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Applying a Health Development Lens to Canada's Youth Justice Minimum Age Law

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OBJECTIVES: We applied a Life Course Health Development (LCHD) framework to examine experts' views on Canada's youth justice minimum age law of 12, which excludes children aged 11 and under from the youth justice system.

abstract

METHODS: We interviewed 21 experts across Canada to understand their views on Canada's youth justice minimum age of 12. The 7 principles of the LCHD model (health development, unfolding, complexity, timing, plasticity, thriving, harmony) were used as a guiding framework for qualitative data analysis to understand the extent to which Canada's approach aligns with developmental science.

RESULTS: Although the LCHD framework was not directly discussed in the interviews, the 7 LCHD framework concepts emerged in the analyses and correlated with 7 justice principles, which we refer to as "LCHD Child Justice Principles." Child involvement in the youth justice system was considered to be developmentally inappropriate, with alternative systems and approaches regarded as better suited to support children and address root causes of disruptive behaviors, so that all children could reach their potential and thrive.

CONCLUSIONS: Canada's approach to its minimum age law aligns with the LCHD framework, indicating that Canada's approach adheres to concepts of developmental science. Intentionally applying LCHD-based interventions may be useful in reducing law enforcement contact of adolescents in Canada, and of children and adolescents in the United States, which currently lacks a minimum age law.

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Youth

Dr Barnert conceptualized the study, conducted interviews, analyzed the interviews, and prepared the manuscript; Ms Gallagher conducted most of the interviews, analyzed the interviews, and assisted with manuscript preparation; Ms Lei transcribed and analyzed the interviews, and contributed to manuscript revisions; Ms Abrams conceptualized the study, analyzed the interviews, and contributed to manuscript revisions; and all authors approve of the final manuscript as it is presented.

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justice minimum age laws are an important protection for children, yet statutes vary widely across the globe. In 2019. General Comment No. 24 of the United Nations Convention on the Rights of the Child recommended a minimum age for youth justice of at least 14, meaning that children 13 and under are excluded from the justice system.1 Based on principles of child development, the rule suggests that children 13 and under are too young to be held criminally responsible. Despite these global recommendations, the United States has no federal minimum age law for juvenile justice jurisdiction. Most European nations and several countries in Africa, Asia, and South America have set minimum ages of 14 or higher.² Countries have implemented a variety of mechanisms to divert and support children under age 14 away from formal processing. For children who have unmet needs, successful alternatives to formal justice involvement include communitybased and family supports, restorative justice practices, as well as intervention by child serving agencies such as health, education, and child welfare systems.³

Minimum age boundaries in the United States are determined by each of the 50 states, as there is no federal statute that currently governs minimum age of juvenile court jurisdiction. Lack of a federal minimum age law leads to a wide range of responses to children that can exacerbate health and racial inequities.^{3,4} As of January 2021, 28 states do not have minimum age laws. In the 22 states with minimum age laws, minimum age boundaries range from 6 to 12 years old.³ In 2018, children under age 12 comprised 3.7% of US juvenile court cases or 2524 cases.⁵ Although only a small percentage of children who are prosecuted are ultimately

sentenced to secure confinement, any involvement with the justice system, including arrest and noncustodial formal or informal probation supervision, traumatizes children.³ Further, uneven legislation across states exacerbates systemic racial inequality as trends show that minoritized children and adolescents are at a higher risk for justice system involvement.3,5 For example, of the 27 524 US juvenile court cases involving children 11 and under, 35.3% involved Black children and 2.0% involved American Indian children, although they comprised 15.3% and 1.0% of this population in the United States, respectively.⁵ Studies have found that an estimated 50% to 75% of youth are rearrested within 3 years of release, which disproportionately affects minoritized youth and negatively impacts their health and well-being.^{6,7} Youth with justice involvement face a fourfold higher risk of premature death, and risk is highest among Black males with histories of justice involvement.8 Furthermore, lifelong health risks of youth incarceration extend into adulthood and include worse adult general health, as well as higher rates of functional limitations, depression, and suicidality.9

In contrast to the United States, in 1984, Canada enacted the Young Offenders Act, which excluded all children 11 and under from the youth justice system. 10 With the passing of this law, children between the ages of 7 and 12 no longer fell under the jurisdiction or responsibility of the criminal legal system. In 2003, Canada's Youth Criminal Justice Act replaced the initial legislation, but it maintained the previous minimum age threshold.11 The 2003 legislation implemented a holistic, nonpunitive approach to youth justice by addressing circumstances underlying offending behaviors,

directing resources toward rehabilitation, and ensuring meaningful consequences and support for adolescents. 12 Since 1984, the majority of provinces have developed programs and services to meet the developmental needs of children ages 7 to 12, funded both by federal and provincial governments. The landmark 1984 legislation represented a large shift in policy and mindset at the time of its passing, yet research on children most affected by Canada's minimum age law, those ages 7 to 12, is minimal. 12-14 Research following enactment of the 1984 and 2003 legislation has focused on youth aged 12 to 17 and has primarily been conducted from a criminological perspective. Such research has shown an 86% reduction in the number of youths held in youth custodial facilities.¹³ However, researchers have not applied a child development lens to understand Canada's minimum age law or its holistic approach to child well-being.14

In the past 20 years, advocates and scientists have pushed for youth justice policy to conform to knowledge of human development, especially in the United States, where such reform is felt to be strongly needed.¹⁵ For more minor and/or first-time offenses, newer models have emphasized strategies such as diversion, specialty courts, and restorative justice to avoid labeling youth and to deter them from further criminalization. For more severe or repeat offenses, reforms have included less institutionalization in correctional facilities, fewer youth tried as adults, and engagement in rehabilitation and trauma programming.¹⁶ As less punitive approaches to youth justice are pursued, it is imperative to examine how existing approaches conform to known developmental science.3,17

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Key system actors, as individuals and as institutions, may not be aware of the conceptual frameworks underlying their decision making, yet their conceptual underpinnings are likely to influence their response to children who come to the attention of law enforcement. In this paper, we use the Life Course Health Development (LCHD) framework¹⁸ to examine the extent to which Canada's minimum age policy conforms to key principles and concepts of child development. The LCHD model views developmental health as the integration of biomedical and biopsychosocial factors in individuals. Developmental health is understood as a complex process in which various social and environmental conditions can influence behavior and physiology. LCHD posits that events and experiences early in life can have profound effects on individuals' trajectories. 18 Given the longitudinal association between justice involvement and later health, the LCHD model suggests that any child referred to the justice system is likely at high-risk for a suboptimal health trajectory.

The dearth of studies on healthy development in relation to Canada's minimum age law signifies a missed opportunity to learn from the nation's 37 years of experience with this critical statute. As such, in this paper, we applied the LCHD framework to examine the development and implementation of Canada's youth justice minimum age law of age 12 from the perspectives of stakeholders across Canada. Our overall goal was to understand the extent to which stakeholders' conceptual frameworks align with LCHD in their thinking about the "why" and "how" of this minimum age policy. Ultimately, this information can be used to better link developmental science perspectives with public policy by

highlighting the biological, psychological, and social needs of children throughout their life course.

METHODS

We conducted semistructured interviews via Zoom, telephone, or in-person, between November 2020 and March 2021, with stakeholders across Canada with expertise relevant to Canada's federal youth justice minimum age law. Stakeholder categories included law enforcement, youth justice, health, education, child welfare, and social service agencies. We sought academic experts, administrators, and frontline providers in these fields. We first conducted extensive literature review to understand the Canadian youth justice system and its minimum age law. We applied methods used previously in global comparisons of youth justice upper and lower age boundaries in regard to purposive sampling across stakeholder groups. 19 We identified potential informants by generating a list of experts, based on literature review and internet searches for contacts at key agencies. We then used snowball sampling to expand the sample. We purposively sampled a range of experts that included federal, provincial, and local perspectives. Invitees represented a diversity of geographic regions across Canada reflective of the population distribution. Some participants were national leaders while others were on-the-ground practitioners; our focus was to gather views from the different types of professionals. Of 25 successful contacts, 21 individuals participated in the study (83%). Study participants included 5 academics, 4 legal youth advocates, 3 law enforcement officers, 2 child protection officers, 2 health professionals, 2 community service providers,

1 probation officer, 1 educator, and 1 youth justice policy expert. Participants also had substantial experience serving indigenous communities.

The semistructured interview guide (Supplemental Information) explored pathways for the implementation of Canada's minimum age law, including conceptual rationale for the statute and for responses to children under 12. We asked participants to discuss roles of police, teachers, health providers, social workers, and other professionals in responding to children under 12 who come to the attention of law enforcement. We digitally recorded the interviews, and the files were transcribed by the research team.

We applied an LCHD framework 18 to the interview transcripts in conducting thematic analysis.²⁰ We first open-coded several transcripts to familiarize ourselves with the data. During weekly team meetings, we generated initial codes, created a codebook, and then applied the codes to the transcripts in Dedoose software 1.3.34 (SCRC, Manhattan Beach, CA). We then conducted a second round of coding using the 7 LCHD principles (health development, unfolding, complexity, timing, plasticity, thriving, harmony) as sensitizing concepts, meaning that we applied the LCHD principles as codes. Next, we extrapolated concepts within the codes into themes to better understand how these perspectives mapped onto the LCHD framework. To enhance the rigor and trustworthiness of the findings, we discussed preliminary findings as a team and triangulated findings across stakeholder groups. The University of California, Los Angeles Office of the Human Research Protection Program approved all study procedures.

RESULTS

Although we did not ask questions directly about LCHD, the 7 LCHD framework concepts emerged and correlated with justice principles, referred to herein as "LCHD Child Justice Principles." Figure 1 outlines the 7 LCHD Child Justice Principles and their relationship to LCHD concepts, demonstrating how childserving systems and adult actors collaborated to support a child's life trajectory using these principles. As depicted in the figure, stakeholders viewed children's disruptive behavior as a symptom of distress, which they understood as indicative of a health development challenge or unmet need. The health or development concern was then responded to with support and interventions provided outside of the justice system. The LCHD Child Justice Principles reflect the conceptual framework shared by the Canadian stakeholders that supporting children is best and most fairly accomplished outside of the justice system. The figure also depicts interviewees' views that by collectively providing support

during crucial times in a child's development, escalation of disruptive behaviors and future criminal justice system involvement can be prevented, allowing children to live healthy lives. In addition to LCHD, children's rights as well as perceived effectiveness informed the conceptual approach to children under 12 who exhibit disruptive behavior and/or who come to the attention of law enforcement. The Canadian experts' perspectives on each of the 7 LCHD principles with respect to conceptualization of Canada's minimum age law are summarized below. Representative quotes for each principle are presented in Tables 1-7.

Health Development

Aligned with the LCHD concept of health development (Table 1), interviewees expressed that the response to children under 12 who come to the attention of law enforcement considers both biomedical and biopsychosocial factors. The experts expressed that the justice system is not the right place to solve children's health development-related issues and that

interactions with law enforcement occur because of failures to address children's health development and social needs. Disruptive behavior is seen as a "child support problem" rather than a "crime problem." Interviewees also expressed the importance of shifting language to focus more on a child's developmental trajectory to promote "well-being" and "growth" in children, a concept central to Canada's restorative and rehabilitative model for youth justice.

Unfolding

Aligned with the LCHD concept of unfolding (Table 2), stakeholders discussed how children's past trauma can affect their lives and interactions with others. For example, interviewees explained that a disproportionate number of children involved in the child welfare system are at heightened risk for entering the justice system once they reach age 12, as many have frequently struggled with a range of issues. These included intergenerational trauma (indigenous communities),

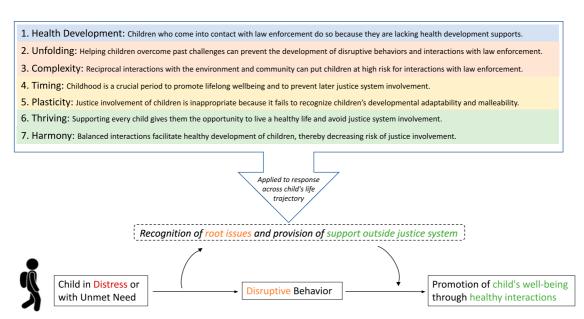


FIGURE 1LCHD Child Justice Framework: Canada's response to a child in distress through the operational lens of child justice principles.

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TABLE 1 Life Course Health Development Conceptualization of Canada's Youth Justice Minimum Age Law Related to Health Development

\ensuremath{LCHD} Child Justice Principle: Children Who Come Into Contact With La Salient Ideas	aw Enforcement Do So Because They Are Lacking Health Development Supports Exemplar Quotes
Psycho-social context	"When you see serious behaviors in those younger age groups, they are much less a criminal matter and more of a psycho-social matter." Youth legal advocate
Context of poverty and available mental health supports	"Well, then if they have a problem with 10-year-olds committing crimes then they have a problem with children's mental health services and poverty It's not a crime problem, it's a child support problem." Youth legal advocate
Child protection and mental health is a more appropriate pathway	"What do the justices provide to a 7- or 9-year-old that the alternative system of child protection and mental health can't? We tracked a whole line of kids who went to the youth justice system under the Juvenile Delinquents Act when the minimum age was 7. And the majority of them fell under child protection and mental health. There was no need to [use] youth justice." Child psychologist
Necessary support resources	"We have to continue to advocate here to have more of those on the ground child and youth mental health resources for families, in-home supports, etc. That absence of those available supports I think, is wha shows upand that's where that unfortunate string of lifelong incarceration goes to." Child welfare director

[&]quot;Health development" integrates the concepts of health and developmental processes into a unified whole. 1

poverty, lack of parental supports, behavioral issues, and other vulnerabilities or trauma, such as being removed from their family. In particular, child protection officers called attention to the "cultural genocide" targeting indigenous communities, with heightened rates of removal of children from families driving law enforcement contact. They explained how these traumas can affect a child's ability to develop healthily and how Canada's

mindset "operationally and philosophically" allows for nuance and adaptability as children develop. To prevent or address the escalation of disruptive behaviors, experts agreed on the importance of engaging with children and families early in life to avoid subsequent interactions with law enforcement throughout children's lifespans. Interviewees also expressed that justice system involvement for children

and youth of any age worsens children's health trajectories.

Complexity

Aligned with the LCHD concept of complexity (Table 3), respondents indicated that Canada's approach to children's health development and youth justice views children as individuals who interact with and are affected by their environment. Experts across various fields believed that children's disruptive and risky behaviors could be

TABLE 2 Life Course Health Development Conceptualization of Canada's Youth Justice Minimum Related to Unfolding

LCHD Child Justice Principle: Supporting Children to Overcome Past Challenges Can Help Prevent the Development of Disruptive Behaviors and
Subsequent Interactions With Law Enforcement Throughout Children's Lifespans
Fixemplar Quotes

Salient Ideas	Exemplar Quotes
Identification of root problems	"So many people only identify the behaviors, but they don't understand where the behaviors are stemming from. So, I try to educate them [teachers, police officers, parents] in every opportunity I have." Pediatrician
Recognition of disruptive behaviors as response to trauma or unmet need for children	"[At-risk children] start off, generally speaking, with real challenges, with parents who might have mental health or addiction issues, or just there's neglect. A disproportionate number of young people come from the child welfare system or should have been in it. So they're dealing with trauma. Their behavior eventually is criminalized when they turn 12." Legal youth advocate
Counseling as a solution to address escalation of disruptive behavior	"I know I definitely internally have this dialogue with myself constantly, which is those youth and children and youth who you know need counseling. Past trauma, whatever, and that their behaviors are going to continue to escalate until the counseling is established." Pediatrician

[&]quot;Unfolding" is health development that unfolds continuously over the lifespan, from conception to death, and is shaped by prior experiences and environmental interactions. 18

TABLE 3 Life Course Health Development Conceptualization of Canada's Youth Justice Minimum Related to Complexity

You've got this young person who's on that trajectory, you know they're going to be arrested poverty, related to demographics, related to boredom, [they're] dealing with real poverty issues, [they're] bullied at school, [they've] got some Reasons for youth criminal justice involvement] are just very interdisciplinary, and I think and the developmental concerns and the real issues, they can all do their part to end the incarceration." Legal youth advocate eventually... [they] need some support, [their] parents need some support maybe related to peer groups, who [children] associate with." Law enforcement officer [they've] got addiction issues." Legal youth advocate . CHD Child Justice Principle: Reciprocal Interactions With the Environment and Community Can Put Children at High Risk for Interactions With Law Enforcement Exemplar Ouotes if everybody understands the actual evidence [Disruptive behaviors are] related from adaptive, multilevel, and reciprocal interactions between individuals and their physical, natural, and social mental health issues, Provision of support for behaviors stemming from complex environmental interactions Importance of interdisciplinary mindset when addressing children's risky behavior Multilevel interactions cause disruptive behaviors that results 'Complexity" is health development Salient Ideas

attributed to multilevel interactions within their unique individual, family, and community ecosystems. For example, interviewees explained that children may need more support if they have experienced poverty, bullying, mental health or addiction challenges, or troubled home environments. Interviewees expressed that these external factors and children's reciprocal interactions with challenging environments put children at higher risk of acting out and ultimately encountering law enforcement at a young age. Many highlighted the importance of viewing children as a product of their upbringing, environment, and past experiences to explain their troubled behavior and to guide intervention, as opposed to labeling them as problematic children and expecting them to have future interactions with law enforcement. Interviewees expressed that "Black [and indigenous] kids are going off to jails that don't need to be," indicating the view that belonging to a minority or indigenous community complicates a child's interactions with his or her environment. Interviewees felt that calling attention to inequities was central to the conceptual approach Canada applies to address risky behavior in children.

Timing

Aligned with the LCHD concept of timing (Table 4), interviewees outlined the neurologic evidence to support the need for early intervention in children's lives, especially during sensitive periods. They viewed early life as the "7 years of warning," emphasizing early intervention by addressing preschool as well as elementary school behavioral issues through providing care and support for families. Participants also explained that the minimum age law provides federal funding support to

provinces. Provinces then implement programs that focus on children ages 7 to 12 to address children's troubled behaviors before adolescence, at which point youth with disruptive behaviors may have contact with the youth justice system. Stakeholders described that community supports, such as teachers, doctors, and program leaders, employ neurologic evidence to explain children's developmental and disruptive behavior, and then create programming accordingly. For example, a pediatrician described herself as "a preventative grassroots individual," expressing that "there's no use waiting until the kids are 12 or 13 because by then we've missed the boat a lot of times." Overall, stakeholders emphasized that identifying warning behaviors at an early age cannot only reduce societal costs associated with future justice system involvement, but also intangible costs to a child's health and development.

Plasticity

Aligned with the LCHD concept of plasticity (Table 5), stakeholders agreed that children's brains are not fully developed at age 12 (and far beyond this age as well) and are still quite sensitive and adaptive to changes in their environments. One legal youth advocate expressed that to subject children under age 12 to the youth justice system equates to ignoring their developmental needs and trajectories, stating that "children are extremely capable and vulnerable all at the same time" and that criminal justice responses do not take the "vulnerable" side into consideration. Others described that Canada's evidence-based programs are designed to recognize children's inherent "elasticity" and developmental malleability, and to avoid punitive solutions. Interviewees pointed to Stop Now and Plan as an example of an

TABLE 4 Life Course Health Development Conceptualization of Canada's Youth Justice Minimum Age Law Related to Timing

LCHD Child Justice Principle: Childhood is a Crucial Period to Promote Lifelong Wellbeing and to Prevent Later Justice System Involvement Salient Ideas Exemplar Quotes Importance of early intervention "Of course, the big point is the earlier you can get to these kids, the better. We're talking about the first few years of a kid's life. Because when you get them when they're 14, it's not to say it's a done deal, but it's much harder to turn a kid around at 14 than it is to socialize them in the first 5 years of their life." Criminologist Identification of warning behaviors supports development in children and community "There are 7 years of warning before a juvenile becomes a serious violent offender... they start having minor problems at age 7, escalate to more moderate, just before their 12th birthday they commit a serious violent or antisocial offense. There are mechanisms to get the kids to the door, have you assess them for level of risk and need, evidence-based models that work, invest in them because if you do, the cost-

evidence-based, award-winning crime prevention model program developed in Canada for children between ages 7 and 12. Overall, interviewees conveyed that Canada's approach to implementing its minimum age law relies on a child's ability to continue to grow and change even after making a mistake. Children's behavior is therefore not criminalized and instead is used as an opportunity to talk through their

decisions, teach them how to make logical choices, and ultimately change their development and subsequent behavior.

Thriving

Aligned with the LCHD concept of thriving (Table 6), interviewees expressed that for children to sustain healthy development throughout their lives, they must have the opportunities and supports needed to succeed. Interviewees explained that strong community supports in Canada are created by impactful programming and open communication between parents, teachers, doctors, social workers, and other professionals in a child's life, as well as the firmly held belief that "all children can be successful." Participants emphasized the value of identifying children's strengths so that children can develop capacities

saving to society is not only dollars, but an emotional cost and education and health and mental health." Community

service provider

TABLE 5 Life Course Health Development Conceptualization of Canada's Youth Justice Minimum Age Law Related to Plasticity

LCHD Child Justice Principle: Justice Involvement of Children is Inappropriate Because it Fails to Recognize Children's Developmental Adaptability and Malleability

Salient Ideas Exemplar Quotes Neurologic context "Our brains develop well into our 20s. Especially the parts that deal with judgement, dealing with... peer pressure, cost benefit analysis, or the assessment of long-term consequences of your actions. It's not just that kids have less life experience by definition. They're not as physiologically developed as adults. It's not really fair... to treat them that way." Prosecutor Punitive justice model ignores children's plasticity "It's developmentally inappropriate to impose this really punitive model of rehabilitation on children. They're so elastic, their development issues are so front and center. And partly because there's just so many opportunities to change things outside of the criminal justice system." Legal youth advocate Community-based programs emphasize neurologic development in children "[High-risk youth] who came into the program were processing more from that ventral fight or flight or freeze part of the brain, not much in that thoughtful executive functioning. In 13 weeks, they started to see decreases in [the ventral] part of the brain and increases [in the frontal lobes] ... [These] kids had fewer criminal convictions." Community service provider

[&]quot;Timing" is health development that is sensitive to the timing and social structuring of environmental exposures and experiences. 18

[&]quot;Plasticity" indicates health development phenotypes that are systematically malleable, enabled, and constrained by evolution to enhance adaptability to diverse environments, 18

LCHD Child Justice Principle: Supporting Every Child Gives Them the Opportunity to Live a Healthy Life and Avoid Justice System Involvement Salient Ideas

Exemplar Quotes

Belief that all children can thrive

Community supports enhance the well-being of children

"I think that we look at the [disruptive] behavior and think there's a reason or cause of the behavior, or there's even looking at that raw screen approach. What are the lagging skills, what are the pieces, and we have a responsibility as educators to start to tease those out and build those successes for a child. But our fundamental belief is that all children can be successful." Elementary school principal

"For the average person who is committing a traumatic event on another person, they themselves also experienced trauma as a response. So, as part of a treatment plan, we want [children] to heal because we know if they are healthy, they are less likely to self-medicate with hard drugs, which leads them to commit crime, which leads them to harm other people, which leads to all of the things that impact our communities and individuals and themselves." Law enforcement officer

nugget of the strategy is teaching kids how their thoughts, feelings, and actions

are all interrelated." Community service provider

that will enable them to succeed and thrive. Interviewees viewed helping children and families thrive as the responsibility of local communities and especially of supportive adult professionals across sectors, including education, health, and law enforcement. One police officer recounted several impactful stories about his continued relationships with children who displayed troubled behaviors. He explained that with the minimum age law and related supports in place, children have been able to find effective treatment outside of the youth justice system and now lead healthy and happy lives. The solutions presented to children prioritize their health, safety, wellbeing, healthy relationships, and ability to succeed

above all else. Likewise, interviewees viewed the notion of punitive responses to children as impediments to later health and wellbeing.

Harmony

Aligned with the LCHD concept of harmony (Table 7), stakeholders agreed that a punitive mindset ignores children's fundamental need for care and support. Interviewees viewed a punitive response to children's disruptive behaviors as a means of destroying relationships instead of growing them, emphasizing that Canada applies a preventive approach to at-risk children. Interviewees stated that achieving harmony goes beyond just one "offending" behavior or one

instance of acting out, and instead focuses on multiple aspects of a child's development. Interviewees explained that children can develop and learn from their troubled behavior, and a punitive mindset that criminalizes behavior is counterproductive. Interviewees also emphasized the importance of communication between children's teachers, parents, doctors, and other supports to ensure that children are on healthy paths. Effective communication goes beyond surface level conversations with families and their children, and instead focuses on creating, developing, and following through with a plan and a system that will support the developmental needs of each individual child. Overall,

TABLE 7 Life Course Health Development Conceptualization of Canada's Youth Justice Minimum Age Law Related to Harmony

LCHD Child Justice Principle: Balanced Interactions Facilita Salient Ideas	te Healthy Development of Children, Thereby Decreasing Risk of Justice Involvement Exemplar Quotes
Punitive mindset inhibits healthy development	"If we're going to change behavior for a child, punitiveness doesn't work. Punishment doesn't deter a child from changing, but actually addressing the skills that are missing or providing the necessary support, that's what changes kids. And kids need to know that they're cared about, and they belong. If they don't have that, that punitive piece can also be relationship destroying." Elementary school principal
Preventative mindset promotes healthy development	"A largely preventative [approach] allows young people the space to actually make decent decisions It impacts our health systems and education systems and all of these things to work together to allow young people to manage to develop healthily." Legal youth advocate
Holistic model incorporates multiple interactive frameworks	"[The rehabilitative and restorative model we follow] is based on different theoretical orientations. It's not just 1. It's cognitive, behavioral, attachment, social interactional learning, feminist, and a systems approach. And really the

[&]quot;Harmony" is health development that results from the balanced interactions of molecular, physiologic, behavioral, cultural, and evolutionary processes.¹⁸

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[&]quot;Thriving" indicates optimal health development that promotes survival, enhances well-being, and protects against disease. 1

interviewees felt that Canada's minimum age law functions most effectively when adults apply "interdisciplinary approaches" to support children, and children under age 12 are guided to services and opportunities outside of the youth justice system in the form of supports from their family, teachers, and communities.

DISCUSSION

Our analysis reveals that the Canadian conceptual approach to its federal minimum age law, and to youth justice more generally, aligns well with the LCHD framework. Their conceptual approach to children under 12 who come under the attention of law enforcement or who exhibit disruptive behavior was consistent across stakeholder groups and included all 7 aspects of the LCHD frameworks. While we did not ask about the LCHD framework, 18 nor use specific LCHD terminology, the rationale and concepts offered underlying Canada's response to children in distress aligned nearly perfectly along these lines. In fact, participants expressed overarching concepts aligned with LCHD, including using language and terminology associated with its principles. Thus, the Canadian conceptual approach to children who come under the attention of law enforcement aligns with LCHD theory, likely reflecting that their approach is based on the acknowledgment that children require support to develop healthily and avoid justice system involvement.

LCHD Opportunities for Canada

If Canada were to purposefully apply an LCHD framework to their systems of support and intervention for children, they may find even more successful outcomes. The LCHD Child Justice principles derived from this study

may be useful for improving future responses to Canadian youth over age 12, which could help put Canada in line with the United Nations recommendation of a minimum age of at least 14.1 Additionally, Canadian interviewees recognized a need to enhance racial and ethnic equity for Black and Indigenous populations. Findings suggest that an LCHD toolbox tailored for vulnerable communities could help enhance equity in addressing children's health development needs across the life course, especially at the earliest sensitive stages.

LCHD Opportunities for the United States

The LCHD Child Justice concepts may also be useful for guiding approaches to children and adolescents in the United States, which is recognized to be in great need of justice reform and addressing systemic racism in the cradle-to prison piepline.3 Of note, H.R. 2908, currently under consideration by US Congress, would set a minimum age of 12 for the federal justice system, and policy mechanisms exist to establish a federal standard that individual states are incentivized to comply with, creating an effective minimum age within state and local juvenile justice systems.²¹ Efforts toward youth justice reform in the United States have likely contributed to a 62% reduction in child and youth arrests from 2009 to 2019.5 Yet, it is unclear whether they came about from a conceptual shift in how children under age 12 are viewed. Prior research in the United States shows that children who exhibit disruptive behavior are often viewed as bad children who need and deserve punishment, as opposed to children who have complex issues and need support. 15 Replicating a conceptual shift in the United States, as occurred in Canada

beginning in 1984, may be challenged by the fact that Canada is well known to be a generous welfare state, whereas the United States is not. However, application of the LCHD framework may guide and expedite translation to the United States context.

Life Course Research Priorities

A network of life course intervention researchers have developed outcomes to guide programs and policy. 18 Findings suggest that potential opportunities to overtly apply LCHD tools, such as outcomes measurement and evidence-based interventions, may be of benefit. To guide such an approach, research priorities include: best practices for how to determine the root cause of troubled behavior in children; measurement of early childhood outcomes in relation to children's contact with police and adolescent's police and justice contact; expansion of evidence-based interventions for troubled children ages 7 to 12 and longitudinal outcomes measurement; life course interventions for minoritized youth with troubled behavior; and policy approaches to further systematically merge public policy with developmental science, including consideration of a minimum age of 14.

Limitations

The study has several limitations. Canada is a diverse nation and provincial variation in policies and programs exist. Views about the minimum age law may have changed since their passage and, as this study occurred nearly 2 decades after, recall bias is a limitation. Also, it was not possible to gather perspectives from experts in all stakeholder categories in each province, group, or setting type, which limits transferability. Our interviews did not directly ask about the LCHD framework, nevertheless, the alignment of

concepts was striking and may prove useful for understanding Canada's implementation and for informing approaches in the United States.

CONCLUSIONS

The opinions of key stakeholders about the underpinnings of Canada's minimum age law align with the LCHD framework. Their central tenet is that "disruptive behavior" is a symptom of a "child in distress" that merits and needs

support, rather than punishment. The alignment between Canada's minimum age law and youth justice philosophy with the LCHD framework presents opportunities for advancement of children's health in accordance with developmental science, particularly as the United States might consider reforms that are in line with the United Nations resolution on age of criminal responsibility. Finally, findings suggest that, across nations,

promotion of children's healthy development through application of the 7 "LCHD Child Justice Principles" may help all children to reach their optimal potential and continue to thrive throughout their life course.

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