

Supporting Youth Towards Positive Mental Health

by

Jill Sharrock

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ABSTRACT

Loneliness is a recognized problem amongst the elderly, but it is fast becoming a serious concern amongst the younger generation. Despite social media and friends on face book being an integral part of their existence, chronic loneliness has been described as the silent plague that is hurting young people more than any other age group (Gil, 2014). In the light of the recent acknowledgement that Canada's mental health service is already failing to care for large numbers of young people, many mental health organizations have turned to digital communication systems to reach vulnerable youth. Although this generation is more digitally connected than any previous cohort, using a digital communication channel to treat loneliness and depression seems counterintuitive. Taking a systems and design thinking approach, this study takes a critical look at the potential causes and complex issues surrounding chronic loneliness, and the link to depression and mental illness for young people, to inform potential preventative interventions.

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1. INTRODUCTION

How might we support young adults suffering from the early symptoms of chronic loneliness, anxiety and depression in an era of digital connectivity?

In 2004, the Canadian government received a wake up call regarding the state of their mental health services when the World Health Organization exposed Canada as the only G8 country without a mental health strategy (World Health Organization, 2004.) Subsequently, after many years of illuminating but damning reports and literally hundreds of recommendations for improvements, the Canadian mental health services are now focused heavily on improving the support they provide and the systems they use. This is a mammoth task being played out across every province and includes every type of mental health establishment, sharing the ultimate objective to improve services for every age group and every ethnicity. The Mental Health Commission of Canada has estimated the current cost of mental illness in Canada to be \$51 billion per year, (MHCC, 2010), and predictions from the World Health Organization indicate that by 2030 depression will be the leading cause of the global disease burden (WHO. 2004). So the resulting cost escalation of doing nothing is obviously unsustainable.

Today, the professionals working within it describe Canada's mental health system as: complex, broken, opaque, confusing and inadequate. Having grown organically from a mixture of publicly funded organizations, non-profit, private and for-profit establishments, it is a crisscrossing amalgam of individual systems, with very few documented communication channels. But as mental illnesses strike early, with more than 75% of all mental disorders having manifested before the age of twenty-five, the

economic lifetime cost of childhood and youth mental health disorders has been estimated at \$200 billion (Smith, J.P., & Smith, G.C. 2010). So supporting young adults to improve their mental health before they become long-term sufferers, not only enables them to achieve their full potential and contribute to society, but also has significant cost saving implications for the health services. This is also the age group that has been exhibiting the highest global increases in loneliness, depression and suicide. The figures have been increasing steadily for the past ten years and no one seems to have an adequate explanation for this trend. They are the generation that psychiatrist and author, Sherry Turkle, described as being “alone together” (2011). They have been digitally connected since childhood, communicating by text and socialising on the web, and yet they appear to be lonelier and more vulnerable to mental distress than previous generations.

In addition to this, research carried out by social neuroscientists, William Patrick and John Cacioppo (2008), has confirmed the fact that social isolation hastens physical and mental deterioration in otherwise healthy individuals. This builds on research that was carried out in Holland, as long ago as 1992 that exposed chronic loneliness as a considerable risk factor in poor health and early mortality in general (White, 2010). Yet loneliness remains a largely ignored phenomenon.

In response to these findings the intention of this study was to understand:

- 1.) The link between loneliness, (lack of social connection) and mental health.
2. What role social media and digital connectivity play in youth socialising
- 2.) Why the system is failing this age group and what can be done to support them.

To that end, this major research project uses a systems and design-thinking approach to the question of unmet mental health needs for youths in Toronto, with the intention of providing system appropriate innovations.

1.1. LIMITATIONS

Whilst every attempt has been made to ensure the research process was comprehensive and robust, there were several factors that limited the result of this work. Researching a system that is in fact, not a system at all; having grown organically from pockets of need and community initiative is challenging enough, but the fact that the services are in the middle of a ten-year redesign makes it a “system” in constant flux. With more than 18 publicly announced initiatives for intervention, and a history of poor implementation, it was tempting to review all 18 initiatives with a view to exploring more extreme or possibly quicker interventions.

The wider landscape of mental health services in Canada is a wicked problem of interconnected systems, funding and unintended consequences. However, staying true to the original research question focused the scope of the project and allowed for some management of the chaotic system revealed by the unfolding research and the interviewees’ disclosures of their experiences in the system.

The time frame of the research also made it impossible to research and review all the different international funding and delivery models of mental health care that would have been useful for comparative purposes and insights into the financial viability of potential interventions. These gaps would be the recommendation for further research and development to deliver deeper learning and additional insights into the design development stage and prototyping of design solutions.

2. RESEARCH METHODOLOGY

2.1. SYSTEMS THINKING

The goal of systems thinking is to understand interrelationships and patterns rather than just individual points of data (Brown, 2009), so taking a systems approach will ensure that the complex connections, influences and patterns of behaviour in the system are viewed as a holistic entity. This will expose the root causes of failings within the system allowing for meaningful interventions and double loop learning opportunities that change behaviour rather than just treat the symptoms (Meadows, 2008).

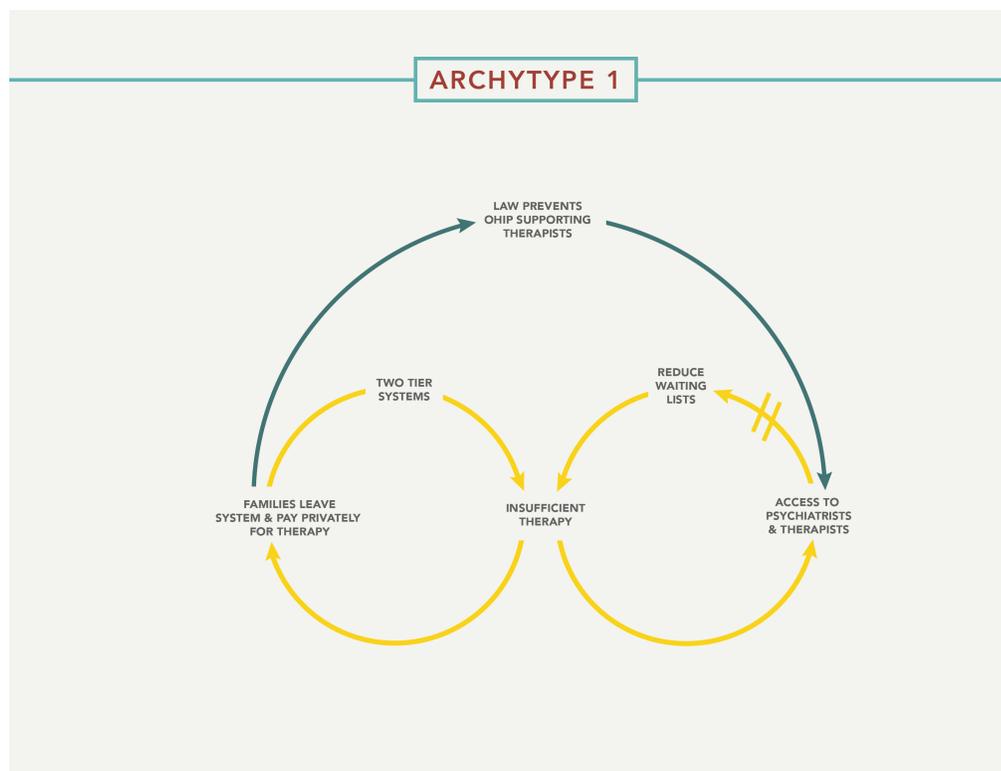


Fig 1. Double loop learning archetype

2.2. DESIGN THINKING

Tim Brown describes design thinking as a human centered approach to innovation that uses analytical tools and generative techniques to place the human point of view at the centre of the problem solving practice, whilst imagining new solutions that are also grounded in business viability and market desirability (2009). Whilst the mental health system is generally slow to accept change, they have already embraced the value of design thinking when they took a human centered approach and utilized several design methods in the development of their 2012 mental health strategy. So some of the stakeholders are already open to this type of problem solving methodology.

2.3. FORESIGHT

Maintaining the long view is an essential element in designing robust solutions for a future-oriented mental health system. Horizon scanning identifies weak signals of emerging trends and foresight techniques explore how they might evolve and interact with each other to create the main critical drivers that will shape change. The mental health landscape is changing rapidly, being affected by new discoveries in the field of neuroscience, continued advances in technology and the various repercussions of economic, political and social change. These three approaches will guide the design process.

2.4. THE PROCESS

The process is an iterative one that steps through four main phases:

1. Problem framing:
Redefining the problem and context through research and system mapping
2. Foresight:
Understanding the emerging changes within which the solution must work

3. Synthesis:

Combining data to reveal emerging patterns, themes and insights

4. Design Framework:

Defining the gaps, developing design criteria and initial concept generation in preparation for discussion and future co-creation opportunities with key stakeholders.

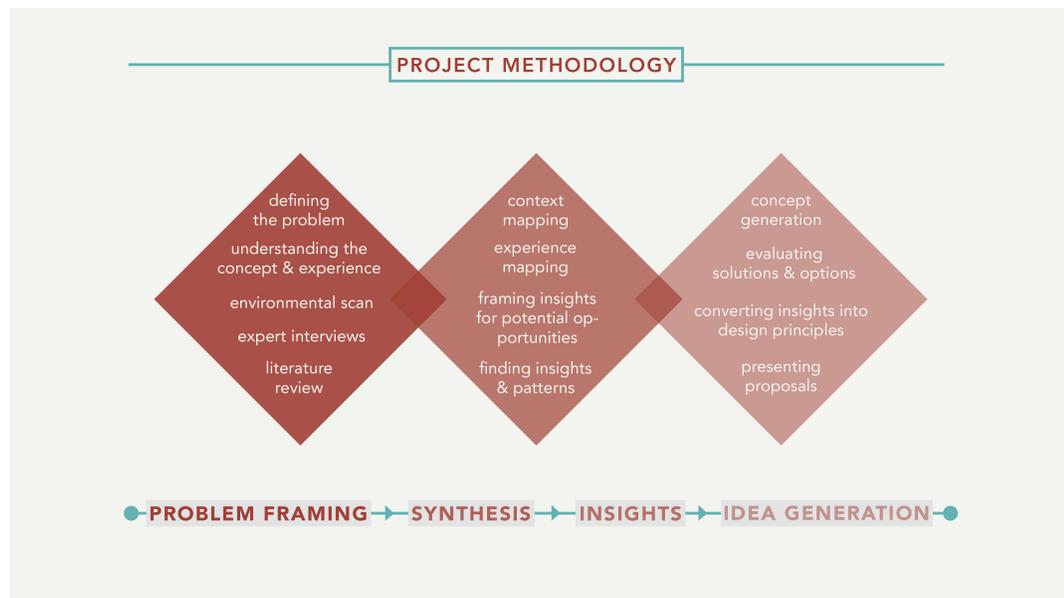


Fig 2. Project methodology

2.5. LITERATURE REVIEW

In order to understand the domain, a literature review was conducted of scientific research papers and journals in the following areas: loneliness, depression and youth relationship with social media.

The historical context of mental health care as well as the increasing diagnostic skills and the rise of

psychopharmacology was researched through government papers, historical documents and contemporary medical journals. The history of stigma, contemporary neurological research and the cognitive development of adolescents were all researched in medical journals, as well as through scans of on-line discussions of the lived experiences of chronic loneliness. An understanding of the lived experience of chronic loneliness and depression was mainly gathered from Emily White’s autobiographical book “ Lonely,” as well as anonymous on-line forums, discussions with professionals with lived experience and publicly written autobiographical documents.

Literature Review
History of mental health
Current state and landscape of mental health services in Toronto
International innovations and interventions in the domain
Cause and effects of social isolation and chronic loneliness
Socialising on social media
Treatments for depression
Resiliency and coping skills

Table 1. Literature review

2.6. SEMI-STRUCTURED INTERVIEWS WITH EXPERTS

Interviews were conducted with experts working in the mental health system, specifically working in on-line mental health communications, youth help-phone lines and counselors working in crisis support agencies in order to bring a deeper understanding of the issues involved in working within the system from a variety of stakeholders at various points in the system. Where possible, I chose experts who also had previously lived the experience of mental health issues. In this way I hoped to

understand what it was like to be both a service provider and someone who has tried to navigate the system, as a patient in distress.

Expert Interviews
1. University counselor
2. Peer to Peer Consultant
3. Kids Help Line executive
4. Director of youth services agency
5. Journalist with lived experience
6. Mental health services coordinator
7. Mental health anti-stigma education executive
8. Social worker with over twenty years in youth mental health services

Table 2: Expert interviews

2.7. SYSTEM MAPPING

Gathering data from government and ministry documents enabled me to map the larger governance structure that controls the primary, public and mental health services in Canada. Mapping the provincial microstructure of the mental health system proved to be a more complex and intractable problem. Data gathered from discussions with experts working in the field confirmed that with over 900 different agencies working independently within the province and reporting to different funding bodies, the system was not a system at all, but a series of random clusters of individual services with very few connections or linkages between them. Currently the existing landscape of services has never been properly mapped and the main services are now in the process of being reconfigured into a connected system. The descriptions of the restructuring plans and current interventions acted as a simple framework to map out services and connections, providing some understanding of the

landscape and the stakeholders involved. This revealed several negative reinforcing loops and potential leverage points within the current configuration of services.

2.8. HORIZON SCANNING

Scanning for weak signals and trend analysis: In order to understand the emerging trends that might influence the future of mental health a scan of various journals, websites and news media was conducted. This included technology that may influence service delivery systems, scientific studies that may provide new information on the workings of the brain, economic trends that may create stresses for young adults and alter government investment in mental health, as well as highlighting potential new treatments. Analyzing the trends through the lens of STEEPV (social, technological, economic, environmental, political and values) a number of underlying drivers emerged that contributed to understanding the possible futures of mental health prevention and future treatment services.

Horizon scanning
Technology in the future of mental health
Psychological and emotional effects of loneliness and depression
Neuroscience, psychology and psychopharmacology
Economics, political and demographic signals
Cultural and social shifts

Table 3: Horizon scanning

2.9. SYNTHESIS OF DATA

Synthesis of the primary and secondary research data supported a mapping exercise that visualized the system from an experiential viewpoint. Working from the interview materials, a group of stakeholder journey maps were created. Pertinent quotes from the interviews added a human centered perspective to the data. Stakeholder mapping provided insight into the touch points between each stakeholder on the journey through the system. Additionally the positive and negative cultural influences shaping society's current attitude towards mental health provided insights into stakeholder behaviors and interests. Grouping these insights, overlaying emerging trends and drivers for change and reviewing other mental health systems around the world also provided additional insights into enablers and barriers to the success of potential interventions. Gaps in the system and possible points of intervention revealed themselves through this iterative process of gathering, layering and reshuffling data as each new piece of information added to the story and allowed for the development of insights.

Synthesis of data
Mapping the system, looking for gaps, pain points and leverage points
Journey mapping for key stakeholders
Cultural mapping for context and influences
Shuffling data to make connections and build themes

Table 4: Synthesis of data

2.10. DESIGN FRAMEWORK

A set of design criteria was developed to frame the requirements and constraints of each design opportunity, describing the purpose, principles, values and boundaries of the brief. This framework

dictated the creative direction of the concept development whilst maintaining focus on the original deliverable.

Design Framework
Developing design evaluation criteria
Initial concept development

Table 5: Design framework

As the current ten year mental health strategy will conclude in 2022, the intention of this research was to explore opportunities for meaningful interventions that may not be addressed within the current strategy and provide impactful design solutions for accessing existing treatments that support long term recovery.

3. LONELINESS

“We're born alone, we live alone, and we die alone. Only through our love and friendship can we create the illusion for the moment that we're not alone.”

Orson Welles

Loneliness is a universal phenomenon, which is a fundamental part of being human. Everyone, regardless of age, race, gender or socio-economic status will feel lonely at some point in life. The ability to be alone is a sign of mental resilience and provides moments of quiet reflection, creative thinking time and rest, but as social animals we are genetically programmed to live in groups for our own comfort and security. As we mature we must learn to balance solitude with social connection in a society that has created many of the economic and social structures that allow social isolation to

proliferate. Culturally we praise independence and self-reliance, which makes it hard to admit to being lonely.

As UK journalist, Esther Rantzen said:

‘Loneliness has a shaming quality, born out of the perception of social failure. It is an ache that dare not speak its name for fear that people will think us needy, and so will shun us like an empty restaurant’

(The Daily Mail, 2011. p1. Para.10).

Nobel prize winning psychologist Professor Daniel Kahneman and his colleague, Angus Deaton state that being chronically lonely can have serious repercussions on mental, emotional and physical health (2010). It is a known causal factor leading to depression, cognitive decline and suicides, and the Marmot Review Report into health inequalities found that individuals who are socially isolated are up to five times more likely to die prematurely than those with strong social ties (Marmot, 2010).

Social neuroscientist, John Cacioppo has been studying loneliness for more than twenty years. His findings show that when loneliness sets in long enough to create a reinforcing loop of sadness and alienation, it can lead to sleep deprivation, erratic behavior, poor judgment, depression and even paranoia (2011). Today, more and more people are admitting to experiencing long-term chronic loneliness. In the 2012 Vancouver urban futures survey, residents listed social isolation as their most pressing concern. More Canadians than ever live alone, and almost one-quarter of the Canadians surveyed described themselves as lonely. In the United States, two recent studies have shown that 40 per cent of people say they're lonely, a figure that has doubled in the last 30 years (White, 2010).

Last year Britain launched a registered charity campaigning to end chronic loneliness in the young as well as the old, and the UK health secretary Jeremy Hunt gave a speech about the isolated many, calling attention to “a forgotten million who live amongst us ignored, to our national shame” (Renzetti, 2013).

The scientific study of loneliness has a very short history. Psychoanalyst Frieda Fromm-Reichmann wrote the first recorded paper “Loneliness,” in 1959. Fromm-Reichmann defined loneliness as “the want of intimacy.” She expounded the theory that loneliness was at the heart of all mental illness, and she chastised her colleagues for constantly abandoning emotionally unreachable patients rather than risk being contaminated by the weight of their hopelessness. (Cacioppo, J. & Hawkley, L. n.d). We are empathic creatures and, like yawning, sadness is contagious. Our ability to unconsciously synchronise moods with each other appears to be a crucial component in smooth social interaction. This fear of sadness contagion goes some way to explaining one of the underlying drivers of loneliness stigma. Research carried out by Cacioppo and James Fowler at the University of California in 2009 indicated that loneliness could spread, forming social clusters of sadness. They found that lonely people spread their feelings of sadness throughout social networks, and that the spread of loneliness is stronger than the spread of perceived social connection.”

In the mid twentieth century loneliness was attributed to a dysfunctional early upbringing, lack of familial and social bonding, the inability to love or a deficit of social skills. All these reasons still hold sway today, but in 2005, studies involving adoption and twins confirmed that loneliness also has a heritable component (Boomsma, Cacioppo, Slagboom, Posthuma, 2005). Neuroscientists believe we each inherit a certain required level of expected social interaction from our parents, shaped further by our early upbringing; establishing a level of socialisation that feels comfortable and normal

to us. Scientists believe that when these needs aren't met, our brain chemistry tells us we are under threat and if this state persists over time the chemistry begins to interfere with our ability to manage the emotions related to loneliness. This alters our "social cognition" and affects the way we perceive and react to any future social interactions. This is one of the paradoxes of loneliness; that it leaves people less able to forge the relationships they crave. This leads to withdrawal and social invisibility, which often deteriorates into depression. Common results of long-term loneliness are symptoms of anxiety, panic attacks, poor social skills, weight problems, high blood pressure, memory loss, cognitive deterioration and insomnia. Once in this negative cycle of bleakness, physical energy is sapped and the ability to socialise withers, brain chemistry changes and it becomes more and more difficult to relate to social demands. The socially isolated slip into depression and depression is nearly always a causal factor in suicide (Cacioppo, 2008). Social psychologists and neuroscientists researching loneliness are careful not to confuse depression with loneliness. It is a separate condition, but the tipping point from chronic loneliness into depression is ambiguous. Loneliness is driven by a sense of absence, a feeling of emptiness and a sense of insufficiency. It has been described as a crushing sense of disappearing. Emily White, the author of "Lonely, Learning to live with Solitude," maintains that despite the fact that:

"10% of North Americans are struggling with persistent loneliness, we don't want to think of what life is like for millions of people. We don't want to imagine what it feels like to feel lonely day after day, month after month. We don't want to dwell on the circumstances of a life marked by strong feelings of isolation, and by long stretches of aloneness."
(2010. p. 207, Para.3).

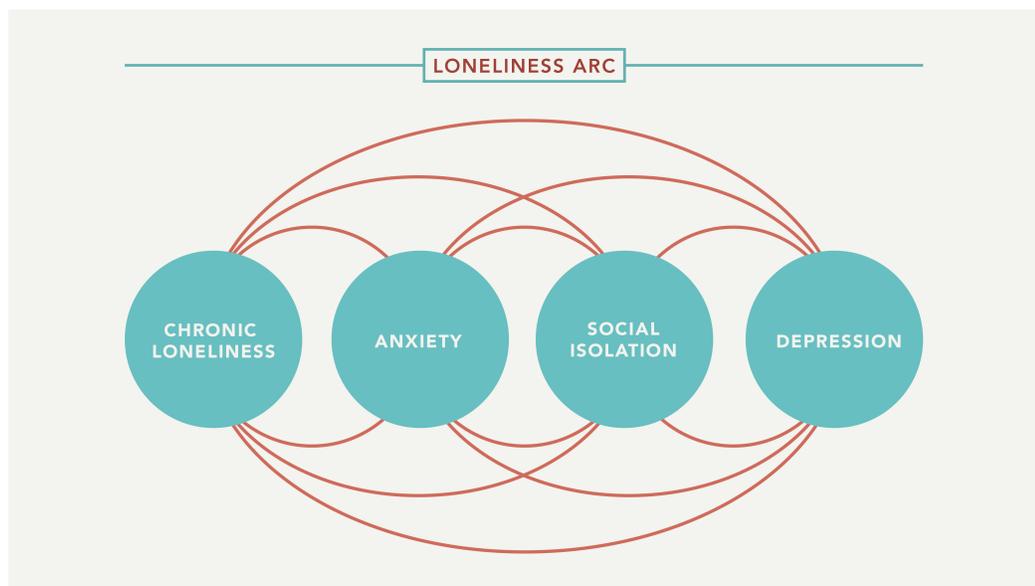


Fig. 3. Negative cycle of bleakness

So loneliness has a genetic heritable component, but the environment is equally important in determining how lonely we feel. Evolutionary psychologists believe that we are unsuited to the social environment we have constructed. Cacioppo has provided scientific evidence that loneliness causes psychological events that degrade our health. In his book, "Loneliness: Human Nature and the Need for Social Connection", he describes the way our hormonal system has developed and the resulting physical effects of loneliness. He states that, in order to survive we have evolved as an "obligatory socially gregarious species." When we are isolated from our social group our brain chemicals prepare us for "fight or flight" activity. Today, we are constantly on chemical alert, which puts a continuous stress on the body. Cacioppo has provided scientific evidence that loneliness causes psychological events that degrade our health. The resulting increase in stress hormones on the immune system and cardiovascular functions have a cumulative effect as potent as smoking 15

cigarettes a day and research suggests it is twice as deadly as obesity. Dementia, high blood pressure, and alcoholism – all these, like depression, paranoia, anxiety and suicide, become more prevalent when social connections are cut. In 2001 a controlled study was carried out that confirmed long periods of loneliness reduced the levels of antibodies in the blood, thereby compromising the immune system. In fact 7% of patients in the trial exhibited such low levels of antibodies, that they had no immune defences at all. This is thought to be due to the increased cortisol production found in lonely people. Cortisol is an immune-dampening hormone that reacts to stress situations (Cacioppo, 2009). Social connections have been found to act as “stress buffers;” having friends nearby lowers the cortisol stress response. The study also recorded increasing spikes in fibrinogen levels, a clotting agent associated with heart disease, yet another indication that long-term severe loneliness erodes physical health. The use of MRI scans has now allowed us to see that important nerve clusters and elements of white brain matter fail to grow, or wither and die away when persistent neglect is experienced. When experiencing rejection the mu-opioid receptors system; the same part of the brain that records physical pain responds, confirming that bullying, rejection and psychological trauma create the same brain responses as when we experience physical pain. Over a continuous period of time we are left with a feeling of lethargy, our reflexes and cognitive responses slow down, memory deteriorates and signs of chronic apathy and disinterest are exhibited. Conversely, when we experience distress from continuous isolation, the brain floods with adrenaline, cortisol and norepinephrine, which causes us to experience stress, anxiety, panic and anger. Treatment has shown that in most cases the deterioration of nerve clusters is irreversible whilst in some but not all cases brain plasticity allows for some return of white brain matter, but this is usually in the very young, whose brains are still growing (Cacioppo, 2008).

Over the past 60 years, a number of social experiments into the effects of isolation have confirmed that lack of human contact is extremely detrimental to psychological wellbeing. From Professor Harlow's experiments with socialising baby rhesus monkeys in the 1960's, the study of long-term hostages returned from war zones in the late 1990's, and monitoring prisoners experiencing solitary confinement, to the ongoing study of the cognitive development of Romania's neglected orphans in the early 2000's, we are learning much about the effects of social neglect on the brain (Cacioppo, 2008).

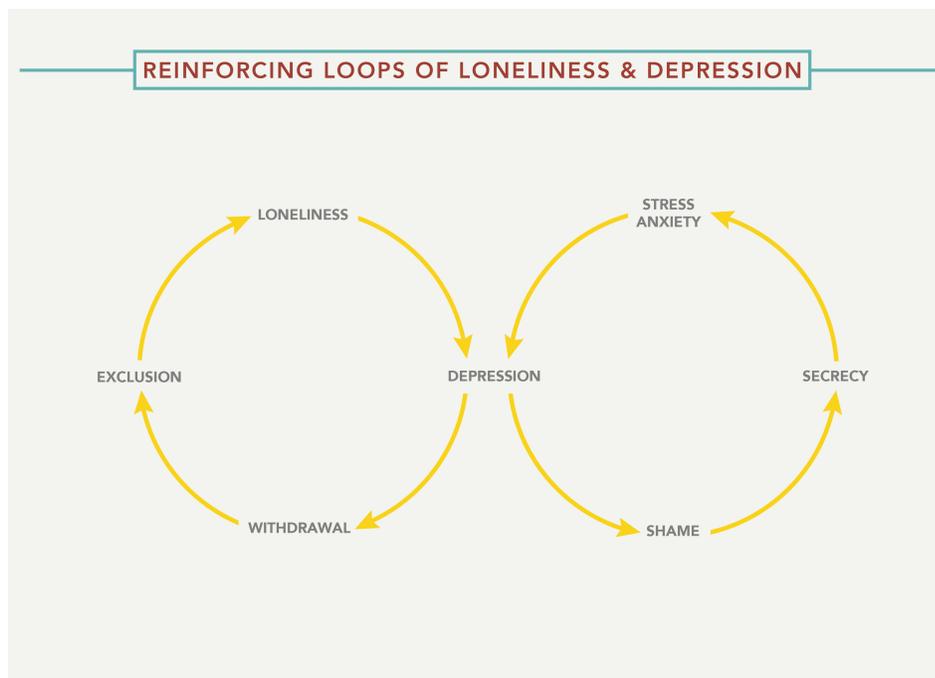


Fig. 4. Reinforcing loops of loneliness and depression

A study in Amsterdam looking at the risk factors for depression, dementia, Alzheimer's and high death rates among men and women over 65 years of age, found that participants who felt lonely were more than twice as likely to develop Alzheimer's and other forms of dementia over a three year period than those who did not. Even when taking into account other contributing factors such as

mental and physical health, loneliness was still associated with a 64% increased risk of the disease. In all age groups it was found that chronic loneliness created a permanent increase in TPR (total peripheral resistance) a tightening of the blood vessels that causes increased blood pressure and restricted blood flow (Holwerda, Deeg, Beekman, Tilburg, Stek, Jonker, & Schoevers, 2012).

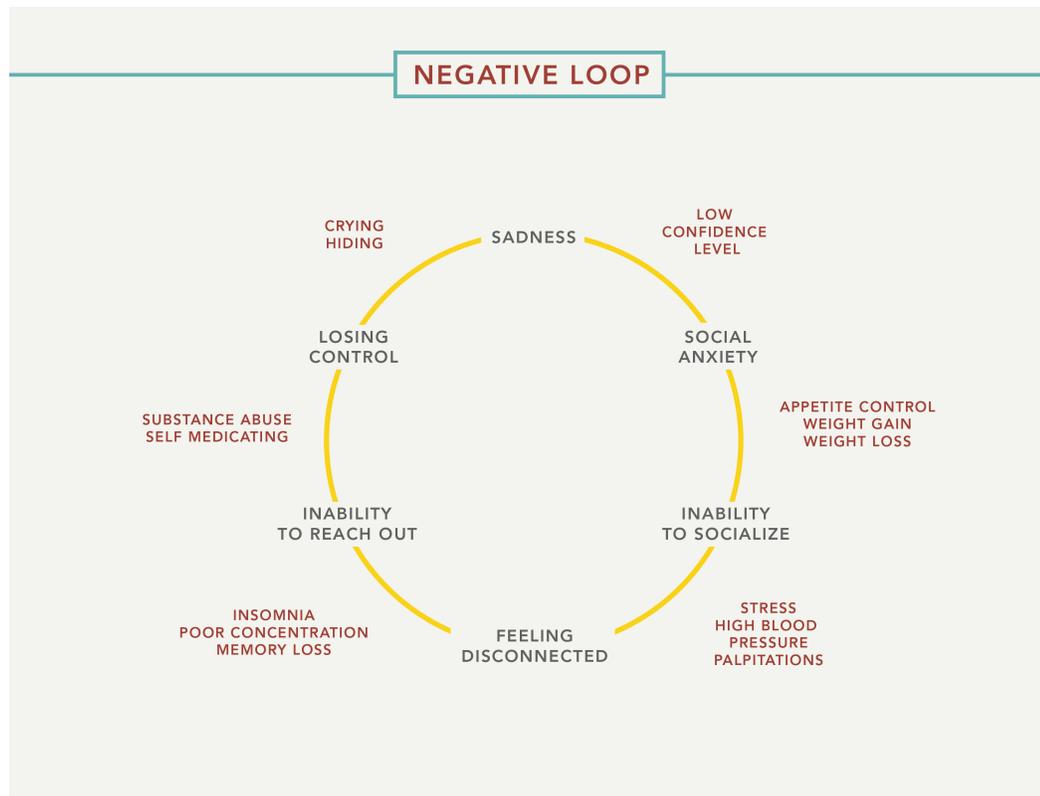


Fig. 5. Loop of chronic sadness and deteriorating health

Interestingly a Canadian Parliamentary report estimates that almost 70% of prisoners being held in Canadian prisons are suffering from some form of mental illness, and one fifth of all prisoners are constantly held in solitary confinement (Canada, House of Commons, Committees, 2010). Currently, somewhere in Canada there is one particular inmate who has spent 6,273 consecutive days in

solitary confinement and continues to do so. This is described as “administrative segregation” where the inmate is kept away from the rest of the prison population for their own safety. Unfortunately segregation has an exponentially devastating effect on mental health. Canada’s ombudsman is now investigating the widespread use of solitary confinement as a control mechanism for prison inmates. Studies into the effects of long term solitary confinement; (long term being defined as more than 100 days), have shown that the consequent stresses and changes to the brain create patterns of abnormal socialisation that are usually irreversible. This brain change in prisoners who already have a mental illness, further impacts their ability to socialise and reintegrate into society when released from prison. As Barbara Taylor points out in her book, “The Last Asylum: a memoir of madness in our times,” historically we have always used the penal system as a way of containing the mentally ill and segregating them from “normal” society. In this way, prisons have taken on the role of the new asylums (2014).

Researchers working in the field of depression often talk about the “cohort” effect. This refers to an emotional experience becoming more prevalent from one generation to the next, and describes, for example, the hypothesis that a group of people with a genetic disposition for loneliness born into a time when there is a cultural shift towards disconnection would result in a generational spike in the figures for loneliness and depression. The cumulative effects of increased urbanization, looser family configurations, and increased Internet communication is one of the current rationales being considered for the rise in depression that has been recorded over the last 30 years (White, 2010). This framework can be applied to loneliness too. Loneliness, perhaps more than any other emotion is social in nature. It is an indication of how connected we feel to our group and it is always a symptom in the mix of suicidal thoughts, depression and anxiety disorders.

Studies have shown that over the past fifty years our working hours have increased by one 150 hours (one whole working month) every year (White, 2010). This is partly due to longer commuting times and the expectation of being available to employers for longer durations through Internet access, but also because employer expectations have shifted the working norm. Consequently people are often too tired to socialise after long hours at work and friendship is reduced to a quick email exchange. Work colleagues have now taken on the role of friends, as they are the people we with whom we spend the most time. The requirement to have several jobs in one lifetime then breaks these connections if they haven't had time to deepen into real friendships and so people relocate and begin the process of forming a new colleague/friendship group again. This nomadic lifestyle requires emotional resiliency as it reduces the opportunities for maintaining family connections and creating deep friendships.

3.1. SOCIAL MEDIA AND SOCIAL BEHAVIOR

So what effect has the Internet and social media had on social connectivity for today's young adults? Facebook launched in 2004, and now boasts over 1.23 billion users worldwide and 556 million visitors every day, making social media a formative element in their social lives and methods of communication. Cell phones have also had a huge influence on young adults' communication style, as texting is quick, cheap, unobtrusive and simple. This generation has been the subject of many research projects and surveys, as we try to define the possible affect this huge leap in information availability and communication streams will have on our cognitive powers and psychosocial behaviours. Early research focused on the methods of utilising computers and the Internet as a learning tool and monitored usage and styles of usage. Today, with the majority of the world connected to the Internet, research has turned its attention to the psychosocial aspect of permanent

connectivity. Psychiatrist and author, Sherry Turkle asks us to consider the paradigm shift that has taken place in the communication styles of the last two generations. Thirty years ago we asked what we would use computers for. Now we ask what don't we use them for. Now through technology, we create, navigate and perform our emotional lives.

In Turkle's book, "Alone Together: Why We Expect More from Technology and Less from each Other," she examines our relationship with digital devices, machine-mediated relationships and our changing attitudes towards computer-enhanced living (2010). Turkle's research suggests that the majority of young adults are extremely comfortable playing out their social lives on the Internet, and have adapted their communication styles accordingly. Although as a psychoanalyst she has had access to young people who would be described as extreme users, suffering from the psychological stresses caused by peer expectations of continuous communication, her analysis gives us insights into the stresses created by the perceived tyranny of constant connectivity.

3.2. ADOLESCENCE ON THE INTERNET

Child psychologists agree that adolescence is the time when individuals first have the required level of cognitive capacity to consciously explore what makes them unique. This rite of passage describes the process of developing an identity or self-concept: exploring and testing beliefs about qualities, interests, and values, as well as defining a personal level of self-esteem. Traditionally, the development of self requires an acceptance of "separateness" from parental control, shifting the focus from family to peer groups. Positive peer relationships serve several important functions throughout adolescence, providing alternative views of the world, reference points for testing new identities and developing moral judgments and values. Most importantly, peers act as powerful reinforcers providing proof of popularity, status, prestige and acceptance. Being accepted has

important implications for adjustment during adolescence and into adulthood. Positive peer relationships during adolescence have been linked to positive psychosocial adjustment. Those who are accepted by their peers foster mutual friendships and have been found to have better self – images during adolescence and perform better at school, (Hansen, D.J. Giacoletti, A.M. & Nangle, D.W.1995) whilst social isolation among peer-rejected teens has been linked to a variety of negative behaviours, and they appear to be at much greater risk of psychosocial difficulties during adulthood (Hansen et al., 1995). So this period of self-actualization and peer bonding has important repercussions for the development of emotional resilience and future mental strength. This can be seen in the observation of crowds in crisis, when they automatically create a strong sense of togetherness. Whether it's a soccer crowd or a group of people experiencing a disaster, the group will coalesce to share a common goal and common identity very quickly. Michael Bond explores this phenomenon, in his book; "The Power of Others," where he describes this behaviour as the 4th emergency service, illustrating collective resilience and the security of solidarity winning out over the selfishness of individuality. He observes that people experiencing these group collaborations often identify strongly with the camaraderie and security, describing the events in emotional terms of belonging and feelings of family. The desire to belong and be accepted is very powerful (2014).

Obviously the transition to adult autonomy has changed from the pre-internet generation. Cell phones now mean that children need never experience the feeling of being truly alone, as it was experienced by previous generations. Therefore they may never experience the transition and emotional growth provided by learning to accept and deal with the knowledge and potential repercussions of being completely alone. Neither will they experience the inability to communicate with friends or the quiet solitude of being without a plethora of devices for entertainment. But perhaps even more formative is the act of public socializing through Facebook. Following the

protocol of Facebook friendships by publicly displaying the number of friends, gauging one's popularity, posting photographs of social events and watching peers' social groups. This is the Internet version of aligning oneself with a school gang or club.

In 2004, Sean Seepersad carried out a major study for the University of Illinois, "Coping with Loneliness: Adolescent Online and Offline Behavior," in which he researched online and offline behavior amongst teenagers, specifically related to coping with loneliness. The results have painted a picture of reinforcing behaviours. It seems that social media is not an instrument for changing socializing behaviours, but it can exaggerate a teenagers' natural inclinations. In other words, socially inclined teenagers become more social whilst introverted or solitary teenagers become more isolated. The research suggests that youths who are experiencing loneliness off-line also avoid dealing with their loneliness on-line. They are more likely to be passive observers, whose activities on-line are described by the researchers as taking an "avoidance" approach. They are more likely to watch other people's Facebook posts, but not post themselves, or use the Internet for distracting activity, playing games or watching movies. It is also worth noting that lonely individuals tend to connect on-line to people they don't know off-line, giving them an opportunity to adjust their identity, but maintain distance. This doesn't seem to alleviate their loneliness or build lasting new friendships in any meaningful way, but it may be a form of practicing positive social connections. Social and extrovert teenagers have more positive results, and their behaviour is described as "approach" activity on-line. They increase their communications by posting pictures and conversations most often, and usually stay within the circle of people they know on-line, strengthening already existing peer friendships. Facebook depression has now become recognized as a term to describe the loneliness felt by people who have been excluded from social interactions, but are allowed to take on

the role of envious audience, watching other people have fun via their Facebook posts. When considering social media's ability to amplify existing social preferences, psychologists have noted an increase in narcissistic tendencies in this age group. Seepersad concludes that the cause cannot be isolated to the rise of social media, as cultural and economic factors need to be considered, but he notes that this cohort describe themselves in a much more individualistic and less altruistic manner than previous generations. So the Internet seems to amplify existing behaviours. These results suggest that left to their own devices lonely adolescents may not necessarily be emotionally equipped to use the internet in a self supporting way, but current research has failed to explore the positive aspects of chat lines for the lonely, that highlight positive interactions on a safe, monitored platform.

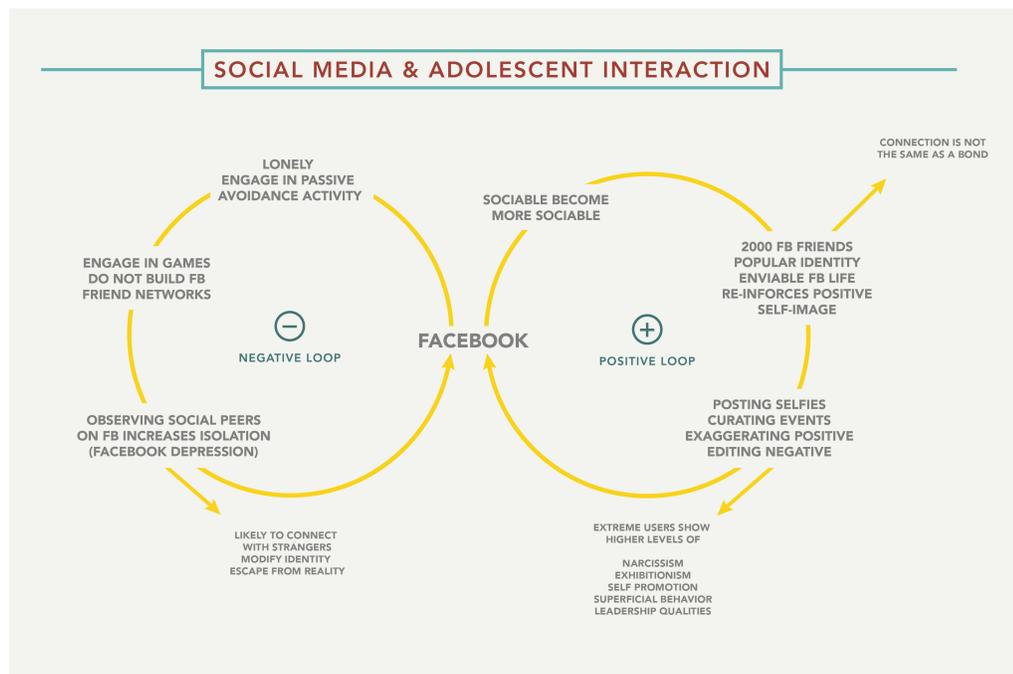


Fig. 6. Reinforcing loops of identity validation on social media

3.3. THE LIVED EXPERIENCE OF LONELINESS

In our culture we are most likely to think of adolescent loneliness as a teenage luxury. Those of us who have experienced the bored refrains of a lonely teenager in the house may admit to having been less than sympathetic to their plight, offering a list of chores to dispel their melancholia. Most of the time this is described as normal adolescent “situational” loneliness, but chronic loneliness is something entirely different. It’s a feeling of isolation that deepens over time, marking them out as different and excluding them from their peer group. It can have lasting effects on their ability to make social connections. At a vulnerable time in their psychological development it can be the beginning of social inadequacy, low self-esteem, fear of rejection and a cycle of negative self-perceptions that will color their perceptions and limit their potential for years to come. What parent doesn’t dread that their child might be the one who is excluded by their peers in the playground, chosen last in school sports and is somehow unable to forge friendships and gain that sense of approval and belonging? As a parent one feels the helplessness and anguish at seeing one’s child or teenager desolate and rejected. We know that in the long term this has a huge effect on their self-esteem, their ability to develop sound relationships and even their professional success in life (Cacioppo, 2008).

Listening to the voices of lonely youth places them at the center of the issue and increases the opportunity for empathic understanding. What follows is a selection of self-published conversations, statements and thoughts from lonely adolescents making human connections on the chat line:

www.webofloneliness.com

“ I Am Lonely

Lonely college student? What?

I'm 20 years old and in college. I should be having the time of my life, right? I should be out mingling and partying and meeting new people daily...right? I'm not. I'm really not. It's Saturday night 10:30 to be exact and I've been sitting here just trying my darndest to convince myself that I'm a normal 20 year old college student. But I'm not, I'm really not. I'm 5'6, 135 lbs, blonde haired and dark brown eyed. I'm pretty, maybe not beautiful but I'm pretty. So why can't I meet a God-damned person? Why can't I have friends and boyfriends and people who call me to hang out? Why? I stay cooped up in my stupid apartment...going out only for class and food. I stay hidden here, away from the world because I'm scared to go out. Why? I really couldn't tell you. I'm scared of uncomfortable situations and awkward silences. I'm scared of bad conversation and sounding stupid. And you know what? I'm incredibly...incredibly lonely. But you know what? As scared as I am of being alone forever, I'm even more scared of not being alone. What's wrong with me? Who thinks like that? I keep people at an arm's length because any closer and they could hurt me. But, keep enough people far enough away and soon enough those people are going to go and find people who will embrace them. And soon enough I stop keeping people at even an arm's length because even they walk away. Please, please if anybody can in anyway (and hopefully a major way) understand this and connect to this, please contact me. I honestly think that I'm alone in doing this, acting like this. It's so abnormal and crazy that I feel like the only person in the world that feels this way. Am I?"
(Posted by anonymous student on www.webofloneliness.com).

"I feel like I'm always waiting. This weekend was dead. I live in an isolated area. My therapist says there are options but it's pointless to discuss them until my meds get right. So I wait for good meds, for emails from people who ignore me. If I could only read again. I wrote this out of boredom and loneliness."
(Posted by Melissa, July 12th 2015).

"Hello everyone. I've been finding it very difficult to connect with people lately, so I was hoping this would help. I see many people on here suffer from depression. I've dealt with it for a very long time and I'm happy to say that I am at a great place with regards to that, however I'm afraid of falling back into it if this loneliness continues."
(Posted by Jo, July 18th 2015-07-29).

I have severe anxiety and depression and although my work and my hobbies sometimes can drown them out, at the end of the day I'm still miserable and empty inside. I see there's others here that can relate. I never looked into doing this before because I don't like getting attention about these things but I realize I need to try something different.

(Posted by Will, June 27th 2015).

"This is a confusing, frustrating time in my life, and what has made it more confusing is that everyone around me seems so happy and put together. It makes me wonder if they're hiding their inner demons or if I'm the only one who's screwed up and has it all wrong."

(Posted by Amanda, November 8th 2014).

"..then there are times like today when I feel I could disappear off the face of the earth and no-one would notice, let alone care and that seems really sad and leads to this gnawing sense of loss eating away at me. It feels like emptiness, resignation, a sense of not being understood, seeing the intimacy I would like available for all and sundry, but always out of reach to me, reasons that are hidden. It feels like being cheated. Like something is missing. Like I'm invisible. It's longing and yearning and it's like a kind of non-specific grief... What have I become, my sweet friend, everyone I know goes away in the end."

(Posted by anonymous, November 2013).

"I'm not sure how to describe my loneliness cause I feel it every day. Sometimes I feel happy when I'm alone and other times I feel suffocated as if I can't breathe or live cause of how sad I feel deeply inside. As far as friendships go, I don't really get out much and nobody around my area has ever given me the chance. Sometimes I feel like it's not worth it on trying anymore cause I try so hard to put myself out there. Once I get slammed down for trying to express myself I kind of back off little by little. Haven't completely given up yet, but I don't try as hard as I used to. Now I'm sort of used to that feeling so much that it doesn't really affect me any more. Wonder if that's a good thing or a bad thing..."

(Posted by anonymous girl. August 2012).

Researching society's' perceptions of lonely people exposes a worrying negative bias towards them. When students at Purdue and Lakehead University were asked to describe a hypothetical lonely person, the terms they used were: unintelligent, unsuccessful, passive, unattractive, uncoordinated, and insincere (White, 2010). This shows that loneliness possesses all the characteristics of stigma. The knowledge of loneliness allows people to attribute other unconnected states that define the person. The term "loner" is used to describe perpetrators of crazed acts of violence, usually related to mass killings. Yet none of the research papers ever link chronic loneliness to violence. This may actually be a misunderstanding of sociopathy. In this instance, sociopaths don't feel lonely- they don't usually require friendships. Lonely women, on the other hand are generically perceived as dusty spinsters, locked in their basement apartments with a crowd of cats for company. This perception that lonely people are dull-witted, uninteresting and needy isn't lost on them, hence the secrecy. White points out the ironic fact that many long-term chronic sufferers of loneliness function well in daily life and professional situations. They aren't always incapable of making eye contact, smiling or engaging in an intellectual conversation, but they describe feeling permanently hollow and disconnected. Or they may have an almost imperceptible air of sadness that alienates people, leaving them excluded. So this is not something that can be cured with the addition of a few slick social skills. Chronically lonely people don't follow the stereotype of being unfriendly, being dull, self-obsessed or whining. Teenage loneliness may manifest itself in an adolescent, sometimes gothic misery, but not necessarily so. Serious, lasting melancholy runs deep and is often silent for fear of rejection (White, 2010).

INSIGHTS

- Loneliness is an overlooked mental state that society continues to dismiss as a temporary mood, despite evidence to the contrary. (Possibly because there are no definitions of the severity of the symptoms and no defined evidence-based treatments.)
- Sufferers of chronic loneliness are at high risk of developing mental health issues and deteriorating physical health.
- Loneliness is an important initial indicator of susceptibility and the likelihood of experiencing mental health issues in the future
- Sadness is contagious and has been proven to alienate people
- Loneliness is considered a sign of emotional immaturity and weak character, despite evidence to the contrary.
- The stigma against loneliness is forcing a silence on society at exactly the time when loneliness is becoming a broader cultural problem.
- Social media does not improve social skills, but it reflects individuals' existing socialising behaviours.
- The Internet will be a useful communication and service delivery tool for mental health care, but it is important to recognize that it will not encourage socialisation or combat loneliness. As lonely people perceive others' behaviour through the lens of rejection, it is likely that being provided with digital services may increase their feelings of being rejected, not valued or worthy enough for face-to-face contact.

4. THE COST OF MENTAL HEALTH

Mental illness affects people at all stages of their lives but one of the most significant characteristics of the onset of mental health problems is that they are more likely to emerge early in life, particularly between the ages of 14 and 25. Fifteen percent of mental health illnesses begin by the age of fourteen, and seventy-five percent of all mental illnesses are evident by the age of twenty-five, peaking at the university and early working stage in life. This equates to one in every five people in Canada experiencing a mental health problem. The remaining four out of five people will be touched by mental illness, as a spouse, a child, a sibling, a friend or a work colleague (Mental Health Commission of Canada, 2013).

Young adults with serious mental health conditions also have high rates of homelessness, arrests, resulting incarceration, and spells of unemployment. They are also vulnerable to becoming substance and alcohol abusers as a form of self-medication. All of these unfortunate issues make it harder for them to integrate into society, maintain secure employment and establish an independent lifestyle, thereby adding more cost to the economy. Early intervention makes an enormous difference over a lifetime. As stated earlier, the economic lifetime cost of childhood and youth mental health disorders has been estimated at \$200 billion in Canada. The estimated lifetime cost for one person with a conduct disorder, without any form of support or treatment is \$1.5 million (MHCC, 2013). The data collected to develop the case for investment revealed that the economic cost of mental illness is estimated at \$51 billion per year. This represents 2.8% of GDP, and includes health care costs, lost productivity and costs from further medical interventions as a result of deteriorating health. None of the major studies to date have included the costs of mental health within the judicial system. At this rate of expenditure it has been estimated that the cumulative costs over the next 30

years are expected to exceed \$2.3 trillion. This means that mental health problems have the highest total direct care costs in Canada, and are the third leading contributor to the total economic burden out of the seven leading health conditions.

At the moment, Canada spends just over seven percent of the government health budget on mental health, compared with New Zealand and the U.K. who spend between ten and eleven percent annually, but, as part of Canada's new mental health Strategy the Ministry of Health has committed to increasing the spend to nine percent over the next ten years; the lifetime of the new mental health strategy (MHCC, 2013).

INSIGHTS

- Early mental health intervention before the age of 25 years old and focused on recovery rather than symptom control supports lifelong good mental health, thereby cutting expenditure on long term mental health issues. (MHCC, 2013)
- A growing body of international evidence has demonstrated that promotion, prevention, and early intervention initiatives show positive returns on investment (MHCC, 2012).
- Reducing the number of young people experiencing a mental illness in a given year by ten percent, after ten years would save the Canadian economy \$4 billion a year. (MHCC, 2013)

5. THE HISTORY OF MENTAL HEALTH

Although the science of mental health is very recent, we can learn a lot about our current attitudes and mental health system by reviewing the history of our treatment of the mentally ill. Madness in the European middle ages was thought to be a manifestation of demonic possession. For over 300 years the church promulgated this belief, resulting in the unfortunate individuals being tortured, burned at the stake, hanged or decapitated. Sufferers were viewed as little more than animals. They were kept in cages or left to wander the neighbourhood, often dying of starvation or exposure from the elements. In the 17th and early 18th centuries, the dominant view was that mental illness was caused by excessive passions and debauchery. This is the theory that first supported self-inflicted illness brought on by character weaknesses, and it marks the beginning of society's attitude that mental patients are therefore un-deserving of compassion. It justified poor living conditions and the use of physical restraints, maltreatment and confinement, keeping mental illness away from the rest of society. Almshouses, churches and local prisons housed most of these people. In London, England, a charity hospital called Bedlam, established back in the 1400's became the most notorious asylum in history. Immortalised in Hogarth's etchings: "A Rake's Progress" they record the gradual degradation of untreatable diseases, mental illness and poverty. (The Rake's Progress is an interesting illustration of the social determinants' of health, whereby poverty, homelessness and unemployment leads to increasing levels of mental illness.) At one point in the mid 1700's, high society would visit Bedlam hospital on holidays, to enjoy watching the antics of the lunatics. Bedlam would charge an entrance fee and arrange for refreshments for the visitors. The mentally ill were considered less than human, so these visits were viewed in the same way that we might visit a zoo or a circus today. Throughout the next 100 years asylums became society's preferred answer to managing the mad by segregating them from society (Dain, N. & Rosen, G. 1968).

Canada's mental health history echoes that of Europe and America, as they all followed similar patterns of social development. In the late 17th century, a more humanistic approach evolved. This was the result of a number of converging events. King George III of England suffered from porphyria, a disease that exhibits symptoms of paranoia, hallucinations and delusions. As his illness allowed for sporadic periods of lucidity between the episodes of madness, people were disturbed, upset and sympathetic to his plight. At the same time, the New Romantic movement of poets and artists were voicing the theory that love sickness and grief could drive people mad. This set the scene for a more humane period of care and understanding. Several innovative young doctors of the day, unable to progress within primary medicine, turned to the unfashionable and second best option of mental health and began to reshape the concept of asylums. Inmates were unchained, decent living conditions were provided and some level of care and activity was provided. This became known as a "moral treatment" and led to the building of many more lunatic asylums across Europe, Canada and the United States. It was no longer considered acceptable to chain lunatics to walls, keep them on near-starvation diets, and maintain freezing temperatures as a method of sedation. Patients were given simple tasks to occupy the hands and mind. Some patients even showed signs of improvement. It is interesting to note how much easier it is for society to show empathy to the mentally ill when there is hope of a cure. This was the period that now marks the early shoots of modern psychiatry and the treatment of mental illness. Drugs have always been part of curing and controlling the mentally ill and would usually be sedative or purging in nature, but now doctors in these new asylums grasped the opportunity to embark on serious drug experiments in an attempt to cure madness. Arguably, this was the very beginning of psychopharmacology.

The 19th and 20th centuries saw the introduction of an even more scientific approach to mental illness. Attempts to study define and explain mental disorders were made, as a result of disease,

brain damage and congenital and hereditary defects. This was a period of dogged and pessimistic exploration and experimentation. Many treatments used hot and cold baths with various additives, early forms of electric shock treatment, insulin-induced coma-therapy and copious amounts of laudanum, lithium and digitalis. Gradually with each new discovery psychiatrists and mental health doctors inched their way out of ignorance and formulated various theories for different types of mental disorder. The deadly ramifications of thousands of “shell shocked” soldiers returning from World War 1 in 1918 provided overwhelming proof that the brain is vulnerable to psychological, social and physical stresses and that it has a breaking point. This heralded a very active era of modern psychiatry and clinical psychology (Greenland, Griffin & Hoffman, 2001).

The first Diagnostic and Statistical Manual of Mental Disorders (DSM I) was published in 1952, and provided the first defined diagnosis that could be agreed and shared between physicians. The first psychotropic drugs were introduced in the 1950's and marked a break-through in mental health treatments. Prior to this time, treatment had really been human experimentation and care had been little more than enforced containment. By 1950 there were over 66,000 patients in psychiatric care in Canada. Most psychiatric hospitals were operating at more than 100% capacity. The understaffing and overcrowding forced an end to the moral treatments, and asylums had no option but to return to their original role of restrictive containment. Locked wards, seclusion and chemical and physical restraints were reintroduced to maintain order and control. Once again, asylums had now become overcrowded containment centers. Fortunately, the pharmaceutical companies were developing the solution; new drugs such as Chlorpromazine seemed to be effective in treating psychosis. Now it was possible to consider closing the asylums and supporting patients to live a meaningful life in the local community.

Deinstitutionalisation and care in the community was the modern answer to the mental health care problem. Between the 1960's and the 1980's asylums were closed, antidepressant drugs became a popular medication and support systems were supposed to be put in place in the community. Unfortunately the required level of community care was vastly under-estimated and this deficit has never been properly addressed. Interestingly this has been the case for every country that followed the de-institutionisation plan. This failure has contributed considerably to the proportion of people living with mental illness among the homeless population and it has turned jails and prisons into the asylums of the 21st century. In turn it has contributed to the general population's negative feelings towards the mentally ill, fuelling stigma and antipathy (Greenland et al, 2001). Patients that were deemed too ill to be returned to the community remained in the few remaining psychiatric hospitals where new treatments continued to be developed. Lobotomy's were introduced in the 1950's and remained a viable treatment until well into the mid 1980's. The 1975 Hollywood film, "One Flew Over the Cuckoo's Nest," which portrayed the poignant and dark story of misdiagnosis and the incapacitating results of lobotomies marked the death knell for that treatment. Science and technology are now moving quickly. It is only sixty years ago that none of the mental health disorders were really treatable. Greenland describes treatments before the advent of antipsychotic drugs as little more than experiments and smoke and mirrors. Yet today, more than fourteen of the defined "severe" mental disorders are treatable and two of them are actually curable.

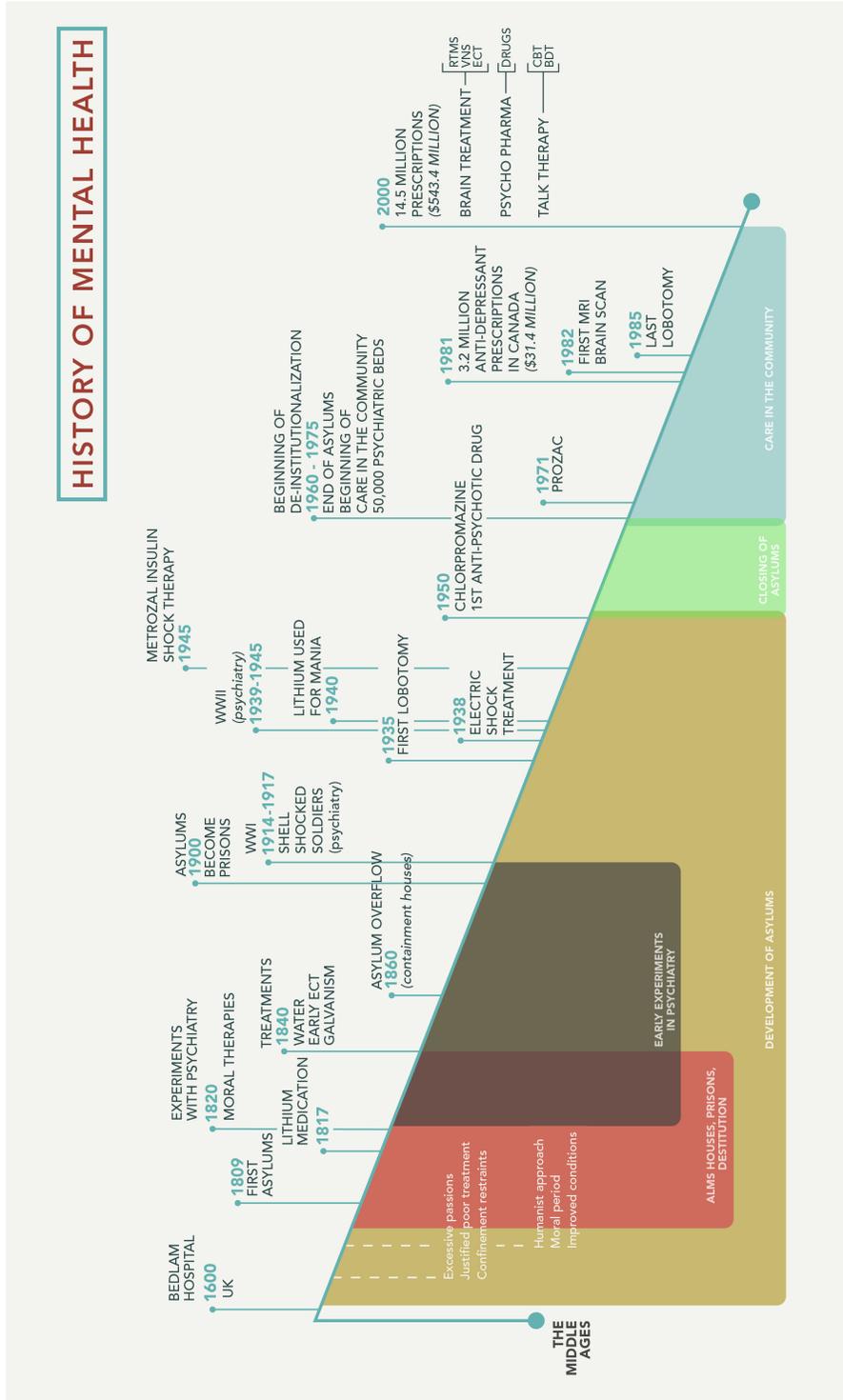


Fig. 7. The Mental Health Service Time line, 1600-2015

The first brain scan was made possible with the development of MRI scanners in the early 1990's and opened up the beginning of a new era of research and discovery. Neuroscience and gene therapy has provided more possibilities that will undoubtedly lead to a better understanding of mental disorders and ultimately better treatments in the future. The prevailing scientific theory for the development of chronic depressive orders, mood disorders and psychosis favors the view that mental health disorders are a complex mix of genetic susceptibility and faulty brain chemistry exacerbated by social determinants of health. This theory aligns with the three main treatments that have been in use since the early half of the twentieth century: drugs, electroconvulsive therapy as a last resort and therapies such as cognitive behavioral therapy and dialectic behavioral therapy used to help patients control their own negative self-talk that can be a major cause in mild depression and anxiety disorders.

INSIGHTS

- Mental health care is a young science, and has only recently entered a new phase of discovery brought about by the use of the MRI scanner
- Mental health care has been dominated by drug therapy for the past 60 years.
- Cognitive behavioral therapy has received little attention from doctors and scientists, as it has not previously had any way of providing evidence-based data to confirm efficacy.
- Care in the community has been an underfunded initiative that has left many people with unsatisfactory levels of care, housing and employment opportunities. (All social determinants of health, without which it is difficult to reintegrate into society in an equitable way.)

6. CULTURAL ATTITUDES TO MENTAL HEALTH

In 2009, the Mental Health Commission of Canada launched “Opening Minds” an initiative to end negative attitudes and discriminatory behaviour associated with mental health problems. The program targeted four groups:

- Health care providers. People report they often experience some of the most deeply felt stigma from front-line health care personnel.
- Media. More than 30% of news stories concerning mental health focus on murder and violent crime.
- Workforce. Many people go untreated for fear of being labeled “unreliable, unproductive and untrustworthy.”

Four years later the MHCC carried out a survey to assess the levels of stigma associated with mental health in Canadian society; the Opening Minds Interim Report of 2013. The survey found that 46 per cent of Canadians still think people use the term mental illness as an excuse for bad behaviour. One in four Canadians are scared of being around those who suffer from serious mental illness. Only half of Canadians would tell friends or coworkers that they have a family member with a mental illness, compared to 72 per cent for a diagnosis of cancer or 68 per cent for diabetes. Most Canadians, (61 per cent), would be unlikely to go to a family doctor who had a mental illness, and 58 per cent would shy away from hiring a lawyer, child-care worker or financial adviser with a mental illness. So there is still a lot of fear and ignorance around mental health. Following these findings, and as part of the holistic reform of mental health care, the Ministry of Health and Long Term Care continues to support several initiatives to combat stigma. Currently, the most high profile campaign is the Bell-Let’s talk initiative, but there are many more initiatives running across Canada. The honourable Michael Kirby, former Chairman of the Board for Mental Health Commission of Canada, founded

“Partners for Mental Health” in 2006, with the sole mandate of fighting stigma for as long as it takes to make a meaningful difference. The Opening Minds initiative rightly targeted the four key areas where stigma exists, but providing high quality evidence to counteract these false beliefs obviously isn’t enough, especially if even professional health care workers continue to treat their patients with disrespect.

6.1. THE MEDICAL PROFESSION

“In a lecture she gave last June, Dr. Heather Stuart spoke about a colleague who had breast cancer treatment and woke up in a hospital room filled with flowers and cards and visitors, thrilled with the support. Sometime later, this woman was hospitalized for depression. She woke up sad and alone in an empty room. The most disturbing part of this story is that her colleague is a psychiatrist and works in a mental health facility. You would think that mental health professionals would be more understanding.”

(Langille, 2014, p.1.Para 7).

After years of anti-stigma campaigns, what is continuing to feed the stigma?

Dr Heather Stuart is professor of Community Health and Epidemiology in the Faculty of Health Sciences, Queen’s University and currently holds the Anti-Stigma Research Chair for the Bell-Let’s Talk Campaign. Stuart’s many research papers into the root causes of mental health stigma has revealed the following findings:

There is endemic hierarchical stigma within the medical profession against working in the psychiatric discipline. Medical students often report hearing disparaging remarks about psychiatrists made by teachers in medical school. The perception that “psychiatrists must be crazy because they deal with crazy people all day” is a common theme. Within the medical community, the status of psychiatrists is described as low. There is an evident lack of respect and a stereotyping of psychiatrists as fuzzy

thinkers who are ineffective and incomprehensible. These institutionalised views have an impact on the medical student's specialization choices and their long-term attitudes towards psychiatry. Stereotypes such as specializing in psychiatry being a "waste of time" and mental health not being "real medicine" are still widespread amongst families of medical students. There is also the fact that psychiatry has a lower earning potential than other specialisations and the lack of government funding for mental health deters students from working in the mental health sector. Psychiatry is also viewed as being an imprecise and ineffective discipline and as being too "slow moving" for medical students' career aspirations. Medical professionals in other specializations often express the argument that the classification of mental disorders in the DSM is not validated by biological criteria, reinforcing the perception that psychiatry is not "real medicine."

Some nursing staff in emergency departments and intensive care units behaviour is openly unsympathetic and demeaning towards people with mental health issues. These nurses stated that dealing with mental health issues was not their job, and they viewed people who have self-harmed or are threatening suicide as wasting resources meant for saving lives. Many health professionals stated that they didn't believe their attitudes and behaviours were harmful to patients. Examples of behaviours that have been documented in health care settings include diagnostic overshadowing (wrongly attributing unrelated physical symptoms to a mental illness), prognostic negativity (pessimism about chances of recovery), and marginalization (unwillingness to treat psychiatric patients in a medical setting.) This often results in psychotic patients being ignored in emergency rooms for several more hours than is necessary, as a covert form of punishment. Derogatory labels are still very much part of the medical environment too; psycho, crazy and frequent flyer are names often used in emergency rooms, because they define, stigmatize and most importantly dehumanize these patients.

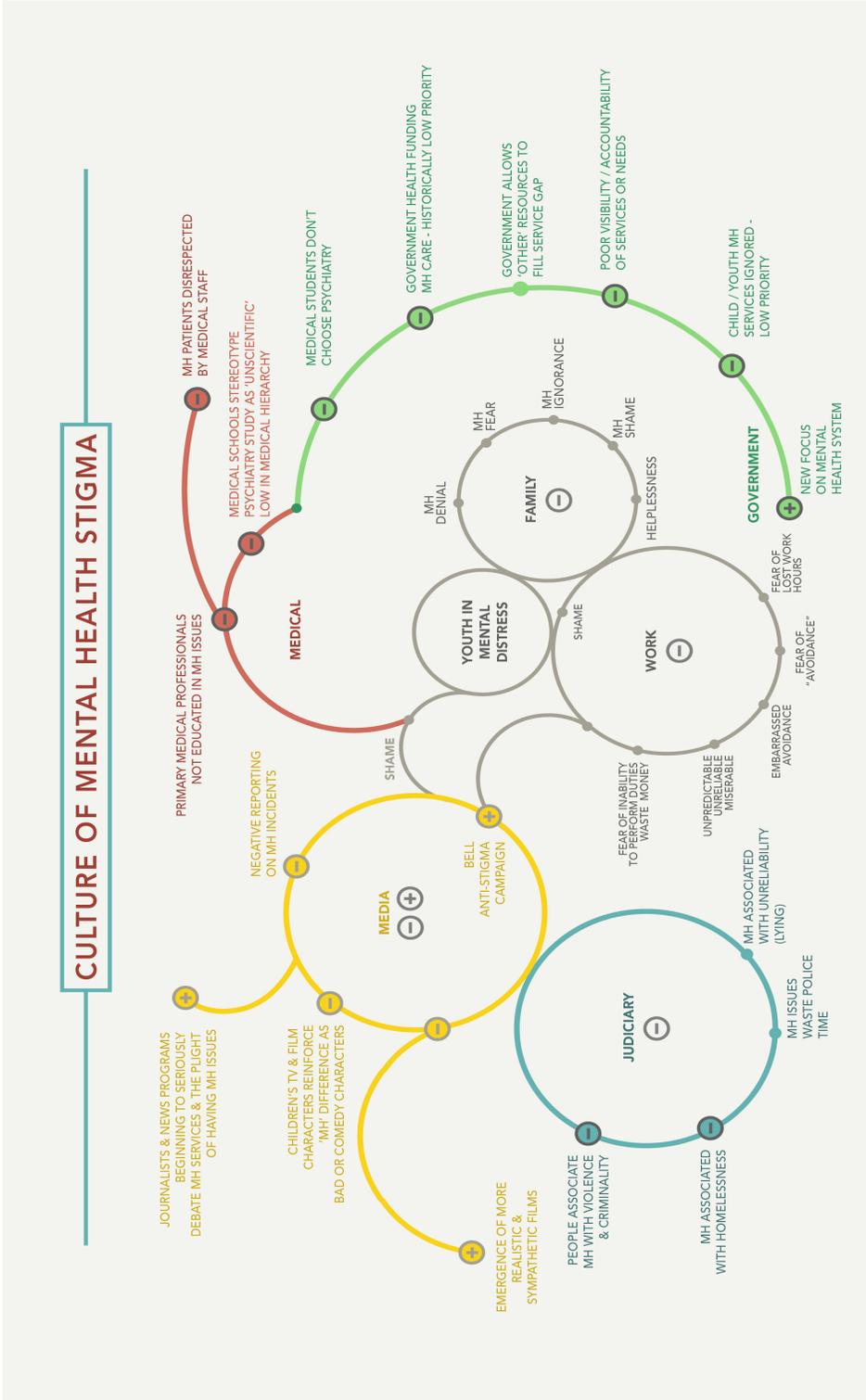


Fig. 8. Context map showing cultural effects of stigma

6.2. THE MEDIA

Studies prepared over the past 25 years have consistently shown that both entertainment and news media have provided overwhelmingly dramatic and distorted images of mental illness that emphasizes dangerousness, criminality and unpredictability. Most importantly, Stuart believes they have also modeled negative reactions to the mentally ill, including fear, rejection, derision and ridicule, which have modeled a standard of behaviour for society to emulate.

In her paper, "Media Portrayal Of Mental Illness And Its Treatments " 2014, Stuart notes that mentally ill characters depicted on television and in film are portrayed as significantly more violent than real people with mental illness. Consider the not exhaustive list of films from Psycho in 1960, to The Shining (1980), Taxi Driver (1976), Se7en (1995), Donnie Darko (2001), Natural Born Killers (1994) and The Silence of the Lambs (1991) to name but a few. Hollywood films such as The Snake Pit and One Flew Over the Cuckoo's Nest dramatized the inhuman elements of psychiatric treatments, the effects of which still resonate with the public today. A 2004 study, "Mental Illness in Disney Animated Films" examined the prevalence of mental illness references and character stereotypes in Disney animated films, finding that 85% of them referenced mental illness and 21% of all principle characters were referred to as mentally ill, at some point in the dialogue. These characters were objects of fear, derision or amusement, and verbal references were used to alienate the character or illustrate their inferior status in the narrative. Surprisingly this story telling formula is also echoed in many children's television programs. Although it can be argued that children's entertainment media exaggerates and caricatures many behaviours for theatrical purposes this is an important issue because media socialization begins even before children have the intellectual capacity to distinguish fact from fiction. Television viewing occupies more of a child's time than any other structured activity, including school. By the time an American child begins school they will have spent the equivalent of 3 school years watching television. This means they will have been exposed

to media coverage of murders committed by people with mental illness, and joined in with the family-approved structured ridicule and alienation of thousands of television characters vilified for being mentally different. Each new generation of pre-school children will learn to accept the societal expectation that ridiculing and alienating the mentally ill is acceptable behaviour. They will also understand exactly how others will treat them, should they ever become mentally ill.

On a more positive note, there have been a few notable films that take a more balanced and sympathetic view of mental disorders. The 1988 film “Rain Man”, was loosely based on the life of Kim Peek, a man suffering from savant syndrome. Then came the 2001 film “A Beautiful Mind” based on the life of John Forbes Nash, an extraordinarily talented mathematician, who also happened to suffer from schizophrenia. These films celebrate the extraordinary, focusing on rare and impressive skills, in which a disorder can seem to provide a person with super human talents. One could argue that celebrating these rare cases has nothing to do with accepting the reality of mental disorders. However, more recently films are emerging that portray the ordinary truth about mental disorders in a compassionate and normalizing way. In 2014, the film “Still Alice” documented life with dementia. The age of the boomer generation and their fear of mental incapacity may have had some influence on this, but there are also films that represent mental health issues with a younger demographic. In 2012, “Silver Linings Playbook” dealt with bipolar disorder and the recently launched film “Cake” revolves around the story of living with depression and suicidal thoughts. These films cross the spectrum of humour, sadness and drama, but are based in the reality of living with these disorders. This may be one of the first weak signals that society is becoming more understanding and accepting of mental disorders.

News media is amongst the most frequently cited source of mental health information. This provides them with the perfect opportunity to dispel inaccurate information or conversely reinforce them with overt stereotyping. But dramatic stories sell; increasing readership, viewer numbers and ratings. The results of monitoring reports show that news representations of mental illness echo those found in the entertainment media, being mostly inaccurate and negative. In general reporters emphasize the violent, delusional and irrational behaviours and sensationalize the story content in order to attract attention. This isn't always the case, but the more vivid, anxiety-provoking stories are the most memorable. Consequently they reinforce the fictional portrayals of mental illness and contribute to the misinformation that increases stigma. A sensational story will receive the most media exposure, appearing in print, repeatedly running on television, radio and cyberspace, giving the mistaken impression that violence among the mentally ill is a frequently occurring event, consequently the public's fear and rejection of the mentally ill increases. Recovery stories are also much less newsworthy, and so the public rarely experiences balancing information. Even though empirical studies show that the majority of people with mental illness never commit a violent act, the public significantly over-estimates the frequency of violence committed by people with mental disorders and they greatly exaggerate their own risk. Under these circumstances, it's hardly surprising that people in need of treatment refuse to acknowledge their need and often suffer for several years before seeking help. In the UK, 75% of mental health patients polled within the mental health services reported that media coverage of mental health was unfair, negative and unbalanced. Half of them indicated that the coverage had a negative effect on their health. One third said that their family and friends acted differently towards them when there was negative media coverage and a third said that negative media coverage had put them off applying for jobs or volunteering. One quarter said they had experienced hostility from neighbors and local communities because of negative media reports and consequently they limited their social contacts in an effort to avoid further stigma and

discrimination. Media coverage has profound implications for people who have mental illness, not only in terms of their own self-image or the fear they have in admitting to needing help, but also the level of fear, intolerance and hostility generated in the community. There is no doubt that the media are instrumental in perpetuating stigma and discrimination towards people with mental illness.

6.3. YOUTH

Many studies have identified stigma as a significant barrier to seeking help. For young people experiencing their first episodes of mental distress, both the young person and their family members often experience the stigma of seeking mental health services. While families may experience stigma, they may also be responsible for further stigmatizing their child. Parental disapproval and perceived stigma have been found to act as barriers to willingness to use mental health services. Concern about a family members response has been reported by teens as the most significant barrier to seeking help. Data from the Canadian Youth Mental Health & Illness Survey (Davidson & Manion, 1996) indicate that 63 percent of youth point to embarrassment, fear, peer pressure, and stigma as most likely to keep a person their age from getting help. Moreover, 38 percent of Canadians would be embarrassed to admit that their children suffer from anxiety or depression (Kinark Child and Family Services, 2007). Given this self-stigma and resounding fear of embarrassment, it is little wonder that stigma presents such a significant barrier.

6.4. THE WORKPLACE

Past research has shown that most people with mild to serious mental disorders are willing and able to work. Yet, their unemployment rates remain high. For example, large-scale population surveys have consistently estimated the unemployment rate among people with mental disorders to be three to five times higher than their nondisabled counterparts. Sixty-one percent of working age adults

with mental health disabilities are outside of the labour force, compared with only 20% of working-age adults in the general population. Employment rates also vary by diagnostic group from 40 to 60% for people reporting a major depressive disorder to 20-35% for those reporting an anxiety disorder.

Unemployment rates for people with serious and persistent psychiatric disabilities (such as schizophrenia) are the highest, typically 80-90%. Whilst the treatment of mental illness hasn't focused on workplace stigma before, it is now apparent that as work is a major determinant in good mental health, workplace stigma has a major destabilising effect on long-term recovery. Stigmatizing views held by employers make it difficult for people with mental disabilities to enter the competitive workforce. Surveys show that employers are more likely to hire someone with a physical disability, and over half of the employers questioned said they would be reluctant to hire someone with a psychiatric history or who was currently undergoing treatment for depression. Approximately 70% were reluctant to hire someone with a history of substance abuse or someone currently taking antipsychotic medication and half said they would rarely employ someone with a psychiatric disability.

Stigma reinforces the negative cycle of events that many people with mental illness experience every day, from being unable to secure employment or find a landlord willing to rent an apartment to someone with a mental health problem.

NEGATIVE CYCLES WHEN RESOURCES ARE LIMITED

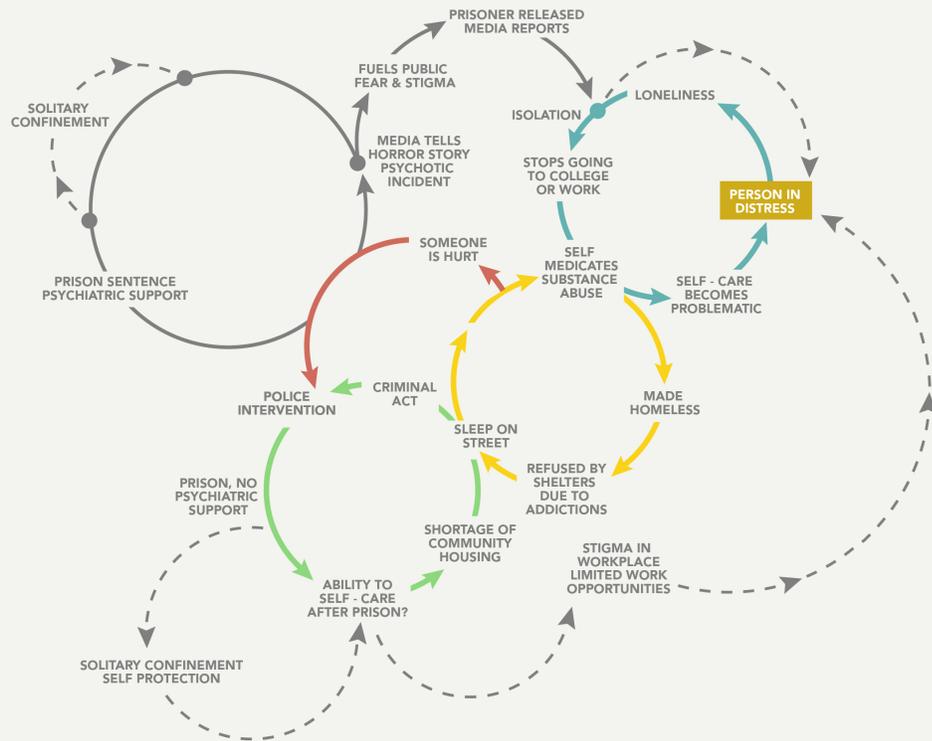


Fig. 9. Context map showing repercussions of stigma

6.5. THE LIVED EXPERIENCE OF STIGMA BY JOWITA BYDLOWSKA

This is an autobiographical writing-describing the experience of self- stigma.

“I’m writing this because I don’t want to die.

If you don’t get help, your shame might kill you. Mental-health illness is deadlier than a car crash.

Lamictal. This is one way to describe my shame. It’s also the name of the medication I take but not because I get seizures — it’s an anticonvulsant — but because it stabilizes my moods. My moods are more balanced now but the shame remains. In fact, there’s even a bit of shame as I write this — it happens sometimes when I expose my madness publicly. Less and less but the doubt is there; a scolding Eastern European-accented voice (mom?) in my head: Let somebody else embarrass herself by writing about her neuroses. You’re not Lena Dunham. I don’t hear voices in my head. I’d like to emphasize this so that you don’t think that I have schizophrenia — which is the worst Crazy, right?

It is not; there’s no such thing as “the worst” — if I was writing about cancer I would feel no need to assure you it is not that kind of cancer. But the thing about shame is that it can stigmatize you to yourself. (Incidentally, is there a type of cancer used as an insult the way it’s possible to insult with something like “schizo?” I’m not saying it would be easier to have cancer but cancer is a more socially “acceptable” illness to have. Also, for the record, I’d pick my Crazy over cancer any day.) “Lamictal. It’s for epilepsy,” I used to tell pharmacists. Not that they asked. I just didn’t want them to picture me walking in my nightgown, in the middle of the street, in the middle of the night, with a backpack full of shoplifted troll dolls. I’ve never done that but that’s the sort of image I conjure when I think of someone who’s impulsive, manic, depressive.

To me, admitting that I have bipolar II (and alcoholism) is like saying I am capable of that kind of exploit. So, yes, maybe I should let somebody else embarrass herself in public. Maybe I’m embarrassing my family. Not a huge surprise: According to CAMH, only 50 per cent of Canadians would disclose a family member has mental illness (sorry, mom!), compared to 72 per cent who would discuss a diagnosis of cancer and 68 per cent who would talk about a family member having diabetes. Continuing: 55 per cent wouldn’t marry a Crazy and 42 per cent wouldn’t befriend one. Then there’s the 39 per cent who wouldn’t disclose mental-health issues to their employer. The final blow: 46 per cent of Canadians think people use the term mental illness as an excuse for bad behaviour. And these sorts of numbers are precisely what keeps people away from getting help and why they feel guilty about needing help. Once a

year, we've got this one special, special day called End the Stigma: Bell Let's talk when we talk about mental health on social media. A few hashtags about mental health issues and then it's another day and the shame is still there. "Stigma" has become this trendy, empty word — what exactly are we doing about it? Personally, I'm just white-knuckling through it. "Almost one half (49 per cent) of those who feel they have suffered from depression or anxiety have never gone to see a doctor about this problem," according to CAMH.

"Therapy can actually help one learn how to live with their existing shame and guilt in a healthier way. Do shame and guilt ever really go away? Not sure, but with therapy it can get easier to tolerate them and not have them become a source to cause one to react inwardly or outwardly in a negative way. In terms of overriding shame or guilt, simple answer: Better stomaching that discomfort than not using the mental-health services," says Naomi Gaskin, a Toronto-based psychotherapist. When I press "9" in the elevator at the hospital (Psychiatric Unit) to see my therapist, I'm still stomaching it. My therapist says to try to see myself as a friend — would I not want my friend to feel better? I would. I'm not my own friend yet. For now, I press "9" because if I don't, I will die. Dramatic? Sure. But it helps to be dramatic. Instead of coyly hashtagging once a year about your anxiety, addiction, depression...think about it this way: If you don't get help, your shame might kill you. Mental-health illness is deadlier than a car crash: On the average there are 2,500 motor-vehicle-related deaths a year, but almost 4,000 Canadians die by suicide, furthermore, about 230,000 Ontarians report having seriously contemplated suicide last year. Among Ontarians aged 25 to 34, and one out of every eight deaths is related to opioid use. There are 6,700 deaths each year resulting from alcohol, with statistics like that- I don't want to die. I press 9." (Bydlowska, 2015).

INSIGHTS

- Stigma in the medical profession: Medical schools are attempting to redress traditional anti-psychiatry views, but it will take several years to change the tide of biased behaviour already out in the working medical profession.
- Media: Being exposed to media from an early age subliminally defines our social norms, and as such we absorb the culturally defined view of the mentally ill before we are old enough to

question. Newspapers, movies and television programs provide a mixed representation of the mentally ill, but the majority depiction is that of the “outsider” or dangerous and unpredictable personality.

- Youth: Youth are concerned by the response they would receive from friends and peers if they were to have a mental illness, but they are also very concerned at the shame and worry they would bring upon their parents. This is described as self-stigma, feeling responsible and embarrassed at the shame brought upon the family by their condition.
- Work: despite many long-term anti-stigma campaigns, there is still a lot of unreported discrimination in the work place, against people with mental health issues. The ability to work is one of the main social determinants of health, both economically as well as psychologically, and a core factor in successful long-term recovery.
- It is no longer acceptable to openly stigmatize the mentally ill, but evidence of continuing bias exists.

7. THE ECO-SYSTEM OF MENTAL HEALTH TODAY

Dr Allen Francis suggests there are two epidemics facing modern psychiatry: the under treatment of the truly ill and the overtreatment of the basically well.

7.1. THE DSM AND DIAGNOSTIC INFLATION

All medical disorders are categorized in the Diagnostic and Statistical Manual for Mental Disorders (DSM). First published in North America in 1952, and now in its fifth iteration, it has standardized the definitions and criteria for diagnosing mental health disorders. It is the professional benchmark for today’s clinicians, researchers, pharmaceutical companies, drug

regulation bodies, legal system and policy makers. Despite the need for clearly defined definitions of mental disorders, critics argue that these diagnoses are the result of unscientific and subjective views created from a consensus of clinical discussions, and as such are not evidence-based or conclusive. This was recently illustrated when the DSM committee debated making “grief” a mental disorder, if it was experienced persistently for more than a 14-day period. Fortunately, common sense prevailed, and this proposal was finally rejected by the committee, on the basis that every human being who has ever lost a loved-one normally experiences extreme grief for more than 14-days, and this does not make them all mentally ill. Francis, Chairman of the DSM Committee has been vocal on the difficulties of maintaining an evidence-based approach to the development of the DSM, writing several publications on the subject, including his most recent book, “Saving normal: An insider's revolt against out-of-control psychiatric diagnosis, DSM-5, Big Pharma, and the medicalization of ordinary life.” Francis describes the issues concerning the validity and reliability of the diagnostic categories, particularly around the reliance on superficial symptoms, the artificially created dividing lines between categories and the final decision as to what constitutes “normal” behaviour within a cultural basis. The most recent edition, the DSM V has been particularly contentious given the recent diagnostic inflation that now follows the inclusion of new disorders. It has been argued that the sudden increases in patients with new disorders (over 40% in the first year of any new disorder being written into the DSM) could not possibly represent a true picture, but is the result of labeling a disorder and allowing pharmaceutical companies to advertise new medications to doctors and directly to patients specifically for the new disorder. There is some evidence to confirm this “marketing” of illnesses. Francis describes an example of just such a case that revolved around the definition of ADD.

Canadian statistics showed that the strongest predictor of a child being diagnosed with ADD was their birth date. The youngest children in a class of 4 year olds were obviously less mature than the elder

children, who were almost a full twelve months older. Consequently, the younger children were less developmentally mature, and many of them were diagnosed as suffering from ADD. This is an illustration of the adverse effects of allowing a direct link for pharmaceutical companies to promote drugs to match new disorders and promote medications directly to the public; a practice described by Robert Weiss, a behavioral expert, as the medicalization of life's difficulties.

The psychiatric profession is split on the advantages or disadvantages of categorizing every emotional challenge as a mental disorder that will inevitably allow the pharmaceutical doors to offer a balancing drug treatment, and yet without acknowledgement of a defined condition, treatment is unlikely. The DSM V has now recognized caffeine addiction but not yet chronic loneliness, but following the DSM guidelines, chronic loneliness would most definitely fit within the category of a mental disorder. The state of chronic loneliness is mentioned as a symptom of "avoidant personality disorder." This is a newly labeled disorder and is highly contentious. It describes the symptoms of restraint in personal relationships; the avoidance of social settings, displaying cool responses with others and it also refers to isolation and loneliness. Emily White argues that the introduction of chronic loneliness as a mental disorder and the withdrawal of "avoidant personality disorder" would make much more sense, and provide loneliness sufferers with the label and visibility required to have their distress taken seriously.

7.2. THE DRUG DEBATE

Has the pharmaceutical companies' constant "over-selling" of the benefits of antidepressant medication to GP's and directly to the general public increased GP's reliance on prescribing wonder drugs such as Prozac? It has certainly successfully promulgated the false conception that antidepressant medication is side effect free and 100% effective not only in alleviating symptoms of depression, but in producing feelings of happiness and contentment. Pharmaceutical companies invest heavily in the maxim that mental

health can only be cured with chemical intervention, and it is true that some forms of severe psychotic mental illnesses do only react to drug medication (Francis, 2013).

Undoubtedly antipsychotic and antidepressant medication has revolutionized the way we treat mental illness. We should all remember that prior to these medications most patients were sentenced to a life of extreme misery and incarceration. However Dr Zindel Segal from CAMH reminds us that in cases of depression, only 30% of sufferers experience satisfactory long-term relief from their symptoms through drug medication. Another 30% spend months if not years trying different cocktails of these drugs and generally only receive episodic relief from their symptoms. Most distressing of all is that another 30% of sufferers experience no improvement at all with the current medications. With few chemical alternatives, the SSRI and SNRI antidepressant drugs have become so popularized in our culture, they are now prescribed widely and often for all age groups and for much longer durations than originally recommended.

“I listen to a lot of medicalized kids...kids who need help, but I don't think they all need labels and prescriptions.”

(Interviewee 3: Helpline counselor, Toronto. 2015)

The discussion around drug therapy is often a contentious one, for all of the above reasons, but also because in many cases, therapy can be equally as successful in relieving symptoms of anxiety and depression. This has led to a polarization of opinions and a sometimes-valid fear of over medication. Specialists agree that the successful management of any kind of mood disorder is more likely when the treatments are specifically matched to the drivers and causes of that condition, and the everyday stressors in that person's environment. Often these therapies have to follow medication. Initially a person may be in too much mental distress or shock to be able to embark on therapy that requires reflective

analysis and constructive development of well being plans until their immediate stress levels have been lowered. Conversely therapy can also be a much needed management tool to support living with the side effects of drugs. Medical staff and pharmaceutical companies invariably describe side effects as “troublesome” or causing “some measure of discomfort” to some patients. The reality can be very different. Symptoms include nausea, increased appetite and weight gain, insomnia, impotence, fatigue, drowsiness, blurred vision, dry mouth, constipation, dizziness, irritability and anxiety, and in the case of adolescents there may be an increase in suicidal thoughts within the first few months of medication. These are not insignificant symptoms to manage while trying to continue to carry out school or university studies and symptoms of sexual dysfunction can be devastating to a young person entering the early stages of sexual awareness. It’s little wonder that patients hope for the day when they might be medication free. Medical staff are often habituated to the list of side effects or alternatively they fail to consider the reality of living with them, and consequently can present an unsympathetic attitude. So the side effects of medication are not insubstantial. Segal’s research into cognitive behavioral therapy and mindfulness confirms that wellbeing management skills are key therapies in learning to manage one’s own illness, especially for teenagers and young adults. Diagnosis of these conditions can be shocking and disorientating for anyone, but particularly so for a vulnerable adolescent.

7.3. ELECTROCONVULSIVE THERAPY AND DEPRESSION

Electroconvulsive therapy was first introduced in 1938, but didn’t become widely used until the late 1950’s. It is still used today, but is usually reserved for the patients who have experienced no relief from antidepressant medications, having exhausted all other options it is now a treatment of last resort. It is still unclear exactly how it works, but it undoubtedly brings relief to chronic treatment resistant depression. The past few years have seen several developments in this area, from deep brain stimulation to transcranial magnetic stimulation. Both treatments stimulate the nerve cells in the area of the brain involved in

mood control in a lighter more controlled manner than electroconvulsive treatment.

7.4. THERAPIES, CBT AND DBT

Statistics show that mild-moderate levels of depression, mood disorders and anxiety, (which account for 80% of all mental illness) are best treated with a combination of medication and therapies and sometimes only therapies.

“When our son was 24, he killed himself. Just maybe, if he had gotten proper care and a psychiatrist who was truly interested in what was bothering him back then, maybe he would be with us today. —Mary”

(Out of the Shadows, 2006. p.47. Para1).

By therapy we mean talking therapies such as cognitive behavioral therapy or behavioral dialectic therapies. This is not just active listening or talking to a sympathetic friend, but structured analysis of negative thinking, approaches to problem solving and exploration of coping strategies. Why is therapy so important? It has long been acknowledged and accepted by the medical profession that access to therapeutic treatments in Canada is inadequate, but it is only recently that the true value of therapy has become widely understood. Whilst medication is also usually required, psychotherapy has been shown to be more effective than medication as a measure in preventing future relapses. Therapy works by engaging the brain, requiring active participation and it very specifically and practically targets the social and stress related factors that contribute to poor mental health. Brain scans have confirmed improved brain activity in the amygdala and prefrontal cortex. Antidepressants act on the amygdala to prevent anxiety inducing chemical production, but they don't work on the prefrontal cortex. The prefrontal cortex controls our self-regulating behaviour and

choices. It is believed that is why people who have received cognitive behavioral therapy have less instances of relapsing into depression than people on medication without therapy (Seminowisz, 2013).

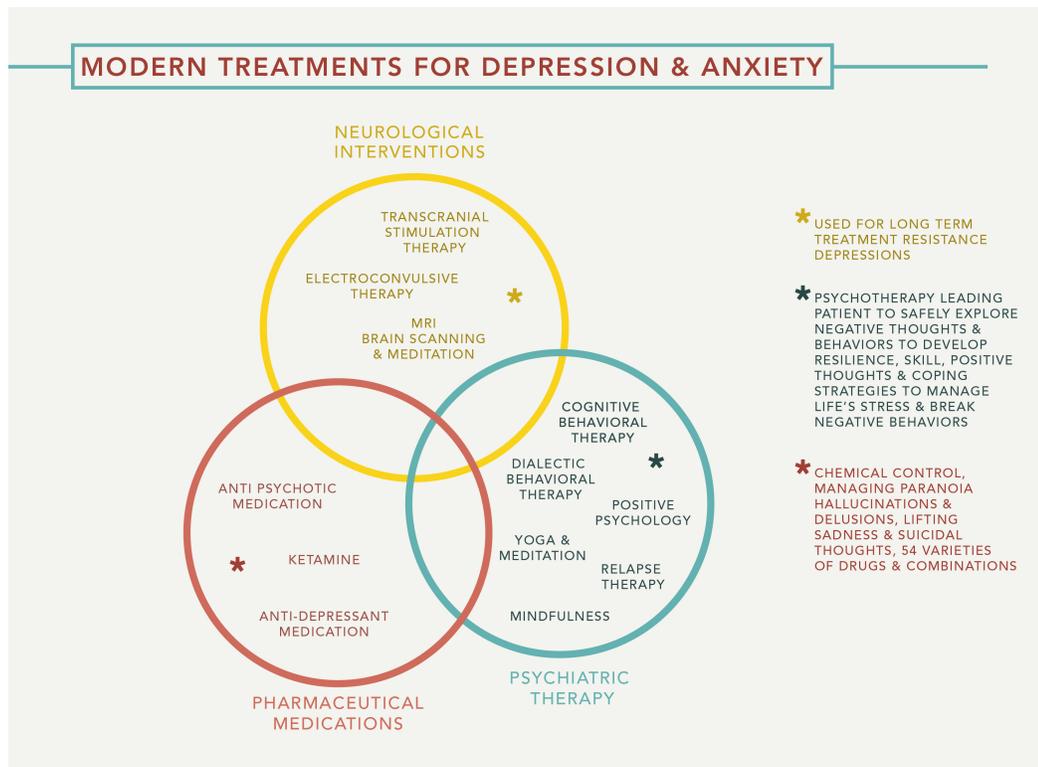


Fig. 10. Modern treatments for depression and anxiety

7.5. PREVENTION AND GOOD MENTAL HEALTH

There is surprisingly little work being generated on the prevention of poor mental health, or rather the strengthening of positive mental health. Whilst all the previous data related to loneliness and depression shows us that a predisposition for mental illness can be a complex mixture of heredity,

genetics, abnormal brain chemistry, exacerbated by external factors such as neglect, physical and mental abuse, trauma, poor role models, inadequate housing, substance abuse and much more, there is little work being done to establish therapies that might strengthen one's abilities to cope. Psychologists at the Duckworth Lab at Penn University in Philadelphia are currently researching a psychological attribute that seems to be fundamental in psychological resiliency; "grit." They define grit as providing the ability to bounce back and survive through adversity. The Duckworth Lab is currently working in collaboration with Chief Psychologist Dr Martin Seligman, who has been researching and pioneering the concept of emotional resiliency and positive psychology for more than twenty years. Although the term resiliency is widely used in the domain of youth mental health care in Canada, there is no access to any specific training or therapy for young people showing the early signs of distress.

Insights

- DSM: Labeling disorders legitimizes the condition and makes some form of treatment more likely, but it has also become a marketing tool for pharmaceutical companies.
- Drugs: Western culture has grown to expect a pill to be provided as the solution to any ailment.
- Long term use of drugs: Many patients are being left on antidepressants for much longer than was originally recommended.
- Alternative therapies and access to them is very limited
- Therapy is an essential part of any treatment and gives the patient a sense of control and choice.

- Cognitive behavioral therapies are now receiving more attention as their efficacy is being verified through the use of MRI scanning.
- Prevention and resiliency training has not yet been introduced into the mental health care services in Canada.

8. MAPPING THE MENTAL HEALTH SYSTEM IN CANADA

“The status quo is not an option.”

M.J.L. Kirby

(Canada, Parliament Senate. 2006, p.42)

Whilst the federal government is ultimately responsible for Canada’s mental health service, the organization and delivery of care falls under provincial and territorial governments. This means that although pan-Canadian initiatives could help all jurisdictions to improve their mental health services, cross-jurisdictional collaboration is rare. Herein, lies the biggest resistance to change within the system, and the greatest challenge to improving services. It also explains why, despite the fact that several mental health and addictions stakeholders have repeatedly recommended a national strategy for mental health and addictions, the government has been historically slow to act in this area.

Exposed by the World Health Organization in 2001 as the only G8 country without a mental health strategy, it took eight more years and six major reports to be presented to Parliament, the creation of a Minister’s advisory group and the passage of a Private Member’s Motion in Parliament, before there was an appetite for confronting the possibility of making real change in the system. Finally in

2006, the government authorized the Standing Senate Committee on Social Affairs, Science and Technology to examine and report exclusively on the state of the mental health care system in Canada. The research took more than two years and over 2000 stakeholders were interviewed, spanning every province and territory and every type of stakeholder, including many with the lived experience of mental illness. The resulting report, “Out of the Shadows At Last,” dramatically exposed the reality of navigating the system and the resulting anger, confusion and shame felt by patients and their families. Many direct quotes from interviews were used to maintain the patient’s position as the central focus of the report.

“One sarcastic nurse said to us, ‘Well, what exactly do you expect of us?’ and I said, ‘I would like to find a cognitive behavioral therapist for Danielle and a psychiatrist who could work different medications until he found the right one for her severe suicidal impulses five days every month.’ The nurse looked at me and said, ‘you are being absolutely unrealistic. “

(The Standing Senate Committee of Social Affairs, Science & Technology, 2006. p.42. Para 7).

This is indicative of two cultural factors working within the system:

- 1.) The medical professional’s resignation to the persistent lack of adequate medical support, and
- 2.) An indifference to mental health suffering within the primary medical health staff.

In 2010, the “Select Committee’s Report on Mental Health and Addictions” was presented to Parliament, and it left little doubt as to the inadequacies of the system:

“One of the main problems in Ontario’s mental health and addictions system is that there is, in fact, no coherent system. Mental health and addictions services are funded or provided by at least 10 different ministries. Community care is

delivered by 440 children's mental health agencies, 330 community mental health agencies, 150 substance abuse treatment agencies, and approximately 50 problem gambling centres. Many people simply fall through the cracks, or give up in frustration because of the complexity of the system. The Select Committee was struck by the observation that no one person or organization is responsible for connecting these various parts, or "breaking down the silos" as we so often heard. There is also no single organization responsible for ensuring that mental health and addictions services and supports are delivered consistently and comprehensively across Ontario."

(The Select Committee of mental Health and Addictions, 2010. p.13 Para 1)

Unlike child welfare and the youth justice system, children and youth's mental health services are not mandated by legislation. This lack of mandate has resulted in the mishmash of uncoordinated services described above, with no comprehensive plan to provide children's mental health services across the province. The majority of children's mental health services are funded by the Ministry of Child and Youth Services (MCYS), a handful of hospital-based services fall under the Ministry of Health and Long Term care (MHLTC) and education-based services fall under the ministry of Education. Historically these services have evolved as a result of work done by independent transfer payment agencies attempting to meet their own local needs, filling the gap due to lack of services in their areas. This piecemeal approach has resulted in the disparities that now exist and explains why services have not been planned to deliver the most appropriate service to the most in need. Data to evaluate what children and youth actually need in terms of mental health care has never been captured by these groups, and any data they do have has not been shared. The important fact to note here is that the Ministry of Children and Youth Services has always supported the (not mandatory) mandate of

the Child and Family Services Act, that states the level of services provided should be based only on available resources- not on need. The Auditor General of Ontario has also confirmed this to be the case. In 2011, as a direct and public response to this information, the Office of the Provincial Advocate for Children and Youth publicly made the following statement:

“... the current availability of children and youth mental health services is dependent on arbitrary and artificial criteria, not related to the real needs of youth and their families. Consequently these people are being left to struggle, while waiting lists grow and demand increases.”

(Office of Provincial Advocate for Children and Youth, 2011.p.4. Para 5).

So it's hardly surprising that accessing help for young people is difficult. Local GP's have an average of 7 minutes consultation time, within which time they will make the initial diagnosis that a patient is suffering from a mental health disorder. They will then usually prescribe medication to begin alleviating any immediate distress. Then they will turn to their own list of local agencies and psychiatrists to refer the patient, but when there are long waiting lists for every psychiatrist on their lists, parents are left to find alternatives themselves. This means telephoning a variety of agencies and navigating their way through repeated screening and intake processes for each agency. They are often told that the needs of their child exceed or do not fit with the agencies' program mandate and they are then referred onto another service, to begin the process again. There is also a considerable variation in programs between each agency, and waiting times can be anything from 4 days to 4 years. Eventually a parent may find an agency capable of meeting their child's needs, and then they must join the waiting list. In very resource poor areas, parents are advised to put their child in any available therapy, whether or not it addresses their specific needs. It is estimated that this

results in approximately 20% of children receiving the wrong support treatments (Out of the Shadows at Last, 2006).

“Trying to get help is a frustrating, lonely journey. Most people make many, many calls in an effort to get help. When you finally find something that looks hopeful, you get on a ten month waiting list.”

(Interviewee 4, Toronto, 2015)

In 2012, Canada’s first mental health strategy was approved: “Changing Directions, Changing Lives.” Described as a blueprint for change, it is a ten-year strategy that is now in its’ third year of implementation. In order to implement the systemic changes required, an umbrella organisation: Canada’s Mental Health and Addictions Ontario (CMHAO) was created. This body would be responsible for designing, managing, and co-ordinating the mental health and addictions system, and ensure that programs and services would be realigned consistently and comprehensively across Ontario. Finally, all mental health and addictions services for all regions and all provinces and all ages would be consolidated in the Ministry of Health and Long Term Care (MHLTC). A budget of \$150 million dollars was allocated to the plan.

‘The best way to understand the system is to follow the money’

(Interviewee 7, Toronto, 2015).

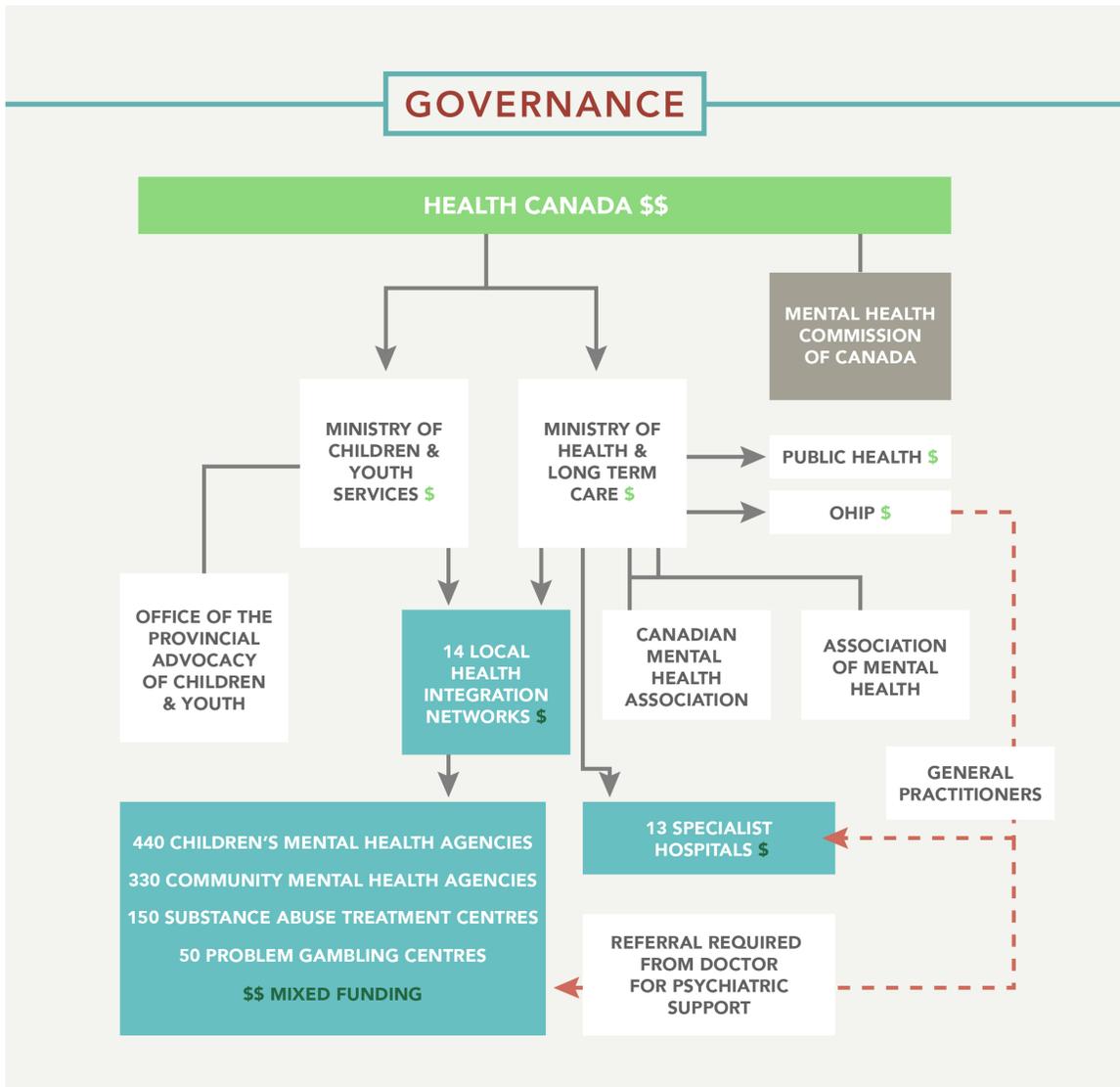


Fig 11. The governance structure of mental health in Canada.
 (Turquoise represents provincial- Ontario)

The report also recognised the social determinants of health and the need to integrate policies and practices of multiple government departments. Acknowledging the impact of employment, justice, corrections, social services and housing on people's mental health and their role in determining outcomes. Social determinants of mental health can be more important than health care or lifestyle choices in influencing health outcomes (Mikkonen and Raphael, 2010). Amongst the 118 recommendations for change, the report outlined several cross-ministry initiatives to address the high levels of imprisonment and homelessness amongst the mentally ill. Consequently a further \$110 million was provided to tackle the problems of homelessness amongst the mentally ill. The investment figures sound high, but in each sector the funds are really only enough to begin this process of change.

Nevertheless, to date, this is the most ambitious mental health change program Canada has embarked upon since the eradication of the mental hospitals and asylums in the 1980's. In order to succeed it requires structural changes within the system that may have serious implications for many individual organisations. The 14 government ministries, commissions, senates, and councils are now aligned behind the strategy ensuring that budgets and strategic objectives reflect the required changes and cascade into the associations, hospitals, agencies and service providers responsible for delivering mental health services. One of the government's major pushes is for "right care, right time, right place," which will be delivered through greater service collaboration within the system. In an interview with TVO in December 2014, Susan Pigott, Head of CMHAO admitted:

“..this one is really heavy lifting...the mystery is why this is proving to be so difficult to achieve.”

Within the development of the strategy it became apparent that mental health services for children and youth was the most overlooked part of the mental health services and the transitional age group or emerging adults were the most forgotten group; falling between the two completely separate services provided for children and adults. This is also the age group, where preventative action, swift first crisis intervention and timely treatment might enable a quicker recovery and prevent them from sinking deeper into mental illness and remaining in the system unnecessarily.

Approximately 6,000 kids are now waiting for treatment and this number will rise to 12,000 by 2016 (CMHO, 2015). Waiting list times vary from 6 months to 24 months depending on needs and neighbourhood. To this end, the Ministry has provided \$138 million of funding over the next three years, to help community service agencies increase access to youth services. Whilst this is a valuable investment, it will take \$30 million a year to reach an additional 7,000 children each year.

“When you face the reality that there is basically no treatment that you can find for your child, it just becomes totally unbearable.”

(Interviewee One, Toronto. 2015)

An experience map and several journey maps were pieced together from a synthesis of the primary and secondary data, enriched by the quotes from the various interviews. This revealed the inadequacies of the system and the negative reinforcing loops that the families and youth repeatedly cycled through within the system.

“Lack of psychiatric support has been a problem for as long as I’ve been a social worker - over 20 years!”

(Interviewee 8, Toronto. 2015)

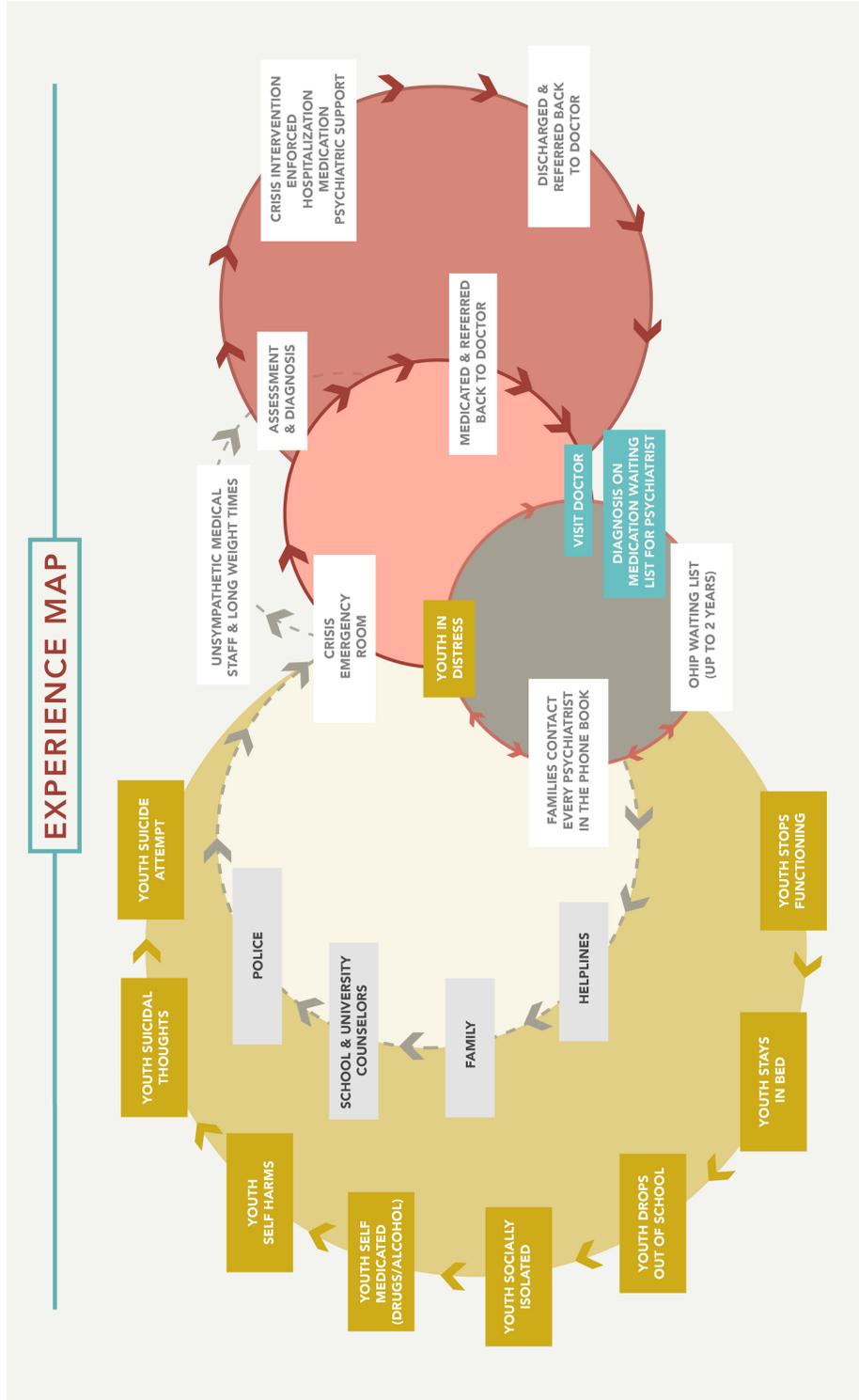


Fig. 12. Experience map showing route to care for youth

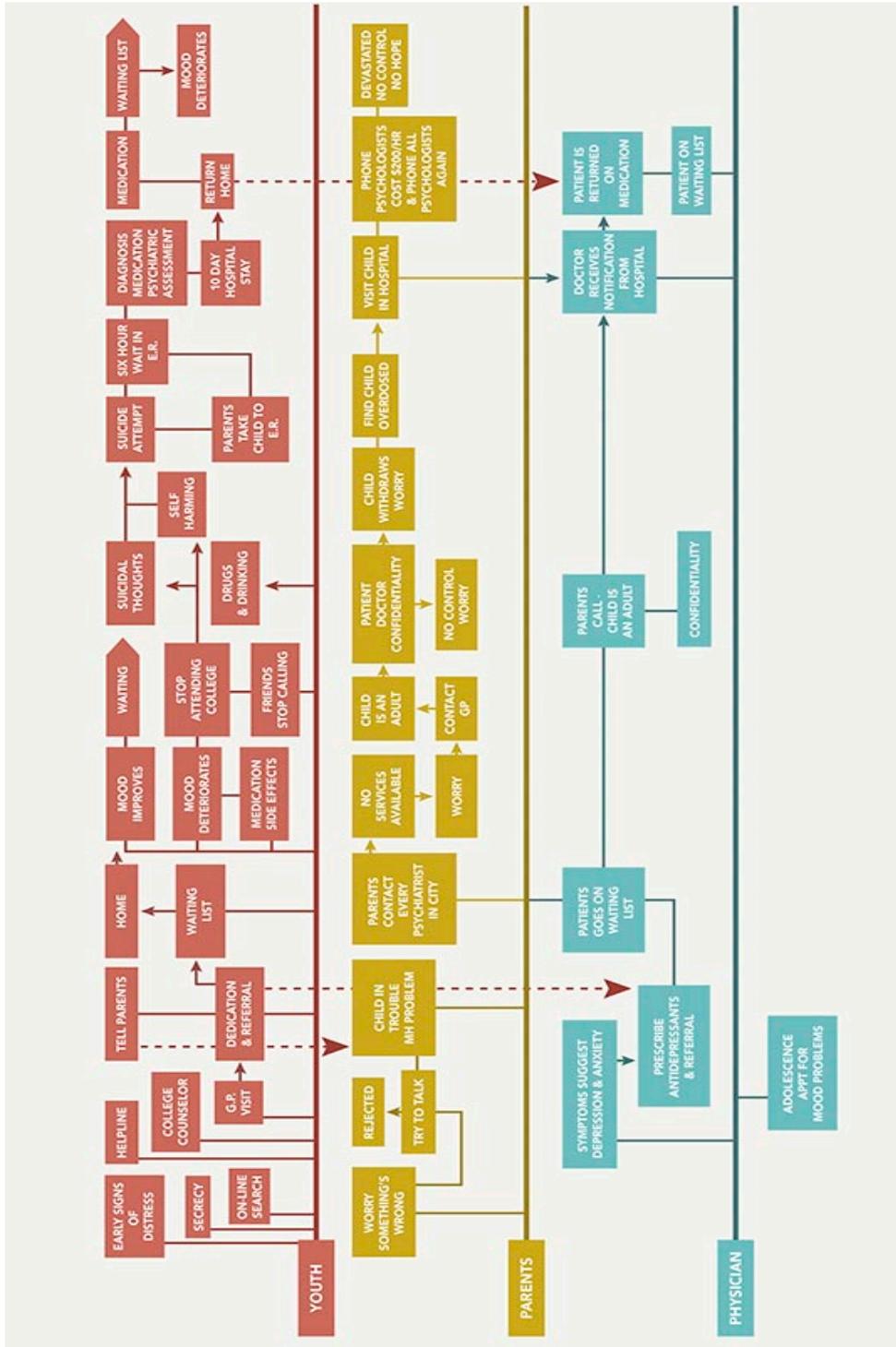


Fig. 13. Journey maps of youth, parent and physician

“Dual diagnosis, mental illness and substance abuse- that’s a really complicated situation for kids. The system just can’t cope with more than one problem at a time.....”

(Interviewee 5, Toronto. 2015)

The Experience:

- Youth initially seek information from a variety of sources: on-line, help-lines, friends, school or university counsellors and possibly family.
- Youth may take several months in this early stage; wondering if they really need help.
- Youth finally seek help and may be in need of instant medication, but then have to join a waiting list for psychiatric diagnosis and therapy.
- Family may not be involved, depending on age/confidentiality.
- Youth’s mental health may decline whilst waiting for therapy and suffer a crisis
- Crisis may be a suicide attempt, self harming, substance abuse, police incident and will result in attending the emergency room
- Crisis intervention will result in immediate treatment, possibly a minimum stay in hospital and then medication and return home – to the waiting list. This is a holding pattern for the services, but a negative reinforcing loop for youth and families.
- Youth drops out of school or university, stops seeing friends, loses contact with the outside world.
- Parents can’t find alternative access to therapy on OHIP
- Parents, who can afford to pay, resort to private psychotherapy.
- Youth loses years of education and social skills, mental health deteriorates.
- This cycle continues indefinitely.

8.1. STAKEHOLDER ANALYSIS

From the experience map it became apparent that there were many stakeholders that came into contact with the youth in distress, but their scope was very limited and their view of the youth experience was very silo'd. Understanding their individual needs and motivations in a stakeholder matrix highlighted the key stakeholders who could make a difference in accessing therapy.

Stake holders	Interests	Needs	Barriers
Youth	Advice, support and treatment Respect and acceptance amongst peers	Return to good mental health Stay in education system	Stigma Fear Poor coping skills Lack of mental health knowledge
Family	Health of child Maintenance of child's education	Health service support and advice	Knowledge and accessibility of services
Friends	Healthy friendships	Adult and expert support to know how to help	Lack of contact with friend Fear and ignorance Stigma
School counselor	Maintain healthy school environment and children Maintain school reputation	Visibility of connecting services Preventative-resiliency curriculum training	Lack of connecting resources or feedback mechanisms Funding and time for resiliency programs
University counselor	Support young adults with mental health issues Maintain university reputation	Inviting accessibility Visibility of connecting services Preventative-coping + resiliency training	Lack of connecting resources or feedback mechanism Funding for resiliency programs
Family physician	Provide good quality health services to local community	Access to available therapies and support	Lack of therapy training Lack of time
ER doctors	Professional prestige as an emergency primary health care specialist	Unbiased treatment protocol for mental health patients	Lack of mental health education
Psychiatrists	Self regulation and autonomy as a professional practice	Profitability (OHIP) Manageable personal case load	No visibility or accountability to larger system
Psycho therapists	Professional prestige Private practice	Profitability (private) Manage case load	Excluded from public health funding

Police	Prestige and respect. Maintain peace and security of public	Support to manage mental health incidents	Narrow scope of police interventions regarding mental health crises
Gov't Ministries	Efficient services Successful ministry initiatives and budget Re-election	Cost control and Successful governance	Repercussions of fundamental change to services and budgets
Mental health agencies	Improve people's lives in the community. Continued growth and security of agency	Continuing adequate resources	Disconnected service agencies

Table 6: The Stakeholder Matrix.

INSIGHTS

1. That everyone is focused within their own area of service
2. Families bear the heaviest burden caring for their child in distress at home, and have to become administrative experts, hunting through waiting lists.
3. Psychiatrists, psychotherapists and ministries are removed from visibility of the youth on waiting lists and therefore are less aware of the human repercussions of the failing system.
4. From a professional health personnel perspective, the mental health of youth is of primary concern to local physicians, counselors and local community agencies, whilst less so to emergency room doctors.

8.2. SYSTEM INTERVENTIONS IN PROGRESS

In order to establish where system intervention might be appropriate, it is important to be aware of the current changes taking place in the system now. The Ministry for Child and Youth Services has already initiated a three-year restructuring program designed to record and audit every agency in the

system and realign them into a more efficient, transparent and cost-effective structure. Local groups of mental health providers will be brought together under the direction of 34 lead agencies within the province (Ministry of Children and Youth Services, 2015).

“We have a track record of suffering from implementation deficit disorder”

S. Lurie, Executive Director of the Canadian mental health society.

(‘The Agenda with Steve Paikin’, 2014).

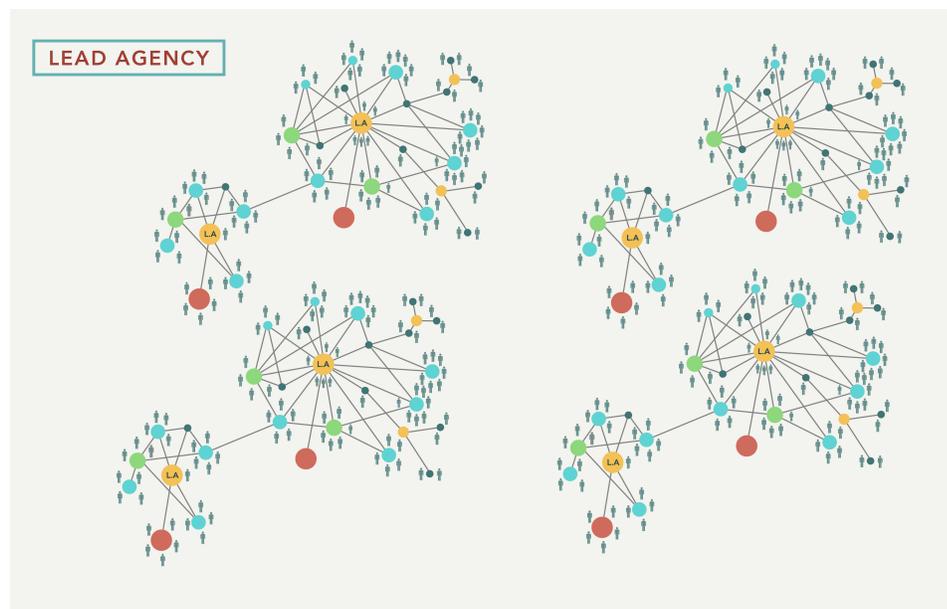


Fig. 14. Lead agency-service cluster map- new system structure

Each lead agency will be responsible for establishing new governing structures, standardised treatments, data collection systems and accountability metrics. The complexity of this initiative should not be underestimated. For the past two years, the Ministry of Health and Long Term Care has been in an ongoing process of vetting and approving lead agencies, and Toronto’s lead agencies were only confirmed in May 2015. Their mandate for the next three years will be to

establish the governance structure, audit and prepare their skills and services and establish a plan for the delivery of mental health services within their locale. In the meantime, in order to prevent disruption to the system, there will be no immediate changes to the system or the services provided. Currently it is anticipated that it will take anywhere between three and ten years to overhaul the system. The most worrying aspect is that it is generally accepted by all concerned that it will be several years before patients experience any real improvements in the system. In a TVO interview in December 2014, Lana Frado, Mental Health Advocate and CEO of Sound Times Support Services, expressed the view that “over the years there have been many plans, but when it comes down to it,” she says, “there has never been a plan that really gets systematically into the weeds of how it will be implemented ” ('The Agenda with Steve Paikin', 2014).

So how did the Canadian mental health system develop into this fragmented tangle of service deliverers, each working on a variety of different funding models, each working within their own financial and local silo of connections and referrals? How did the mental health services become such a broken orphan, worth only one-sixteenth of the total health budget? And how did these services become devolved to a provincial responsibility rather than a federal responsibility? The answers to all these questions lie in the history of Canada’s understanding and attitude towards mental health.

“The care of people with mental and behavioural disorders has always reflected prevailing social values related to the social perception of mental illness.”

(World Health Report. 2001.Chapter 3, p.1 Para 2).

8.3. ASSESSING CURRENT SYSTEM INTERVENTIONS IN TORONTO

As the lead agencies, the 289 community agencies and the Ministry's of Health, Education and Justice align behind various mental health initiatives there are a number of pilot programs now being tested in Ontario that will truly benefit young adults and their families seeking help in the system.

These include the following:

1. The Waiting List Problem. This is a complex and opaque area that has been the focus of much ministry research to establish the root cause of the problem and deserves detailed exploration.
2. Tele-psychiatry- The Tele-Link Mental Health program is a video conferencing psychiatric consultation for rural patients. (Hospital for Sick kids, partnered with the Psychiatry department, U of T.)
3. Medical mental health apps- mood trackers connected directly to your psychiatrist. (Sunnybrook Health Sciences Centre, MyChart app- mood tracker.)
4. The Family Navigation Program- Mental health professionals tasked with assisting patients in finding appropriate services within the system.
5. Schools introducing the concept of wellbeing, anti-stigma and mental health training for school staff. (Toronto District School Board)
6. Students mental health on-line platform with coping strategies and diagnostic quizzes, leading to mood apps, university counsellors and community agencies. (Under development with the University of Toronto.)
7. Homeless agencies and police collaborating to prevent unnecessary arrests.
8. Mobile Crisis Intervention Teams. Mental health nurses accompanying police on mental health police "call outs." (Toronto Police Service)
9. Medical staff being trained in mental health issues.

10. Government funding provided for additional mental health beds in hospitals. (Youthdale Treatment centre)
11. On-line access to medical files. Families may now have access to their own files on-line (CAMH)
12. Youth Passport, ownership of your own files. Allowing transition from service to service without loss of time or information. (CAMH)

In the synthesis process, these initiatives were mapped onto the experience map to create a visual interpretation of the system changes, and to cross-reference them with the problems experienced when journeying into the system.

The mapping process highlighted two major intervention points that currently have no redesign plans:

- The waiting list problem
- Schools introducing the concept of mental health resiliency into their curriculum.

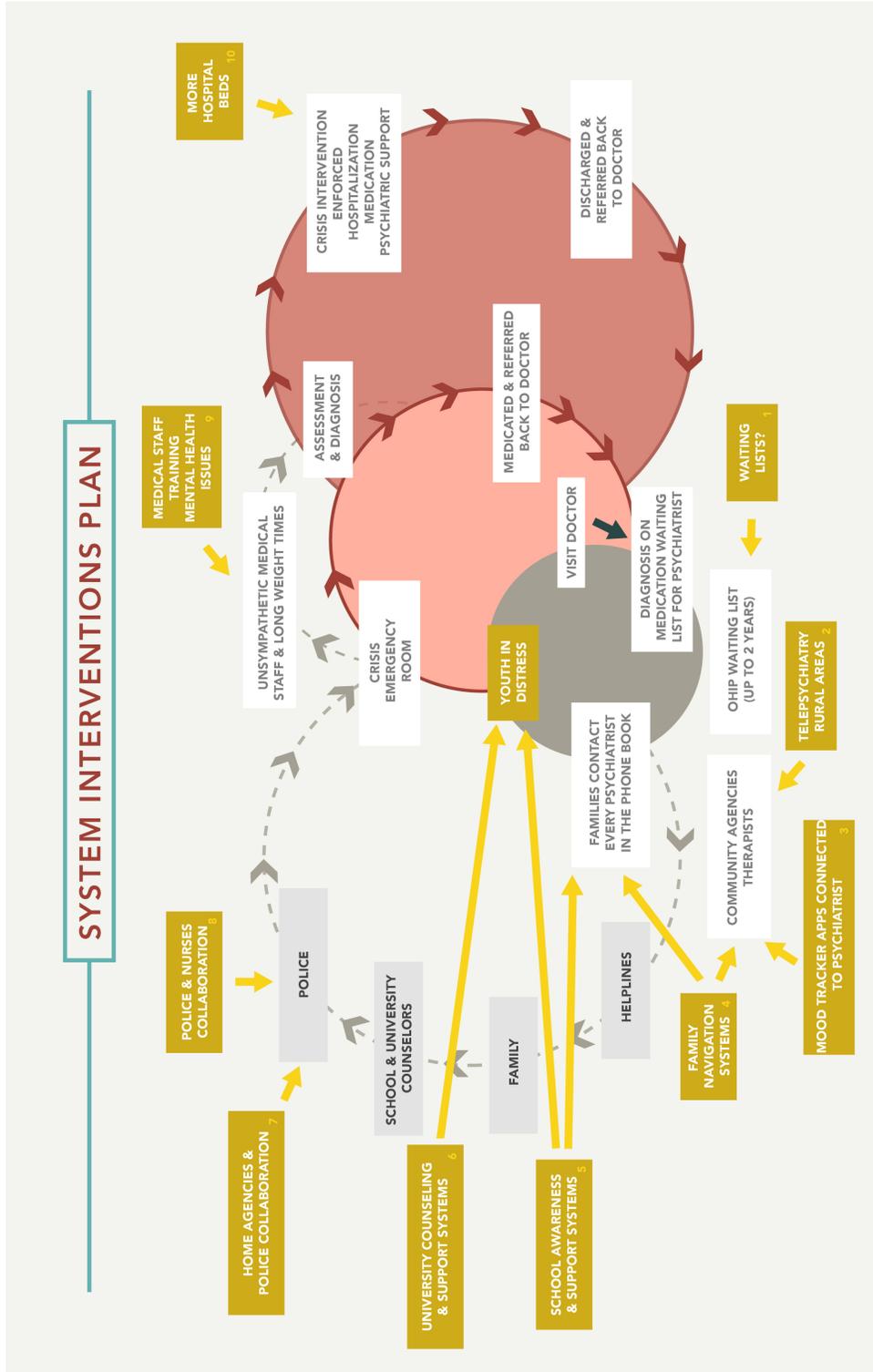


Fig. 15. Systems intervention map, showing current planned interventions

8.4. INITIATIVE ONE - THE WAITING LIST PROBLEM

Currently in order to see a psychiatrist in Toronto there are a number of waiting lists ranging from 12 months to over 2 years. Within this fragmented system there is no one database or list of psychiatrists and psychoanalysts within the province and no visibility of individual waiting lists. Neither is there any mechanism by which the health authority can monitor the workload of each psychiatrist or review the relative needs, severity of illness or duration of treatment of any of their patients (Peachey, Hicks & Adams, 2013).

Meanwhile patients on the waiting lists remain medicated, in limbo and often end up as recurring patients in the emergency room. An example of this situation was described in the editorial section of the Toronto Star newspaper on Monday May 11 2015, when journalist Cole Burston, interviewed Matthew Leaton, regarding his experience of being on a Toronto waiting list for psychiatric therapy. The 18-year-old ended up visiting the emergency department 15 times in less than two years for depression, anxiety and suicidal thoughts, because there was nowhere else for his mother to take him.

Those who can afford it may choose to pay for private treatment, but those who can't, remain untreated and many resort to self-medicating with alcohol and drugs, self-harming or attempting suicide. Local GP's attempt to turn their appointments into therapy sessions in the interim, although most GP's admit they have no training in psychiatry and merely attempt to soothe the patient. In 2014, Dr. Kurdyack, senior psychiatrist at CAMH, embarked on a study of the problem, providing the Ministry of Health and Long Term Care with a comprehensive study of psychiatrist supply and practice treatments in Ontario. Their findings show that from 2003 to 2013, Ontario saw an 80%

increase in doctors being trained in psychiatry, but GP's have so many patients that their time for therapy sessions is limited.

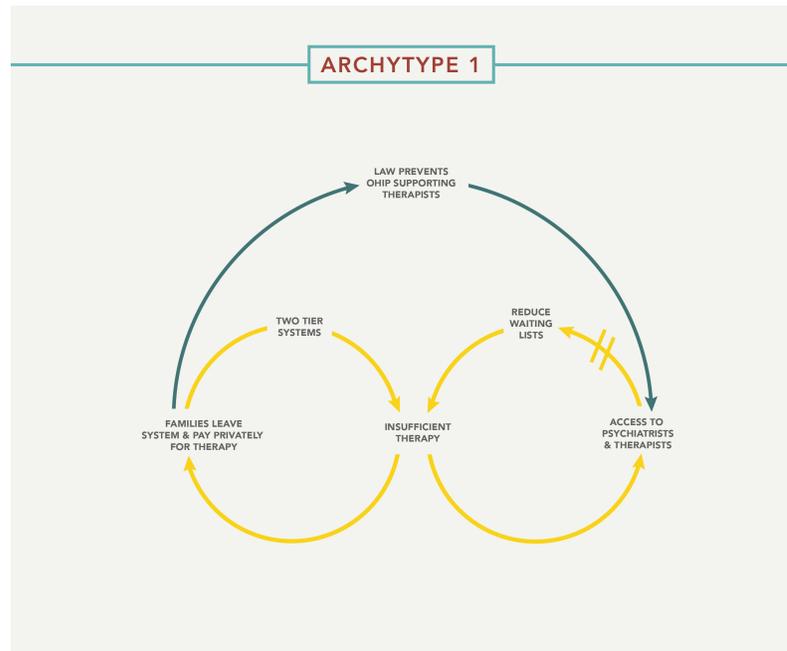


Fig 16. Limits to Growth diagram

Currently the provincial governments are paying GP's and psychiatrists approximately \$1 billion a year to provide counselling and psychiatric therapies. Psychiatrist's fees are included in the publicly funded health system, with patients being referred by GP's or hospitals. Psychoanalysts, therapists and counselors, on the other hand, are not included in the publicly funded health system. They must be paid for privately. Fees for psychologists in private practice in Toronto are approximately \$200 per hour. This means that low income Canadians, who are 3 times more likely to report mental distress, can't afford to pay for therapies, and are suffering disproportionately. They continue to wait on the list and take medication. This may have contributed to the fact that Canada is now one of the highest "medication drug taking" nations in the world (Anderson, 2015).

SHIFTING THE BURDEN

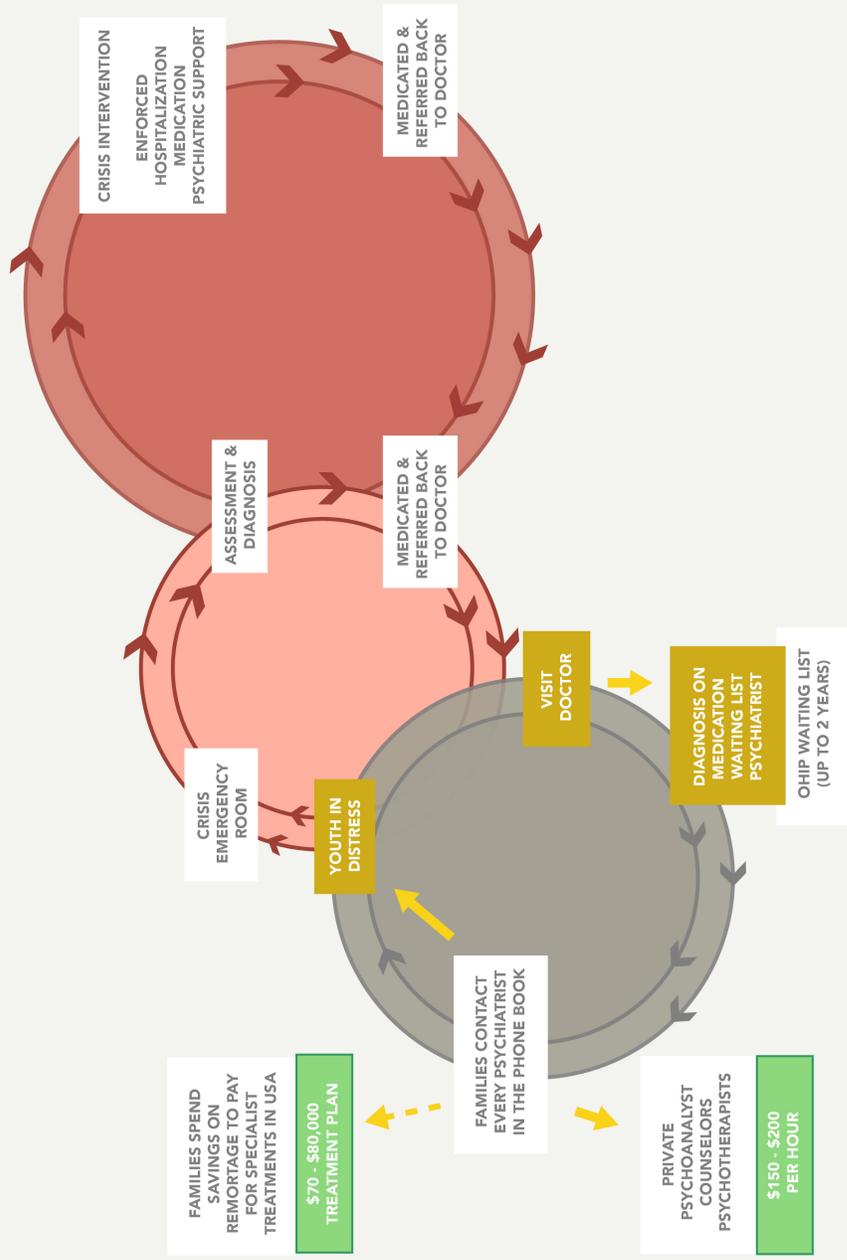


Fig 17 Shifting the burden archetype

Gathering data from previous surveys, Kurdyack found that only 65% of patients had received the counselling they needed, but more than 95% of them were prescribed the drugs they requested. So GP's seem to be managing the brunt of the mental health burden with medication and active listening sessions. Initially it may seem that only the uninsured are suffering, but this is not the case. About 60% of Canadians have some form of private insurance, but this will usually only cover 4 or 5 therapy sessions in total. Kurdyak also sites details from a study conducted in Vancouver in 2011; an experiment carried out to see how easily a GP could locate a psychiatrist willing to see a patient with depression.

- 297 psychiatrists were contacted.
- 230 psychiatrists responded.
- 70 said they would consider taking a referral.
- 64 required extensive documentation and would not give a wait-time estimate.
- 6 were willing to take a new patient immediately, but the wait times ranged from 4 to 55 days.

The reasons for this shortage are complex. A recent study performed by CAMH indicates that simply increasing the number of psychiatrists won't necessarily improve access to treatment. The problem appears to be systemic and related to practice methodologies and remuneration rather than numbers of psychiatrists available. The study highlighted the fact that wait lists exist in both urban and rural locations, but the psychiatric practices in these locations behave very differently.

This is the working practice for psychiatrists in Toronto over a twelvemonth period:

1. 10% saw less than 40 patients
2. 40% saw less than 100 patients
3. On average their practices were half the size of rural practices.

Psychiatrists in well-supplied areas such as Toronto chose to see relatively few patients, and chose not to take on many new patients. They saw, on average 181 patients per year, whilst in low-supply areas, the psychiatrists saw 431 patients per year. Drilling down into these figures we find that patients in the smallest practices were more likely to be in the highest income bracket and they were least likely to have been hospitalized for a mental illness. So they were often the wealthiest patients with the mildest illnesses. The Canadian health system allows psychiatrists to determine how many patients they wish to treat, exactly who they wish to treat and for how long they wish to treat them, with no checks and balances in place from the health authority. The health care system has no visibility of how long patients remain in therapy and no mechanism to ensure that the patients in most need are prioritized. At the moment the health care system has no mechanism to encourage psychiatrists to take on more publicly funded patients and it provides no alternative psychiatric services to patients. Overall, Kurdyak says “specialists who see relatively few patients have an insignificant impact on the broader ocean of need out there.”

Many psychiatrists are not compelled to see more patients, in part because of the way they are paid under the provincial health-care plans. Psychiatrists are paid on an hourly rate. The rate is the same for the initial consultation and every follow up treatment session, which means they can take on a roster of patients (numbers of their choice) and see them over and over again and be well compensated. This is unique to psychiatry as other medical specialists are paid a set fee for an initial visit and then significantly less for subsequent appointments, which incentivizes them to see new patients.

This situation is not new, in 2011, the Ministry of Health tried to encourage psychiatrists to take on new patients by offering a 15% bonus payment for appointments with patients who had recently

attempted suicide and having just been discharged from hospital, were in urgent need of follow up therapy. The incentive proved inadequate to change the psychiatrist's behaviour.

Currently The Mental Health Advisory Capacity (MHAC) is tasked with monitoring and reporting on the delivery of the various implementation plans in the mental health strategy. One of their major objectives is to review and re-align the current resources, in order to answer the question: "Is the capacity gap due to a lack of psychiatric resource or poorly managed resources?" Kurdyak believes that the issue is not lack of resource but the billing and process structure that is the problem.

Toronto has 13 psychiatrists per 100,000 members of the population. The global agreed number specified by the World Health Organization is 15 per 100,000, so the lack of access should not be this acute. In the closing remarks of his report, Kurdyak says:

"Increasing the supply of psychiatrists funding an unlimited frequency of psychotherapy care may not improve access for patients who need psychiatric services." (Kurdyak, 2014. p. 24 Par 8).

The unintended consequence of doctors working around this problem is proving detrimental to young people who are appearing again and again in emergency rooms. In the February 2015 edition of the journal, "Doctor's Review," medical journalist Susan Usher confirmed that GP's, at the front line of mental health issues are stepping up to the mental health crisis. Unfortunately this may mean that as GP's are trained to detect depression more easily, where there is no availability for psychiatric support, the unintended consequence is that prescribing antidepressants and taking on the role of active listening to a patient is considered "good enough." According to the Ontario Medical Association, from a total of 10,641 family physicians, fewer than 500 have the time or training to conduct psychotherapy sessions as part of their practice. Ultimately patients in extreme distress and urgent need of psychiatric support are being left on waiting lists. One Toronto doctor said that he

often had to set aside 15 minutes or so to listen to a depressed patient. When asked what determined him billing his time as therapy he replied: "if a patient cries- I charge for therapy" (Anderson, 2015. p.6. Para 12).

8.5. PRIVATE THERAPY

A definitive study commissioned by the Canadian Psychological Association in 2013, "An Imperative For Change," found that \$950 million is being spent every year on private-practice psychologists, by Canadians, insurance companies and compensation boards. Thirty percent of patients going to a private psychologist are paying the fees themselves, which equates to \$316 million per year. There are 3,378 licensed psychologists in Ontario, charging between \$125 and \$220 per hour. The fact that therapy sessions from psychologists, psychotherapists, trained social workers and counselors are not covered by OHIP is a historical relic left from the original health legislation of the 1960's. Public financial support for health care is founded in The Canada Health Act of 1984, which states that mental health services provided by physicians and psychiatrists working within hospitals and asylums would be compensated but "other" professionals would not. This was rolled over from the previous financial act that was in existence at the time of the asylums and mental institutions, before care in the community existed. Since then, several government reports have recommended altering the act and increasing funding to mental health so that other professionals could be included. This does however carry the additional cost of the \$316 million per year currently being paid for privately.

The federal response to calls for change has been to push the issue back to the provincial level to absorb the costs. Federal health minister Rona Ambrose reportedly said that The Canada Health Act doesn't preclude provinces and territories from extending public coverage to other service's or

providers such as psychologists, inferring that the cost should be absorbed into their existing budgets.

There is also the added complication that up until now therapists did not need to have accredited qualifications in order to practice and were therefore unregulated. The government began addressing this by creating the Psychotherapy Act in 2007, which calls for all therapists to be registered. This act was passed into legislature in 2007 but has to be proclaimed in order to come into action. It was finally proclaimed in May 2015 and thousands of psychotherapists across Canada are now being processed. The delay was due to definitions of therapy, which had to be considered in relation to all other practitioners within the domain.

So the case for publicly funded therapy from other professionals is gaining traction among many different stakeholders. Michael Kirby is now lobbying the government for 8 publicly funded therapy sessions for every child in Canada, as a basic OHIP requirement. This would equate to approximately \$1000 per child. Kirby argues that the reduced long-term mental health costs would create a future saving. To date the government remains silent on the issue.

INSIGHTS

- The access to therapy gap is a financial and legislative issue as well as a systems issue.
- Whilst the issue of psychiatric resource has never been thoroughly researched before, the Ministry of Health has been well aware of the lack of access to therapy and the cost of absorbing other therapists into OHIP for several years.
- Other countries have developed design solutions to the problem that suit their individual health funding and delivery models.

9. INITIATIVE TWO - RESILIENCY TRAINING TO PROMOTE POSITIVE MENTAL HEALTH

Resiliency is a term often used when discussing good mental health, and resiliency training describes a variety of programs designed to teach coping skills, build self-awareness, self-esteem and self-control. These services are most often provided by therapists in situations such as crisis centers or homeless centers, where youth may be arriving for support with histories of sexual and psychological abuse or neglect.

As part of the cross-ministry mental health strategy, the Toronto District School Board has committed to improving mental health resiliency services in their schools. This has been written into their strategy document for 2014-2017, but it appears to refer to a series of school initiatives designed to provide mental health counselling, and awareness within the classroom, rather than resiliency classes for the children. This is a good start but is not a preventative initiative that addresses the wider and deeper contributory factors leading to the initial development of mental health problems. Susan Pigott's public declaration on TVO last December, that the preventative piece of the strategy was "already well under way" highlights the fact that this is not an area in which they are focused or looking for innovation.

9.1. WHAT IS RESILIENCE AND POSITIVE PSYCHOLOGY?

Promoting resilience teaches young adults to manage the issues in their lives that are causing the symptoms of depression and suicidal thoughts, if they are the result of situational and emotional drivers. In general, it's not possible to know who will experience mental health problems in advance. However, we can strengthen factors that are known to help protect

people from the onset of some mental health problems. It has been proven that some protective factors include having a sense of belonging, enjoying good relationships, feeling in control of one's life, and possessing good problem-solving skills. Obviously there are social determinants that include childhood trauma, poor housing, unemployment and substance abuse problems; all stresses that impact mental health and increase the risk of suicide, but a sense of personal empowerment and belonging has been proven to support people through traumatic events.

We don't yet know why some people show more natural resilience than others, but we do know that we can learn to increase our capacity for resilience. Teaching resilience isn't a new phenomenon, psychologists have been studying resilience since the 1960s, and research has demonstrated that there are many aspects of resilience that are teachable. (Reivich & Shatte', 2002; Seligman, 1991). Psychiatrists, neuroscientists and social psychologists have all researched the concept of resilience from a genetic, biological, behavioral and socio-contextual point of view, with the ultimate intention of understanding how best to increase resilience.

Social psychologist Martin Seligman, from the University of Pennsylvania, has contributed greatly to the practical application of thinking on resilience. He and others have focused on the value of teaching children, adolescents and adults "accurate, positive and flexible thinking patterns" as a way to optimize the development of resilience. The Penn Resilience Program (PRP) trains teachers and adolescent children in the use of cognitive skills that promote resilience in the face of adversity. This approach is based on the idea that skills that help develop resilience can be learned. Strength-based approaches, which have grown out of the

positive psychology movement, have also contributed to understanding the psychosocial needs of youth. Rather than focus on risk factors and individual deficits, there has been a growing movement that promotes assessing and treating youth at risk on the basis of their strengths and assets. This asset-based model of intervention has been widely promoted by a number of predominantly American organizations including the SEARCH Institute, with its list of 40 developmental assets, and The Center for Educational Research and Development (CERD). Canadian proponents of the asset-based approach to youth at risk such as Dr. Michael Ungar, from Dalhousie University and Dr. Kim Schonert-Reichl, from the University of British Columbia, have also contributed internationally to the promotion of this approach.

Dr. Michael Ungar, Professor of Social Work, at Dalhousie University, has also contributed much to a practical understanding of resilience. His definition of resilience focuses on the interaction between the individual and the environment:

“The fit between the individual’s capacity to cope (their strengths), the risks they face, and the context in which the adaptation takes place (Is the environment supportive or does it burden the person?) are all integral to whether resilience can be expected or not.” (Thelearningpartnership.ca, 2015. p.4.Para 2)

Challenging approaches that focus primarily on the internal strengths or biogenetics, his understanding of resilience is:

“The capacity of individuals to navigate to resources that sustain well-being; the capacity of individuals’ environments to provide resources; and the capacity of

individuals, their families and communities to negotiate culturally meaningful ways for resources to be shared.” (Thelearningpartnership.ca, 2015,p.2. Para 5).

According to Dr. Ungar, shifting the focus from the individual to the interaction between the individual, the values of the individual (and family and community) and the environment, allows for better interventions. His work as principal investigator of the Resiliency Research Centre has included the International Resilience Project (IRP) - a collaborative, global project examining the aspects of young people’s lives that help them cope with challenges. A pilot phase of a comprehensive study by IRP was conducted in 11 countries on five continents, with participation from youth and adults who were interviewed and asked a series of common questions. The study identified a range of factors that contribute significantly to youth resilience, including the following four key factors:

1. **Assertiveness factors:** the ability to solve problems; self-awareness; empathy for others; having goals and aspirations; sense of humour.
2. **Relationship factors:** Positive mentors and role models; perceived social support; appropriate emotional expression and parental monitoring within the family; peer group acceptance.
3. **Community contexts:** Avoidance of exposure to violence among family, community, and peers; recreation, housing, and jobs when older; access to school and education, information, and learning resources; safety and security
4. **Cultural factors:** Tolerance of differing ideologies, beliefs; having a life philosophy; cultural and/or spiritual identification; being culturally grounded.

Dr. Schonert-Reichl from the University of British Columbia reminds us that;

“While the early years of a child’s life are a crucial time to nurture resilience, other effective opportunities include periods of transition, such as pre-adolescence and early adolescence (when young people learn to regulate emotions, build self-awareness, relationship skills and self-management) and the transition from childhood to adulthood (which is especially important since brain development, particularly the development of executive functions, continues from 18-25years of age.)” (Thelearningpartnership.ca, 2015, p.13. Para 4).

Dr. Gabor Mate, a physician and author, who works with drug addicts in Vancouver, has defined resilience as the capacity to learn from and grow with negative experience. Dr Mate believes that addiction flows from a lack of resilience. His patients have turned to narcotics to blunt their pain and regulate their stress levels as a coping mechanism. He also believes that once adolescents become peer-oriented, life becomes more dangerous for them because the peer group is not designed by nature to give unconditional love and acceptance. Adolescents protect themselves by becoming cruel and indulging in risky behaviours (Thelearningpartnership.ca, 2015).

WHO’S ALREADY USING RESILIENCY TRAINING?

Dr Kenneth Greensburg, an adolescent medicine specialist and Director of Services at Covenant House, Pennsylvania has developed a program called Fostering Resiliency. Covenant House, a crisis center and shelter for homeless youths in Toronto uses the program to support youths in crisis. Adolescents need the adults in their lives to believe in them unconditionally and hold them to high expectations. Adults in a position of trust need to help youths develop the resiliency skills required to lead a fulfilling life. Dr. Ginsburg explains that resiliency, or the ability to overcome challenges, is something that is strengthened when kids

are loved and supported. Adolescents in crisis have had their resilience abilities undermined by the trauma they have experienced, usually through abuse or neglect.

The United Kingdom has embraced the concept of resiliency training on many levels. The Prime Minister and the cabinet have publicly acknowledged their support for this form of training for adults in the workplace, as well as endorsing resiliency programs within the school curriculum. The RISK AND RESILIENCY program is in use as part of their YOUNG MINDS strategy for youth well being, supporting a preventative approach to poor mental health for all children.

Australia is also developing these strategies for both kids in crisis, kids in the school curriculum and as a development tool for adults in the workplace. Both Australia and the UK governments are integrating Dr. Seligman's PRP resiliency program into their school curriculum.

Studies have provided evidence-based research that has shown the efficacy of this work in improving levels of depression and anxiety. Dr. Seligman carried out controlled trials in 2009 on groups of adolescents exhibiting mild to moderate depression with successful results. The non-medicated group experienced at least as high levels of mood improvement as the medicated control group. These elevated moods lasted for the full twelve months in which both groups were monitored. So the concept of emotional and psychological resilience as a preventative methodology is accepted and in several forward thinking countries it is being integrated into the school curriculum or is being used to help youths in crisis. However, it has not yet reached the general population of young adults (16-24 years old), who may be

struggling with the early symptoms of social isolation, depression and mild anxiety but who are not yet in crisis.

Dr Seligman is currently providing resiliency training programs for special US forces and a unique program for the children of US forces, combatting the stresses of military life, relocation and absent parents.

Manifestations of these services are also paid for in the private sector or as workplace training programs to manage stress, improve performance and teamwork. CEO'S use one-to-one mentorship that is based on similar strategies and these methodologies have also been influential in the development of sports psychology and resilience training being used for potential Olympic athletes. Resiliency has become an effective and marketable strategy for the wellbeing and improved psychological performance of high achievers.

9.2. RESILIENCE AND LONELINESS

Neuroscientists are now turning their attention to strategies that may encourage the chronically lonely to develop good social skills. Otherwise described within the resiliency paradigm as a mixture of “confidence, “ and “connectedness” or “relationship development.”

Dr. John Cacioppo, Dr. Christopher Masi and two other co-authors have recently published a sweeping analysis of every study on chronic loneliness intervention done between 1970 and 2009; a meta-analysis of over 50 different interventions. The treatments fell into four types:

1.) Improving Social Skills by bringing lonely people together.

- 2.) Establishing social support for victims of changing circumstances. (This refers to professional counselling for the bereaved, youths who have been relocated several times or find it difficult to foster new relationships, particularly youths from broken homes.)
- 3.) Increasing opportunities for social interaction. Providing young people with opportunities to meet other people..
- 4.) Changing maladaptive thinking. Similar to cognitive behavioural therapy as a form of changing the lens with which lonely people view social information, like disagreements or criticism.

Interventions aimed at changing maladaptive thinking patterns were, on average, four times more effective than other interventions in reducing loneliness. In fact, the other three approaches were evaluated as being superficial and not particularly effective at all. So it appears that resiliency training coupled with the cognitive behavioural therapeutic approach involved in changing maladaptive thinking can be extremely beneficial in supporting young people suffering from loneliness, isolation and the early symptoms of depression and anxiety. This approach is already being seen in use amongst the elderly lonely population in the UK, with a number of initiatives underway to support the elderly to make new connections, but also, to be self-aware in regards to their behaviours and monitor their negative thinking (Masi, Chen, Hawkey, & Cacioppo, 2011).

UK social worker, Caroline Starkey has been instrumental in developing possibly an isolation and loneliness resource kit, designed for health care professionals and caregivers to support the elderly to rebuild social connections. Currently the UK is reaching out to lonely seniors on every communication level available to them:

1.) **On-line:** The Silver Line is a 24-hour help line for lonely seniors seeking advice or just the companionship of a human voice.

2.) **Telephone or person to person:** Silver Line Friends is the name for a local volunteers club, making friends to visit, skype or telephone regularly.

3.) **Socially in person:** Local “Elder’s” Forums and befriending cafes and lunching clubs encourage lonely people to meet.

4.) **Literature:** Information packs designed to educate lonely elders on the benefits of making human connections again.

The UK, as with other countries, has not yet turned their attention to the loneliness crisis of young adults who have left the educational system and are not yet in crisis, or made the connection between chronic loneliness and the early onset of mental health issues. This remains the gap in preventative treatment in every country working to improve their mental health services.

INSIGHTS

- Resiliency and positive psychology training has an evidence-based success rate that proves it would support good mental health and coping strategies in a whole generation of young people, if it could be provided in an affordable and accessible manner.
- Resiliency training coupled with the cognitive behavioural therapeutic approach involved in changing maladaptive thinking can be extremely beneficial in supporting young people suffering from loneliness, isolation and the early symptoms of depression and anxiety.

- Resiliency training can support chronically lonely people to change the lens through which they view social interaction and strengthen their abilities to socialize.
- Resiliency training is already in use for the severe cases of abuse and for elite professionals and athletes.
- Resiliency training is becoming widely used in the UK and Australia within a limited number of school environments.
- Resource kits to support lonely elderly already exist

10. FORESIGHT–EMERGING TRENDS

Scanning the wider environmental context as it related to mental health uncovered the following signals for future change:

1. Neuro-science and Therapy Research
Brain training to beat depression
CBT and DBT therapies gain evidence-based credibility
Mindfulness and yoga trials confirm efficacy
Resiliency programs considered in educational system
Definition of new disorders and the issue of over-medicalization
Resiliency research, and positive psychology therapy
2. Social Trends
Awareness campaigns make mental health services a public issue
Social media amplifies feelings of isolation- labeled face book depression
Rise in antidepressant prescriptions for all age groups, but also for the unemployed
Increasing levels of loneliness recorded across all age groups
Police over-burdened with rising mental health incidents
3. Technology
Tele-psychiatry reaches rural areas
Apps for mood monitoring now available

4. Economic
Pharmaceutical companies push for earlier introduction of new drugs
Future unemployment anxiety rises in youth age group
Increased debt anxiety amongst the young
Mental health systems unable to cope with numbers of patients in need of support
Commercialization of non-medical therapies filling accessibility gap
5. Environment
Youth increasingly worried about future- climate change
Housing costs and increasing inability to leave parental home
Architects and town planners discuss designing for “social cities.”
6. Political
Government acknowledges lonely society, but focus is on elderly
Rising awareness of mental health issues pressure ministry’s to act
Positive political climate to address systemic problems in mental health services
7. Values
Treatments must have evidence-based success
Patients at center of their own care plans
Deterioration of work-life balance
Patient choice – including end of life choices being debated

Table 7: Emerging trends

Reviewing these emerging trends shows hidden connections of cause and effect and strengthening factors where trends work in tandem, supporting and building on each other to reinforce the direction of change.

Neuro-scientific research has recently taken a huge leap forward with the use of MRI brain scanners. Social neuroscientists and neurologists are working together to investigate the effect that alternative therapies have on brain chemistry and neural synapse activity. This is confirming the positive remedial effects of previously discounted therapies. Their findings show that self-help therapies such

as cognitive behavioral therapy and resiliency techniques are effective in managing anxiety levels and depressive thinking habits. Research is currently being undertaken to test the theory that by monitoring one's own brain waves with equipment similar to the interaxon muse headset, it may be possible to train oneself to create a state of self-calm. This self-soothing technique has also been monitored in subjects who practice advanced mindfulness techniques. Evidence based efficacy of therapy is encouraging the medical profession to focus on non-drug treatments. Resiliency training is becoming an area of "personal development" in the USA and the UK. To date it has mainly been utilized in two areas: children with deeply disturbed and abusive histories and surprisingly, at the elite level of personal growth for Chief Executives and Captains of Industry. More recently it is being introduced into some schools in the USA and UK.

Health systems have been relatively slow to embrace technology in areas where patient confidentiality is a concern, but it's unrealistic to imagine that health services won't have to solve this issue and embrace digital communication. Tele-psychiatry is now being introduced to reach rural areas of the community and is already in use for "virtual" expert meetings when discussing patient case files. Preparation for electronic sharing of personal files with patients is also underway. Looking at technology from another angle, the recent success of apps has created a proliferation of innovators and entrepreneurs providing apps for self-help purposes. Mental health has not been overlooked, and there are many commercial apps that offer mood trackers and daily tips for managing social anxiety, sadness and symptoms of depression. These don't need to be medically approved, but come under the umbrella of non-medical advice services. Many other countries are beginning to add apps to their health service offerings and CAMH is currently running controlled trials on the use of mood tracking apps as a communication tool for patients and their psychiatrists.

Digital consultations are being trialed, on-line therapy is being tested and distance treatment will be considered.

Several countries have published statistics that point to increasing levels of loneliness across all age groups. There is a perfect storm of new social norms that contribute to mass loneliness and depression. The work-life balance has gradually eroded as society encourages families to move for employment, working hours have increased, youths relocate for higher education and the concept of being independent and travelling are considered positive elements in life.

The older generation is a large demographic that have been left alone as children move away, their pensions are no longer adequate for a reasonable quality of life and old friends die leaving them further isolated. This large group has a substantial impact on health care costs and how this cost will be managed in the future will have an impact on resources available for the younger generations too. It is interesting to note that all countries seem to be softening their legal and medical approach to the moral discussion of “end of life” choices. Sensitive discussions around “end of life” choice and terminal illnesses are currently taking place- and long-term chronic depression has been added to the list of “non-recovery” illnesses.

From an economic and environmental point of view, there are many weak signals of change for youth mental health. The increasing levels of education debt have cast a long shadow over youth’s psychological stability. Connect this with rising levels of unemployment and increasing rent and housing costs and society seems to treat youths as a consumer market for exploitation rather than the potentially educated and responsible population of the future.

These trends have created a fertile environment for Big Pharma to flourish. Thirty years of medical advertising and editorial have convinced the population that pills can solve most problems, and there are no signs that governments will change the way medical trial results are managed or the direct advertising of drugs to the public. It's not surprising that antidepressant prescriptions spiked amongst the unemployed at the peak levels of the banking crisis and the resulting economic depression and it seems likely that prescribing pills will remain the quickest and easiest solution for economic stresses.

The police in Canada have recently voiced their concern at the quantity of mental health incidents they have been experiencing, and they profess to be understaffed and under-qualified to manage this new aspect of their job. This trend is likely to continue, making the police "first responders" to mental health crisis situations.

Amongst all of these weak signals weaving together, there is a growing public awareness of the current critical state of mental health services. Several individuals involved in the original government investigation of Canada's mental health services have gone on to establish their own on-going interventions; anti-stigma campaigns and support services. Consistent media publicity is keeping a level of pressure and visibility on the system that doesn't allow ministries to 'shelve' this issue for the time being, and rising costs of today's health care model makes doing nothing, not an option.

10.1. DRIVERS OF CHANGE

Reviewing all these interconnected trends a number of core drivers for change have emerged:

Drivers	Importance	Uncertainty
Financial cost of system interventions	High	Low
Systemic problems	High	Low
Technology innovation	Medium	Low
Medicalization of symptoms	High	Low
Anti-medicalization campaigns	Low	High
Culture of medical professionals	Medium	Medium
Anti-stigma campaigns	Low	Medium
Pharmaceutical influence	High	Low
Non medical commercial services (apps)	Medium	Low
Service crisis management	High	Low

Table 8: Drivers for change

10.2. DRIVER ANALYSIS

1. The biggest driver of change is the financial burden provided by increasing mental health issues. But insecurity of on-going government funding and alignment behind the strategy is very high risk.
2. The systemic problems are also very ingrained, and there will be many human-centered “personal” change issues within the system for the next three years. This will most likely have a dragging effect on successful uptake of system redesigns.
3. The culture of the medical profession is a very deeply ingrained bias, that will take several years to effect meaningful change. Emergency room staff may continue to exhibit unconscious bias against mentally ill patients.
4. The pharmaceutical companies’ influence is very strong. Their corporate and government connections are very powerful. They will continue to maintain very strong alliances with physicians.
5. Apps and digital service provision may be an easy and affordable option, rather than necessarily always the best option. Affordability will mean they are privately funded, thereby exempting the government from funding many of these initiatives. An unintended consequence may be more services proliferating outside the main service redesign.

11. DEFINING THE GAPS

Synthesis of the data has highlighted and reconfirmed the two main areas of concern within the current mental health system that are not being addressed by the current initiatives:

- 1) The lack of access to non-drug therapy paid for by OHIP or insurance
- and
- 2.) The lack of early preventative interventions that strengthen good mental health.

11.1. DESIGN OPPORTUNITY ONE: ACCESS TO THERAPY

As the mental health services across Europe, America and Canada have all developed along similar lines, it is quite feasible to think that other countries may be facing the same problems. The Ministry of Health Canada and the Association of Psychiatry are both reviewing best practice scenarios that have already taken place in the health systems in the UK, Germany, Finland, America, Norway and Australia, to resolve this very problem. Many of these countries have existing health care funding models that are too far removed from the Canadian model to be integrated into our broader system of governance. However, much can be learned from the various approaches to accessibility and funding.

The Ministry of Health in the UK has enforced a new consulting role on psychiatrists to resolve the specific issue of psychiatrists being outside the system. UK Psychiatrists are now mandated to manage the most complex psychiatric cases, often within a multi-disciplinary team, and the services of psychologists and other mental health workers are covered by public insurance. These other professionals provide evidence-based psychotherapy at a lower hourly rate than the psychiatrists consulting rate. The UK has introduced four main mental health apps that connect directly to the

national health services and therapists. These include Beating the Blues, Buddy, Kooth and Silver Cloud (Gov.UK, 2014).

The London school of Economics worked with medical researchers collating data that suggested a program of 20-28 CBT sessions would effectively treat mild to moderate depression for £1500 per person. The report concluded that this had the potential to put 50% of sufferers into long-term recovery (Anderson, 2015).

In 2006, Australia altered their mental health system, incorporating psychologists, occupational therapists and social workers into the government fee schedule. This provided for psychotherapy and psychological therapies, paid at a lower rate than psychiatrists' fees. This has resulted in more patients opting for the faster-track, more widely available and affordable therapies, and freeing psychiatrists up to deal with only the more complex and time-consuming cases. They have also launched a website called MoodGym that offers on-line cognitive behavioral therapy programs (Peachey, et al, 2013).

In the USA, health insurance organizations have created a two-tier fee structure to cover simpler psychotherapy treatments at a lower and more affordable insurance rate, with psychiatrists continuing to charge the higher rates for consultations (Peachey, et al. 2013).

Each country has developed their own system, varying from modest interventions and directed self-help programs to full-scale psychiatric programs, and their delivery models are a mixture of the following systems.

INTERNATIONAL DELIVERY MODELS
Integrated primary and mental health care teams
Family doctor and psychologist teams
Psychiatrist leading psychologist teams
Community outreach teams
Video-conferencing teams
On-line therapy sessions and apps

Table 9: International delivery models

Currently, the Ministry of Health in Canada and the Association of Psychiatry have both provided written papers on the subject, but neither have drawn any final conclusions or provided any transparent data on psychiatrists schedules. An expert interviewee confirmed that In the last few weeks, (May 2015) the Ministry of Health has tasked CAMH and three major mental health hospitals in Toronto to collaborate on a project to investigate the data on wait lists and provide transparency of wait list times and the number of patients currently in the system.

INSIGHTS

- Each country working to resolve this problem has developed a different model or mixture of delivery and funding models that best suit their individual health funding schemes.
- The UK and Australia have models that rigorous financial evaluation has shown to be cost effective in the long term, based on lower mental health interventions later in life.
- The UK and Australia have both taken a three-pronged approach to therapy, integrating personal consultations with on-line therapy programs and apps.

11.2. DESIGN EVALUATION CRITERIA

The following design criteria would work as a design framework to evaluate proposed design solutions.

DESIGN EVALUATION CRITERIA ONE
Therapy and medication delivered in tandem
Integrated mental and primary health care services
Works for family and youths with mental illness
Deliverable through a mix of medical stakeholders and other professionals
Country wide availability
Easy access system and minimum wait list time to be established and monitored
Variety of access/delivery formats- (apps, on-line, consultations)
Affordable (everyone has a right to medical care)
Established financials evaluating initial government expenditure against projected long term mental health care cost savings

Table 10: Design evaluation criteria one

11.3. CONCLUSION AND NEXT STEPS

Currently there are several private apps and “on-line” therapy programs being developed to provide affordable “private” therapy outside the public health service. Whilst increased, affordable access to therapy must be a good thing; this is the same process by which the original chaotic and disconnected mental health service evolved in the first place. Private therapy should be an additional option to a public service fit for purpose, not the only option.

As the consortium of hospitals in Toronto are researching youth waiting list numbers and the Association of Psychiatrists is reviewing their position on psychiatrists’ fee structure, the resulting data

would be a useful addition in defining the optimum design solution for this project. However, the next step for this project would be to review in detail the international models for service methodology and their financial evaluations, with a view to developing a blend of potential service structures and funding models that would ultimately be acceptable to the Canadian mental health funding structure for discussion, co-creation and evaluation in the Canadian system.

The successful acceptance of any proposal to integrate psychotherapists into OHIP funding will ultimately depend on the robustness of the financial argument, offsetting initial therapy costs against longer term savings in adult mental health care, primary care, disability payments and potential employee illness savings. Further detail related to the cost of failing to provide therapy will be discussed on page 112.

11.4. DESIGN OPPORTUNITY TWO: A PREVENTION INTERVENTION

Whilst there was much noise in the system and amongst the various stakeholders regarding the waiting list issue, very few people mentioned preventative support without being prompted. Once prompted their views on prevention were positive, but they expressed the fact that they were overwhelmed with crisis management. This suggests that as a society we expect to have good mental health as a natural state and we only consider our mental health when it is poor, deteriorating or at a crisis point.

It's not surprising that so little attention has been paid to preventative interventions when there are so many urgent service problems to solve. Yet prevention is one of the four main pillars of the current mental health strategy, and if delivered effectively would slow the increasing numbers of

youth requiring mental health care. This would effectively be treating a root cause for some forms of mental illness and reducing the stress on the mental health system.

Having previously reviewed some of the existing resiliency and positive psychology interventions in use around the world, there are several successful evidence based programs that could be tailored to deliver strong preventative services to a variety of youth mental health needs here in Canada. Currently there are some potential interventions that might provide virtual digital support, but this ignores all the research that points towards the ultimate need for human connection, a feeling of belonging, peer acceptance and the physical and emotional well being elicited from social interaction.

Synthesis of the data has highlighted the fact that self inflicted social isolation is a very strong early symptom of distress, and all the resiliency programs in use in other countries have addressed this issue by making face to face interaction an important element in the delivery of their resiliency programs. This poses an additional resource challenge for the provision of a preventative service within Canada's current mental health system.

Ideally any new program should be embedded into the education and health care system as an early preventative service that would be available for all youths to access. This would require a cross category approach that encompasses all of the following current agency silos:

- Homeless youths (specialist agencies)
- Youths in school (school curriculum)
- Youths in university (campus counsellors)
- Youths in crisis (already in the mental health system.)
- Youths in crisis (mental health issues and the penal system)

- Youths in work- or unemployed

Providing a preventative service that crosses several categories also raises the issue of consistent and secure funding as well as that of secure venues. Developing emotional resiliency and the ability to easily maintain human connections is not a skill that can be learned in a pre-determined time span. It is a very individual learning process and may take some people many months to overcome debilitating shyness, habitual negative thinking, or feelings of inadequacy and social rejection. Having reviewed the previous “access to therapy” issue, it is clear that there would be a financial barrier to this service and whilst cross-ministry support: possibly from public health and primary health care budgets, educational budgets as well as mental health care budgets would be a paradigm shift in health care funding and delivery, it also has the potential to be “bogged down” in ministry discussion for years to come.

Remembering Tim Brown’s premise that design thinking, brings together what is desirable from a human point of view with what is technologically feasible and economically viable, to provide this service in an efficient, timely and economically viable manner requires a different approach to funding and delivery (Brown, 2009).

11.5. DESIGN EVALUATION CRITERIA TWO

After much discussion with an expert interviewee regarding the current funding and resource barriers, several possibilities for funding affordable, temporary or virtual Prevention Training hubs Were explored, whilst trying to maintain the all-important human connection.

To achieve this goal a set of design criteria framing and guiding the design solution was developed.

DESIGN EVALUATION CRITERIA TWO
<p>Resiliency Program toolkit, communication platform and support service Prevention toolkit- mission, principles and a set of core resiliency programs and delivery standards.</p>
<p>Adaptable content - for all cultures and levels of economic status Cultural and environmental fit (programs can be rewritten at a local level to suit different cultural groups)</p>
<p>Easy access and flexible delivery system for Trainers Programs provided in modular format- consisting of two linking delivery platforms. 1.) On-line and 2) Classes in service providers' venue</p>
<p>Partnership- Support the providers. Training programs for service providers (train the trainers) On-line support and sharing forum for trainers</p>
<p>Easy access (and human contact) for youth Connect on-line and link to nearest service provider (with human contact) Also available in local service provider venues. (Encourage the isolated to make the leap from on-line to live venue.)</p>
<p>Communication 1.) Trainers: Central program hub for support and communication with service providers/trainers. Training the trainer programs, resiliency coursework development, on-line course work and app program development. 2) Youth: Live resiliency classes- content development provided Deliver service through schools, universities, health centers, websites</p>
<p>Minimal investment in "back room" core team. Investment to be in resiliency program development, training resources and delivery and monitoring development of communication platform</p>

Table 11: Design evaluation criteria two

11.6. DESIGN SOLUTION - THE LIVE-SMART RESILIENCY TOOLKIT.

The live-smart program would be a series of resiliency training programs designed by socio-psychologists to encourage youths to increase their well being, break the mental and social patterns of loneliness, develop stronger emotional resiliency and lower their stress levels by:

- 1.) Learning coping strategies when experiencing stress
- 2.) Breaking down seemingly insurmountable problems into smaller, more manageable tasks
- 3.) Dealing with negative emotions and drivers of social isolation
- 4.) Developing social skills such as empathy, cooperation self control and assertiveness
- 5.) Acknowledging personal strengths and developing core strengths and values
- 6.) Building positive attitudes by recognizing personal abilities and potentials
- 7.) Developing slow friendships through trust and loyalty
- 8.) Practicing methods of social connection and living in flow
- 9.) Practicing mindfulness, meditation and finding meaning.

It works on two platforms:

- i.) Live venues, the Live-Smart Café or hub style center (Based on the Australian Headspace model; a youth mental health agency in Australia. Designed to look like a café and café website, it is a professional mental health agency, with 90 Headspace café's across Australia.)
- ii.) A website that echoes the feel and mood of the Live-Smart Café and an interactive training app that supports practicing the learned skills in each training module.

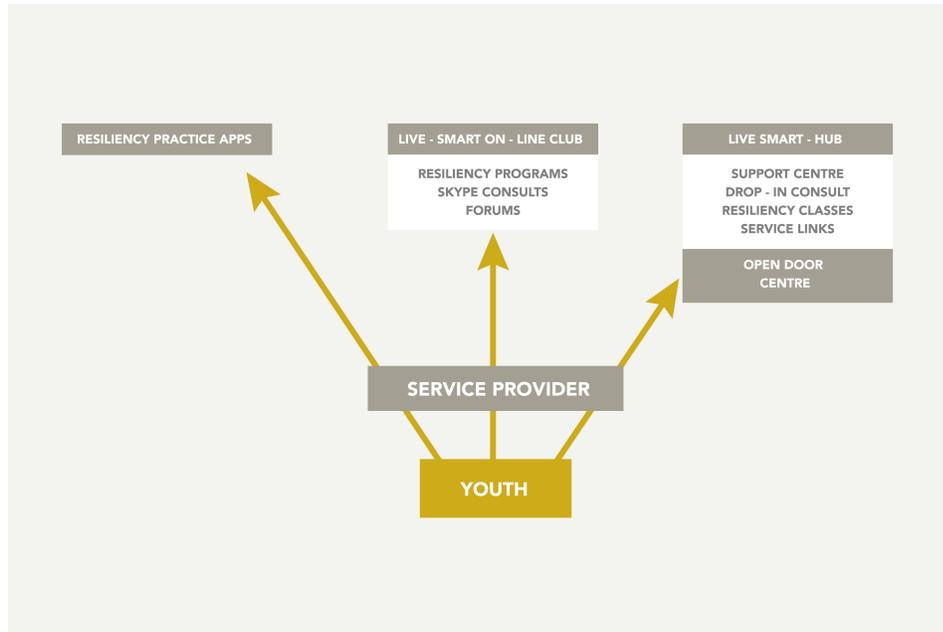


Fig. 18. The Live-Smart Toolkit- provision system

The intention of the two-platform model is to ensure that the most socially isolated or shy have an opportunity to gradually engage in the program, allowing them to enter the program from the on-line entry point, at their own speed, privately and to their own level of comfort. The website should feel like a window into the Live-Smart café. It should have information on the programs, on-line tests and quizzes that begin the process of assessing levels of resiliency and suggestions for making small changes to negative thinking and behaviour. There should also be a counselor chat line, enabling youths to book a chat directly with staff. This mustn't be confused with a crisis line, it should be a personal entry point to the program; a way of making human contact, as that is the core value of the intervention. There should also be a safe, monitored peer-to-peer forum on the website enabling youths to talk to each other. The underlying principle should be one of making a personal human connection before relying on the digital connection. There should be an on-line resiliency program

that can be taken, with on-line feedback from a counselor. This would enable youth to progress through the levels of resiliency at their own speed, in a similar fashion to on-line learning. The app should provide a series of personalized resiliency suggestions to practice in their daily lives that can be discussed with a counselor, enabling youths to practice the skills learned in the program, in an iterative process of review, learn and practice again at their own speed. The Live-Smart Café should be a venue for taking group resiliency programs, enabling social interaction as well as learning. There should be counselors to speak with and an open “hang out” environment for youths wanting to join the program or talk with a counselor or peer mentor. The goal of the Live-Smart Café concept is to make preventative resiliency programs available to all youths, not just youths with medical referrals or youths in schools or university programs.

The proposal is to deliver the program to service providers as a toolkit with access to a central website; the Live Smart Hub. The Hub would have two elements:

- 1) a private portal for service providers and trainers to access the toolkit, the required training and on-going support as well as a trainer’s chat/sharing forum
- 2.) a youth portal that can be accessed via the service providers/trainers allowing the youths to access the resiliency programs, apps and youth community chat lines and counselor support chat lines.

11.7. THE BUSINESS CASE

As previously stated, investing in preventative programs will inevitably mean spending more money on early intervention mental health programs. Despite evidence that early intervention reduces the cost of long-term mental health care, the budget for additional initiatives does not exist. However, with strong evidence to support the success of resiliency training in reducing levels of depression in young people, this model may provide a cost effective, nimble solution that would require minimum funding to develop and maintain within the existing service structure. By utilizing existing service providers and existing venues within the mental health services and collaborating with schools and universities it may be possible to deliver the resiliency program as a supported training package and a resource toolkit.

The value to existing service providers will be in receiving a complete package and an on-going support service with the resiliency program. In this way the resiliency program is pre-prepared and provided in on-line modules with support that should ensure the service is easy to deliver, being beneficial to both youth and service providers.

Although this is an additional service for agencies, schools and universities to provide, **it** nests within their existing services, and with the resiliency programs being mainly on-line, with central support provided, to manage the website communication, it should be a relatively time-efficient service. The only additional resource consideration may be in the availability and delivery of the café/hub environments.

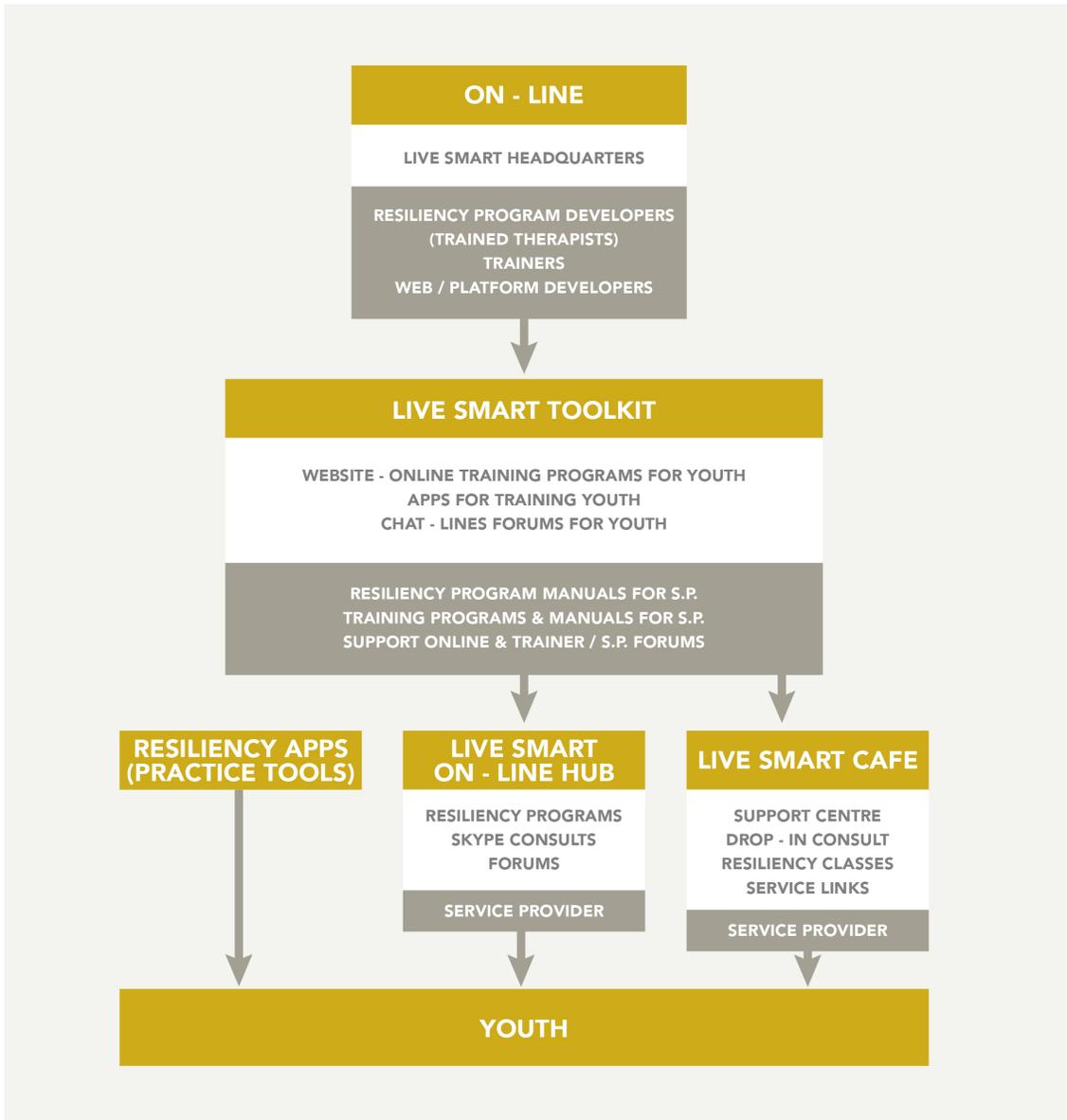


Fig. 19. The Live-Smart framework

11.8. COST SAVINGS

To present a viable case for funding preventative services, it is important to define the current costs related to youth in need of therapy. The financial burden of keeping youth in the “maintenance loop” of emergency department visits could be greatly reduced by proper preventative interventions.

In May 2015, The Canadian Institute for Health Information (CIHI) collated and published the administrative data regarding emergency department visits for youth with mental disorders in Ontario and Alberta. Whilst these figures are only specific to two provinces, it allows for some evaluation of the size and cost of the problem. In 2014, there were 4,319 mental health emergency room visits per 100,000 youth. (18-24 years old). Each visit to the emergency room is valued at \$148.00. This equates to \$639,212.00 in emergency room costs in 2014- for every 100,000 youth population in Ontario and Alberta. Elections Canada states that there are currently 2.9 million 18-24 year olds in Canada (Elections Canada, 2011.) If these figures held true across all provinces it would mean that there are 125,251 youth mental health visits to emergency departments in Canada annually, at a cost of \$18,537,148 to the health service every year. Reducing emergency department visits by 40% would provide a saving of \$7,414,859 every year. Whilst it is difficult to get an accurate picture of individual costs per person, it is worth reviewing the recently publicized case of Matthew Leaton, as a financial example (Burston, C. 2015.) This 18-year-old was mentally unwell, consequently unable to work, cared for by his mother and visited the emergency department 15 times in 2 years, whilst on the waiting list for therapy. Assuming that Matthew would be able to find productive work on the minimum wage, his tax contribution would have been \$9,900 for 2 years. His mother was also unable to work, as she was his full time carer, so it's reasonable to assume the same loss of tax contribution in her case (Canada Revenue Agency, 2015.) The fifteen visits to the emergency department total \$2,220. This equates to a cost of \$11,010 per year, to the government for failing to

provide prompt mental health care to this youth. Again this is only one example, but it provides an illustration of the size of the potential cost savings that could be utilized to pay for preventative training and therapies that would work towards the long-term reduction of youth requiring mental health interventions.

11.9. THE BUSINESS MODEL.

Having revealed the current budget constraints, it was essential to find a funding model that would be a viable option for the existing service providers. The possibility of using a licensed business model was identified through discussion with expert interviewees and from reviewing the funding models used by a number of diverse international initiatives.

In this way, service providers would pay an initial licence fee to access the Live-Smart Hub and resources, with a smaller annual maintenance fee to cover on-going support and additional resource materials. Initial thoughts on a business model were tested using the business model canvas from Osterwalder and Pigneur's book "Business Model Generation" (2010). This provided a simple framework for the exploration of required business components. In this case, the franchise model seemed to be the most affordable way for individual service providers, including schools and universities, to purchase the service, without large initial investments. This model was inspired by and owes much to the practices of two entirely separate operations who share similar values and delivery methods: Peer Zone and WRAP. Peer Zone was originally devised by Mary O'Hagan and Sara McCook in New Zealand and has extended into Australia and more recently into Canada. Peer Zone licenses (for a fee) the training of individuals who qualify to facilitate their workshops, specialising in peer support for people with mental health issues. In a similar vein WRAP (Wellness

Recovery Action Plan) trains individuals to an introductory level of the WRAP program and an intensive facilitator course, enabling them to deliver the WRAP program. In both instances, these are professional services, with trained facilitators being paid for their work; not volunteers. The business model is presented here as an early first draft, only to illustrate the initial thoughts on funding and business development, and much work still needs to be done to confirm the credibility of the design solution with stakeholders.

<p>Key Partners</p> <ul style="list-style-type: none"> Ministry of Health Ministry of Education School Board LHIN's Lead Agencies Individual service providers Schools Universities local physicians On-line platform 	<p>Key Activities</p> <ul style="list-style-type: none"> Program development Training programs web maintenance Data collection 	<p>Value Proposition</p> <ul style="list-style-type: none"> Providing resiliency training programs to support young people in distress Providing a toolkit of resources for community services to deliver resiliency programs Providing resiliency training to facilitators and counselors Providing on-line programs, chat forums, apps and private trainer portal for shared learning and expert connection 	<p>Customer Relationships</p> <ul style="list-style-type: none"> Training and support to service providers in the community 	<p>Customer Segments</p> <ul style="list-style-type: none"> Young Adults: school children college kids youths in distress (12-25yrs old) Ministry of Health Public Health Ministry of Children & Youth Services Ministry of Education Individual mental health agencies
<p>Key Resources</p> <ul style="list-style-type: none"> Psychotherapists Facilitators Web and app content developers 		<p>Revenue Streams</p> <ul style="list-style-type: none"> Tool kit, training, access to web site programs and hub support provided on a licence fee from agencies, ministry's or individual service providers. Service to youth is free 		<p>Cost Structure</p> <ul style="list-style-type: none"> Central hub support Program developers Trainers Web monitors Administration staff

Table 12. . The business model canvas

11.10. CONCLUSIONS AND NEXT STEPS

Spending money on youth who are not in mental health crisis will always be a hard sell to overworked and under-funded service providers and to ministerial staff who have budget constraints. However, in a time of upheaval, service re-evaluation and system redesign, now might be just the right moment to develop and integrate preventative programs.

There is a growing body of evidence that emotional resiliency is a key factor in maintaining positive mental health, and that it is a life skill that can be learned. Improving the emotional resiliency of the general population and future generations will inevitably increase the coping skills of the nation, which in turn will lower the mental health service costs and ultimately increase workforce productivity. Under these circumstances, preventative and educational services should be made available to youth as an approved and accepted program funded by the health and education ministries. In the same way that basic health care and education is provided for everyone.

In order to further develop this concept, two key elements need to be addressed as next steps:

1) RELIABLE COSTING INFORMATION

As with the previous access to therapy opportunity, cost savings for similar sized interventions such as resiliency school programs, mental health café's and loneliness toolkits for the elderly, have already been evaluated in the UK, New Zealand, Australia and America. Reviewing their business models and financial evaluations would be a powerful first step in validating potential investment costs and confirming potential future savings (Peachey, et al, 2013).

2.) PROTOTYPING

A period of co-creation, prototyping and piloting should be instigated with key stakeholders, to ensure the program is easy to deliver and truly supports the service providers, as well as meeting the needs of youth.

Reviewing stakeholders within the system who may already be open to this type of intervention has highlighted a number of opportunities for exploratory dialogue regarding funding and collaboration:

- In 2014, the Ontario government pledged \$12 million over 2 years, to fund mental health projects for schools, colleges and universities (Brown, L. 2014).
- The Ministry of Training Colleges and Universities Mental Health Innovation Fund (MTCU) sponsors initiatives designed to support mental health programs for youth, through educational facilities. In the past two years they have funded more than 20 key initiatives in the area of youth mental health (Ontario newsroom. 2015).
- McMasters University has recently been granted \$900,000 funding over two years, for the development of their “Arrive and Thrive” program. This is a website initiative, designed to improve students’ coping skills when returning to academic life, after a mental health hospitalization.
- The University of Toronto, in collaboration with CAMH, is developing a student wellness program that will provide a service that will support positive mental health and resilience by focusing on personal skill development, individual resiliency, coping skills, problem solving and self-advocacy.

Whilst there are a number of avenues for seeking funds for concept development and initial piloting, the initiatives outlined above, show that government funding is currently focused on colleges and

universities, as a direct route to youth through educational facilities. This makes the university sector a unique point of leverage for accessing potential partners working on mental health initiatives, and it provides an opportunity to open a dialogue for collaboration with the possibility of piloting a preventative project together. Consequently partnering with the University of Toronto or McMaster University would have obvious advantages. They have both secured grants for developing early support and preventative services, they are both already working towards the same preventative goal and they both have the infrastructure, staff and venues to provide the Smart-Live Hub café space. They also have the students with mental health needs.

Recommendations for next steps must include opening a dialogue with the Ontario government and the Ministry of Training Colleges and Universities to discuss potential funding opportunities, as well as approaching both the University of Toronto and McMasters University with a view to some sort of collaborative relationship.

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