AMERICAN PSYCHOLOGICAL ASSOCIATION

History of Psychology

ISSN: 1093-4510

2023, Vol. 26, No. 4, 283–313
https://doi.org/10.1037/hop0000236

“Mere Guesswork”: Clarifying the Role of Intelligence, Mentality, and Psychometric Testing in the Diagnosis of “Mental Defectives” for Sterilization in Alberta From 1929 to 1972

Elliott M. Reichardt[1], Henderikus J. Stam[2], and Kim Tan-MacNeill[3]
[1] Department of Anthropology, Stanford University
[2] Department of Psychology, University of Calgary
[3] Department of Psychology and Neuroscience, Dalhousie University

From 1929 until 1972, the Alberta Eugenics Board (the Board) recommended that 4,739 individuals be sterilized. The original 1928 act that legalized eugenic sterilization stipulated that the surgery itself required the consent of the individual or their caregiver; however, in 1937, the Alberta government removed the consent requirement for such cases where the Board determined individual patients to be “mental defectives.” By analyzing published reports, case histories, medical journals, and primary sources from the Board, we situate the concept of “mental defective” in a historical context to clarify the Board’s diagnostic process. By analyzing how the Board found individuals to be “mental defectives,” we challenge a previous historiographic assumption that intelligence tests played a critical or defining role in this diagnostic process. We argue that the notion of the “mental defective” used by the Board had a long history before the advent of intelligence testing and eugenic thought. This history helps to explain how and why the Board relied extensively on the broader examination of behavior, social status, and physical appearance as core evidence in the diagnosis of “mental defect.” Intelligence tests were certainly important as they shed light on an individual’s academic ability. However, this alone was only one part of “mentality.” Defects of mentality were understood to be broad and multifactorial, and included difficult, if not impossible, to measure attributes such as personality, emotionality, and morality. Further research should incorporate the concept of mentality in the history of psychology, testing, and eugenics.

Keywords: eugenics, mentality, psychological testing, sterilization, mental defectives

The Alberta Eugenics Board (hereafter the Board) was the most active centralized sexual sterilization bureaucracy in Canada (Grekul et al., 2004). During its operation from 1929 to 1972, the Board recommended 4,739 be sterilized, of which, physicians sterilized 2,834. Following a law passed in 1,937, those who were diagnosed as “mental defectives” were sterilized without the requirement of consent (Grekul et al., 2004). The Alberta government

---

Elliott M. Reichardt https://orcid.org/0000-0002-8322-8646
Henderikus J. Stam https://orcid.org/0000-0002-2659-9248

Kim Tan-MacNeill acknowledges funding support from the University of Calgary’s Program for Undergraduate Research Experience.

Correspondence concerning this article should be addressed to Elliott M. Reichardt, Department of Anthropology, Stanford University, Building 50 450, Serra Mall, Stanford, CA 94305, United States. Email: erei@stanford.edu

empowered the Board to review cases referred to them from provincial mental health clinics (also known as guidance clinics) and mental health hospitals to evaluate whether a given individual was to be sterilized. Despite the importance of the diagnosis of "mental defective" in the operation of the Alberta Eugenics Board, the topic has yet to be adequately situated in historical analysis. From its beginnings in 1928 to its dissolution in 1972, we investigate how the Board evaluated cases, the evidence it used, and the concepts it relied upon to determine whether to sterilize children and young adults.

Interest in the history of eugenics in Alberta became widespread in the late 1990s when Leilani Muir filed a successful lawsuit against the Government of Alberta for her wrongful sterilization. The substantial evidence gathered during the case made the Court of Queen's Bench of Alberta's ruling one of the first historical investigations of the Alberta Eugenics Board (*Muir v. The Queen in Right of Alberta*, 1996). This ruling is historiographically significant because it contains rare testimony from the normally secretive Board members. Indeed, most of the members of the Board left a little historical trace of their existence, including the chair of the Board—John MacEachran—limiting the possibility of gaining insight into its workings (Stam & Barlow, 2020). What is known is summarized in Table 1; see Figure 1 for a photo of the original members of the Board. Since the ruling, histories of the Alberta Eugenics Board have provided an overview of the general narrative of eugenics in Canada (Dyck, 2013; Grekul, 2011; Grekul et al., 2004; Malacrida, 2015), its intersections with gender (I. H. Clarke, 1973; Grekul, 2008; Moss et al., 2013), race (Dyck, 2013, pp. 53–83), allied health professions (Boschma, 2020; Mansell & Hibberd, 1998; Samson, 2014), its relationship to eugenics practiced in other British colonies (Dyck, 2018; Paul et al., 2018), and early reproductive rights (Dyck, 2014).[1] This scholarship has added to a greater understanding of the social history of eugenics. However, even a recent review of the historiography has not yet included an analysis of how the Board utilized intelligence testing in its decision-making process nor has it examined how eugenics relates to the history of psychology and psychological testing (Kurbegović, 2016).

Indeed, no study to date has explicitly examined the history of the Board from the perspective of the history of psychology, save for a chapter on the long-serving chair of the Board, John MacEachran (Stam & Barlow, 2020) who was the only Canadian to have studied with Wilhelm Wundt—however, his dissertation was on ethics, a philosophical subject. He did not appear to take part in any of Wundt's experimental psychology research and had no training in psychometrics—a field that did not exist when he was a student. As Annette Mülberger has argued, much of the extant literature on the history of psychological testing has inadequately contextualized how testing has been moved and adapted in different cultural spaces (Mülberger, 2014). John Carson has similarly argued that the effective historical contextualization of mental testing requires paying careful attention to "the dissemination, appropriation, and transformation of mental testing in the early 20th century" (2014, p. 249). Carson (2014) highlighted the importance of provincializing the "U.S. experience" in history by placing it in relief with other efforts to implement intelligence testing programs (see also Bultman, 2020; Cicciola et al., 2014). This article

---

[1] To situate eugenics in the general history of Western Canada in this time period is not possible here but can be found elsewhere (e.g., Dyck, 2013; Francis & Kitzan, 2007; Friesen, 1998; Kurbegović, 2016, 2019; Rennie, 2000). The oppression of indigenous communities was, until recently, not part of these histories and deserve much greater exploration, particularly in light of the general overrepresentation of indigenous people in the eugenics program, the history of anti-indigenous violence within the Canadian healthcare system, and ongoing practices of anti-indigenous violence within it (E. Clarke, 2021; Dyck & Lux, 2016; Stote, 2015, 2022).

Table 1

Members of the Alberta Eugenics Board and What Is Known About Each

Member	Role on the Alberta Eugenics Board	Years on board	Notes
J. M. MacEachran	Chair, Founder	1929–1965	First Chair of Board. Philosopher and psychologist. Few writings, all detailed in Stam and Barlow (2020). No training in testing or developmental psychology.
Dr. Edward George Mason	Member	1929–1947	Dr. Edward George Mason, one of the four original members of the board, was a McGill University medical school graduate who came to Calgary in 1902. He was a commanding officer of the 50th Calgary battalion in the First World War and was awarded the Order of the British Empire for, among other action, his participation in the capture of Vimy Ridge in April of 1917.
Dr. Edgerton Pope	Member	1929–1949	Pope was a graduate of McGill University medical school who came to Alberta in 1906 and was head of medical services at the University of Alberta Hospital.
Mrs. Jean Field	Member	1929–1937, 1938–1945, 1947–1949	Mrs. Field was the Health Convener of the United Farm Women of Alberta. Mrs. Field was on the first "Board of Visitors" to inspect mental institutions in Alberta formed in 1925.
Dr. Herber C. Jamieson	Member	1937	An endocrinologist and historian of medicine.
Marjorie M. Pardee	Member	1937	
Miss Blanche Emerson	Member	1945	Public health nurse from Edmonton.
Dr. E. L. Selby	Member	1947–1951	
Dr. R. B. Gunn	Member	1949–1956	Married to Margaret Gunn, United Farm Women of Alberta president in 1924.
Dr. A. W. Park	Member	1949	Physician
Dr. E. Green	Member	1949	
Dr. W. R. Fraser	Member	1951–1964	Physician
Mrs. C. T. Armstrong	Member	1956–1958, 1962–1972	An executive of the executive of the FWUA (the Farm Women's Union of Alberta), the successor organization to the United Farm Women of Alberta, which changed its name again in 1970 to Women of Unifarm. It was dissolved in 2000 due to declining membership.
M. Stetson	Member	1958–1960	
Dr. Margaret Thompson	Member	1960–1962	Thompson was an assistant professor at the University of Alberta until she left for the University of Toronto in 1963. She had a PhD in zoology from the University of Toronto, but specialized in genetics. She founded the Hereditary Counseling Service at the University of Alberta in the Faculty of Medicine in 1957.
Dr. A. V. Follett	Member	1966–1972	
H. E. Panabaker	Member	1966–1967	Harold E. Panabaker (1897–1977) fought at Vimy Ridge where he won a medal for bravery. He then worked for the Calgary Board of Education in various capacities, has a school named after him, was president of the Calgary Family Bureau and was an occasional lecturer at the University of Alberta as well as the University of New York.
Dr. W. R. N. Blair	Member	1967–1968	Dr. William R. N. "Buck" Blair (1915–1990) had been a senior military psychologist and colonel in the Canadian army and became head of the Department of Psychology at the University of Calgary in 1966. He was on the board from 1967 to 1968. He had published on personnel issues in the

(*table continues*)

Table 1 (*Continued*)

Member	Role on the Alberta Eugenics Board	Years on board	Notes
			Canadian army. He is responsible for the "Blair Report" (officially Alberta Mental Health Study) where he argued that the eugenics program should be revamped. He recruited David Gibson to the board.
Mr. E. J. Kibblewhite	Member	1969–1972	Social worker and psychometrician
David Gibson	Member	1968–1969	Professor of Psychology at University of Calgary
Dr. R. Kenneth Thomson (d. 1999)	Member Chair	1950–1972, 1965–1972	Psychiatrist

Note. List of members adapted from Grekul (2002, p. 120).

continues this effort by illustrating how testing was taken up outside of the United States in Canada, where similar yet divergent local priorities shaped how testing was understood and utilized, in this case by a eugenics board.

This study also contributes to and complicates existing bodies of scholarship on the Board's decision-making processes by clarifying the role that intelligence testing played in its operations. A common assumption within the extant historical scholarship is that "In Alberta, throughout the entirety of the province's sterilization program, the Board relied heavily on the results of intelligence tests in their decision-making process" (Samson, 2014, p. 148). A more extreme statement claimed that "There have long been two general approaches to establishing mental deficiency: the *psychometric* and the *social*" and that the "[Board] considered only the psychometric evidence, primarily the IQ score" (Wahlsten, 2020, p. 62 emphasis original). Frequently, these accounts will assert that an IQ of 70 was clinically used as a "cut-off" to determine whether a given subject was a mental defective providing only speculative evidence that this was the case (Grekul, 2002, pp. 121–124; Malacrida, 2015, pp. 202–205; Oliveira, 2016, p. 125; see especially Wahlsten, 2020, p. 66).[2] Our analysis of the records of the Alberta Eugenics Board and its relationship to psychology and testing in Canada does not support the assertion that intelligence tests played a dominant role in the Board's decision-making process. The reasons for this are multiple and will be detailed throughout the article. In short, we argue that the concept of "mental deficiency," derived from "mentality," that the Board used in its deliberations included a wide range of attributes including personality, emotionality, and morality that were insufficiently captured by the narrow conception of intellectual deficiency indexed by intelligence testing (de la Cour, 2013; Gelb, 1989; Rapley, 2004). This local history also has implications for the history of intelligence testing and eugenics, which we detail in our conclusion.

During their construction, the medicoscientific categories of "mental defectives" were self-consciously shaped by their designers to consider social and behavioral impairment alongside intellectual deficiency. As Alfred Frank Tredgold, the author of the influential

---

[2] Wahlsten (2020) is the sole exception to this trend. Wahlsten cites testimony from R. Kenneth Thomson from a deposition in the *Muir* trial. R. Kenneth Thomson was a member of the Board from 1950 to 1972, and the chair of the board from 1965 to 1972. Wahlsten Thomson "stated explicitly that the cut-off score for mental deficiency was an IQ of 70" (2020, p. 66). However, Wahlsten does not provide the direct quote from Thomson, nor does he adequately contextualize the quotation for us to understand the precise sense of Thomson's utterance. Given this lack of context there are two good reasons for discounting this evidence, which elaborate throughout this paper. Firstly, we cannot discern whether Thomson is referring to a standard for scientific reporting or for that of clinical practice. Secondly, this threshold model is directly contradicted by accepted testimony at the Muir trial which notes that a comprehensive psycho-social–medical workup was normal practice for the diagnosis of mental deficiency.

Figure 1

Photograph of the Original Four Members of the Alberta Eugenics Board

Note. In order, Mrs. Jean Field, Dr. J. M. MacEachran, Dr. Edward George Mason, and Dr. Edgerton Pope. Photograph courtesy of the University of Alberta Archives Accession # 81-104-259 (J. MacEachran Collection). Edmonton, Alberta, Canada.

textbook *Mental Deficiency*,[3] noted in his discussion of inclusion of moral imbecility as a form of mental deficiency: "It is necessary to point out that the definition says 'mental,' and not 'intellectual,' for there is a great difference between these as ordinarily understood." (Tredgold, 1920, p. 360). The dominance of social considerations in the evaluation process was a direct result of the scientific and conceptual categories used by the Board. Therefore, while the Board may have relied on tests in some cases such as borderline cases, the outputs of intelligence tests were less relevant because IQ did not provide information on the broad social and behavioral considerations that the Board prioritized. We develop a new understanding of how intelligence tests were used by the Board by examining the tests themselves,

---

[3] Tredgold's work and textbook is frequently mentioned in the writings of Canadian eugenicists and researchers discussing mental deficiency. See, for example Bastow (1928), Beck (1914), Bryce (1916a, 1916b), Burnette (1922), Farrar (1931), Hincks (1918), Jay (1914) and Young (1919).

extant concepts of mental deficiency and their identification, the conceptual orientation of the Board, and how those concepts entwined with one another and lingered throughout the Board's operation. The first part of the article begins with a background on eugenics in Canada. Then we explore how a certain current of eugenic and psychiatric thought, mainly the notion of "social defectives" in contrast to "intellectual defectives," came to be central to the Board's evaluation of candidates for eugenic sterilization. We then reconstruct the operations of the Board, including the referral process from archival and published sources. The second part of the article analyzes the psychometric tests that the Board used to evaluate mental defectives. We argue that these tests insufficiently indexed the concept of "mentality" the Board prioritized and were therefore of secondary importance.

The Emergence of the Alberta Eugenics Board

White anglophone Canada, and especially Western Canada, during the late 1800s and early 1900s, retained a sense of national identity (e.g., Francis & Kitzan, 2007; Rennie, 2000) that was linked to being "British" or at least of British extraction (Pitsula, 2013). The settlement of the western provinces was often characterized by a degree of utopian fervor as various groups of settlers sought to construct ideal communities. These were often short-lived and the arrival of the railway ensured the social disruptions typical of the age (Rasporich, 2007).[4] During the 1920s, a concern of progressive, White-anglophone, and middle-class Canadians was the perseveration and the cultivation of its imagined White, Anglo-Saxon character rooted in White supremacy (Pitsula, 2013). As historian Howard Palmer argued, "Many American and English–Canadian intellectuals thought that North America's greatness was ensured so long as its Anglo-Saxon character was preserved" (Palmer, 1976, p. 494). J. S. Woodsworth, who would be an important founding figure of Canada's progressive political tradition, said in 1909 that "we need more of our own blood to assist us to maintain in Canada our British traditions and to mould the incoming armies of foreigners into loyal British subjects" (Woodsworth, 1909, p. 50). In addition to ensuring Canada's racial and ethnic purity, many of these same intellectuals were also concerned with what they saw as another source of social contamination: mental defectives (Chadha, 2008). Eugenics, during the late 1800s and early 1900s, was popular and found support across the political spectrum, although the most prominent supporters were typically wealthy and educated (Levine, 2017, p. 12). The specific form of eugenic thought that would emerge and take hold among liberal White Canadian anglophones drew upon existing discourses of racial purity to point toward an insidious internal source of contamination: the uncontrolled proliferation of mental defectives. While federal legislators supported efforts to discourage or screen out undesirable immigrants to Canada, they also recognized that these policies could fail. Immigrants to Canada who had recently been admitted but were found to be "mental defectives" could and would be deported (Chadha, 2008). These concerns diminished significantly among Canadians in the 1930s following the passage of highly restrictive immigration laws (Dack, 2020). However, a third group consisting of defectives born in Canada could not be deported and, therefore required a different approach to manage (Strange & Stephen, 2010). Eugenicists in Canada during the 1920s began debating sexual sterilization along with immigration control and deportation of undesirables as part of a larger amalgam of eugenic policies that targeted the mental

---

[4] Tens of thousands of Ukrainian settlers arrived in Western Canada in the first decades of the 20th century, many misclassified in government records as Poles, Russians or Austrians. During the WWI over 5,000 Ukrainians were classified as enemy aliens and held in internment camps, including one at Castle Mountain in Alberta (Kordan, 2002).

defectives to ensure the production of a prosperous Canadian future rooted in the privileging of narrow and highly gendered conceptions of whiteness, racial purity, and fear of racial mixing (Brownlie, 2006; Pitsula, 2013; Quesnel, 2021; Stote, 2012, 2015). However, sexual sterilization was itself controversial as a method to deal with the reproductive capacities of mental defectives and only gained substantial and prolonged implementation in Alberta where its program expanded in the late 1930s (Dack, 2020; Strange & Stephen, 2010; Wahlsten, 2020).

The passage of controversial eugenics legislation in Alberta in 1928 was a result of the prominence of proeugenic thought imported from England, the inadequate funding of mental hospitals for the population of Alberta, news of similar legislation passed in the United States, the presence of influential eugenic advocates, and the absence of an organized political opposition (I. H. Clarke, 1973, pp. 78–117; Dack, 2020; Kurbegović, 2020; Pocock, 1932). Published in 1921 by Dr. Clarence Hincks, the “Mental Hygiene Survey of the Province of Alberta” provides implicit insight into the social atmosphere at that time toward the mentally ill or the intellectually disabled (1921; for an important early history see Christian & Barker, 1973). In the report, Hincks suggested that the relation between social marginality (be it sexual, moral deviance, or academic) and mental disability or illness was causal. Given the desire to reduce the prevalence of those occupying socially marginal positions, the social discord they were seen to cause, and the financial cost of providing residential care, Hincks recommended that sterilization be used to control increases in the residential population by making it a precondition of their release (Christian & Barker, 1973). Sterilization was an inexpensive method of reducing the residential populations at provincial care facilities (Dack, 2020).

By 1928, a proeugenics movement (which included Hincks) had been active in Canada promoting eugenic legislation in the province of British Columbia for over 7 years and had garnished significant support from several prominent individuals and institutions in Alberta (Christian & Barker, 1973; Nind, 2000). First-wave feminists and members of the United Farm Women of Alberta were strong advocates of eugenics policy in Alberta and through their connection to the United Farmers of Alberta ensured that eugenics remained firmly on the legislative agenda of the United Farmers government (Moss et al., 2013). However, there was a far from unquestioned belief in the validity of the doctrines of eugenics in Alberta: for example, the College of Physicians and Surgeons and a number of other women’s organizations did not actively support the legislation (Nind, 2000). In the broad history of eugenics, Alberta was somewhat of an anomaly because by the late 1920s eugenic thought was losing momentum both scientifically and socially. Against this trend, a proeugenic position was publicly endorsed in 1922 by the United Farm Workers Minister of Health R. G. Reid who stated that the Alberta government “was in favour of sterilization and only waiting for public opinion to catch up” (McLaren, 1990, p. 100). Reid, however, did not ultimately introduce or oversee the eugenics legislation, as his tenure as Minister of Health ended in 1923; instead, the legislation would be introduced in 1928 by the new Minister of Health, George Hoadly, who adopted the California model of sexual sterilization (I. H. Clarke, 1973, p. 85; see Frost, 1942). Nonetheless, despite these negative developments, Alberta was able to pass, amend, and implement the legislation for 44 years (McLaren, 1990, pp. 7–12).

Eugenics Legislation: Defining “Mental Defectives” in Law and Practice

The original 1928 *Sexual Sterilization Act* did not specify or legally define what constituted the class of individuals known as “mental defectives” (The Sexual Sterilization Act, 1928). Rather it empowered the Alberta Eugenics Board to sterilize any inmate of any mental hospital on the provision it be a condition of their release and would eliminate the “multiplication of the evil by transmission of the disability to progeny.” It was only in 1937 with the passage of "An Act to Amend The Sexual Sterilization Act" that an explicit statutory definition of the class "mental defectives" was entered into Alberta law; before that time the Board relied on common-law definitions of mental deficiency. The amendment held that "[a] '[m]entally defective person' means any person in whom there is a condition of arrested or incomplete development of mind existing before the age of eighteen years, whether arising from inherent causes or induced by disease or injury" (An Act to Amend The Sexual Sterilization Act, 1937). Additionally, this amendment allowed the Board to authorize the sexual sterilization of "mental defectives" without consent if in the unanimous opinion of the Board "that the exercise of the power of procreation would result in the transmission to such person's progeny of any mental disability … or that the exercise of the power of procreation by any such mentally defective person involves the risk of mental injury either to such person or to his progeny" (An Act to Amend The Sexual Sterilization Act, 1937). The 1937 amendment is significant as its introduction was the result of requests from the Alberta Eugenics Board to the Minister of Health to have legislation that better represented the actual goals and basis upon which sterilization decisions were made. Therefore, the Board could (and did) authorize forced sterilizations following the passage of the 1937 act on the grounds, not that the transmission of the defect was likely, but rather that the parent was incapable of "intelligent parenthood" and would likely cause harm to a "normal child" if one were born.

The Medico-Legal Category of Mental Deficiency in Historical Perspective

Rather than bring about the creation of the "mental defective," the 1937 amendment to the sexual sterilization act merely codified preexisting assumptions and earlier medico-legal definitions from common law. The medico-legal existence of a concept of mental deficiency such as idiocy predated the advent of intelligence tests by centuries. The term "idiot," for example, had been used by English legal authorities as early as 1534 to denote "a person congenitally deficient in reasoning powers" (see Hilliard & Kirman, 1965, pp. 1–36 for the evolution of the concept in common law) and used the following test to ascertain the status of idiocy: "And he who ſhall be ſaid to be a Sot and Idiot from his Birth, is ſuch a Perſon who cannot account or number twenty Pence, nor can tell who was his Father or Mother, nor how old he is, etc." (Fitzherbert, 1755, p. 532). However, the transition from a narrower definition of "idiots" to a moral panic around mental deficiency centuries later in North America was related to shifts in U.S. American psychiatry. During the 1850s, the term "idiot" increasingly began to be used to describe a general class of individuals that had fundamentally similar needs that could be accommodated through centralized solutions, such as asylums or special education programs (Trent, 1994, p. 10). Following the emergence of these institutional repositories, the Americans departed from contemporary French conceptions of idiocy and increasingly reframed it as a medical condition, effectively beginning its pathologization (Trent, 1994, pp. 16–17). In the 1850s, the U.S. psychiatric and institutional community increasingly defined idiocy as the product of visual stigmata or disorder within the body that produced the functional state of being less developed than peers of a similar age further medicalizing the condition and solidifying the medical authority required to diagnose idiocy, in particular through its relationship to phenotypically distinct genetic conditions like Down Syndrome.[5]

The pathologization of the "idiot" by psychiatrists within U.S. medical discourse (and concomitantly in the United Kingdom) during the late 1800s was not bounded to notions

---

[5] For a discussion of the emergence and description of mental deficiency in the 19th and early 20th centuries, see Jarrett (2020).

of "intelligence": medical descriptions of idiocy never abandoned nor opposed the infusion of moral language into descriptions. Indeed, the medical notion of idiocy was compatible with the imposing of a moral judgment onto the state of "being defective" (Trent, 1994, pp. 18–20). During the late 1800s and early 1900s "morality" in this discourse was as much of a psychological attribute as "intelligence"; correspondingly one could be a "moral idiot" by possessing defects in "moral consciousness."[6]

The late 1890s up to the 1910s was a period in which the new concepts of the "feeble mind" and the "moron" that closely mimicked that of the moral idiot rearranged previous notions of mental deficiency and solidified them into a coherent narrative fueled by the stories told by prominent eugenics advocates in the United States and in Canada.[7] As de la Cour (2013) notes "by the late nineteenth century, 'bad' was more decisively and successfully melded to the concept of 'feeblemindedness'" (p. 144). These stories included influential books in Canada such as Helen MacMurchy's *The Almosts* (1920), reports issued by the government, advocates such as the Eugenics Society of Canada and provocative news stories that raised panic about the threat of feebleminded folks (O'Brien, 2013; Strange & Stephen, 2010). All the pieces for constructing the menace of the feeble mind had been present and were sufficiently culturally legible in the early 1900s in Canada and the United States for them to be deployed influentially by advocates to the Canadian public and legislators. The metaphorical language used during this period did much to accomplish this. As Gerald O'Brien notes:

> At the beginning of the twentieth century the term "moron" did not exist, and therefore had no meaning. Within a few decades, morons were everywhere. They were weeds in our garden, cancers on our collective body, rapidly reproducing rats and viruses, weights on our shoulders, and a host of other pejorative images. (O'Brien, 2013, p. 6)

Canadian eugenicists were at the forefront of this process by constantly invoking a wide variety of metaphors to import associations to the newly forming group known as the "feebleminded," "morons" or "mental defectives." Canadian eugenicists such as Dr. Helen MacMurchy would frequently employ evocative turns of expression that presented the feebleminded as the "waste products of humanity" that if treated with care could become "useful" (MacMurchy, 1917, 1920, pp. 173–174; O'Brien, 2013, p. 49). Without "protection" from the evils of society, they could become corrupted and engage in immoral activity or

---

[6] This is a significant point. During this period (1900–1940s) leading psychiatric experts on mental deficiency advocated for a broad understanding of "mental" to include attributes such as "wisdom" and "morality" as part of a set of mental attributes that like "intelligence" one could be defective in—see for example (Berry & Porteus, 1920; Hilliard & Kirman, 1965; Sarason, 1953; Tredgold, 1920). One clear example is Karl Pearson and Gustav Jaederholm's critique of the categorical models of mental deficiency

> How then has it come about that such mentally defective children have been drafted off into special classes or schools and classed under a separate category? Clearly not by their intelligence, but by the combined personal equations of teachers, school nurses, and medical officers, judging and determining by a whole variety of factors, which make for practical social efficiency—such as capacity and willingness to learn, power of self-control, habits of cleanliness, moral order, power or desire of attention to instruction, fits, possibly epilepsy, and a vast variety of semiphysical deficiencies. The term feeblemindedness is a misnomer; these children would be better "social inefficients." (1914, p. 18)

[7] As Steven Gelb has noted, the definition of feeblemindedness went through a transition between 1900 and 1920, coming to be associated with crime and poverty (1995).

become vectors of infectious disease. In addition to warning of the immediate threat that the feebleminded posed to the well-being of their society, eugenicists also adopted eschatological rhetoric warning of a catastrophic future if governments failed to act. Formal reports produced by the Canadian National Committee for Mental Hygiene for review by the various provinces would frequently deploy these tropes in explaining the urgency of the problem of mental defectives to their governments (Strange & Stephen, 2010).

Due to the peculiarity of the conceptualization of moral idiots as "higher-grade idiots" (who could masquerade as "normal"), they became a site of lay concern in Canada, the United States, and the United Kingdom. As Wendy Kline argued, during the early 1900s in the United States, sexual morality, especially female sexual behavior became a reliable indicator of defect in both lay and medical discourses (Kline, 2001, p. 38). It was a concern well represented in publications on the "mental defect" problem in Alberta. R. B. Chadwick the Superintendent at Neglected and Dependent Children for the Province of Alberta published a 1914 article in the *Public Health Journal* entitled "Mental Defectives in Alberta" where he described several cases of "deficiency." The case of "Jenny" is illustrative of the characteristic cultural preoccupation with dominating and controlling the sexuality of women:

> Jenny is one of six children. Three of these children are verging on imbecility, and, of the three others, two boys appear to be normal, and the girl Jenny, appears to be normal in every respect except that she is incapable of distinguishing between moral right and wrong … This child should never be allowed to mingle with society at large, because as she comes to years of womanhood she is bound to become a vagrant, and professional prostitute, and an easy prey to any designing beast who will make up his mind to take advantage of the girl's mental Incapacity. (Chadwick, 1914, pp. 220–221)

Women and girls were to become central concerns within Canadian eugenic discourse, as "A defective girl, especially the moron type, is frequently possessed of great physical attraction as a result of which men of normal mentality are led to approach her. The feebleminded boy or man is ordinarily unattractive to the normal woman" (F. E. Brown, 1922, p. 226).[8] It is this medico-legal category of "mental deficiency" with a common-law basis and history that would become the target of the Alberta Eugenics Program.

The ascendancy of the concern surrounding the "moral imbecile" highlights how capacious the category of "mental" was during this period. The 1913 passage of the *Mental Deficiency Act* in the United Kingdom codified five distinct categories of the mental defect (Leach, 1914, pp. vi–vii). Four of these are relevant: idiot, imbecile, feebleminded, and moral imbecile. The first three were arranged categorically along an access of capacity, with idiots being so impaired as to be unable to protect themselves from physical dangers, imbeciles being unable to maintain a living, to the feebleminded denoting those who are incapable "(i) of competing on equal terms with their normal fellows; or (ii) of managing themselves and their affairs with ordinary prudence" (Leach, 1914, p. vii). The moral imbecile by contrast was defined as persons who "some mental defect coupled with strong vicious or criminal propensities on which punishment has little or no deterrent effect" (Leach, 1914, p. vii). The Canadian eugenicists were deeply influenced by the act and in Ontario and frequently referenced these categories in their academic publications with an emphasis on the dangers of the latter two categories: the feebleminded and the

---

[8] See also Chadwick (1914, p. 220) "Dr. Goddard, of Vineland, New Jersey, has pointed out time and again, that the mentally defective woman or girl can nearly always find a mate even among normal men."

moral imbecile. In 1920, Justice Franck Egerton Hodgins, who had been appointed by the Ontario government to review the problem of mental deficiency suggested that the statutory definitions of mental deficiency found in the *Mental Deficiency Act* be adopted in Ontario (Hodgins, 1920).[9]

The Peripheral Location of Intelligence Testing in Eugenics

For many prominent Canadians and feminists during the 1910s and 1920s, the feebleminded or the mental defective posed a clear and present danger to the well-being of society (Gibbons, 2014). This unique sociohistorical environment enabled the rapid integration of the narrative of eugenics as a scientific fact. The possible “scientific” classification of these mental defectives through testing was a key claim made by psychologists who sought to establish the social and practical value of their discipline by purportedly creating an objective method of identifying the threat ideally during childhood, to enable the early identification of the defectives. This enabled the generation of a whole new field of expertise closely tailored to developing socially relevant tests (Rogers, 1995, pp. 98–99). The foundation for this can be traced to attempts by Francis Galton in his Anthropometric Laboratory in 1884 to measure merit; while it was ultimately unsuccessful, it laid the conceptual and technical foundations of ranking and sorting people quantitatively by thoroughly entangling eugenics and psychometrics in the anglophone world (Rogers, 1995, p. 147).

It was during the 1880s–1900s that the notion of intelligence began to be differentiated from that of intellect and became instantiated in the English language translations of the Binet test from 1905 (Danziger, 1997, pp. 66–84; Jarrett, 2020). Intellect and intelligence existed during this time as synonyms, and typically referred to the general ability of species. For example, humans are more intelligent than dogs. Intelligence tests enabled the narrowing of this conception and began to refer to intraspecies variation in the early 1900s. The first of these tests, designed by Binet for use on French schoolchildren, was highly pragmatic, explicitly stated its inability to measure “intelligence,” and was designed primarily as a means of identifying students for additional support rather than for any explicit eugenic ends (Nicolas et al., 2013). Robert Yerkes famously adopted these early tests for use by the U.S. Army during the First World War specifically for the exclusion of mental defectives and the placement of “intelligent” recruits into higher-ranking positions (Yerkes, 1921). The U.S. Army’s widespread use of intelligence tests during the First World War raised the prominence of psychometrics and made it a culturally accessible concept, allowing its possible applicability to sorting individuals within schools into predefined social categories such as asylums or special education classes. Henry Goddard popularized the tests through his work at the Vineland Training School from 1906 to 1918 in Vineland, New Jersey and created an intelligence testing program on Ellis Island, creating a panic about the quality of immigrants to the United States when his work was published in 1917 (see Zenderland, 1998, for a comprehensive history of Goddard’s work). Lewis Terman’s popular and influential 1916 translation and revision of the Binet test reframed it as explicitly measuring intelligence and, importantly, as a tool to be used for eugenic ends. Terman, through his extensive testing program in California, was in part responsible for the creation of the California Bureau of Juvenile Research in 1915 (Stern, 2005). This organization was preoccupied with mental deficiency and was

---

[9] For a more detailed analysis of the relationship of mental deficiency and intellectual ability in Canada during the Eugenic period, see Chapter 2 of de la Cour (2013).

"instrumental to the explosion of IQ testing in California classrooms in the 1920s" (Stern, 2005, pp. 95–96).[10]

The transition of American tests to Canada was not always straightforward and resulted in, in the opinions of a variety of psychologists, invalid assessments of intellectual function (Laycock & Clark, 1942; Sandiford, 1923). Some contemporary Canadian psychologists frequently warned against the overreliance on the results of a given test score in making clinical assessments (Laycock & Clark, 1942; Sandiford, 1923). Moreover, even prominent Canadian eugenicists like Helen MacMurchy opposed the overreliance on tests for diagnosis (MacMurchy, 1920, p. 175).

Despite these concerns, as rapidly as testing became a feature of social life in the United States, it did so in Canada. Intelligence tests became frequent features of educational systems and were adopted in some cases more zealously than by Americans in school districts across Canada (Ellis, 2013; Thomson, 1999). The results of intelligence tests correlated with pre-existing social categories like "idiot" or "moron. This correlation was useful for Canadian physicians as it provided additional sources of information about the category (Carson, 2007, p. 159). As Danziger notes "Whatever it was that intelligence tests could be said to 'measure' it had to be broadly similar to the understandings prevalent in the specific institutional settings in which large scale validation of the tests had taken place" (Danziger, 1997, p. 80; see also Gelb, 1987). Relying extensively on American expertise and publications, Canadian psychologists and school districts allowed the notion of "IQ" and its metric conceptualization of "intelligence" to be imported into how Canadian educators at that time made sense of mental defect (Ellis, 2013; Polyzoi, 1986).

However, psychiatrists and physicians in Canada and the United States, including those who made the recommendations to the Alberta Eugenics Board,[11] rejected the primacy of psychometric tests, unlike perhaps their colleagues in psychology in Canada, as they provided less relevant and useful information in the diagnosis of mental defectives. Indeed, the diagnosis of the lower-grade defectives of "idiots" and "imbeciles" was already a common practice within medicine and there was little need for a psychological test to identify these groups or verify the diagnosis from the perspective of medical practice. One early statement of a consistent position of psychiatrists with regard to the clinical utility of psychometric tests is:

> An accurate and incontestable diagnosis of one of these border line cases can be satisfactorily made only after a thorough physical examination of the patient, knowledge of the family history, personal history, especially the story of his infancy and early childhood, school history and records, social and moral reactions, sexual habits, emotional stability, associates, interests, and the fullest inquiry as to his general information and practical knowledge. Appropriate psychological investigation by formal tests is especially indicated in these doubtful cases … In the borderline adult cases the Binet tests are of value as additional evidence, but they are not conclusive and should not be relied upon in the absence of clinical and other evidence … The Binet tests, in the hands of competent examiners, usually corroborate the results of clinical examination in the recognition of all degrees of mental defect in children under ten, and of pronounced defect in older persons. These tests are not so effective in detecting slight mental defect in world-wise adolescents and adults. In other words, the Binet tests corroborate where we do not need corroboration, and are not decisive where the differential diagnosis of the high grade defective from the normal is in question. (Fernald, 1914, pp. 254, 259–260)[12]

---

[10] Stern (2005) provides a detailed history of the relationship between testing and eugenics in the United States. Given the interest among Alberta eugenicists for the development of sterilization in California, there may have been more contact than we can ascertain from the record.

[11] See Le Vann (1950), this is also discussed in further detail later in the article.

[12] See also "an accurate diagnosis can only be arrived at after consideration of many data, and that the importance of the mental ratio is very apt to be greatly overestimated" (Diagnosis of mental deficiency, 1931, p. 271).

The diagnostic utility of intelligence tests was only gradually adopted after the categories describing the feebleminded were firmly in place (Gelb, 1987, 1995). Indeed, intelligence testing was used by school physicians during the 1930s to "to determine amount of retardation of the feeble-minded" rather than as an acontextual diagnostic tool (A. J. Brown, 1937, p. 380). The medical users of mental tests within Canadian schools would frequently highlight that it "is only one aspect of the total personality.... Other personality traits are equally important, but are more difficult to measure" (A. J. Brown, 1937, p. 381). Fernald's position is also clearly endorsed by Dr. Clarence Meredith Hincks, a founder of Canada's first mental health clinic, and a leading Canadian researcher in mental deficiency in 1918:

> Binet suggested, and he has been followed by Goddard and others, that 12 year mentality was the dividing line between mental deficiency and normality … This procedure seems to me to be unsound because the Binet tests are not true mental tests in the broad sense of the term but only intellectual tests, and even in the intellectual realm they give us merely a rough estimate of the intelligence of a school child … The intellectual life of an individual is, if anything, the lesser half of his mental life … The tests, then, may tell us not that a child is mentally deficient, but that he is intellectually deficient … I find, for instance, children who have an intellectual age of 13, but who are so defective in emotional and volitional development that they are unsafe members of society … The only road left open is a definition in which social efficiency is taken as the standard. I, for one, am satisfied to define the condition as one in which the individuals affected can never be expected to earn an independent living, or conduct their affairs with ordinary prudence … I have dwelt at length on the subject of classification because I am convinced that by adhering to the old grouping into idiots, imbeciles, and morons, and by attaching to these terms their old significance we are overlooking many cases of deficiency-many of the so-called moral cases that constitute by far a greater menace to society than any other group. (Hincks, 1918, pp. 103–105)

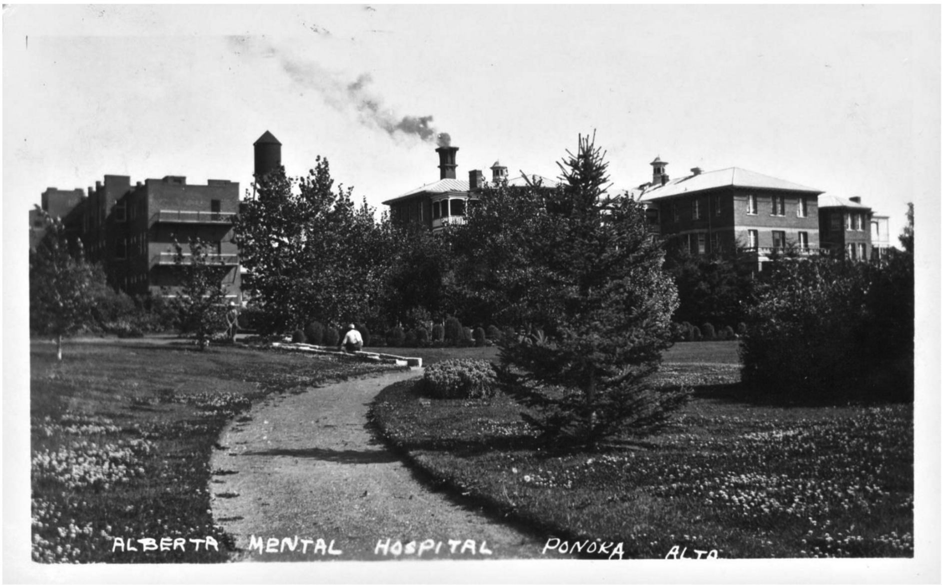
This position that intelligence is one of many mental faculties that include personality, wisdom, emotionality, and impulse control (especially with regards to sexuality) is essentially endorsed by all of the major test creators at the time, for example, Lewis Terman and Weschler, which were the tests primarily used by the Alberta Eugenics Board.[13] For the

---

[13] Terman for example writes in his manual "It must be emphasized, however, that this doubtful group [the high-grade defectives] is not marked off by definite IQ limits. Some children with IQ as high as 75 or even 80 will have to be classified as feeble-minded; some as low as 70 IQ may be so well endowed in other mental traits that they may manage as adults to get along fairly well in a simple environment. *The ability to compete with one's fellows in the social and industrial world does not depend upon intelligence alone.* Such factors as moral traits, industry, environment to be encountered, personal appearance, and influential relatives are also involved" (Terman, 1916, pp. 87–88 emphasis added). For Wechsler, scoring low on an IQ test (i.e., being an intellectual defective), while correlated with, did not guarantee that one was a social defective. Social defectives were "more often than not, individuals who had run afoul of the law or otherwise proved themselves incapable of meeting the ordinary exigencies of social adjustment" and noted that "if judged by social criteria they are mentally defective." This fragmentation explains why, in Wechsler's opinion "the concept of mental deficiency, based on I.Q. ratings or any other single criterion, frequently fails in actual application. The reason for this is that there is not one but several kinds of mental deficiency.... Between them there is a certain degree of correlation, but this correlation is not sufficiently high to make any one a diagnostic indicator of the others, and, in any case, it is quite certain that the concept of mental deficiency as a definite entity has no reality in fact" (Wechsler, 1935, p. 236). Indeed, Wechsler's theory of mental defectives, while open to the problems of conflating various forms of "defects" based on a single indicator, did not itself severely undermine the notion of a "mental defective." This suggested a way of locating socially deviant individuals within the discourse of mental defect and therefore was compatible with the goals of the Board. For a more extended analysis of the manuals and their relation to subjectivity see Derksen (2001).

Figure 2

Postcard Featuring an Image of the Alberta Mental Hospital in Ponoka, Alberta



Note. The majority of cases presented to the Alberta Eugenics Board originated from Ponoka (Grekul et al., 2004, p. 366). It was originally called the Alberta Hospital for the Insane when it opened in 1911. This photograph would have been taken in the mid 1940s (Private collection, Henderikus J. Stam).

Alberta Eugenics Board, the notion of a "mental defective" was a capacious one that explicitly incorporated social and moral considerations as constitutive of the category itself. As eugenic board member Margaret Thompson observed "The decisions of the Eugenics Board and eugenics committees seem to be determined more often by medical and sociological than by genetical considerations" (1959, p. 168), an understatement at best.

The Standard Operating Procedure of the Alberta Eugenics Board

While the diagnostic process was multidisciplinary, psychiatrists retained control over the boundaries of the medico-legal category of "mental deficiency" in Alberta throughout the duration of the Board. The standard operating procedure of the Board remained consistent throughout the Board's tenure. The 1927 legislation created the Alberta Eugenics Board that was chaired by John M. MacEachran for its first 38 years and included three other members: Dr. Edward George Mason, Dr. Edgerton Pope, and Mrs. Jean Field (Grekul, 2002, p. 120). The Board would review patients and their case files referred to them by guidance clinics or mental institutions, primarily at Ponoka Mental Hospital though they would also travel to other medical institutions (Figure 2). According to Jana Grekul's (2011) estimate, the Board spent an average of 13 min considering whether each case be sterilized. At their meetings the patients were physically presented to the Board where both the patient and supporting documents would be inspected and reviewed by the Board before recommending whether a given patient ought to be sterilized (Baragar et al., 1935, p. 899; Grekul et al., 2004, p. 366).[14] Nevertheless, the result in 99% of the cases would be the same: recommended or passed clear for sterilization (Grekul, 2011).

We now review the referral and presentation process.[15] Individuals would be referred for sterilization to the Board from provincial guidance clinics after being presented at the clinics.[16] "Patients visiting the clinics receive a physical (especially neurological) and a psychiatric examination, including a psychometric where indicated, and appropriate recommendations are made…. For problems arising out of a mental or social maladjustment the patient himself, or the parent or guardian or the referring agency is advised how the case may be dealt with" (Baragar, 1935, p. 65; Samson, 2014, p. 152).[17] Following this inspection, a patient could be committed to mental institution or referred to the Board for possible sterilization. Once referred, Baragar et al. (1935, pp. 898–899) describes the Board's process "All authority rests with a board composed of persons of high repute. Application to the Board for the sexual sterilization of a patient is made by a responsible medical officer, a psychiatrist in the Public Health Service and his recommendation must be supported by at least one other psychiatrist, also in the public service. A concise but comprehensive summary of each case must be submitted to the Board setting forth the facts with respect to family and personal history, physical and mental state, and with the reasons for recommending sterilization. The patient is presented in person to the Board and examined by the medical members. Both surgeon and hospital act only when they receive the written authority of the Board

---

[14] John MacEachran the chair of the Board verifies this description in a (MacEachran, 1946) letter to a pastor explaining that "Mental Deficiency, according to the Mental Deficiency Act of 1927, means 'a condition of arrested or incomplete development of mind existing before the age of 18 years, whether arising from inherent causes or induced by disease or injury.'" He then explained the boards operation "Operations for sterilization are authorized after examination by the Eugenics Board consisting of two medical men and two laymen – one a woman. [sic] Before presentation to the Board each patient receives a thorough mental and physical examination by the Medical Staff of a Mental Hospital, the Provincial Training School for Mental Defectives, or of a Mental Hygiene Clinic."

[15] The below examples of descriptions of the function of the board and of the mental health system in Alberta illustrate the dominance of psychiatric authority in the determination of the medico-legal status of "mental defective."

[16] The names of these clinics changed over time from "mental hygiene clinics" to "mental health clinics."

[17] This procedure remained consistent throughout the operation of the board. We reviewed the annual reports from the department of public health from 1925 to 1966 and found that the guidance clinics operated consistently in this fashion. Published reports from the physicians in 1960 and 1968 in charge of the guidance clinics or involved with their operation support this claim. See for example the 1960 report of Le Vann, the director of the PTS at Ponoka "All admissions were first assessed and in many cases treated on an out-patient basis by the Provincial Guidance Clinic set-up. Alberta is fortunate in this respect in having Provincial Guidance Clinics for children, serving as far south as Lethbridge and as far north as Peace River. In this way a considerable compilation of valid material, social background, psychometric assessment and response of therapy was available for the unit and a good deal of the anticipated difficulties in relation to each child were known, as well as their reactions to many of the life situations which they encountered" (Le Vann, 1960, p. 525). See also "All rural cases are handled by a guidance clinic team consisting of at least a psychiatrist, a social worker, and a psychologist. The child is seen for testing and evaluation by the psychologist, the parents are seen together for a case history by the social worker, the child is then seen by the psychiatrist, and finally the psychiatrist, acting on all the available information, sees the parents and discusses with them their child's problems and makes recommendations to them whenever possible. When the child has been referred by someone other than the family, an evaluation and recommendations are forwarded by the psychiatrist to the referring agency and, wherever practical, the team meets with the referring agency for a discussion of specific recommendations" (Davidson et al., 1968, p. 238). A report from 1963 by a member of the Alberta Eugenics Board and two physicians corroborates this: see Gibson et al. (1963, p. 342). G. S. Mundie and Silverman (1924) provide an in depth accounting of how Canadian guidance clinics operate highlighting the comprehensive and multidisciplinary evaluation of cases presented to them, noting the importance of the physical examination.

for the operation."[18] Indeed, given that there was little psychological presence on the board,[19] save for MacEachran who was a psychologist in name only,[20] medical and psychiatric authority was used to determine whether a given case was in fact a "mental defective," a process we examine in greater detail.[21]

How Intelligence Tests Were Used by the Board in the Identification of "Mental Defectives"?

Intelligence testing was a part of the material considered by the Alberta Eugenics Board, however, up until this point, the precise role that intelligence testing has played in their decision making has not received serious scholarly attention. As discussed in the introduction, the "cut-off account," arises from a misreading of the opinion of the Queen's Bench of Alberta in *Muir v. The Queen in Right of Alberta* (1996). The narrative within the opinion is the most historiographically influential description of how the Board used or ought to have used IQ tests.[22] In this section, we first review the "cut-off account," its possible basis in the historical record, and highlight the analytical problems that emerge from it. Then, through a detailed review of the cases presented to the Board, we consider and challenge the "cut-off account" to offer a more synthetic account of the interface of social and scientific priorities.

The "Cut-Off Account" of Intelligence Testing

According to the cut-off approach the results of intelligence tests were, or should have been, interpreted as the determining factor demonstrating clear boundaries between the

---

[18] Meeting minutes from March 1, 1929, outline how this process would take place: "The Board upon receiving such recommendations should proceed to a full discussion of each case with respect to the following: (1) History of case—Physical, Medical, Mental, Environmental, etc. (2) Family History—Including children, if any. (3) Nationality—In this connection, it was decided to inquire into the conditions governing nationality, particularly in regard to citizenship status of wards of the Government. (4) Consent of husband or wife. In this connection, it was decided to ask for a ruling from the Attorney General's Department, as to the position of the Board in case of: (a) the husband being considered incapable of being giving consent to his own sterilization, and the wife being able, and refusing to give her consent (b) the husband being considered capable of giving consent and doing so and wife refusing to give consent. (5) Consideration of the economic advantage of discharge rather than continued institutionalization. (6) Consideration of the advantage, or disadvantage of discharge from a social point of view. (7) Necessity of a through physical examination of patient before ordering operation. (8) Personal interview of patients by Board."

[19] There were only 4 years during which a psychologist was present 1967–1969 (see Table 1).

[20] The board which included MacEachran was itself aware of its limited psychological expertise and explicitly requested the presence of psychologists from the presenting medical institutions to aid it in the interpretation of psychometric tests. In a 1958 letter to Dr. T. C. Michie, the Medical Superintendent, of Provincial Medical Hospital, the Board's secretary Mrs. E. S. James (1958) wrote "Dear Dr. Michie: At the time of the last Board meeting at your institution the Eugenics Board directed that I write you requesting that your psychologist be present at all future Eugenics Board meeting held at your institution. It may be explained that this was requested because of the Board's inability to accurately interpret the findings reported in connection with the various psychological tests mentioned in the summaries of the cases presented." See also Stam and Barlow (2020). A retrospective piece published in 1973 by David Gibson, a former board member and psychologist sheds some details on the Board's process (Gibson, 1974, p. 60).

[21] Although it appears crude at times, the decision-making process was not much different in other jurisdictions. In California, Braslow (1997) shows that "doctors often consciously altered the boundaries of accepted diagnosis in order to smooth the path to the operating room suite" (p. 59). Likewise, the decision-making process for deciding who was to be recommended for psychosurgery in Alberta, Saskatchewan and Manitoba could also be described as rather haphazard since it frequently involved a judgment of the degree to which a patient was "disruptive" (Collins, 2020).

[22] As discussed in the introduction, the ruling by the Queen's Bench of Alberta on Leilani Muir's case has been frequently used by historians as a source for understanding the operations of the Alberta Eugenics Board due to its detailed descriptions of the operations of the board. Therefore, we use its description of the role that intelligence testing played in the diagnosis of mental defects as a starting point for our discussion.

"normal" and the "defective." Evidence for this account draws from the groupings of reported results of intelligence tests published in the psychological and psychiatric literature and a conflating of clinical norms with the communicative norms of scientific publishing. Within scientific literature, and in line with the guidance provided in intelligence testing manuals, the results of the tests were grouped into varying categories that typically included a "normal" group and numerous "subnormal" groups that included "idiot" and "moron." The assumption drawn from this case and from the testimony is that these norms are directly transferred into clinical practice. In contrast to the score of 70 cited, but still in support of the "cut-off account," scientific publications produced by the Board frequently used an IQ cut-off of 75 for the upper limit of the "high-grade defectives" when they would report their results, while other documents from the Board suggest a cut-off of 60 (Gibson, n.d.; Grant, 1956a; Kibblewhite, 1937). Direct evidence of this comes from one of the more prominent social workers who tested many individuals for the eugenics board before eventually becoming a member: Edward James Kibblewhite. Kibblewhite, in his Bachelor of Education thesis, summarized his test results from the 1916 revision of the Stanford–Binet test and used an IQ cut-off of 75 to denote the cut-off for "mental defectives" (1937, p. 14).[23] However, these published limits in a variety of scientific publications should not be interpreted as providing evidence for the "cut-off account," rather, these were largely recognized as necessary for scientific communication, while at the same time being arbitrary and distinct from the "comprehensive" clinical evaluations that would have been done on individuals in the process of selecting them for sterilization. James Russel Grant, a prominent Albertan physician specializing in the study of mental defectives during the 1950s, himself cautions against "[t]he fallacy of assessing mental defectives solely on a basis of I.Q. and specific work performance, without due regard to the personality and character assets of the individual" (Grant, 1956b, p. 921).

One passage describing sterilization is instructive:

> Dr. M. Thompson, a former board member and geneticist … approved the sterilization of a boy who had a tested IQ of 76. *Persons with an IQ of 70 or more were considered to be of normal intelligence.* This particular boy's level of IQ rating was achieved despite a severe hearing defect; being deaf could be assumed to have had a negative impact on the education that he would have required to have done well on the verbal IQ testing. The PTS report commented that this boy had no interest in the opposite sex, but that he masturbated. The report added that he required little supervision in social hygiene. It was said that he was a poor worker. Dr. Thompson was asked why she approved the sterilization of this boy. She replied that social success is a factor to be taken into account in a sterilization decision. When the school reported that he was a poor worker, she concluded that despite all the information that he was a nice quiet boy, he was not really functioning in society. She said that she was being protective of him when she decided to have him sterilized (*Muir v. The Queen in Right of Alberta*, 1996 emphasis added).

The above quote outlines the justice's condemnation of Dr. Thompsons discounting of the boy's IQ score of 76 and her hyperfocus on his possible queerness and disinterest in school. Yet, it is in part an account that is constrained by the framing of the Board that the *Muir* case adopted. Problematically, the legal account presented the boundaries between "defective" and "normal" as knowable through a scientific method grounded in the rigorous analysis of psychometric data, in contrast to the ambiguous, biased,

---

[23] There exists other evidence to reject the notion of a clinically significant cut-off, for example, Dr. James Grant (1956a) a physician at the Provincial Training School for Mental Defectives in Alberta reported the category of an IQ of 70–85 as consisting of "high-grade morons" and lumped together "borderline defectives" in the same category.

and unreliable incorporation of testers' subjective assessments. The legal account reproduces a problematic binary between the "scientific" method of identifying mental defectives that the Board "ought" to have used and the "social" method that the members of the Board actually used. There are problems with this account. Firstly, by locating fault in the Board's deviation from the pedantic application of the results of intelligence tests, it elides a deeper interrogation of a misogynistic, heterosexist, and ableist social system that interfaces and constitutes the very categories of scientific and medico-legal interest and control. We deepen this analysis through a review of cases presented to the Board that takes seriously the interplay between scientific knowledge and political power. Drawing upon prior studies that found social factors dominant in the evaluation of mental defectives in Alberta (Grekul, 2002; Park & Radford, 1998), British Columbia (Quesnel, 2021), and Ontario (de la Cour, 2013), this section deepens this analysis by providing explanations as to why psychometric tests played a minor and contextual role in the evaluation process.

Analysis of Intelligence Tests by the Alberta Eugenics Board

Quantitative Review of Intelligence Testing

Evidence of how the Board utilized tests is found through a quantitative analysis of the case records of the Alberta Eugenics Board. Between 1929 and 1972, a total of 2,834 patients were sterilized (Grekul et al., 2004), while over 4,700 cases were proposed for sterilization. These patients were largely residents of Alberta's mental health institutions and training institutes and tended to be female and young (e.g., teenagers or young adults). Of the 4,785 patients originally presented to the Board, only 861 files, constituting 20% of the total, remain in the Provincial Archives of Alberta; the other 80% were culled and destroyed in 1988.[24] We reviewed all 861 files contained in the Provincial Archives and selected cases that either used IQ tests or were relevant to testing in some capacity. This produced a final number of 235 cases, in addition to relevant meeting minutes.

Using the above 235 records alongside the work of Grekul et al. (2004) and Park and Radford (1998), we have been able to partially reconstruct how the Board processed cases of those labeled "mentally deficient" to illustrate how testing was done and how test-derived information was used.[25] The first point of analysis is examining the wide diversity of tests used by the Board in the evaluation of mental states that suggests an atmosphere of experimentation and variation. Table 2 enumerates the diagnoses of the sample we analyzed, while Table 3 enumerates the 32 different tests used by the Alberta Eugenics Board. Some of the tests that were used, such as the Rorschach Ink-Blot Test, the Vineland Social Maturity Scale, and the personality tests did not produce IQ scores, but were nonetheless used by the Board in the evaluation of mental defectives.[26]

---

[24] Jana Grekul (2002, pp. 84–86) describes the "1 in 5" sample in greater detail, see also Grekul et al. (2004, pp. 365–366, 381n6).

[25] Prior research on the case files, in particular the work of Grekul et al. (2004) and Park and Radford (1998) has examined closely the role that social, behavioral, and environmental concerns played in the evaluation of cases. Our work complements these earlier analyses through the focused analysis of the use of testing by the Alberta Eugenics Board by placing those analyses in a broader historical context.

[26] The American Journal of Mental Deficiency would publish different ways of assessing mental defectives with many of the tests used by the Alberta Eugenics Board (e.g., the Goodenough test, Rorschach test). For an example of the usage of Rorschach Ink-Blot Tests in the clinical assessment of defectives, see Font (1950). See Tredgold (1920) for an overview of how these tests could be used in the diagnosis of defect.

Table 2
Diagnosis of Patients Presented to the Eugenics Board in Sample

Diagnosis	Number of diagnoses	Percentage of diagnoses
Mental deficiency	154	53
Schizophrenia	58	20
Psychosis	28	10
Other	14	5
Epilepsy	13	4
Manic-depression	8	3
"Interest in sex"/sex delinquency	5	2
Behavior problem	3	1
Depression	2	1
General paresis of the insane	2	1
None	2	1
Psychopathy	2	1

Note. Patients were frequently diagnosed with multiple illnesses, therefore the number of illnesses will be greater than the number of cases.

One hundred fifty four of the cases were categorized by us under the umbrella term of "mental deficiency."[27] Of these cases, 129 of the "mental deficiency" group were successfully tested, and 25 were not. Of the 25 who were not tested, all were recommended for sterilization, 13 had no consent requirement (i.e., passed "clear"), six did not list whether consent was a requirement, while five required consent. The cases were presented to the Board between 1935 and 1958. There were various reasons why testing was not conducted, ranging from "subject not testable," language difficulties, being "deaf," "patient was working at home," being "not well enough for test," "being Indian"[28] or being "obviously defective." Of the 25, 15 were sterilized, nine without consent, three with no statement of consent requirements and three with consent. Based on an examination of these 25 cases, mental defectives could be detected and sterilized without the technical label produced by IQ tests. Of the 129 mental "deficiency group" who were tested, 126 were assigned IQ scores. Individuals could be subjected to a variety of tests to understand their mental status more precisely. These scores ranged from 12 to 92 with an average of 55.8 and a standard deviation of 14.4. Sixty-four (or just under half) of those tested were passed clear by the Board for sterilization, of those passed clear their IQ ranged from 12 to 92, 10 of those who "passed clear" possessed an IQ of 70 or higher. The IQs of those who required consent ranged from 25 to 90; however, the vast majority of these cases occurred before 1937, when new legislation was passed that waived the requirement for informed consent. After 1937, only two individuals required informed consent, one of an IQ of 90 and another of an IQ of 60, both in 1965.

The quantitative review of the usage of IQ scores and intelligence tests illustrates that the possession of IQ scores lower than 70—the boundary for normality cited in *Muir v. The Queen in Right of Alberta* (1996)—was not used either in a cut-off fashion by the Board or as the singular determinant of deficiency. Indeed, intelligence tests themselves were occasionally presented as unnecessary given that some cases were "obviously defective" and

---

[27] The term "mental deficiency" includes the following terms used by the Board: mental defective, moron, idiot, imbecile, borderline intelligence, etc.

[28] The full quote reads "She gives the impression of being very limited in intelligence. She is unable to solve simple problems with which she would have to contend in her daily life. All her reactions are simple. Mr. R.N. Crawford, on the 12 of January stated this patient is not testable as there are no tests in hospital that are applicable to Indians." The term "Indian" is historic and pejorative. In this context it refers to an Indigenous individual.

Table 3

Psychometric Tests Used by the Alberta Eugenics Board in Sample

Psychometric test name	Number of patients tested	Percentage of total Number of tested patients
Stanford-Binet	46	31.7
Unspecified Intelligence Tests	41	28.3
Wechsler-Bellevue Scale, I and II	22	15.2
Wechsler Intelligence Scale for Children (WISC)	19	13.1
Wechsler Adult Intelligence Scale (WAIS)	14	9.7
Raven's Progressive Matrices	13	9.0
Kohs Block Design Test	8	5.5
Bender Visual Motor Gestalt	6	4.1
Peabody Picture Vocabulary Test	6	4.1
"Estimated" or "Approximate" IQ Scores	6	4.1
Performance Tests	5	3.4
Rorschach Ink-Blot Test	3	2.1
Vineland Social Maturity Scale	3	2.1
Columbia Mental Maturity Scale	2	1.4
Mill Hill Vocabulary Scale	2	1.4
Schonell Reading Age Test	2	1.4
Aphasia test	1	0.7
Army *M* test	1	0.7
Detroit Beginning First Grade Intelligence Test	1	0.7
Driscoll Play Kit	1	0.7
Goldstein Scheerer Test	1	0.7
Goodenough Test	1	0.7
Graham Kendall Memory-for-Design	1	0.7
Hickey Nebraska Intelligence Test for Deaf and Mute	1	0.7
House-Tree-Person (H.T.P.) Drawing Test	1	0.7
Kahn Test of Symbol Arrangement (KTSA)	1	0.7
Minnesota Multiphasic Personality Inventory (MMPI)	1	0.7
Otis Self-Administering Test	1	0.7
Personality Tests	1	0.7
Porteous Test	1	0.7
Quick Test	1	0.7
Revised Beta IQ Test	1	0.7
Symonds Picture-Story Test	1	0.7
Wechsler Memory Scale	1	0.7

never tested. That IQ scores lacked a definitive or determinant role in the diagnosis of "mental defectives" is supported by minutes taken at Board Meeting 153, March 31, 1949:

> There was some discussion on the Mental Defectives' Act, and on the interpretation of "Mental Defective". The Board then suggested that there might be some further definition for this term, say in terms of I.Q., which would act as a guide for them in considering borderline cases (Alberta Provincial Archive, Accession No 1988.0211).

This quote implies that the Board did not have a clear definition of a defective in terms of an IQ score 20 years into its operation and is consistent with the shifting and inconsistent role that IQ scores played in the assessment of mental defectives.[29] The Board used psychometric tests in the assessment of mental defectives. However, it appears this usage was driven by a variety of contextual factors such as the severity of impairment. In "borderline cases," the

---

[29] Alberta was hardly unique in this respect, see Jarrett (2020); The Mental Deficiency Act of 1913 passed by the parliament of the United Kingdom outlines a broad set of factors similar to those used by the Board when defining "idiots," "imbeciles," "feeble-minded persons," or "moral imbeciles," including the Binet–Simon test as one of more than nine broad categories of diagnostic significance (Leach, 1914, pp. 254–256).

roles that testing played were limited, consistent with the explicit inability of the tests to indicate the social attributes prioritized by the Board in their deliberations and foundational to the construction of a "social defective."

Qualitative Review of Borderline Cases

Kibblewhite's (1937) Bachelor of Education thesis provides a rich overview of the assessment and identification strategies used by mental health clinics in the identification of possible defectives for sterilization and how intelligence tests were used in the assessment of "borderline mental defectives." Consistent with Terman's and Wechsler's guidance regarding an awareness of the broad social, moral, and intellectual features of the various mental defectives, Kibblewhite's approach to diagnosis was multifaceted and interpretative. The interpretive approach adopted by Kibblewhite in the assessment of borderline defectives closely aligned with Terman's suggestion to consider "factors as moral traits, industry, environment to be encountered, personal appearance, and influential relatives" when drawing the boundary between normal and pathological (Terman, 1916, pp. 87–88). For example, when examining the 10-year-old son of a bank manager with an IQ of 76 whom he deemed "subnormal," Kibblewhite found that he came from a respectable family, which had a "stable, cultured home atmosphere" and should, therefore, be kept in a regular school and provided with appropriate vocational training (Kibblewhite, 1937, pp. 38–41). However, in another case, a boy with an IQ of 75 (IQ of 71 on retest) became a "high-grade defective" as he came from a poor family of "defectives" and had been accused of stealing a number of horses, though he had ultimately returned them (Kibblewhite, 1937, pp. 41–47).

Kibblewhite describes another case of a "borderline deficiency"—a woman with an IQ of 80 (78 upon retest). He recalls several important features of her case to explain why she was referred to and sterilized by the Alberta Eugenics Board (apparently without consent). This woman, "Case IV" was referred to Kibblewhite's mental health clinic through the Child Welfare system, having come from a working-class family. Case IV was described as difficult to manage: "She was self-willed and impetuous, fond of company, and of adventure" (Kibblewhite, 1937, p. 48). She would ride horses, spend time with men, and engage in activities of petty theft, which ultimately landed her in Juvenile court in 1933. While she appeared to briefly improve, by the "[s]pring of 1934 she got in with, a rough "fast" crowd, and there was a succession of parties and dances on which smoking and drinking were common, and sexual indiscretions took place" (Kibblewhite, 1937, p. 49). Both of her parents found her to be "out of control." Upon clinical examination by Kibblewhite, she was found to have "quite a pleasing appearance," a "noticeable extrovert tendency and a rather vivacious manner" (Kibblewhite, 1937, pp. 49–50). It was recommended that she be removed from her home and placed in care in Calgary. Upon reexamination, it was found that she "showed no essential change in physical or mental health or capacity" and was then put forward for consideration by the Board and subsequently sterilized.[30]

Alongside the Kibblewhite's thesis, other archival sources illustrate how the diagnostic procedures used by the Alberta Eugenics Board drew substantially upon physical, social, and behavioral indicators of deficiency in defining the state of being "mentally defective." For example:

Letter to Dr. W. J. McAlister from E. J. Kibblewhite (social worker), December 17th, 1935

---

[30] In cases where IQ was high, typically >90, morally deviant individuals would not be labeled by Kibblewhite as a "mental defective," instead they were psychopaths or antisocial individuals (1937, p. 50).

> It was not possible to get formal ratings for the children as cooperation is still poor, because of the language handicap and shyness. However, there seems no doubt that —, the 7yr old is quite markedly mentally deficient, probably fairly well down in the moron group. The other two, one would judge, would rate in the normal, or at lowest in the dull normal group (Alberta Provincial Archive, Accession No 1988.0211).

The individuals were "markedly" deficient; this phrasing is important as it illustrates the importance of observation in the diagnosis. This position is more explicitly stated in Kibblewhite's thesis where he stated, in describing how he classified individuals:

> The whole range of juvenile cases may be divided into two groups on the basis of comparative intelligence: (1) those that are manifestly mentally deficient; and (2) these that are of normal or superior intelligence (1937, pp. 85–86).

Kibblewhite's use of the expression "manifestly mentally deficient" should be interpreted literally, as he did himself in adjudicating cases in which tests were not done and in "borderline cases." In cases where the "manifestly" defective presentation of the client disagreed with the results of an intelligence test, Kibblewhite would reliably label the person a defective.

Another encounter between the Dr. J. W. McAlister and the Edmonton City Police Court in 1935 as reported in the files of the Alberta Eugenics Board is instructive for the importance of direct observation in the diagnosis of defectives and provides further evidence that this style of diagnostic practice was standard in Alberta throughout the operations of the Board:

Notes from Case 000195—737 presented to the Alberta Eugenics Board Inquiry held at the Edmonton City Police Court on the 21st day of January 1935 before Magistrate A. I. Miller, to enquire into the mental state of IM of the City of Edmonton Direct Examination by Mr. McLennan of Dr. J. W. McAlister (Oliver Institute, Alberta) Dr. J. W. McAlister (Oliver Institute, Alberta) having been duly sworn, testifies as follows:

DIRECT EXAMINATION BY MR MC. LENNAN:

Q: Doctor, you are a duly qualified medical practitioner in the Province of Alberta?

A: Yes.

Q: You investigated this case?

A: Yes.

…

Q: Will you tell us the result of your investigation, Doctor?

A: Well, in the diagnosis of mental defectives, there are two approaches: one is a subjective approach and the other is an objective approach. The objective approach is the question of the conduct of the individual, and the subjective findings cover her mental functioning. After a child passes the age of 16 years, we generally judge the mental status of that child by her conduct. Of course, such conduct is generally strengthened by our findings psychologically. My psychological findings this morning would give this girl a mental age of not higher than nine years. That is her mind is on the nine year level, although her life age is 19 years. That would definitely place her in the feeble minded class. This psychological finding or diagnosis is strengthened by her definite lack of practical knowledge; and her poor vocabulary which indicates a poverty of ideas etc., so that I am quite satisfied that we are dealing with a case of mental deficiency and I am quite satisfied to make that diagnosis (Alberta Provincial Archive, Accession No 1988.0211).

Tests, in McAlister's assessment form the "subjective" component of the evaluation of the patient, which served to "strengthen" his diagnosis of her as a defective based on "objective" indicators such as her conduct. Testimony, such as McAlister's helps to highlight how, from its outset, the Board operated as an institution of social control relying primarily on social indicators of marginality, such as deviant behavior in the process of identifying "mental defectives" and was supplemented in the search through the incorporation of psychological testing and in line with the judge's finding from the Muir trial that in 1955 "a proper assessment to determine if a child was mentally defective would have involved a multidisciplinary approach" that considered:

- a clinical interview, with parental involvement, to obtain personal and family history;
- a medical examination to review the general health of the child, any physical damage or scars, rickets, infectious diseases, lice, signs of mental handicap, such as concrete versus abstract language, narrow range of vocabulary, stuttering, short attention span, hyperactivity, stability, "dull face," epilepsy, physical deformities;
- IQ tests;
- records of academic achievement;
- a comprehensive social work report, including a home visit to ascertain the child's living conditions, including areas of potential neglect: dress, cleanliness, language, family stability, alcoholism, numbers, ages and conditions of siblings, signs of abuse;
- more intensive follow-up if any concerns arose during the initial assessment. (*Muir v. The Queen in Right of Alberta*, 1996).

As noted in the *Muir* trial, even under ideal circumstances, the identification and diagnosis of mental defectives, while containing a medical component, nevertheless displayed a marked interest in the social location and marginality as key diagnostic indicators of defect. And as observed in the trial, social and sexual considerations dominated in the identification of mental defectives for sexual sterilization, including in the case of Leilani Muir.

Longitudinally, the stability of this broader understanding of the diagnostic category was also evidenced from the description of the Board's operations in 1968 from an unpublished manuscript by David Gibson (1926–2006), a former Alberta Eugenics Board member and Professor of Psychology at the University of Calgary from 1963 to 1989. Gibson was a member of the Board for 8 months yet remained interested in the issue for the remainder of his life. In an undated and unpublished manuscript entitled "Anatomy of a Eugenics Law: From Doctrine to Expediency in the Sterilization of Mentally Retarded Youth—Then and Now" (written at the earliest in 1999), he explicates in detail how the Board operated from 1968 to 1969 which provides crucial a longitudinal perspective on the operation of the board (Gibson, n.d.). In his manuscript, Gibson examines the documents submitted to the Alberta Eugenics Board (from his year on the Board) and the case-by-case deliberations that occurred to determine "the relative significance of one or both legislated criteria for selection of MR [Mentally Retarded Individuals]" and "the reliability and relevance of the evidence supporting a request for sterilization …" In short Gibson sought to explicate the decision-making process of the Board and subject it to critique with an eye toward the reinstatement of a new sterilization board.

In his manuscript, Gibson notes that the information considered was broad and included "patient and family histories, medical, development and school records and psychometric evaluations. Noted also were the patient's behavioral and psychosexual status. A final section offered a care staff appraisal of the likelihood that a given MR patient was likely or not to achieve a level of community integration that could include marriage and parenthood to the advantage of both patient and offspring—retarded or not." In his summary, he noted that:

> For the balance, the major reasons offered for sterilization centered on the "mental injury to self or progeny"—provision of the legislation. Information summaries highlighted references to a mental age at maturity of below 12 years as a sufficient indicator of inability to nurture children. For MR patients in the upper-Mild or Borderline category of intelligence, arguments for sterilization brought to the Board emphasized behaviour disorders as grounds [sic] for sterilization. Descriptors such as disruptive, aggressive, destructive and generally lacking in self-control were common. For the more mildly retarded females, note was taken of past and present sexual liaisons, including pregnancies, such descriptors as "exposes self to strangers." Since psychosexual immaturity/irresponsibility must surely presage nurtural irresponsibility, the "unfit to parent" provision became, in later years, "the *sine qua non* of sterilization referral and Board approval" … [Points of consideration are] vulnerability to sexual predation while on home visits or within institution…. The most cited reason offered in support of a request of a request for sterilization was having a mental ability level judged by the institution or clinic to be below the mid-Mild diagnostic category and which typically represented an IQ score of fewer than sixty points. The assumption was that only those MR patients in the upper-Mild classification category could be expected to succeed as parents and breadwinners, and then, only if responsive to training and free of a record of heterosexual aggression, vulnerability or other psychopathology. (Gibson, n.d.)

As this quote illustrates, while testing may have occupied increased importance during the final years of the Board in the diagnosis of "low-grade defectives," the medicolegal categories of "mental deficiency" and the attendant social considerations, especially the sexual status of females still occupied priority during the diagnosis of "borderline" cases.

What these cases and trial evidence illustrate, is that while it may appear that intelligence testing might have offered some guidance to the evaluation of borderline mental defectives, social and behavioral considerations would routinely take precedence over the numerical results of intelligence tests because. This was because a social assessment of defect was seen as more reliable and "scientific" than the reliance on intelligence tests alone and it spoke directly to a broader construction of mentality. In this way, testing was only ever secondary to what were seen as the primary social and behavioral indicators of mental deficiency. Moreover, the "social" considerations in the diagnostic process also reliably produced evidence of social marginality that were central concerns of the Board. Indeed, when a violent institution is jealously surveilling the population for deviants "visibility is a trap" (Foucault, 1995, p. 200). It does not matter how rigorous or "valid" the diagnosis is when its ultimate function is to direct and facilitate state-sanctioned violence in the form of sterilization.

Conclusion: Why Tests Did Not Matter That Much

One final piece of evidence comes from Leilani Muir's lawsuit against the Government of Alberta, which as noted earlier, has been a frequently cited historical source for information about eugenics in Alberta. In writing her opinion for the Queen's Bench of Alberta (1996) the Honorable Madam Justice Joanne Veit noted that:

> Dr. Thompson [a member of the Board] testified that eugenics was not primarily a scientific movement, but a political and social one … She testified that just as only 2% to 4% of abortions

> are done for genetic reasons and the rest are done for social reasons, so too was sterilization done essentially for social reasons.[31]

This assessment by Dr. Margaret Thompson is largely consistent with the argument we have made in this article: the diagnosis of “mental defective” and subsequent sterilization was not done merely for social reasons, but these social reasons were constitutive of the very category itself and reflected the practical medico-legal diagnosis of the “mental defective” category used by the Board. Being presented to the Board was a product of occupying a socially marginal position, which would then be used as evidence of being “mentally defective.” One early criticism of this process from the Knights of Columbus stated that this was “mere guess-work, an unwarranted interference with the natural rights of individuals, and liable to become an intolerable tyranny” (cited in a letter from MacLean, 1946), a position well supported by reviews of the case files elsewhere (Park & Radford, 1998). Intelligence tests were designed to be objective by eliminating variation caused by social conditions to provide an unbiased estimate to the true level of a given individual’s “intelligence.” Intelligence tests could not have played a decisive role because they occluded from view the practical and social considerations central to medical notions of “mental deficiency” and the broader category of “mentality” from which it is derived (Gelb, 1989; Rapley, 2004).

A significant amount of the historical literature describing the term “mental defectives” remains confused by a problematic tendency to assign far too much agency to early psychologists in constructing social categories of profound significance, in this case, those of the “mental defectives.” Most problematically, the analysis of “mental defectives” tends to remain overdetermined by the notion of “intellect,” pushing aside the possibility of variance and divergence in the construction of defectives. The notion of “mental defectives” originated from an entanglement of discourses about intellect and morality that circulated freely in periodicals, books, and conversation as *bona fide* social categories. While during the course of the 20th-century mainstream educational psychologists gradually narrowed, parsed, and redefined the notion of a “mental defective” to more closely reflect the group now commonly described as “intellectually disabled,” the eugenics board did no such thing and operated uniformly with the broader categorical approach of a “mental defective” that included intellectual, moral, and social valences that originated from the 1800s (Rapley, 2004; Wehmeyer, 2013). It was these “mental defectives” of the social and moral kind that were defined as such through their social deviance that the Board targeted. While the intellectual defectives were constructed through the results of IQ tests, it was the “high-grade defective” with her compromised sexual morality that concerned the Board and required a social examination.[32] Indeed, the identification of mental defectives was imagined to be plainly obvious. Judgments of whether a given individual was a “mental defective” relied more on observing the behavior, physical features, and the social status of the individual than did any specific intelligence test. Psychological testing found its value, not in the diagnosis of the average “mental defective,” but by providing an estimate of the magnitude of the defect. It was here that intelligence tests could prove their value, and hence the value of psychologists, by adding a form of technologically enhanced perception. Stated bluntly, intelligence tests needed the preexisting categories of mental defect to establish their social utility and scientific legitimacy far more than the inverse for the Board.

---

[31] This is a rather contentious statement by a former board member. It admits, upon questioning in a court of law and after the demise of the board, that the grounds for sterilization were not essentially medical or scientifically grounded but instead consisted of limiting social deviance.

[32] See I. H. Clarke (1973, pp. 78–117) for a thorough investigation of the sexist implementation of sexual sterilization in Alberta, as well as more recent scholarship (de la Cour, 2013; Quesnel, 2021).

In clarifying and complicating the usage of intelligence tests by the Alberta Eugenics Board we provided a detailed case study illustrating what we believe is an oversight in the history of mental deficiency, eugenics, and intelligence testing in North America and contributed to enriching the history of psychology by providing a contextualized account of how and why testing was taken up and used as it was by a eugenics board. Histories of eugenics in Alberta and in Canada have yet to deeply engage the history of psychological testing as a historically situated and dynamic practice, allowing us to provide an analytical and empirical overview of the relationship between the practitioners of eugenics and those producing the tests used by the Boards. Further historical research into the relationship between psychology and eugenics should exercise caution in deploying the concept of "intelligence" given the importance and the social and moral considerations that the concept of "mental defective" was constituted from. This study lays the groundwork for further study of the decision-making process for other eugenic boards, such as the sexual sterilization programs in U.S. states such as California and countries such as Japan, New Zealand, and Australia by exploring the conceptual foundations that orientated and guided the Alberta Eugenics Board in evaluating mental defectives for sterilization by clarifying the concept of "mentality" and its relationship to "mental defectives" in practice.

Archival Sources

Alberta Provincial Archives. *Alberta Eugenics Board Records* (Accession No. 1988.0211).

References

An Act to Amend The Sexual Sterilization Act, 45, Legislative Assembly of the Province of Alberta, 3rd, 8th Legislature. (1937). https://docs.assembly.ab.ca/LADDAR_files/docs/bills/bill/legislature_8/session_3/19370225_bill-045.pdf

Baragar, C. A. (1935). Mental health clinics. In G. Hoadley (Ed.), *Annual report of the Department of Public Health, Province of Alberta 1933* (pp. 65–69). W. D. Mclean, King's Printer.

Baragar, C. A., Davidson, G. A., McAlister, W. J., & McCullough, D. L. (1935). Sexual sterilization: Four years experience in Alberta. *American Journal of Psychiatry*, *91*(4), 897–923. https://doi.org/10.1176/ajp.91.4.897

Bastow, D. C. (1928). The complete physical examination in school children. *The Public Health Journal*, *19*(9), 410–415. https://www.jstor.org/stable/41973885

Beck, L. A. W. (1914). Medical inspection of schools and school children. *The Public Health Journal*, *5*(3), 200–206. http://www.jstor.org/stable/45246159

Berry, R. J. A., & Porteus, S. D. (1920). *Intelligence and social valuation: A practical method for the diagnosis of mental deficiency and other forms of social inefficiency*. The Training school. https://catalog.hathitrust.org/Record/001584357

Boschma, G. (2020). "You had to just kind of rub her cheek": Memories and emotions of mental deficiency nurses in Alberta, Canada, 1945–1975. *Quality Advancement in Nursing Education*, *6*(2), Article 5. https://doi.org/10.17483/2368-6669.1247

Braslow, J. (1997). *Mental ills and bodily cures: Psychiatric treatment in the first half of the twentieth century*. University of California Press.

Brown, A. J. (1937). Mental tests. *Canadian Public Health Journal*, *28*(8), 378–382. https://www.jstor.org/stable/41977627

Brown, F. E. (1922). Mental defect and venereal disease. *The Public Health Journal*, *13*(5), 222–229. http://www.jstor.org/stable/41972849

Brownlie, R. (2006). "A better citizen than lots of white men": First Nations Enfranchisement—An Ontario Case Study, 1918–1940. *Canadian Historical Review*, *87*(1), 29–52. https://doi.org/10.3138/CHR/87.1.29

Bryce, P. H. (1916a). The work of bureaus of child hygiene and of medical inspection in schools. *The Public Health Journal*, *7*(2), 59–62. http://www.jstor.org/stable/41996941

Bryce, P. H. (1916b). Tuberculosis in relation to feeblemindedness. *The Public Health Journal*, *7*(8), 365–370. http://www.jstor.org/stable/41997075

Bultman, S. (2020). Seeing inside the child: The Rorschach inkblot test as assessment technique in a girls' reform school, 1938–1948. *History of Psychology*, *23*(4), 312–332. https://doi.org/10.1037/hop0000167

Burnette, N. L. (1922). Mental defect and social hygiene. *The Public Health Journal*, *13*(2), 69–75. http://www.jstor.org/stable/41972809

Canadian National Committee for Mental Hygiene, & Hincks, C. (1921). *Mental hygiene survey of the province of Alberta conducted by the Canadian National Committee for Mental Hygiene in the months of October and November, 1921*.

Carson, J. (2007). *The measure of merit: Talents, intelligence, and inequality in the French and American Republics, 1750–1940*. Princeton University Press.

Carson, J. (2014). Mental testing in the early twentieth century: Internationalizing the mental testing story. *History of Psychology*, *17*(3), 249–255. https://doi.org/10.1037/a0037475

Chadha, E. (2008). "Mentally defectives" not welcome: Mental disability in Canadian Immigration Law, 1859–1927. *Disability Studies Quarterly*, *28*(1). https://doi.org/10.18061/dsq.v28i1.67

Chadwick, R. B. (1914). Mental defectives in Alberta. *The Public Health Journal*, *5*(4), 220–222. https://www.jstor.org/stable/41997614

Christian, T. J., & Barker, B. M. (1973). *The mentally ill and human rights in Alberta: A study of the Alberta Sexual Sterilization Act*. Faculty of Law, University of Alberta.

Cicciola, E., Foschi, R., & Lombardo, G. P. (2014). Making up intelligence scales: De Sanctis's and Binet's tests, 1905 and after. *History of Psychology*, *17*(3), 223–236. https://doi.org/10.1037/a0033740

Clarke, E. (2021). Indigenous women and the risk of reproductive healthcare: Forced sterilization, genocide, and contemporary population control. *Journal of Human Rights and Social Work*, *6*(2), 144–147. https://doi.org/10.1007/s41134-020-00139-9

Clarke, I. H. (1973). *Public provisions for the mentally ill in Alberta, 1907–1936* [Master's thesis]. University of Calgary.

Collins, B. M. (2020). *Uncharted territory: Psychosurgery in Western Canada, 1935–1970* [PhD thesis]. University of Calgary. https://prism.ucalgary.ca/handle/1880/111599

Dack, W. M. (2020). The Alberta Eugenics Movement and the 1937 amendment to the sexual sterilization act. In K. Erna, & F. Stahnisch (Eds.), *Exploring the relationship of eugenics and psychiatry: Canadian and trans-Atlantic perspectives, 1905–1972* (pp. 103–118). Athabasca University Press.

Danziger, K. (1997). *Naming the mind: How psychology found its language* (1st ed.). Sage Publications.

Davidson, P. O., Schrag, A. R., Evans, G. B., & Francis, M. (1968). Diagnostic services for maladjusted rural children. *The Journal of Psychology*, *69*(2), 237–243. https://doi.org/10.1080/00223980.1968.10543470

de la Cour, L. (2013). *From "Moron" to "Maladjusted": Eugenics, psychiatry and the regulation of women, Ontario, 1930s–1960s* [Thesis]. https://tspace.library.utoronto.ca/handle/1807/70070

Derksen, M. (2001). Discipline, subjectivity and personality: An analysis of the manuals of four psychological tests. *History of the Human Sciences*, *14*(1), 25–47. https://doi.org/10.1177/095269510101400102

Diagnosis of mental deficiency [Review of *The Diagnosis of Mental Deficiency*, by Henry Herd]. (1931). *British Medical Journal*, *1*(3658), 271.

Dyck, E. (2013). *Facing eugenics: Reproduction, sterilization, and the politics of choice*. University of Toronto Press.

Dyck, E. (2014). Sterilization and birth control in the shadow of eugenics: Married, middle-class women in Alberta, 1930–1960s. *Canadian Bulletin of Medical History*, *31*(1), 165–187. https://doi.org/10.3138/cbmh.31.1.165

Dyck, E. (2018). Eugenics in Canada: Choice, coercion and context. In D. B. Paul, J. Stenhouse, & H. G. Spencer (Eds.), *Eugenics at the edges of empire: New Zealand, Australia, Canada and South Africa* (pp. 41–61). Palgrave Macmillan.

Dyck, E., & Lux, M. (2016). Population control in the "Global North"?: Canada's response to indigenous reproductive rights and neo-eugenics. *Canadian Historical Review*, *97*(4), 481–512. https://doi.org/10.3138/chr.Dyck

Ellis, J. (2013). "Inequalities of children in original endowment": How intelligence testing transformed early special education in a North American City School system. *History of Education Quarterly*, *53*(4), 401–429. https://doi.org/10.1111/hoeq.12035

Farrar, C. B. (1931). Sterilization and mental hygiene. *Canadian Public Health Journal*, *22*(2), 92–94. http://www.jstor.org/stable/41976281

Fernald, W. E. (1914). The diagnosis of the higher grades of mental defect. *American Journal of Psychiatry*, *70*(3), 741–752. https://doi.org/10.1176/ajp.70.3.741

Fitzherbert, A. (1755). *The new Natura brevium* (8th ed.). Crown and Mitre, against Fetter Lane in Fleet-ftreet. http://archive.org/details/newnaturabrevium00fitz

Font, M. (1950). Some clinical applications of the Rorschach technique in cases of borderline deficiency. *American Journal of Mental Deficiency*, *54*(4), 507–511.

Foucault, M. (1995). *Discipline and punish: The birth of the prison* (REP ed.). Vintage.

Francis, R. D., & Kitzan, C. (Eds.). (2007). *The Prairie West as promised land*. University of Calgary Press.

Friesen, G. (1998). *The Canadian prairies: A history* (Reprint). University of Toronto Press.

Frost, E. M. (1942). *Sterilization in Alberta: A summary of the cases presented to the Eugenics Board for the Province of Alberta from 1929 to 1941* [Master's thesis]. University of Alberta. http://archive.org/details/sterilizationina00fros

Gelb, S. A. (1987). Social deviance and the "Discovery" of the Moron. *Disability, Handicap and Society*, *2*(3), 247–258. https://doi.org/10.1080/02674648766780311

Gelb, S. A. (1989). "Not simply bad and incorrigible": Science, morality, and intellectual deficiency. *History of Education Quarterly*, *29*(3), 359–379. https://doi.org/10.2307/368909

Gelb, S. A. (1995). The beast in man: Degenerationism and mental retardation, 1900–1920. *Mental Retardation*, *33*(1), 1–9. https://pubmed.ncbi.nlm.nih.gov/7707934/

Gibbons, S. (2014). "Our power to remodel civilization": The development of eugenic feminism in Alberta, 1909–1921. *Canadian Bulletin of Medical History*, *31*(1), 123–142. https://doi.org/10.3138/cbmh.31.1.123

Gibson, D. (n.d.). *Anatomy of a eugenics law: From doctrine to expediency in the sterilization of mentally retarded youth—Then and now* [Unpublished Manuscript].

Gibson, D. (1974). Involuntary sterilization of the mentally retarded: A Western Canadian phenomenon. *Canadian Psychiatric Association Journal*, *19*(1), 59–63. https://doi.org/10.1177/070674377401900112

Gibson, D., Frank, H. F., & Zarfas, D. E. (1963). Public mental retardation services in Canada: Evolution and trends. *Canadian Psychiatric Association Journal*, *8*(5), 337–343. https://doi.org/10.1177/070674376300800511

Grant, J. R. (1956a). Physiological correlates of intelligence. *Canadian Psychiatric Association Journal*, *1*(3), 149–154. https://doi.org/10.1177/070674375600100306

Grant, J. R. (1956b). Results of institutional treatment of juvenile mental defectives over a 30-year period. *Canadian Medical Association Journal*, *75*(11), 918–921. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1823350/

Grekul, J. (2002). *Social construction of the feeble-minded threat: Implementation of the sexual sterilization act in Alberta 1929–1972* [PhD thesis]. University of Alberta.

Grekul, J. (2008). Sterilization in Alberta, 1928 to 1972: Gender matters. *Canadian Review of Sociology/Revue Canadienne de Sociologie*, *45*(3), 247–266. https://doi.org/10.1111/j.1755-618X.2008.00014.x

Grekul, J. (2011). A well-oiled machine: Alberta's Eugenics program, 1928–1972. *Alberta History*, *59*(3), 16–24.

Grekul, J., Krahn, A., & Odynak, D. (2004). Sterilizing the "Feeble-minded": Eugenics in Alberta, Canada, 1929–1972. *Journal of Historical Sociology*, *17*(4), 358–384. https://doi.org/10.1111/j.1467-6443.2004.00237.x

Hilliard, L. T., & Kirman, B. H. (1965). *Mental deficiency* (2nd ed.). Little, Brown and Company. http://archive.org/details/mentaldeficiency0000hill

Hincks, C. M. (1918). Mentally deficient children. *The Public Health Journal*, *9*(3), 102–105. http://www.jstor.org/stable/41975587

Hodgins, F. E. (1920). The mentally deficient in Ontario. *The Public Health Journal*, *11*(3), 126–134. http://www.jstor.org/stable/41965657

James, E. S. (1958). *1958 letter to Dr. T. C. Michie, the Medical Superintendent, of Provincial Medical Hospital, Ponoka* (Accession No. 1988.0211). Alberta Provincial Archives.

Jarrett, S. (2020). *Those they called idiots: The idea of the disabled mind from 1700 to the present day*. Reaktion Books.

Jay, O. C. (1914). Review of *Mental Deficiency (Amentia)* second edition 1914 by A. F. Tredgold. *The Public Health Journal*, *5*(7), 474. http://www.jstor.org/stable/41996654

Kibblewhite, E. J. (1937). *Mental hygiene clinics in Alberta, with a study of selected clinic cases of school age* [Bachelor's thesis]. University of Alberta. http://archive.org/details/mentalhygienecli00edwa

Kline, W. (2001). *Building a better race: Gender, sexuality, and eugenics from the turn of the century to the baby boom*. University of California Press.

Kordan, B. S. (2002). *Enemy aliens, prisoners of war: Internment in Canada during the great war*. McGill-Queen's Press-MQUP.

Kurbegović, E. (2016). Eugenics in Canada: A historiographical survey. *Acta Historiae Medicinae, Stomatologiae, Pharmaciae, Medicinae Veterinariae*, *35*(1), 63–73. https://doi.org/10.25106/ahm.2016.0912

Kurbegović, E. (2019). *Eugenics in comparative perspective: Explaining Manitoba and Alberta's divergence on eugenics policy, 1910s to the 1930s* [PhD thesis]. University of Calgary. https://prism.ucalgary.ca/handle/1880/109868

Kurbegović, E. (2020). Eugenics in Manitoba and the sterilization controversy of 1933. In K. Erna, & F. Stahnisch (Eds.), *Exploring the relationship of eugenics and psychiatry: Canadian and trans-Atlantic perspectives, 1905–1972* (pp. 119–136). Athabasca University Press.

Laycock, S. R., & Clark, S. J. (1942). The comparative performance of a group of old-dull and young-bright children on some items of the Revised Stanford–Binet Scale of intelligence, form L. *Journal of Educational Psychology*, *33*(1), 1–12. https://doi.org/10.1037/h0054593

Leach, R. A. (1914). *The Mental Deficiency Act, 1913: Together with the regulations and rules made under the provisions of that act, the departmental circulars, the Elementary (Defectice and Epileptic Children) Acts, 1899 and 1914, and, introduction and annotations* (2nd ed.). Local Government Press. https://wellcomecollection.org/works/h7ykpfbw

Le Vann, L. J. (1950). A concept of schizophrenia in the lower grade mental defective. *American Journal of Mental Deficiency*, *54*(4), 469–472.

Le Vann, L. J. (1960). A pilot project for emotionally disturbed children in Alberta. *Canadian Medical Association Journal*, *83*(10), 524–527. PMID 13759888.

Levine, P. (2017). *Eugenics: A very short introduction* (Vol. 495). Oxford University Press.

MacEachran, J. M. (1946). *Letter to Rev. Francis Mackay, St. Mary's Rectory, Calgary* (Accession No. 1988.0211). Alberta Provincial Archives.

MacLean, R. (1946). *Letter to John Malcolm MacEachran, chair of the Alberta Eugenics Board* (Accession No. 1988.0211). Alberta Provincial Archives.

MacMurchy, H. (1917). The care and treatment of mental defectives. *Canadian Medical Association Journal*, *7*(10), 893–895. PMID 20311007.

MacMurchy, H. (1920). *The Almosts; a study of the feeble-minded*. Houghton Mifflin Company, The Riveside Press. http://archive.org/details/almostsastudyfe00macmgoog

Malacrida, C. (2015). *A special hell: Institutional life in Alberta's eugenic years* (1st ed.). University of Toronto Press.

Mansell, D., & Hibberd, J. (1998). "We picked the wrong one to sterilise": The role of nursing in the eugenics movement in Alberta, 1920–1940. *International History of Nursing Journal: IHNJ*, *3*(4), 4–11. https://pubmed.ncbi.nlm.nih.gov/11620425/

McLaren, A. (1990). *Our own master race: Eugenics in Canada, 1885–1945*. University of Toronto Press.

Moss, E. L., Stam, H. J., & Kattevilder, D. (2013). From suffrage to sterilization: Eugenics and the women's movement in 20th century Alberta. *Canadian Psychology/Psychologie Canadienne*, *54*(2), 105–114. https://doi.org/10.1037/a0032644

Muir v. The Queen in Right of Alberta, 132 Dominion Law Reports 695 (Court of Queen's Bench of Alberta 1996). https://eugenicsnewgenics.files.wordpress.com/2014/01/muir-v-alberta.pdf

Mülberger, A. (2014). The need for contextual approaches to the history of mental testing. *History of Psychology*, *17*(3), 177–186. https://doi.org/10.1037/a0037487

Mundie, G. S., & Silverman, B. (1924). The child guidance clinic: For vocational and educational guidance and the prevention of mental disease and juvenile delinquency. *The Public Health Journal*, *15*(10), 441–451. http://www.jstor.org/stable/41973216

Nicolas, S., Andrieu, B., Croizet, J.-C., Sanitioso, R. B., & Burman, J. T. (2013). Sick? Or slow? On the origins of intelligence as a psychological object. *Intelligence*, *41*(5), 699–711. https://doi.org/10.1016/j.intell.2013.08.006

Nind, A. N. (2000). Solving an appalling problem: Social reformers and the campaign for the Alberta Sexual Sterilization Act, 1928. *Alberta Law Review*, *38*(2), 536–562. https://doi.org/10.29173/alr1444

O'Brien, G. V. (2013). *Framing the Moron: The social construction of feeble-mindedness in the American Eugenic Era* (1st ed.). Manchester University Press.

Oliveira, A. (2016). *The coming and going of eugenics in Alberta: A Discarded History, 1928 to 1972* [Thesis]. https://knowledgecommons.lakeheadu.ca/handle/2453/748

Palmer, H. (1976). Mosaic versus melting pot?: Immigration and ethnicity in Canada and the United States. *International Journal*, *31*(3), 488–528. https://doi.org/10.1177/002070207603100307

Park, D. C., & Radford, J. P. (1998). From the case files: Reconstructing a history of involuntary sterilisation. *Disability and Society*, *13*(3), 317–342. https://doi.org/10.1080/09687599826669

Paul, D. B., Stenhouse, J., & Spencer, H. G. (2018). Introduction: Eugenics as a transnational subject: The British Dominions. In D. B. Paul, J. Stenhouse, & H. G. Spencer (Eds.), *Eugenics at the edges of empire: New Zealand, Australia, Canada and South Africa* (pp. 1–19). Palgrave Macmillan.

Pearson, K., & Jaederholm, G. A. (1914). *Mendelism and the problem of mental defect III: On the continuity of mental defect*. Cambridge University Press.

Pitsula, J. M. (2013). *Keeping Canada British: The Ku Klux Klan in 1920s Saskatchewan*. UBC Press.

Pocock, H. F. (1932). Sterilization in the empire: An account of the working of the Alberta act. *The Eugenics Review*, *24*(2), 127–130. PMID 21260037.

Polyzoi, E. (1986). Psychologists' perceptions of the Canadian immigrant before world war II. *Canadian Ethnic Studies = Etudes Ethniques Au Canada*, *18*(1), 52–65.

Quesnel, A.-A. (2021). *"For this girl's sake, and society's, it is better that she be sterilized": An act respecting sterilization 1933–1973* [Master's thesis]. University of British Columbia. https://doi.org/10.14288/1.0406059

Rapley, M. (Ed.). (2004). Intellectual disability as diagnostic and social category. In *The social construction of intellectual disability* (pp. 30–77). Cambridge University Press. https://doi.org/10.1017/CBO9780511489884.005

Rasporich, A. W. (2007). The city yes, the city no: Perfection by design. In R. D. Francis & C. Kitzan (Eds.), *The prairie west as promised land* (pp. 177–198). University of Calgary Press.

Rennie, B. J. (2000). *The rise of agrarian democracy: The United Farmers and Farm Women of Alberta, 1909–1921*. University of Toronto Press.

Rogers, T. B. (1995). *The psychological testing enterprise: An introduction*. Thomson Brooks/Cole Publishing.

Samson, A. (2014). Eugenics in the community: Gendered professions and eugenic sterilization in Alberta, 1928–1972. *Canadian Bulletin of Medical History*, *31*(1), 143–163. https://doi.org/10.3138/cbmh.31.1.143

Sandiford, P. (1923). The standardization of tests and scales. *The Journal of Educational Research*, *7*(1), 14–27. https://doi.org/10.1080/00220671.1923.10879325

Sarason, S. B. (1953). *Psychological in mental deficiency* (2nd ed.). Harper and Brothers. http://archive.org/details/in.ernet.dli.2015.187540

Stam, H. J., & Barlow, A. (2020). John M. MacEachran and Eugenics in Alberta: Victorian sensibilities, idealist philosophy, and detached efficiency. In K. Erna, & F. Stahnisch (Eds.), *Exploring the relationship of eugenics and psychiatry: Canadian and trans-Atlantic perspectives, 1905–1972* (pp. 37–56). Athabasca University Press.

Stern, A. M. (2005). *Eugenic nation: Faults and frontiers of better breeding in modern America*. University of California Press.

Stote, K. (2012). The coercive sterilization of aboriginal women in Canada. *American Indian Culture and Research Journal*, *36*(3), 117–150. https://doi.org/10.17953/aicr.36.3.7280728r6479j650

Stote, K. (2015). *An act of genocide: Colonialism and the sterilization of aboriginal women*. Fernwood Publishing.

Stote, K. (2022). From eugenics to family planning: The coerced sterilization of indigenous women in post-1970 Saskatchewan. *Native American and Indigenous Studies*, *9*(1), 102–132. https://doi.org/10.1353/nai.2022.0013

Strange, C., & Stephen, J. A. (2010). Eugenics in Canada: A checkered history, 1850s–1990s. In A. Bashford & P. Levine (Eds.), *The Oxford handbook of the history of eugenics* (1st ed., pp. 523–538). Oxford University Press. http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780195373141.001.0001/oxfordhb-9780195373141-e-32

Terman, L. M. (1916). *The measurement of intelligence: An explanation of and a complete guide for the use of the Stanford revision and extension of the Binet–Simon intelligence scale*. Houghton Mifflin Company. http://hdl.handle.net/2027/mdp.39015001995250

The Sexual Sterilization Act, 51, Legislative Assembly of the Province of Alberta, 2nd, 6th Legislature. (1928). https://docs.assembly.ab.ca/LADDAR_files/docs/bills/bill/legislature_6/session_2/19280202_bill-051.pdf

Thompson, M. W. (1959). A new heredity counseling service in Western Canada. *Eugenics Quarterly*, *6*(3), 167–170. https://doi.org/10.1080/19485565.1959.9987410

Thomson, G. E. (1999). *Remove from our midst these unfortunates: A historical inquiry into the influence of eugenics, educational efficiency as well as mental hygiene upon the Vancouver school system and its special classes, 1910–1969* [PhD thesis]. University of British Columbia. https://doi.org/10.14288/1.0055545

Tredgold, A. F. (1920). *Mental deficiency (amentia)* (3rd ed.). William Wood & Company. https://catalog.hathitrust.org/Record/007683432

Trent, J. W. (1994). *Inventing the feeble mind: A history of mental retardation in the United States*. University of California Press.

Wahlsten, D. (2020). The consequences of eugenic sterilization in Alberta. In K. Erna & F. Stahnisch (Eds.), *Exploring the relationship of eugenics and psychiatry: Canadian and trans-Atlantic perspectives, 1905–1972* (pp. 57–85). Athabasca University Press.

Wechsler, D. (1935). The concept of mental deficiency in theory and practice. *Psychiatric Quarterly*, *9*(2), 232–236. https://doi.org/10.1007/BF01562866

Wehmeyer, M. L. (2013). *The story of intellectual disability: An evolution of meaning, understanding, and public perception* (1st ed.). Brookes Publishing.

Woodsworth, J. S. (1909). *Strangers within our gates or coming Canadians*. The Missionary Society of the Methodist Church, Canada.

Yerkes, R. M. (1921). *Psychological examining in the United States Army*. United States of America Government Printing Office. http://archive.org/details/psychologicalexa00yerkuoft

Young, M. (1919). Mental deficiency from the preventive aspect. *The Public Health Journal*, *10*(8), 363–370. http://www.jstor.org/stable/41997267

Received June 8, 2021
Revision received December 29, 2022
Accepted March 27, 2023 ■