we live in have to sign for the instructions before the genes can carry them out. Positive experiences are signatures left by environments, which authorize the proper instructions to be carried out. Negative experiences are environmental signatures that don’t authorize the right instructions, or sign for the wrong ones. These negative signatures lead to poor development and can make a person more vulnerable to developing addictions to all kinds of substances and activities later in life.

Although infrequently, some participants were able to use the simplifying model to grasp how genes and environments interact. However, the connection to addiction was not entirely clear for these participants:

I think that it’s not so black and white, and there seems to be something “genetic,” but also

tied to the environment. You know, that can create more of a maybe a predisposition or a vulnerability, so I agree with this. It's kind of an interesting way of stating it.

Edmonton Mixed Group 1

We have genes that can either be turned on or off. Like let's say I eat a lot of like something bad. Like I have a genetic potential for my I.Q. say what I eat here, and if I eat just potatoes, I'm only gonna get to right here. [CHUCKLE] You know what I mean? You have genetic potentials that can be turned on or turned off by environmental variables.

Calgary High School education

Perhaps the most difficult obstacle this prime faced was that participants simply did not believe it was scientifically correct. For some, the information in the prime did not comport with what they knew about genetics. Others interpreted the prime to fit their understanding of genetics, through the concept of evolution for example.

I really can't hack this. Scientists talk about how environments leave a signature on our genes, the genes are there, the environment is not — I guess I don't really understand how the environment can impact the genes themselves. You've got a certain amount of DNA, and it's gonna be ... I don't see how the environment can impact that. This is trying to kind of combine nature/nurture arguments into one, and clearly the environment has an impact on people and their behavior, but I think that seems a novelty, and not purely a noteworthy — scientifically understand how the environment can leave a signature on our genes.

Calgary High School education

I read a book called "Survival of the Sickest," and in it they said that the Asian race, and when they crossed over the land bridge all those people, they boiled water in herbs, and they developed an enzyme to break that alcohol, where Europeans and whatnot, mixed alcohol in with the water to kill bacteria to where it was safe to drink, and over thousands of years we developed an enzyme to break that down. So that would be say a product of our lifestyles, and environment, where we're living on the planet. We did what we had to do, and that's how we're separating, and that's how we develop these positive markers, or negative markers, depending on how you look it.

Calgary College/University education

The Signature Effect model led to debates about whether biological *or* environmental influences are stronger determinants of outcomes. This was similar to discussions following the Brain Architecture prime and shows the strength and dominance of problematic assumptions about the separate and distinct relationship between genes and environmental in determining outcomes.

I think that the genes are stronger than the environment. That's my opinion.

Edmonton Rural

Also similar to the discussions that followed the Brain Architecture prime, participants were resistant to the Signature Effect because they interpreted it as a way to absolve addicts of their responsibility for their behaviors. This again displays the strength and dominance of the assumption that individuals are responsible, through their lack of willpower, for addictions.

Here's a problem I have; if we keep going this road, and they're trying to do this; if we can keep blaming everything on genes ... nobody's accountable, and now the murderers are starting to use this in court. They have a genetic problem.

Edmonton Rural

Like okay fine, "negative experiences are environmental signatures that don't authorize the right instructions"; okay, fair enough. You had an early childhood or an adult has a negative experience, okay, or a couple of negative experiences, I think the important thing is how to deal with those negative experiences ... and move on.

Edmonton Mixed Group 2

Well, I kind of see this as like, again, the "nature versus nurture" thing ... Someone could be genetically disposed or whatever, to being a bad person, or have a drug addiction, or any kind of addiction, but I think a lot has to do with free will, like where's the "free will" in this?

Calgary College/University education

After exposure to the Signature Effect models, participants were unable to make links between genes and environments and were unable to grasp *how* early experiences impact vulnerability to addiction. And perhaps most significantly, participants employed willpower models with greater strength as they argued in opposition to the prime.

Ingenuity

The Ingenuity values prime was designed to tap into a "can do" sense among participants and to promote the idea that solutions to complex social problems, such as addiction, exist. As part of the prime, we listed some of the solutions proposed by experts interviewed by FrameWorks, including early diagnosis and ongoing interventions.¹³

Canadian Medical Association Promoting Ingenious Solutions for Addictions

The Canadian Medical Association issued a report recently that demonstrates the need for society to invent more effective solutions to address addiction issues. Innovative provinces have been able to design highly effective solutions to address addictions of all kinds. Examples of these programs include interventions that focus on early identification and diagnosis, and therapies that have a strong focus on changing people's patterns of thinking and that last for longer periods of time than is typical of current addiction interventions. These innovations have solved problems in how we provide care for addiction and have led to significant improvements in the lives of people who are addicted and their families.

This values prime was successful in allowing people to think about how communities might prevent addiction. This is an important finding because, without priming, participants were not able to consider such preventative measures.

The basic thing when you're trying to sort out somebody with an addiction is it's getting to the root of the problem, and focusing on getting better, and focusing on ways to get better, and changing behavioral thinking in terms of your triggers, and what makes you go and reach for that drink, or doing drugs, or eat the gallon of ice cream, and then finding a different outlet for it. So there you've got the time and the therapy, but it's — it's the basic formula, it's always been there, it's now just putting the money in, and maybe going back and starting earlier, you know, like preventing it from happening in the first place because of all the money that you're putting into it now.

Calgary Conservative

Oh, I agree with everything. I know it's costly, but I think if we can clear up the communities, I think we have like, to me, it just worries me how much addiction is out there right now ... it's just running rampant, addiction, with drugs especially, and I'm thinking we have to do something, cause where are we going? And that's my biggest thing ... I'm thinking we have to put out money somewhere to do something.

Edmonton Rural

Several other participants discussed the importance of prevention, but had relatively narrow conceptions of what prevention might actually look like.

It's a huge bite talking about changing people's patterns, like that's a societal thing that it's just a huge undertaking that you can do through education, but you know, we educate kids about the

dangers of smoking, but kids are still smoking. We talk about all those kinds of issues. Kids are still getting pregnant. Kids are still doing drugs. So, either we're not effectively delivering the education, or the message isn't right, or kids just aren't getting it right, or they're just ignoring the message, right?

Calgary Liberal

Canada's not the greatest example of a country that has a great justice system because like you get caught with all these drugs and you could be out in five, ten years. Like in the states it's like you kill somebody you're in for life and that is like no if, ands or buts. Like if there's a stiffer penalty for drug and alcohol use and for possession of drugs, you think that it's a deterrent. For some people, they don't want to take that risk because you could spend the rest of your life in prison

Edmonton Youth

The experts we interviewed in an early part of the project emphasized the benefits of early identification and diagnosis of addiction as intervention measures. Following the Ingenuity prime, several participants emphasized similar points about intervention.

I agree with it. Like I'm a nurse myself, and I work with people for disability pensions, a lot that have comorbid, physical and a lot of people are homeless and whatnot, too, and I think that it's important we have an early identification and diagnosis, and more like a multidisciplinary approach, like because a lot of times people have comorbid things — well, like they might be bipolar, or depressed ... or schizophrenic, or whatnot, and then that kind of leads them more into this path, and so if they have early intervention, and they can treat that, probably then that can help prevent that before it gets into like a desperate situation.

Edmonton Mixed Group 1

And they should keep on finding innovative ways to deal with addiction treatment. They should work on a shot that you can get that cures you of addictions. That would be great, and maybe one day there will be such an invention, and if there's scientific research that they're working on that solves that problem, then fantastic. So, I hope that this is true, and I hope that they continue to look at ways of treating addiction.

Calgary Conservative

However, at the same time, participants were unclear about exactly how to identify and diagnose addiction earlier.

Seems to be that, you know, you're far into something, and they're talking about "early

intervention.” So what do you mean, like “early” in terms of identification of an addiction, or once, you know, you have an addiction, finally coming around to admitting it, and how weird is that, right? How do you do that, you know? It’s a little vague.

Calgary Liberal

I don’t understand it, actually. The “interventions that focus on early identification and diagnosis,” how can you do that if you — if it’s “early” that — does that mean they don’t have an addiction yet, and how are you gonna get help if there’s nothing to help yet? I don’t really understand it.

Edmonton Rural

Furthermore, some groups understood this prime as advocating enhanced surveillance and monitoring of people identified with certain kinds of addictive personalities.

I see it also somewhere there as an education, cause very often we don’t know what to look for if there is an onset of an addiction. We may not know symptoms, and I know very often — maybe it’s not a good example, abuse. A lot of people don’t know the signs of it. How do you tell if somebody’s abused? So a lot of people are oblivious to that, and that could be the same as addiction, especially if it’s a youngster. If you don’t know what you’re looking for, then you ain’t gonna find it.

Calgary Conservative

So, but there’s got to be something in that person’s behavior that will eventually give them away.

Calgary Liberal

As with other primes, some participants complained that the prime did not give them enough information.

We don’t have proof that this happening. There’s nothing here that speaks to me as to how they got to these conclusions really.

Calgary Conservative

Finally, as with most of the other primes tested, group conversations returned and defaulted to the issue of willpower. In the context of the Ingenuity prime, several participants argued that all of the innovative solutions “in the world” would be ineffective if the addict is not willing to acknowledge and deal with his or her problem.

I don’t know if whatever solution was to come up with, if the person that was addicted did not

have the desire, it doesn't matter what we're gonna do, at least that's what I think. We can have all kinds of different treatments, and programs, and all kinds of things, but if the deep down desire is not there to help yourself and cure yourself, all of this would, I think, be for naught.

Edmonton Rural

Well, the thing is, like you can't help them unless they want to be helped.

Edmonton Mixed Group 1

This prime demonstrated that participants were supportive of finding new solutions to address addiction, but the prime did not offer enough concrete information about how early identification and diagnosis could be helpful tools in addressing this problem. This indicates a need for future communications to detail how interventions work.

Interdependence

Interdependence was tested here because previous FrameWorks research in Alberta had shown that it was a highly accessible and powerful value for Canadians in thinking about social issues.¹⁴ The prime was designed to encourage people to see that all parts of the province are interconnected and that, therefore, addiction is an issue that affects everyone.

Addiction Advocates Talking About Interdependence – A report released by a coalition of addiction advocates argues that now is a great time to work on helping people with addiction because what affects one part of Alberta affects us all. According to this view, we need to have programs that get people to work together to solve our health and social problems like addictions. We also need programs that prevent the factors that put people at risk for addiction. The advocates ask that all members of our community come together to use our resources to deal with the issue of addiction. Each of us has a role to play and shares responsibility for the health of our communities. This helps to bond our communities together and deal effectively with problems. In essence, promoting policies that address addictions illuminates the ways that we depend on each other to succeed.¹⁵

The discussions that followed the prime indicated that, as intended, it engendered an understanding of addiction as a community issue which multiple stakeholders are responsible for addressing.

I think people who are at home playing computer games, shopping online, they are susceptible to their addictions, and they're alone in them. I think if we had more community interrelational stuff going on, the fact that we call "volunteering" volunteering; like 100 years ago we called that being "good neighbors," you know? And we just can't seem to do that easily anymore because we're so isolated. The way we get together with our families is at the biannual family reunion. We don't just easily have Sunday dinners with everybody we know, and I think it needs to be more "grassroots," not just, a structure going into a community and imposing solutions.

Edmonton Mixed Group 2

Because I think that, okay, in a large centre like Calgary, for example, I think that we have more resources, we're better able to treat people with addictions, and if you go to a small town in Alberta, they don't have the resources, they don't have the centers that we have here. I agree that it — they should have that opportunity, as well.

Calgary High School education

The fact that it brings awareness that hey, maybe you can help someone that's close to you that you may not normally pay attention to. I mean, there's a news story that there's a large portion of individuals that actually use our healthcare system for mental health issues, and I'm sure addictions is a large part of that, and that impacts all of us. You know, when we get sick or we break our arm and we have to go to the emergency, and there may be four other people there for addictive behaviors.

Calgary Liberal

In fact, several groups were able to use the Interdependence value to engage with the idea of prevention. This included recognition that preventative measures are financially beneficial to the province, but also that government should play a prominent role in preventing addictions.

But I still think that there are some bigger ones that they could target, and it's good that they are realizing maybe that they need to put an emphasis on what happens before the addiction, as opposed to just treating the addiction, and the aftereffects.

Edmonton Mixed Group 1

I think a lot of money that's put into jails and dealing with the problems of addictions: the end result of it. And if you can recognize it early, when you're young, and put the resources there, I think that would a way of benefiting for our society

Calgary High School education

While several participants talked about the importance of preventative measures, their notions of what constituted prevention was in many senses quite limited. Most people proposed programs that targeted individual behavior, rather than interventions that address social conditions that may precipitate addiction.

I think maybe what they're trying to say here is that every community could get together and develop programs for the community by themselves. For example, parenting courses, if you have single parents ...

Edmonton Mixed Group 1

Several groups interpreted the prime as advocating stripping resources from more “deserving” communities and spreading them to other communities. This reaction highlighted the difficulties that arise when attempting to invoke a sense of collective responsibility in the context of addiction. Here we see how moral evaluations are prompted as a result of the prime’s interpretation as promoting those “deserving” any kind of social assistance.

They have a promise of the resources. It's asking all members of our community to come together to use our resources to deal with the issue of addiction. It's talking about “money” as far as that goes. I'm all for everybody being taken care of, but who's paying for it all? And when they talk about “resources,” it's a huge chunk of change, I think, working with everybody's addictions.

Calgary Liberal

I think some people, as a society though, don't want to help other people. They work really hard, why should — like I'm not saying that this is how I think, but I do know people who are like, no, I worked my butt off, I kept my nose clean, literally, and I don't want to help these people, they chose this.

Calgary College/University education

The sense that addicts might “unfairly” be given resources was further compounded by ideas about the willpower and the willingness of the addict to want to change. People who “choose” to maintain certain lifestyles were deemed undeserving of any kind of social resources. Again this emphasis demonstrates the power and pervasiveness of assumptions of individual responsibility and willpower in shaping how Albertans think about addiction.

I don't think that simply going in there, and giving these people resources to help themselves with addictions is gonna make any difference unless they actually want to be helped, and want to get better. So, I don't know, I just think this is kind of like just shuffling off to the side the real

issue, and say, oh well, there's not enough resources to help for these people to get themselves better. I think that's not true.

Edmonton Mixed Group 2

I don't agree with a lot of it, either, because you do help out, and try to help a person get help, but you know, it's not only us that should be helping, it should be the person helping themselves, right? I mean, there's a lot of people out there that don't want to help themselves. I have a friend of mine that had his girlfriend move out here, and he had a perfectly good job. As soon as she moved out here, he was out on the streets, and now he lives on the streets. He lives in the drop-in center, and so it's just a cycle that he cannot get out of, and he doesn't want to help himself, so why have everyone else pay for it when he doesn't want to help himself.

Calgary College/University education

Prevention

The Prevention prime was included to directly insert the issue of prevention into group discussions. In this iteration, prevention was tied directly to the social costs of addiction.

Pay Now or Pay More Later is the Theme of Policy Debate over Addiction. People are talking about how important it is to put some of our resources, early on, into making sure that we both diagnose addictions early, and provide supports to protect people from developing addictions in the first place. Researchers now believe that one reason this is so important is because trying to treat addictions that have progressed requires more work and money, and it's actually less effective, than focusing on addictions early on, and preventing them in the first place. According to this view, some interventions are more costly than making sure that young people have strong effective relationships, appropriate experiences, and that they get the right inputs in their environments from the start.

Several groups talked about how expensive addiction was for Alberta and Canada at large. In discussing the prime, participants talked about how people with addictions use other social resources, such as increased use of the health care system and the criminal justice system. Consequently, they were able to think about how addressing addictions was important for all Canadians.

It comes back and we can talk about thinking about how to prevent and how resources actually are spent, than somebody easily addicted, or how much money it cost to treat, or find the resources, whatever you want to call them, and somebody actually put that same amount of

money or maybe less in prevention, and building the clubs or something that people are not going to get addicted, so maybe he's gonna look more expensive at the beginning, but in the long run I'm thinking that where they are saying, or maybe I'm agreeing that that prevention thing is like, let's put the resources in something that is going to prevent addiction.

Calgary Liberal

They're certainly right in another aspect is, it is costing either way, it's costing, and these people with some addictions we talked about, where the selfish attitude is, I have the money, I can do what I want. Yeah.

Edmonton Mixed Group 2

As the last quote illustrates, framing prevention as fiscally responsible did not necessarily shift individualized thinking about the causes of addiction or dominant and negative images of the addict.

Most groups agreed that preventing addictions was smart economic and social policy. But as was found in discussion following the other primes, participants had a very difficult time figuring out what exactly prevention means as an approach to addressing addiction.

Who's going to — where are they gonna address this? Like we're not gonna get all the adults in the community to move to a preventative Alcoholics Anonymous meeting.

Edmonton Mixed Group 2

What, you know, who decides, like you know, if your kid — your kid's at high risk? How do you administer that? ... Parents are gonna go nuts. You telling them that their kid is defective or that they're at high risk for something, and basically, suggesting in some way, shape, or form that they're having inappropriate experiences, or like positive foundation, or whatever.

Calgary High School education

And, similar to the findings with other primes, when participants were able to talk concretely about prevention, the conversations were largely confined to educational programs that are targeted to shift individual behaviors, such as “Just Say No” type programs.

After initial conversations about the importance of prevention, several group conversations focused on the importance of parents, rather than other parts of the community, in preventing addiction. That is, the “family bubble” was employed to argue against the notion of communal responsibility that is embedded in the Prevention prime.

Participant 1: If we look at the picture, when just a family saying, how could this happen, and

if you look at our society, and as a society we can say, how did this happen? If we're telling, you know, it all goes back to kids — if we're educating our children in school and saying, drugs are bad, and gambling is bad, and alcoholism is bad, all those things are bad, why is it that we still have those problems?

Participant 2: Well, because sometimes it could be that there's a lack of the will on behalf of the parents, right, 'cause it's happening to children.

Calgary Liberal

The biggest thing for this last one here, for me, would be, I think there's only really, to be honest with you, one way to prevent addiction in the first place, and I think it's just strictly up to parents and their kids. Like for me personally, the way I was brought up and raised, and I don't think it was ever an option for me to become addicted.

Edmonton Mixed Group 2

Other groups returned to conversations dominated by the highly accessible model of addictions as related to personal responsibility, choices and willpower. When participants employed this model, the importance of social context disappeared.

You can send someone to drug counseling. As a parent, if your child has an addiction to drugs and you send them to ADDIC, it's entirely up to that kid of what choice they make about whether or not they continue to be addicted, right?

Calgary Liberal

Well, I think they do educate you in smoking in the community. When I started smoking they had those nasty pictures on the front of every pack and they were always talking about how bad it is, the doctors, everybody, your parents. I still started. So I mean, again, it gets back to personal choices and I think we have gotten to a point where we have to educate people but you can only do so much and it goes back to that person. It's a choice.

Edmonton Youth

Finally, and unlike other primes tested in these sessions, several group conversations turned to their sense of the hypocritical or harmful role of government in addressing addictions. It is important to note that these conversations about government were present in most groups, despite differences in political identification of the group.

I'm assuming there is some sort of government connection here. What's interesting about our society is our government makes billions of dollars off of these so-called "addictive behavioral

things,” and I’ll further add that — I’m not an expert, but I’ve attended some things that experts have talked about, okay? Pornograph or pornography, alcohol, I mean, sure the government doesn’t endorse selling marijuana or crack, or things like that, but all these other things which are just as highly addictive, which lead into these other lifestyles, it’s really interesting how we as a society say, hey, let’s try to prevent these things, but at the same time, put it all on the table. So, of course there’s a bit of confusion there. Don’t do it as a kid, don’t do it as a child, but when you get to be 18 years old, hey you’re on your own, and be at it! So, do we really want to fix this?

Calgary Conservative

The government deciding for me what I can and cannot do. As long as it’s my own recreational choices, as long as I don’t hurt somebody else.

Edmonton Mixed Group 2

We have like Al-Anon or drug counseling, you know, all that kind of stuff. It all costs money, and when you think about it, would you rather see a \$1,000 increase in your taxes every year, or would you like to give more money to some charity that’s dealing with this?

Calgary Liberal

This sounds like commies. What is the “appropriate” experience? What’s going to help me along my life? I really — that bugs me. I can’t stand — that just scares me.

Calgary High School education

In sum, while most groups recognized the financial benefits of prevention, the prime was confusing because several addictive substances or behaviors, such as alcohol, tobacco or gambling, are sources of revenue for the Canadian government. Furthermore, similar to other primes, participants needed more information about how to prevent addictions.

Prosperity

Similar to Prevention, the Prosperity prime framed addiction as an issue important to the social good.

Addiction Treatment is Critical for Alberta's Prosperity Economists believe that treating addictions is important for community development and economic development. They say that when we address addictions, especially in young people, all Albertans are prepared and equipped to develop important skills and abilities. This then becomes the basis of a prosperous and sustainable society. When we invest in preventing and treating addictions, we make sure all people contribute to things like good school achievement, solid work skills and being strong citizens.

While economic development was not intended to be the central focus of the prime, participants narrowly construed Prosperity as economic success. Several participants focused on how addressing addictions would increase worker productivity.

This makes sense. I mean nobody who's hung over at work does as good of a job as somebody who's not hung over and it's — I mean from the paragraph it's hard to say what the main effect is, but I do suspect that the money that you invest in province-wide programs to address addiction and use of whatever would have enough of a positive effect on the economy to justify the expense.

Edmonton Youth

The reasons that I agree, well take somebody, for instance, as homeless, doesn't have a high school diploma, has no post secondary education, if we have those programs set up where we can show these people, this is what you can become in two years, you can have this in two years, and get off the street, and you can have a home, and can actually have these things set up for you. We give them a trade to do. We show them, all right, you know, within a year's time I'm gonna show you how to weld properly. We have these programs set up for these people. Show these trades, get them started in something, and then they apply themselves. Obviously our economy does somewhat flourish because of this person, or he needs, adding to the construction of the homes around the city, he's adding on to the commercial buildings, and because of his trades, and that's what I see, but pulling someone off the street, teaching them a trade, putting them into the real world, and it just works out for them, works out for me.

Calgary Conservative

Other groups had more ambivalent reactions to the prime, discussing how thinking about addiction in terms of economic gain “cheapened” the discussion by making it “about the wrong thing.”

I agree. I think if you have an addict in the family that it affects everybody. I mean if you have to go pick up your sister randomly at a bar because she got too wasted or something like that, then obviously that's going to affect you. I don't even think we should be necessarily thinking in terms of Alberta's prosperity. I mean these are real people still. These are our neighbors and our friends and our family and ... Maybe discussing it in monetary terms cheapens it, but what's good for the economy in this case is also good for the individual.

Edmonton Youth

The biggest drawback to this prime was, however, in the associations people made between prosperity and addiction. Rather than thinking about the importance of dealing with addictions in order to ensure a prosperous future, all of the groups saw the issues of prosperity and addiction connected in a different way — that prosperity *causes* addiction.

It's almost saying, the more prosperous Alberta gets, the more addictions come out.

Calgary Liberal

When I read this, the first line, I honestly thought of up north on the oil rigs, right, because of all the drug addiction up there. People are — young people are given a lot of money and they buy drugs and alcohol because they're isolated and they have the money to-to spend which quickly leads to addiction, right?

Edmonton Youth

The title, I immediately thought of, when I saw "prosperity," I was thinking when the Alberta boom happened, everyone was drinking ... so addiction treatment goes up.

Calgary High School education

And we look at history's already proven that this one's a little off the mark, I think, because in our most prosperous times in Alberta, you go up to Fort McMurray, and someone of my stature in size and gender wouldn't dare walk around the streets after dark. Why? Because addiction is rampant.

Calgary Conservative

Both the Prevention and Prosperity primes illustrate some of the drawbacks to framing addiction in terms of economic gain or development. With the Prosperity prime, the unique economy of Alberta and participants' sense that addictive behaviors increased as a result of an economic boom made it difficult for them to grasp the idea that preventing and treating addiction could be the basis for a prosperous society.

Negotiation

In the negotiation exercise, the participants in each session were divided into three subgroups. These subgroups were given a hypothetical budget of \$10 million dollars and were asked to develop programs to address the following kinds of addiction: drug abuse, gambling and work addictions. Each group was assigned one of these more specific types of addiction. The small groups developed proposals about how to address and improve each problem. Below, we discuss the primary focus of participants' presentations and discussion during this exercise. Analysis of the data from this part of the peer discourse sessions revealed three dominant themes: education as prevention, ensuring programmatic quality, and social causes and effects of addiction.

Education as Prevention

Not surprisingly, most groups apportioned a certain amount of their money to providing direct services for people suffering from the addictions they were instructed to address. Free counseling, supporting local treatment groups (e.g., Alcoholics Anonymous), familial supports and various kinds of treatment programs were included in each of the groups' plans. All of the groups that worked on addressing either alcohol or gambling addiction proposed to use some of their money on prevention. However, this was almost exclusively in the form of educational or advertising in an attempt to change individual behavior.

So, in the first one, "preventive," our first one was education. So making aware, especially to the youth about alcohol and the dangers and effects. But not only to the youth, but maybe to certain sects, such as all the oil and gas section, young males maybe, even 24 type of thing.

Calgary Conservative

Gambling addiction, we're all at a loss here because we didn't really know what a gambler looked like. What does a gambler addict look like? And came up with the idea, you know, for more public service type ads and stuff, kind of like, what does an alcoholic look like? What does a meth user look like? What does a cocaine user look like? And then, do you know what a gambler looks like? You know what an addict looks like, and then go from there explaining, okay, here's some of the signs, does your dad leave the house at 8:00 at night, and not come back until 4:00 in the morning with nothing in his wallet?

Edmonton Mixed Group 2

We kind of talked to how there is a standard definition of an alcoholic but none of us could say how many drinks a day or week that was so that would definitely need to educate more on statistics. So, start with our children. As you can see, we're all adults and we don't know that so maybe we need to educate at that level as well.

Edmonton Youth

At least one group expressed pessimism about their proposed educational programs:

More counseling for the youths, 'cause the more the youth know all about the effects of how things go, [the more] we can curb the alcoholism, hopefully, but if a person's gonna become an alcoholic, you're gonna become an alcoholic. You can put them in a room and show them pictures all day long, and show them the bad effects, it's not gonna change them. So, that's what we want the \$10 million dollars for.

Edmonton Mixed Group 1

Embedded in these ideas about educational programs is the fundamental assumption that addiction is largely about individual choice and that education is one means to address this individual decision-making process. The implicit understanding here is that, when people are given all the information they need about alcohol or gambling (such as the potential effects), most people will make the “right” decision and “just say no.” While this exercise was unable to completely inoculate against the assumed central role of individual choice and willpower, it did shift thinking in significant ways. When participants were asked to actively design social policy, the idea that addressing addiction could only happen when the addict “acknowledged” their problem or “wanted” to change largely disappeared from the conversation. That is, this slight change in perspective resulted in broader conception of what societies might do to prevent addiction, even if these actions largely remained focused on educational programs designed to change behavior at the individual level.

Programmatic Quality

Several of the groups dealing with alcohol addictions included assurances of programmatic quality in their proposals for direct services. They wanted to make sure their programs were proven to work not only for the wellbeing of the addict, but also to promote better use of financial resources.

Like their feedback and their thoughts on how — what would help them to maintain a good recovery, or to get into recovery, and feedback from the family members on, well this sets them off, or what they would also think so that you can develop programs that are sort of maybe better geared to people, rather than just a blind spectrum.

Calgary Conservative

A couple things that we talked about are that alcohol consumption has physical consequences such as liver failure renal disease, all kinds of things, withdraw factors and so down the road the health care system is taxed and/or there is a strain put on because of alcoholism and so by putting research money into creating resources for alcoholism that will pay itself out on the other side once it — once people get to that health care standpoint. Also, we talked about alcoholism with aboriginal issues as well and putting research dollars into that.

Calgary College/University education

Well, we figure this \$10 million dollars that is going to be given to us would be best spent towards looking after the problem of alcohol addiction because we would take some of the qualitative results that the scientists have come up with, and start new programs that would work with different people in different areas of the province, or different environments

Edmonton Rural

The frequency with which subgroups discussed programmatic quality is a very important

indicator of the success of the Effectiveness Factors prime. While several groups planned to design new kinds of interventions, they were ultimately concerned that their programs “worked” and wanted to include safeguards to that end.

Social Causes and Effects of Addiction

All of the groups assigned to discuss work addictions were able to think in very sociological ways about the causes and effects of addiction. Perhaps because work addiction does not carry the same assumptions of moral failing as do the other addictions, these groups were able to move away from individualist explanations and see how social structures shape addictions. Importantly, the role of social stressors was critical in all of group presentations that focused on work addictions. In fact, several of the work addiction subgroups argued that work stress might be a contributing factor to other kinds of addictions.

These programs will also prevent things like alcohol and drug addiction because a lot of times burnout, the way people cope when they work long hours is to turn to other vices to fill those voids. It will cut costs of society, of taking care of broken families, medical and health issues that come from being burned out from work, and all the rehabilitation that comes with that, so although most people don't think of work as an addiction, it's a real problem in our province, and we ask for your help.

Calgary Conservative

Stress is the leading cause of a variety of illnesses in our society including heart disease, it's been linked to cancer, all the killers in our society have to do with stress. And of course, stress leads to addictions, both alcohol and gambling, and other addictions. I would contend that the stress caused by our attitude toward work in our society is the cornerstone of why we have the other ailments in our society, and risky behaviors. Our view toward work is incredibly unbalanced compared to other Western cultures.

Calgary College/University education

So why do we need to put money into work addictions? Because we need to encourage people

to have a balance in their life. So, when you have a balance, you're gonna make healthier choices about things. When you have an unbalance, when you work all the time, you're going to be stressed out from working all the time, which is going to lead to things like alcohol addiction and gambling, and as well as physical, the physical manifestations of that stress which is gonna put an additional stress on our health care system.

Calgary Liberal

Finally, the work addiction groups were much more likely to propose social solutions to work addictions. That is, rather than targeting individuals, these groups thought of ways to reorganize employment in order to ensure a healthier work-life balance.

You mentioned that, in Switzerland and Japan and some countries in Europe, the government has made a conscious effort to restrict the work week, and have people working 4-day weeks, and looking at that, and its impact on society, and if the goal of the government is to have a healthier society, that by taking a really concerted look at work, what's important in our world, people that are spending less time at work have more time to spend with their families, we have a better overall society, so that by restricting the workweek and helping people find a better work/life balance, we'll have a better, brighter future.

Calgary High School education

We would like to ask funding today to fund our programs to prevent work addiction, and that is with work with our corporations, and our employers of our province to make sure that there's infrastructure within all types and walks of life of work to promote work/life balance, to promote family retreats, to promote mandatory vacation, if it's job share, and they need to be subsidized to have more employees because you got to pay for benefit packages for employees, we want funding to help that.

Edmonton College/University education

CONCLUSION AND IMPLICATIONS

Analysis of the peer discourse sessions offers clear communications implications. The first lesson is that the dominant cultural models that structure public thinking about addiction are extremely powerful. The assumption that addiction is largely a result of failures in willpower or morals is highly available and readily employed by Albertans in how they understand all aspects of addiction-related issues. In addition, these peer discourse sessions underscored how effectively these patterns in thinking are in derailing more social and systemic conversations about addiction. Unless experts and advocates are aware of the existence of these patterns and deploy specific reframing strategies to both counter their potency and avoid their activation, messages about addiction are destined to be eaten by this cultural model that currently dominates the swamp of public thinking.

These sessions also point to the difficulty of communicating several critical parts of the core story of addiction and confirm several gaps between public and expert understandings. First, participants had difficulty moving beyond willpower and self-discipline as causes of addiction. Brain Architecture and the Signature Effect explained that addictions involve neurobiological and/or genetic processes and that early developmental experiences shape and impact vulnerabilities to addiction by affecting the architecture of these neural systems. In general, participants only reluctantly agreed that there was some biological basis of addiction either through the workings of the “brain” or through a fuzzy notion of “genetics.” This reluctance is notable when placed side by side with FrameWorks’ research on child mental illness in Canada, where “genetics” is assumed to have a powerful role in shaping mental health outcomes.¹⁶ This is likely the effect of differences in the perceived personal and moral characteristics of the individuals implicated in these issues. While children are understood as innocent victims of mental health issues, our research has shown very powerfully that people suffering from addictions were held responsible for what was understood primarily as moral failing and poor “life choices.” For most participants involved in the peer discourse sessions, the primes that introduced the concept of addiction as brain-based or genetically influenced were interpreted as threatening the belief that the addict should be held responsible for their behavior. Because of the strength of this fundamental assumption, participants interpreted ideas that violated this understanding as highly problematic. This suggests that, in the next phases of research, we refine existing models as well as develop new simplifying models that deepen understanding of the causes of addiction.

Second, while participants agreed that addressing addictions through preventative measures or treatment was an important goal, almost all groups struggled to figure out *how* addictions might be prevented or effectively addressed. Several of the values and the Effectiveness Factors prime were able to bring ideas about *prevention* into the conversation, whereas unprimed conversations were almost exclusively about the *treatment* of already problematic addictions. Furthermore, preventative measures were central to subgroups’ presentations in the negotiation section. However, the participants struggled to understand what the concept of prevention meant concretely in the context of addiction. When they were able to think in concrete terms about prevention, they focused primarily on preventative measures that would address the behaviors of individuals, such as improving parenting skills or implementing more

educational programs (such as “Just Say No” campaigns). Understanding how environments shape rates of addiction and how preventative measures can be effective through *social* changes remained largely elusive for the participants. Future revisions of the primes will need to make stronger and clearer links between environmental context and addiction causation and intervention.

The experimental values that stressed the economic benefits of addressing addiction were in large part successful at allowing participants to understand why tackling this problem would be important and beneficial for all Albertans. Several participants realized that addictions cost society through increased use of governmental services and that spending resources to address addictions early makes better financial sense than treating addiction later in life. However, appealing to participants’ sense of fiscal responsibility did not necessarily change their understanding of why people can become addicted or shift their estimation of addicts as “other” and undeserving of help.

Finally, it is critical to note that the most successful primes in these sessions were a simplifying model (Effectiveness Factors) and a value (Interdependence). These two frame elements accomplished two fundamentally different communications goals. Effectiveness Factors explained programmatic quality, while Interdependence encouraged participants to think about why addiction matters for all Albertans and not just those people with direct experience with addiction. That is, Effectiveness Factors explains a critical part of the core story and Interdependence emphasizes collective responsibility to address addiction. As FrameWorks moves forward to the more prescriptive phases of its research process, we will continue to refine and develop new simplifying models to bridge the gaps in understanding between expert and public understandings of addiction as well as quantitatively test values to confirm their efficacy. This was a promising step in that direction.

APPENDIX: SUMMARY OF ADDICTION CULTURAL MODELS RESEARCH (BY NATHANIEL KENDALL-TAYLOR)

Expert Interviews

- » Experts focused persistently on the fact that addiction is a brain-based phenomenon and that neurobiological systems are central in understanding how addiction works and why it occurs. They emphasized how addiction can be more functionally defined as an impairment of rational decision-making. This emphasis on definitions, along with the specific definitions emphasized, suggested that experts assume the public largely thinks of addiction as a moral rather than a biological issue and that a fair share of the expert discourse is based on this assumed pattern of public perception.
- » The expert discourse also stressed a common etiological explanation — that addiction arises because of a complex confluence of genetic and environmental factors. This interaction was described as complex and giving rise, because of variation in both variables in the equation, to incredible differences between individuals in susceptibility and resilience to addiction.
- » The expert discourse also focused heavily on *intervention*. There was a common view that quality matters — in short, that not all interventions are created equal and that the work of addiction specialists is to replace ineffective interventions with those that are evidenced-based. The expert discourse also focused on the timing of interventions — that they should occur early for maximal benefits. Experts also emphasized that intervention needs to be sustained over time and incorporate multiple modalities of treatment.
- » Despite these points of consensus, analysis revealed a key tension within this field — a debate about the appropriateness of a more inclusive concept of addiction. On one side of this debate was an argument for a category of addiction that would include both substance and behavioral addictions. Others in the field, however, were weary of lumping these addictions into one concept. These latter experts believed that there were considerable differences in process and etiology between “types” of addiction and, therefore, advocated a more strictly delineated taxonomy of addiction.

Cultural Models Interviews

- » Cultural models interviews revealed that Albertans apply a set of two dominant assumptions in thinking about **what addiction is**:
 - ◆ *Addiction is a dependence on a foreign chemical — narrowly drugs or alcohol; and*
 - ◆ *Addiction is an internal “need” response — a process of insatiable and irrational need that takes place within the individual.*

- » A second set of cultural models was used in thinking about the **causes of addiction**. These models form a complex set of both general and more specific assumptions that are brought to bear in understanding causation. The general assumptions in this set included:
- ◆ *Addiction results from derailed development.* A host of childhood experiences were viewed as potential causes for addiction, including trauma, exposure to addictive behaviors and inadequate parenting.
 - ◆ *There are proximate triggers of addiction, such as access or escapism.* The most likely scenario for the development of an addiction was when an individual who has experienced derailed development later experiences the proximate triggers.
 - ◆ *There is a perceived continuum of control.* At one end of the continuum, an individual has complete control over their behaviors and actions, while at the other there is a complete absence of control. Addiction was caused when an individual reached a *tipping point* on this continuum.
 - ◆ *Some things are just too addictive.* A common and specific set of drugs — crack, heroin and methamphetamines — were perceived as so powerful that, once taken, they quickly result in chemical dependencies that are difficult if not impossible to break.
 - ◆ *Damage done is damage done, or addiction is incurable.*
 - ◆ *The power of will explains individual differences or who will become addicted and who will not.*
- » Research suggested that there were **relationships between the cultural models used to think about what addiction is and its causes**. When Albertans use certain definitional models they also use certain causal models. This is to say that there are patterned associations between models from these domains such that when a model from one set is used, a corresponding model from the other set is also employed. Furthermore, research suggests that this co-recruitment occurs in highly patterned ways. In this way we found, for example, that when individuals thought about addiction as an internal process, they assumed it to be caused by derailed development and tended not to employ other available causal models.
- » One of the most important findings from this research is that **the cultural models employed to reason about the causes of addiction structured perceptions of effective and appropriate treatments**. In this way, certain treatment modalities, interventions and policies become easier or harder to think based on the specific model(s) of causation employed.
- ◆ When Albertans employed a *derailed development* causal model they reasoned that addiction can be prevented by focusing on childhood and development; that the root causes of addiction must be addressed; that community and society play a role; and that intervention involves the government.
 - ◆ When employing a *proximate triggers* model of causation, Albertans concluded that addressing the environments surrounding individuals is an essential component of intervention.
 - ◆ When informants approached the issue of causation through the *continuum of control*

model, they reached conclusions that gradual weaning and early treatment were effective and necessary components of intervention.

- ◆ The use of the *damage done* assumption structured opinions that treatment may assuage symptoms but that underlying causes are beyond repair and that long-term and ongoing treatment are necessary to manage addiction symptoms.
 - ◆ Finally, when employing a *willpower* assumption in understanding issues of causation, Albertans concluded that intervention is fundamentally about an individual cultivating the desire and discipline to change their behaviors.
- » Research also suggested that understandings of causation shape two very different perspectives of the **responsibility for addiction**: *Addicts are not to blame* and *addicts are to blame*. Research suggested that informants' vacillation between these two views of responsibility was linked to the specific model(s) of causation they employed. When they used one set of causation models — *derailed development, proximate triggers, continuum of control* and *damage done* — they reasoned that individuals are *not* responsible for their addictions. However, when informants used the *some things are just too addictive* causal model they reached conclusions that individuals *are* responsible for their behaviors.

Mapping the Gaps

The research identified the following gaps between the ways that Albertans and experts understand the issue of addiction:

- » *Definitional Focus* — Experts view addiction as a brain- and biologically-based concept, while Albertans frequently assume the issue is about the properties of external chemicals.
- » *Causational Process* — While experts have an understanding of addiction causation and susceptibility that is based in the science of the gene-environment interaction, Albertans lack an understanding of this dynamic interactional process and have their own, decidedly more discrete, ideas of causation.
- » *How Development Happens* — Experts expressed complex and rich understandings of developmental processes and how such processes influence addiction. Albertans, while clearly implicating the process of development as a key factor in explaining addiction causation, lack an understanding of how development actually “works.”
- » *Where the Processes Occur* — Experts focused on the brain as the location where addiction happens. Albertans, on the other hand, had a vague and imprecise sense of where addiction occurs — defaulting to general explanations of experiences somehow getting “embedded” into individuals.

- » *Responsibility* — Whereas experts clearly place the onus of responsibility on neurological and bio-developmental *processes*, Albertans have mixed opinions about responsibility — in many places blaming the addict and his or her lack of willpower.
- » *Potential for Change and Intervention Approach* — Experts have clear ideas and place a strong emphasis on the fact that addiction *can* be addressed and that there are evidence-based programs that have been shown effective in this regard. Albertans, on the other hand, frequently conclude that addiction is an affliction about which nothing ultimately can be done. When informants did see intervention as possible, they focused on treatment and on increasing the *quantity* of intervention, with no recognition of the importance of programmatic quality.

Communications Implications

- » There are many implicit understandings that limit public thinking and narrow perceptions of certain solutions and programs around addiction. However, there are also assumptions that hold promise in creating broader understandings of the issue and may therefore be helpful in translating the science of addiction. Such promising associations include the connections that Albertans make between early child development and addiction, or the implicit relationships they draw between community, society and government, and solutions to addiction issues.
- » The *connections* that Albertans draw between more specific aspects of the issue are of paramount importance in designing more effective communications on addiction. Activating clusters that contain assumptions that run against and obscure the science or that are unproductive in thinking about public policy and programmatic solutions is a very real danger in messaging about addiction. The connections and the complexity of the relationships between assumptions point to the need for communicators to be aware and deliberate in how they navigate this swamp of public perception.
- » More specifically, the connections between definitional and causal understandings and, in turn, the power of causal assumptions to shape thinking about solutions and responsibility highlight the pressing need for messages to activate internal process-based definitional understandings and avoid cuing co-existing assumptions that focus on the properties of a narrow range of external substances.

ENDNOTES

¹Kendall-Taylor, N. (2010). Rounding up the associations: How perceptions of addiction are recruited. Washington, DC: FrameWorks Institute.

²Ibid.

³Ibid.

⁴Ibid.

⁵For more information about FrameWorks methods, see <http://www.frameworksinstitute.org/methods.html>

⁶Ibid.

⁷Ibid. See also, Kendall-Taylor, N. (2010). “Kids can have mental health ... but they can’t, can they?”: How Albertans think about child mental health. Washington, DC: FrameWorks Institute.

⁸Ibid.

⁹Ibid.

¹⁰Ibid.

¹¹Manuel, T. (2009). Refining the core story of child development: The effects of science and health frames. Washington, DC: FrameWorks Institute. O’Neil, M. (2010). Destiny or destructive environments: How peer discourse sessions toggle between mental health and illness. Washington, DC: FrameWorks Institute.

¹² Kendall-Taylor, N. (2010). Rounding up the associations: How perceptions of addiction are recruited. Washington, DC: FrameWorks Institute.

¹³Ibid.

¹⁴ Kendall-Taylor, N. (2010). “Kids can have mental health ... but they can’t, can they?”: How Albertans think about child mental health. Washington, DC: FrameWorks Institute.

¹⁵ In the first iteration of the prime tested in two initial sessions, there was one line which stated “the advocates ask that we give greater support to those people in areas without resources to deal with the issue of addiction.” This was changed to “The advocates ask that all members of the community come together to use our resources.”

¹⁶Ibid.

