# Cultural Continuity as a Hedge Against Suicide in Canada's First Nations

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## Abstract

This research report examines self-continuity and its role as a protective factor against suicide. First, we review the notions of personal and cultural continuity and their relevance to understanding suicide among First Nations youth. The central theoretical idea developed here is that, because it is constitutive of what it means to have or be a self to somehow count oneself as continuous in time, anyone whose identity is undermined by radical personal and cultural change is put at special risk to suicide for the reason that they lose those future commitments that are necessary to guarantee appropriate care and concern for their own well-being. It is for just such reasons that adolescents and young adults—who are living through moments of especially dramatic change—constitute such a high risk group. This generalized period of increased risk during adolescence can be made even more acute within communities that lack a concomitant sense of cultural continuity that might otherwise support the efforts of young persons to develop more adequate self-continuity warranting practices. Next, we present data to demonstrate that, while certain indigenous or First Nations groups do in fact suffer dramatically elevated suicide rates, such rates vary widely across British Columbia's nearly 200 aboriginal groups: some communities show rates 800 times the national average, while in others suicide is essentially unknown. Finally, we demonstrate that these variable incidence rates are strongly associated with the degree to which BC's 196 bands are engaged in community practices that are employed as markers of a collective effort to rehabilitate and vouchsafe the cultural continuity of these groups. Communities that have taken active steps to preserve and rehabilitate their own cultures are shown to be those in which youth suicide rates are dramatically lower.

## **Author Notes:**

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# Cultural Continuity as a Hedge Against Suicide in Canada's First Nations

This research report, which is all about self-continuity and its role as a protective factor against suicide, comes in three parts. One of these, told as a cautionary tale against all loose generalizations about aboriginal society as a whole, works to make the point that, while certain indigenous or First Nations groups do suffer rates of youth suicide that are among the highest of any culturally identifiable group in the world (Kirmayer, 1994), it is also true that the incidence of such suicides varies dramatically across British Columbia's nearly 200 aboriginal groups. Some communities, we demonstrate, show rates some 800 times the national average, while in others suicide is essentially unknown. A second part goes on to demonstrate that these variable incidence rates are strongly associated with the degree to which BC's 196 bands are engaged in community practices that are interpreted here as markers of a collective effort to rehabilitate and vouchsafe the cultural continuity of these groups. The remaining part, and the one with which we begin, reviews our efforts to get clear about the axial notions of personal and cultural continuity, and how our search for some way of understanding youth suicide has come to turn upon them.

## PART I

## Personal & Cultural Continuity

It is, no doubt, in some measure just because those who are left dead by their own hand are necessarily lost to most other kinds of data collection strategies, that epidemiologists concerned with suicide are typically reduced to trolling through whatever sea of demographic variables dead people ordinarily leave in their wake. As a result, most problem-focused studies aimed at identifying risk factors associated with suicide have tended to be largely atheoretic, data driven enterprises, ordinarily concerned with whatever correlational bits and pieces manage to get caught up in their actuarial nets. In contrast, the research to be reported here is not like that. What we mean to describe instead is the end product of a heavily theory-laden and concept driven program of research into the usual process of adolescent identity development—a project that only gradually and reluctantly backed its way into the troubled waters of risk research. It did so, as we will show, by following a thread that began with a normative study of the self-continuity warranting practices of standard-issue adolescents, and ends, where we stand, awash in the brutal epidemic of suicide among First Nations youth.

Because it is far from obvious why the study of young people's beliefs about personal persistence, or self-continuity, might recommend itself as a vehicle for getting closer to an understanding of how cultural continuity might serve as a protective factor against suicide, the balance of these introductory remarks are given over to linking up these seemingly disparate matters. In miniature, the argument, to be more carefully unfolded in the paragraphs to follow, goes roughly like this. At least as it is taught in standard Euro-American intellectual history (e.g., Cassirer, 1923; Habermas, 1991), any followable conception of self or personhood necessarily presupposes some summing across the inevitable changes that time has in store for each of us. Any account of selfhood that lacked provisions for linking each of us up with the persons we have once been, and are now in the process of becoming, would, consequently, prove fundamentally nonsensical.

However constitutive self-continuity may be for our ordinary adult conceptions of persons, children, it would appear, are not born into the world with their own especially high minded understanding of how such arguments in favor of self-continuity are meant to work. Rather, they tend instead to proceed only gradually and fitfully toward first one and then another increasingly mature way of warranting their own continuous identity. En route toward the construction of some acceptably grown-up way of thinking about personal persistence, children and youth regularly abandon the outgrown skins of their own still earlier ways of finding sameness within change and so, until newly refitted with some next-generation means of connecting the future to the past, are often temporarily left without a proper sense of care

and concern for the person they are otherwise in the process of becoming. Under such transitional circumstances, when self-continuity has temporarily gone missing, suicide newly becomes a "live option" for the reason that the dead person in question would scarcely count as them.

With respect to all of the prospective circumstances that are most likely to aggravate the problem of maintaining a sense of self-continuity, two difficulties, in particular, stand out as especially troublesome. One of these is composed of all those often dramatic adolescent changes that make up the usual transition to adulthood. The other is more circumstantial, and arises whenever one's culture, out of which the particulars of one's identity are necessarily composed, is also thrown into serious disarray. In either case the grounds upon which a coherent sense of self is ordinarily made to rest are cut away, life is made cheap, and the prospect of one's own death becomes a matter of indifference. These, at least, are the expectations that have brought us to the hypothesis that the steps being taken by certain First Nations communities to protect and rehabilitate the continuity of their own culture might be shown to work as protective factors against the current epidemic of suicide among native youth.

At least four things naturally follow from what has been said so far, all of which receive empirical support, either directly from the new data to be reported here, or from the larger program of research of which the present study is a part. One of these is that adolescents and young adults, who are classically understood to be undergoing a degree of personal change that seriously threatens their sense of self-continuity, should evidence a dramatically elevated rate of suicide and suicidal behavior. The second is that individual youth who are otherwise marked by a breakdown in their efforts to achieve a sense of personal continuity should be dramatically over-represented among those known to have made serious attempts on their own lives. Third, First Nations persons, who are generally acknowledged to have suffered a train of crippling assaults upon the continuity of their cultural lives should, as a group, be marked by typically high suicide rates. Finally, if lack of cultural continuity is indeed a risk factor for suicide, then First Nations communities that are actively engaged in preserving and restoring a sense of their own cultural continuity should demonstrate lower rates of youth suicide than do counterpart communities that are not engaged in such rehabilitative measures. The first and third of these propositions (i.e., that suicide rates will be dramatically higher for young persons, and for those whose culture is under siege) have so frequently been demonstrated to be true that they now constitute old news. The remainder (i.e., that suicidal adolescents will prove to be uniquely marked by an inability to sustain a sense of self-continuity; and that First Nations groups characterized by community efforts to achieve a greater sense of cultural continuity will show reduced suicide rates) are largely untested, and form the subject of our own ongoing research efforts.

Before turning to the particulars of these data, however, three matters, already briefly touched upon, require being set out more clearly. First, more needs to be said to clarify what is meant here by the notion of self-continuity. Second, because it is not widely known, the already available evidence linking failures in self-continuity and self-destructive behavior needs to be reviewed. Finally, some better case needs to be made in support of our contention that self and cultural continuity are necessarily bound up together.

### What is Self-Continuity?

Wary readers who find something dangerously esoteric about talk of self-continuity are well within their rights. As Harré (1979), Rorty (1976), and a host of other contemporary philosophers (MacIntyre, 1977; Wiggins, 1971) have pointed out, the job of working out how even the simplest of things, let alone impossibly complex human selves, might achieve some kind of enduring identity needs to be counted among the oldest and most intractable of philosophical problems. In light of such confusions, the wiser course might have been to stay as far away from the subject of self-continuity as possible. Or at least this would have been the case if it were not for the generally agreed upon facts: a) that the requirement that persons be seen to

persist in time is an immanent providence at work in all human affairs (Shotter, 1984); b) that the fundamental logic of the identity formation process necessarily understands each of us as self-identical (Haber, 1994); c) that a sense of personal continuity is not an elective "feature" of the self, but a "constitutive condition" of its coming into being (Habermas, 1991), and so stands as one of those things that everyone needs in some measure in order to count as a person at all (Cassirer, 1923); d) that personal persistence stands as a necessary condition over which even the term "self" could reasonably be allowed to operate (Shotter, 1984); e) that any notion of selfhood that was not held to be abiding in this diachronic sense would have no functional value in the operation of any human social order (Hallowell, 1955); and finally, f) that any society that failed to make provisions sufficient to permit the re-identification of persons across time would simply fail to function.

For philosophers, then, and for others officially charged with the task of working up generic accounts of human functioning, it all seems clear enough: any claim to selfhood that does not include some measure of self-continuity is fundamentally nonsensical (Luckman, 1976). What about putative owners of selves like you, like us? If losing track of one's self-continuity is to somehow figure as a reason in any chain of mental events leading to a decision to take one's own life, then it would also need to be experienced, one might suppose, as a personal necessity. Although, as Lifton (1974) points out, self-continuity may not always be an ordinary part of one's moment-by-moment conscious awareness, such convictions do appear to underlie and support the tone and quality of one's self-awareness. This is especially so, it is widely supposed, during times of crisis and transition when threats to one's continuity are most in evidence (Barclay & Smith, 1990). On such occasions—when, for example, we are brought up short by seeing an old photograph of ourselves, or by the recognition that we have just behaved in a way that was once deeply out of character—all of us do evidently feel the need to scramble for some discursive means with which to argumentatively redeem the implicit claim that, through thick and thin, we somehow go on being self-same. That is, all appearances to the contrary aside, we go on being committed to the proposition that the seemingly discontinuous bits that together form the archipelago of our changing selves are somehow either structurally equivalent, or otherwise functionally interchangeable.

If, each of us is under a primary definitional obligation to repeatedly work out some justificatory means of warranting our belief in our own personal persistence, then the prospect is raised that, as young persons develop more workable conceptions of their own identity, their ways of warranting their convictions about self-continuity might also change apace. At least, this has served as a guiding prospect in our search for possible age-graded changes in the ways that children and adolescents ordinarily think about their own and other people's personal persistence. So far, we and our co-workers (Ball & Chandler, 1989; Chandler & Ball, 1989; Chandler, Boyes, Ball & Hala, 1986; Chandler & Lalonde, 1994; Chandler & Lalonde, in press) have taken up such matters with upwards of 200 young persons. While this is not the place for a detailed recounting of the precise methods and procedures followed in these several studies, the broad outlines of our findings are clear enough. When apparent disjunctures in their selfpresentations were pointed out, our young subjects of every age quickly came forward with what they took to be good reasons as to why such evident changes could be discounted in ways that left untouched what they judged to be the underpinning continuities of their lives. Middle school children, for example, believed themselves to be self-same because of the simple existence of one or more personal attributes (e.g., same name, same fingerprints, etc.) that were thought to stand apart from time. Older adolescents, by contrast, more often found commonalties either: a) by hypothesizing underpinning genotypic personality characteristics thought to be capable of bridging the merely phenotypic changes they judged to have taken place in their more outward appearances; or b) by seeing functional relations thought to make their own pasts the "causes" of which their present identities were the "effect."

These studies have led us to distinguish a half dozen strongly age-graded ways in which the young subjects of our earlier research commonly reasoned aloud about their own personal persistence through time, and differently defend the conviction that they necessarily extend forward and backward in time in ways that leave them responsible for their own pasts and committed to their own futures. Setting aside the details about how all of these distinctive ways of thinking about self-continuity can be ordered in terms of their formal adequacy, or shown to co-vary with other developmental accomplishments, the essential point is that, with exceptionless regularity, all of these young subjects were committed to the necessary importance of, and found some conceptual means of succeeding at, the task of weaving a continuous thread through the various episodes of their own and others' lives. What makes this otherwise uniform achievement somehow deserving of special attention here is that, with almost the same regularity, adolescents who were also actively suicidal ended up distinguishing themselves by utterly failing in their efforts to find any personally persuasive means of warranting their own self-continuity in time.

## What is the Relation Between Failures in Self-Continuity and Self-Destructive Behaviors?

The foregoing account of the changing ways that young persons ordinarily succeed in warranting their own self-continuity could be substantially correct without, at the same time, actually making any real contribution to our understanding of adolescent suicidal behaviors in general, or the extraordinarily high rate of youth suicide in certain First Nations communities in particular. Among the several reasons to suppose otherwise, two in particular stand out as especially relevant here. One of these arises out of the good prospects that problems in selfcontinuity hold out for making conceptual sense out of the otherwise paradoxical fact that, with all of life's potential sweetness full upon their lips, it is adolescents who, more than any other age group, are quickest to take steps to end their own lives. The other is more straightforwardly empirical, and turns on the existence of a substantial body of new evidence demonstrating that suicidal adolescents are in fact uniquely characterized by a thoroughgoing inability to warrant their own continuity in time.

### Why do adolescents show dramatically elevated rates of suicidal behavior?

The general problem of finding some objective way of accounting for the fact that adolescents engage in self-destructive behaviors at rates variously described as some 20 to 200 times greater than any other age group (Hendin, 1982; Petzel & Cline, 1978) is that no one other than another adolescent could ever be persuaded that "the slings and arrows of outrageous fortune" actually do rain down more heavily on teenagers than they do upon the rest of us. What does appear to be the case, however, is that the sharply accelerating rate of developmental change routinely understood to be the fate of adolescents does in fact confront them with more than their fair share of difficulties in repeatedly re-engineering new ways of counting themselves as somehow persistent through time. That is, *if* navigating the usual course of identity development necessarily requires tacking one's way back and forth between one qualitatively different self-continuity warranting strategy and the next, and *if*, while momentarily "between stays," one is at special risk to temporarily going adrift by losing any workable sense of self-continuity, *then* the prospect arises that, adolescents, more than most, will also end up losing all proper care and concern about their own future well-being. It is during these periods of selflessness that the momentary self-destructive impulses, often triggered by life's routine hardships, become emptied of their ordinary personal significance, and that suicide suddenly becomes an actionable possibility.

In view of all that has just been said, our own general explanation for the remarkably elevated rates of suicidal behavior characteristic of the adolescent period is roughly as follows. Momentarily plagued by what we often later judge to be trivial problems, few of us remain entirely free of occasional suicidal thoughts (Ross, 1985; Rubenstein, Heeren, Housman, Rubin & Stechler, 1988). All such transient self-destructive impulses notwithstanding, few of us ever

seriously act on such inclinations, primarily because we understand that the person who would be hurt or lost would be us. Suicide, when it really becomes a live option, does so, we propose, primarily for those who have lost a sense of connectedness to their own future. Finally, it is adolescents, we suggest, who are most repeatedly put at risk to such hazards, all for the reason that the normal course of their identity development naturally serves to careen them from one self-continuity crisis to another. There are several potential merits to this account that are all seen to lie in the facts that it means to succeed: a) by linking suicidal behaviors to hazardous but transitory developmental *processes*, rather than fixed suicidal *traits*, it renders the often ephemeral nature of suicidal behavior more understandable; b) by tying self-destructive urges to often short-lived transitions in the usual course of identity development, it helps to explain the fact that such self-destructive urges are most often acted upon during times of rapid developmental change; and c) by finding a way to understand how it could be that suicidal persons actually succeed in circumventing those usual inhibitions that otherwise operate to block the possibility of self-harm.

## An empirical case in point

What is required in order to lift all that has just been said above the rank of mere speculation is some solid demonstration that suicidal adolescents are in fact especially marked by at least a transient inability to successfully count themselves as numerically identical, and thereby continuous with their own past and future selves. The available data in support of this proposition is contained in a series of published reports (Ball & Chandler, 1989; Boyes & Chandler, 1992; Chandler, 1994a; Chandler, 1994b; Chandler & Lalonde, 1994; Chandler & Lalonde, in press; Noam, Chandler & Lalonde, 1995) detailing a series of comparisons between actively suicidal adolescents and their psychiatrically hospitalized and non-hospitalized peers. In each of these publications, data are presented that lend strong support to the theory driven expectation that, in contrast to their <u>non-suicidal age-mates</u>, actively suicidal adolescents are clearly and uniquely marked by their inability to successfully understand themselves as somehow continuous in time. Stripped down to the barest of details, what these studies demonstrate is that psychiatrically hospitalized but non-suicidal adolescents, while less mature in their efforts to warrant their beliefs that they are continuous, were, nevertheless, always able to find good reasons as to why the person they once were, and the person they were en route to becoming, still qualify as related instances of the self-same numerically identical person. In sharp contrast to those still ready to go on livin powever, more than 4 out of every 5 (84%) of the approximately 50 actively suicidal adolescents so far tested completely failed in their efforts to find any grounds whatsoever for warranting the necessary conviction that they are numerically identical through time, or in any way connected to their own prospective future. Viewed in relation to a research literature largely devoted to the apparently circular demonstration that suicidal individuals of all ages also feel helpless or depressed, these findings hold out the promise of offering some conceptually coherent means of understanding, not only the selfdestructive acts of particular suicidal individuals, but of making sense of the alarmingly high incidence of attempted and completed suicides among adolescents as a group. What is left unaddressed by these comparative data are any of the possible reasons that might explain why, for many groups of First Nations adolescents and young adults the demonstrated suicide rate is several hundred times still higher than that of their already suicide prone non-native age mates.

### From Self- to Cultural Continuity

The conceptual account of suicidal behaviors outlined in the preceding pages offers a way of understanding how it is that radical changes to the hardware of one's personal identity (e.g., dramatic changes in physical appearance, personality organization, etc.) can overload existing cognitive mechanisms responsible for the maintenance of a sense of self-continuity, resulting in an image of the future that no longer counts as one's own. On this account adolescents are put in double jeopardy, both because their lives are often a kaleidoscope of radical change, and

because their developing strategies for warranting self-continuity often prove inadequate to the task. While this provides a way to understand the dramatic increase in suicidal behavior known to occur during the adolescent years, there is nothing about this explanatory account that restricts its applicability to those personal changes brought on by the turmoil of the teenage years. Rather, the stuff of which potential continuities and discontinuities are made tends to arrive from any and all quarters, including the cultural quarter.

Like other potential sources of continuity and discontinuity, cultures too appear to be double-edged swords. At least when they tended to outlive the people who populated them, cultures offered a more "mythic" time-frame that could be relied on to lend a certain age to things. Even now, when cultures seemingly wink in and out of existence, they still appear to sometimes work in the service of self-continuity by holding our noses to a grindstone of social responsibilities and cultural promises during our own moments of developmental transition. At least this is possible when they are working well. In other times and places, cultures appear to be more a part of the problem than the solution. Certainly this appears to be the case with the various cultures that make up BC's First Nations. Here, in addition to all those factors that ordinarily work to undermine cultures and promote their "natural" deaths, the massed forces of government have also actively disassembled aboriginal culture as an explicit matter of official policy (Titley, 1986). If simple job or marital instability is enough to heighten one's risk to suicide (Maris, 1981; Sakinofsky & Roberts, 1985), then what are the prospects for self-harm when one's whole culture is officially condemned, one's religion is criminalized, one's language is forbidden, and one's right to rear and educate one's children suspended?

No one seriously doubts that all of these social factors contribute to the fact that, as a group, First Nations people commit suicide at rates that are, by various estimates, some 3 to 5 times greater than that of the non-native population (Cooper, Corrado, Karlberg & Pelletier Adams, 1992; Kirmayer, 1994). Unfortunately, the certainty ends here. What is not at all clear is just how the difficult circumstances of most aboriginal people (inadequate income, education, housing, health care, nutrition, etc.) are converted into the deeply private reasons that lead only some to intentionally take steps to end their own lives. While epidemiological studies are ill-suited to deal with such ultimate questions, they can identify various risk or protective factors that might distinguish First Nations communities that are marked by high and low suicide rates by focusing attention, as we do here, on those variables that address the problem of self-continuity on a cultural level.

To do this we have chosen to proceed in two steps. Part Two of this account, that immediately follows, begins this process by first situating each of BC's 196 First Nations bands along a continuum that differentiates those with low and high rates of youth suicide. Part Three examines a series of cultural factors that, if present, could potentially serve to help insulate the adolescents and young adults within First Nations communities from the risk of suicide, by working to preserve or rebuild in them a more robust sense of cultural continuity.

## PART II

## Rates of Youth Suicide Among BC's Aboriginal Bands

British Columbia occupies a land mass comparable in size to all of Western Europe. The indigenous peoples living within this highly varied and often geographically isolated pattern of ecosystems have spent upwards of 10,000 years situating themselves with regard to their own local circumstance. Different languages, kinship patterns, religious beliefs, and economic practices (to name but a few) have naturally sprung up, making the whole of this province's First Nations a cultural collective only in the most abstract of statistical senses. While the overall rate of suicide for this population of diverse peoples is some 3 to 5 times higher than that for the country as a whole, such summary figures obviously make no real human sense when applied to any given community of First Nations persons. What is needed instead, as a first step toward any real understanding of suicide in the lives of aboriginal people, is some much more

fine-grained look that begins by examining the rates of suicide that hold for different selfidentified cultural groups.

### Method

Information on every act of suicide recorded in the province of British Columbia for the years 1987-1992 was provided by The Office of the Chief Coroner of British Columbia, and included: age, gender, date of death, cause of death, means of death, and associated factors (alcohol, drug involvement, etc.). This data also permitted each suicide to be identified as either "Native" or "Non-Native."

Although every attempt was made to ensure the accuracy of these data, two potentially significant sources of error should be acknowledged. First, when there is no clear and compelling reason to regard a given death as suicide, it is typically recorded as accidental, leading to a potential underestimation of the true incidence of suicide. For example, single-occupant motor vehicle accidents have been recorded as accidental deaths even when the driver was known to have been suicidal at the time of death. This fact takes on added significance when it is noted that up to one quarter of all accidental deaths are viewed by some experts as actually being suicides (Health-Canada, 1991). Further, because accidental death rates are substantially higher within the First Nations population, the effects of this under-reporting may be especially magnified.<sup>1</sup> In addition, there are reasons for concern that the general under-reporting of suicide common to all groups may be even more prevalent within certain First Nations communities eager to reject a perception of themselves as especially prone to suicide.

A second source of error arises from the fact that accurate data on whether or not a person is 'Native' or 'non-Native' is difficult to collect. At least three independent sources of such information exist: self-declaration, census declaration or government registration, and band membership. First, (although this is obviously problematic in the case of completed suicide), persons can, under usual circumstances, be asked to identify themselves as being of Native ancestry. While there is some evidence that Native Americans are becoming more likely to identify themselves as "Native" for US census purposes (Nagel, 1995), there is no documentation of a comparable trend in Canada, where First Nations have been known, for political reasons, to refuse to participate in census taking.

Whether or not persons consider themselves Native, however, is somewhat independent of whether the Canadian government counts them as Native in its registry of "Status Indians," entitled to certain federal benefits. Some Native persons—particularly those living offreserve—reject this system of registration, resulting in a growing number of young Native persons who have never been registered as "Status Indians," and who consequently do not figure into estimates of the "Native" population. Finally, each Native band maintains its own record of band membership which may or may not agree with published population estimates based on other counting strategies. Even when each of these possible data sources are consulted, deciding whether a particular suicide was committed by a "Native" person is rarely a simple matter. To overcome these difficulties, the Office of the Chief Coroner routinely makes use of information provided by the family of the deceased, by social service agencies and police officers involved in the case, as well as data from other provincial government agencies in designating suicides as Native or Non-Native. For present purposes it was these best available, but still problematic designations, provided by the Coroner's Office, that were used to code persons as either Native or Non-Native.

### Population Data and Suicide Rates

The population data used to calculate suicide rates in this study were collected from various branches of the federal and provincial government charged with maintaining census informa-

<sup>&</sup>lt;sup>11</sup> Data provided by the BC Ministry of Health indicates that, for the period under study, deaths by what are termed "external causes" (accidents, suicide, homicide) accounted for 27.6% of all First Nations deaths compared to 7.8% of deaths in the total population.

tion and vital statistics. Basic population data were obtained from Statistics Canada for the Canadian census years 1986 and 1991. The British Columbia Ministry of Health, Division of Vital Statistics provided adjusted provincial population estimates for non-census years. Health and Welfare Canada provided further age-graded Native and Non-Native population figures for British Columbia. Comparative suicide data for the years 1986 to 1990 for the population of British Columbia was provided by The Canadian Centre for Health Information. At our narrowest level of regional analysis, we obtained age-graded population figures concerning First Nation bands and tribal councils using the Indian Registry and Band Governance Database provided by Indian and Northern Affairs Canada.

Each of the governmental agencies responsible for the sources of population data that figure into our analyses also employed their own classification procedures for identifying persons as "Native." Our own attempts to obtain accurate data were aided by the results of a special project undertaken by the BC Ministry of Health, Division of Vital Statistics. This project linked together data held by the BC Medical Services Plan, Health Canada–Medical Services Branch, and Indian and Northern Affairs Canada, in the form of a comprehensive report on aboriginal health that resulted in the most accurate Native population figures to date (Burd, 1994). These data were used wherever possible in our analyses.

#### Socio-demographic Data

### Band & Tribal Council Affiliation

Because some of BC's bands contain too few members to support their being singled out for statistical treatment, as a corrective, we have, for certain of our analyses, followed the common practice of categorizing bands with reference to the particular "tribal council" to which they belong. For the period under study, there existed 29 cultural/political alliances generally known as tribal councils. While some of these councils are historical in character, reflecting a common language and a shared traditional land base, others are more political in nature, aligning bands that, in the past, belonged to different tribal groupings. Each suicide was classified as belonging to not only a particular band, but also to one or another of these tribal councils using data from provincial (BC Ministry of Aboriginal Affairs) and federal sources (Indian and Northern Affairs Canada).

### Language Group

In a part of the data analyses to follow, attention is focused on First Nations persons arranged, not by band or band council, but rather by language group. In spite of a long history of government suppression of Native language, the First Nations of British Columbia form a remarkably diverse linguistic community representing 16 distinct language families. Classifying suicides by Native linguistic families and language groups was accomplished using data from Indian and Northern Affairs Canada, with the invaluable assistance of a recognized expert in First Nations languages, Dr. Jay Powell, professor of sociology at the University of British Columbia.

### Population Density & Geographic Location

Many of the measures to be reported here are obviously influenced to some extent by the size and geographic location of the community. Sparsely populated communities in remote regions of the province, for example, will rarely be able to sustain permanent health care facilities or resident health care providers. In an effort to control for this possibility, separate youth suicide rates were calculated for communities designated as rural, urban, and remote. Furthermore, measures of population density were derived for each band and tribal council by dividing the number of separate dwelling places by the total community population.

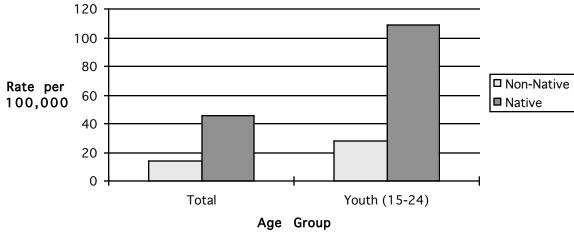
## Results

*Suicide Rates* 

In the 5-year period under study, a total of 2,495 deaths were designated by the Office of

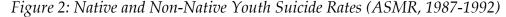
the Chief Coroner as being deaths by suicide. This represents an annual rate of 14.8 suicides per 100,000 persons in the province. A total of 220 suicides during this same period were judged by the Coroner's Office to have been committed by "Native" persons, resulting in an annual rate of 45.2 suicides per 100,000. For all young persons aged 15-24 years, the overall annual suicide rate during this period was 24.0, and for young Native persons the rate was 108.4 per 100,000. These rates are displayed in graphic form below (see Figure 1).

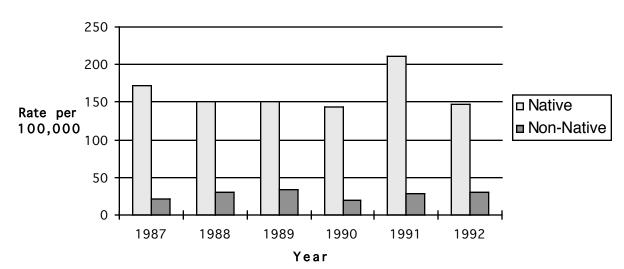
*Figure 1: Suicide Rates in British Columbia (1987-1992)* 



Age Group In order to compensate for differences in the relative proportion of young persons within each population, age standardized mortality rates for 15-24-year-olds were calculated separately for the Native and Non-Native groups. Age standardized mortality rates (ASMR) allow for more accurate comparisons between groups with different age structures and reflect what the mortality rates would have been if the population in question had the same proportion of persons in various age groups as does the 'standard' population. In this case, suicide rates for both the Native and Non-Native youth of BC have been standardized to the 1991 Canadian census population. The use of these standardized rates in relation to the Native population is particularly important given that the proportion of Native youth is large in comparison to the proportion of youth in the Non-Native population. These adjusted rates, for the period

1987–1992, are shown in Figure 2.

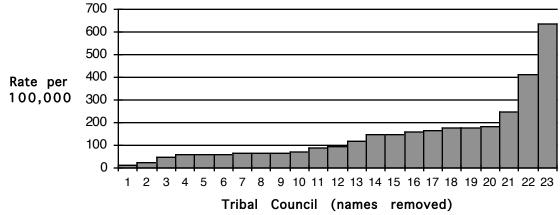


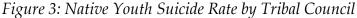


## Socio-demographic Data

## Political Affiliation

Although it needs to be recognized that raw suicide rates can be misleading when calculated for small populations, youth suicide rates were collected for the 196 individual Native bands under study. The resulting rates varied from 0 to 3636.4 per 100,000. When these communities were collapsed into larger groupings according to their membership in one of the 29 tribal councils within the province, rates varied again from a low of zero (true for 6 tribal councils) to a high of 633 suicides per 100,000. Because the youth population within certain of these separate groups is relatively small, and because such rates can misinform, Figure 3, which displays suicide rate by tribal council, omits the names of these councils out of our own wish to avoid identifying individual communities. The 6 tribal councils without recorded acts of suicide are also omitted from this figure.

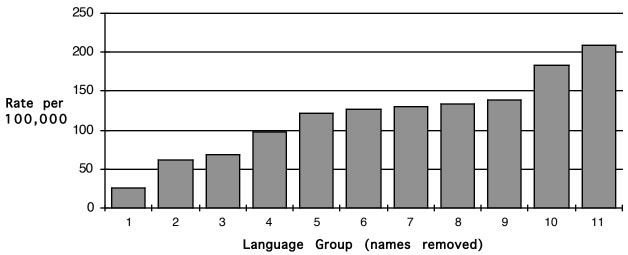




## Language Group

When bands were classified according to language group, the observed youth suicide rate again varied quite dramatically, ranging from 0 to 208.3 suicides per 100,000. The 11 language groups with rates above zero are arrayed (again by number rather than name) in Figure 4.

Figure 4: Native Youth Suicide Rate by Language Group



## Population Density

Our measure of population density resulted in a mean of 3.84 persons per dwelling structure (range=1.25–8.33). The computed correlation between the youth suicide rate and popula-

### tion density was essentially zero: r = -0.05.

### Geographic Location

First Nations youth known to have committed suicide during the study period were classified in terms of whether their band of origin was either "urban," "rural," or "remote" using a categorization scheme developed by Indian and Northern Affairs Canada which combines weighted measures of both population and geography. The categories of urban and rural differ largely with reference to the size of the surrounding population. Remote communities are those which either cannot be accessed by road (but only by air or water), or, when roads exist, where year round access is problematic. The rates of youth suicide for communities of these 3 types were as follows: Urban = 147.4; Rural = 95.1, Remote = 78.2. Because the "urban" category included many communities that are located at the periphery of major metropolitan areas, without literally being an immediate part of a true city-scape, an attempt was made to further distinguish those bands that existed "on the apron" of a city, from those more fully inside a true metropolitan area. Although the data are incomplete, the figures available suggest that the bands located within truly urban communities actually had substantially lower rates of suicide than did those for which the "lights of the city" were only on the horizon.

## Discussion

Two things are evident from the data summarized above. The first is that when the suicides of First Nations youth known to have occurred during the study period are arranged in terms of their tribal communities (Prigin, it becomes startlingly clear that no generalizations about the overall suicide rate of BC's First Nations are possible. For over half of the communities studied (111 of 196) there were no known suicides during the targeted 5-year period, while the remainder contains communities which suffer rates of youth suicide some 500 to 800 times the national average. Obviously, if there is something about the lives of certain First Nations communities that is conducive to, or serves as a protective factor against suicide, it cannot be something that is equally true for all First Nations people.

The second point to be made is really a codicil to be attached to the first. Because many of BC's Native bands are small, even a single suicide can have a dramatic effect upon rates that are commonly calculated as a ratio of incidence to a base of 10,000 or 100,000. The possibility, therefore, exists that the variability in suicide rate by band, in which we are putting so much store, is actually no more than a statistical artifact being driven by the coincidental placement of a real but small number of suicides within a set of particularly small communities. Several things speak against this dismissive interpretation. The categorization of bands in terms of their placement along a dimension of increasing urbanization, for example, similarly counts as a demonstration of intra-band variability, as does the fact that major differences in suicide rates also characterize the 16 different language communities that cut across the provinces' various bands. Finally, collapsing 196 bands into the 29 different tribal councils that serve to federate them similarly has the effect of substantially increasing the size of the populations being considered, yet does so without introducing any appreciable change in the overall picture. On these grounds it was concluded that the dramatically different rates of youth suicide that characterize these First Nations are not artifactual, but represent a real fact in the world that holds out the promise of helping us to better understand what it might be about life in certain Native communities that is conducive to suicide, or serves as protection against it.

## PART III

### Associations Between Youth Suicide Rates and Measures of Cultural Continuity.

The entire program of research, of which the present epidemiological study is a part, has been driven by the theory-laden assumption that the problem in understanding suicidal behaviors is not one of appreciating why it might occur to people to end their own lives, but rather why it is, given the likelihood that such impulses tend to be commonplace, that most people, most

of the time, end up choosing life. The short answer, we have suggested, is that because it is constitutive of what it means to have or be a self to somehow count oneself as continuous in time, we end up showing appropriate care and concern for our own well-being precisely because we feel a commitment to the future self that we are en route to becoming. By these lights, people end up being at special risk to suicide whenever they are unable, for whatever reason, to successfully count themselves as continuous. Difficulties in warranting one's own self-continuity potentially arise from several quarters. Quite apart from whether they are members of Canada's First Nations, young people are at heightened risk to suicide for the double-barreled reason that they are both: a) still in the process of acquiring the full compliment of ways used by more mature adults to find self-sameness within difference; and b) because many of the fixities of their lives are in the process of being radically altered by the sweeping changes that regularly mark the adolescent period. While, as we have suggested, all this may be sufficient to account for the elevated suicide rates known to characterize adolescents and young adults in general, and to help pick out which particular adolescents are most likely to personally manifest these risks, it does not, without further extension, also explain the additional burden of risk that Part II of this report has shown to be visited upon the young members of certain First Nations bands.

The hypothesis that this third and final part of our report is meant to test is that some First Nations communities, but not others, succeed in providing their members with an otherwise missing measure of cultural continuity, essential to understanding themselves as connected to their own past and building future. If this is true, then it ought to prove possible to identify within such communities various markers of cultural continuity that are missing in other communities that have much higher suicide rates. The balance of this section describes our efforts to identify such potential markers of cultural continuity and to test their efficacy as protective factors against youth suicide.

### Method

If one were free to order up in advance some commonly agreed upon measure of cultural continuity, then the task at hand would have been much easier than it proved to be. As it was, two factors in particular complicated our task. One of these was that, rather than starting with purpose-built marker variables of our own design, we were obliged to work with the kinds of information routinely collected by various government agencies, and to jerry-build a set of after-the-fact proxy variables meant as indirect measures of cultural continuity. Second, and as already indicated, the cultural life of the First Nations of BC has been so undermined by government policies and practices explicitly conceived as ways of systematically rooting out all traces of aboriginal culture that much of what remains is not so much continuous cultural life, as an attempt to reconstruct it. As such, our criteria for what could count as continuity needed to be expanded to include evidence of efforts on the part of communities to preserve, rebuild or reconstruct their culture by wrenching its remnants out of the control of federal and provincial government agencies.

In the end, we settled on a small handful of variables that were generally available and that could be reasonably counted as markers of attempted cultural rehabilitation. These included: a) evidence that particular bands had taken steps to secure aboriginal title to their traditional lands; b) evidence of having taken back from government agencies certain rights of self-government; evidence of having secured some degree of community control over c) educational services; d) police and fire protection services; e) and health delivery services; and finally, f) evidence of having established within their communities certain officially recognized "cultural facilities" to help preserve and enrich their cultural lives. Each of these proposed marker variables is further specified below. Our hypothesis was that, to the extent that each of these "protective factors" was present in a given community, some quanta of cultural continuity would be added in place, and some reduction in that communities" overall suicide rate would occur.

## Markers of Cultural Continuity

## Land Claims

Although a federal-provincial process of lands claims negotiation is currently underway in BC in which all First Nations are meant to participate, bands differ in the extent to which they were involved in pursuing land claims prior to the establishment of this province-wide settlement process. With the assistance of the Federal Treaty Negotiations Office and the BC Treaty Commission, we obtained up-to-date data on the status of land claims negotiations for all Native groups in the province. On the basis of these data, each of BC's First Nations communities were classified as having taken, or not taken, early steps to actively secure title to traditional lands.

## Self-Government

The Self-Government classification recognized those few bands that, irrespective of having begun their land claims efforts early or late, were nevertheless especially successful in their negotiations with federal and provincial governments in having further established their right in law to a large measure of economic and political independence within their traditional territory.

## **Education Services**

Communities differed widely in terms of the arrangements made with local and provincial education authorities for the purpose of schooling their children. In the 1980s, changes were made to the various federal and provincial laws concerning the funding of education services to Native children residing on reserves. These changes included provisions that allowed individual bands to exercise some control over education funding through agreements negotiated with local school districts. While the details of these individual agreements were not easily available, one effect of this process could be measured by calculating the percentage of community youth who attended band administered schools. Data derived from Indian and Northern Affairs Canada were used to divide communities into those in which the majority of students either did or did not attend a band school.

## Police & Fire Services

Data concerning band control of police and fire protection services were compiled from a number of sources. For smaller Native communities that are located at some considerable distance from major population centers, fire protection services are often controlled by the band. In other instances, the band will have the option of utilizing the services of a fire department located in a nearby non-native community. Control over these services was measured largely in terms of community ownership of fire fighting equipment. Although general policing services outside of large metropolitan areas in British Columbia are provided by the federally controlled Royal Canadian Mounted Police, Native communities in BC have, in varying degrees, adopted local community-based law enforcement programs. Data on these local efforts, provided by Indian and Northern Affairs Canada, permitted bands to be classified as having or not having substantial control over their police and fire protection services.

## Health Services

Although efforts are currently underway at the federal level to fully transfer control of health services to individual bands, large differences continue to exist in the extent to which health care services are managed by Native communities. At the time our data were collected, communities could be rough-sorted into those that exercised some direct measure of control (e.g., funding provided for permanent health care providers within the community), and those that had little or no such control (temporary clinics and 'fly-in' care providers, or services rendered outside the community). These data were provided by the BC Ministry of Health and by Indian and Northern Affairs Canada.

## **Cultural Facilities**

Community profile data from Indian and Northern Affairs Canada and information obtained directly from individual band offices was used to calculate the number of communal facilities located in each community. A community was said to contain "cultural facilities" if a single facility was specifically designated for cultural use either in centrally held government records, or, if the existence of such a facility was confirmed by officials contacted within the community.

## Summing Across Cultural Factors

A final data reduction step involved simply counting up the number of markers that were present in each community. Each community was then assigned a score from 0 to 6 and a final set of youth suicide rates were calculated for these 6 groupings.

## Results

### Markers of Cultural Continuity

## Self Government

Although 12.3% of all Native youth (2,201 of 17,902) reside in communities that enjoy some measure of self-government, this factor appears to provide the greatest protective value with an estimated 102.8 fewer suicides per 100,000 youth within communities that have attained self-government against those that have not (18.2 vs. 121.0 suicides per 100,000). Comparative suicide rates for this and other cultural factors are shown in Figure 5.

## Land Claims

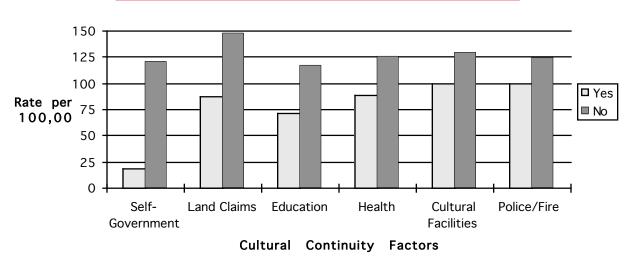
While the majority of youth suicides (50 of 97, or 51.5%), and the majority of the youth population (64.3%) are to be found within communities marked by long standing efforts to exert control over their traditional land base, the rate of suicide within these communities is substantially lower: 86.8 vs. 147.3 suicides per 100,000.

## Education

Similarly, while just 21.8% of the youth population live in communities in which a majority of children are known to attend <u>band controlled schools</u>, only 11.3% of all youth suicides occur in such communities, the difference in suicide rates between communities that do and do not have such educational systems in place is substantial: 71.1 vs. 116.2.

## Health Services

A slight minority of the youth population (46.4%) live within communities that have some measure of control the provision of health care services and, as expected, an even smaller percentage of youth suicides (38.1) occur in such communities, resulting in comparative rates of 89.0 and 125.1.



## Figure 5: Youth Suicide Rates by Cultural Continuity Factors

## **Cultural Facilities**

The percentage of suicides within communities that contain cultural facilities was lower (56.7) than the proportion of the population that reside in such communities (61.7) resulting in lower overall suicide rates: 99.4 vs. 128.7.

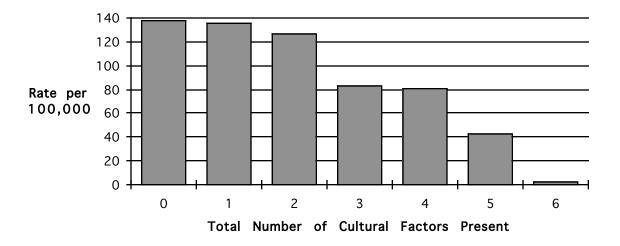
## Police & Fire Services

Finally, communities that control police and fire services contain 62.1% of all Native youth, but account for only 56.7% of all youth suicides, resulting in suicide rates of 99.0 and 123.7.

It should be noted that the comparative suicide rates reported above are, in every case, derived from data sets that cover the entire population of Native persons in the province of British Columbia and, therefore, reflect exact population parameters rather than sample estimates of Native youth suicide. Consequently, inferential statistics of the sort often employed as a hedge against the possibility of having drawn non-representative samples are inappropriate. Rather, these comparative rates are best judged by standards of practical or clinical significance, and considered as "cases in point" when viewed in relation to possible comparison groups. As illustrated in Figure 5, the presence of each of the factors was associated with a lower incidence of suicide. These findings were then quantified as a percentage reduction in the relative risk of suicide within the group of communities in which the factor was present. The presence of Self-Government, for example, resulted in an 85% reduction in the relative risk of suicide. For the remaining variables, the percentage reduction in relative risk were: Land Claims 41%; Education 52%; Health 29%; Cultural Facilities 23%; and Police/Fire 20%.

## Summing Across Cultural Factors

To assess the overall effect of these markers of cultural continuity, each community was assigned a single point for each factor present and thus a total score varying from 0 to 6. The resulting suicide rates that attach to these scores are displayed in Figure 6, and ranged from a high of 137.5 for communities in which none of the factors were present, to zero (no suicides within the 5-year study window) for communities in which all 6 factors were present. The additive effect of these cultural factors was examined using a chi-square model of linear trends in proportions. The analysis revealed a strong linear relation between suicide risk and the number of factors present ( $\chi$ 2[6] = 10.042, p < 0.002).



*Figure 6: Youth Suicide Rates by Number of Factors Present in the Community* 

Taken together, these results are abundantly clear: <u>First Nations communities vary dra-</u> matically in the rates of youth suicide that they evidence, and these differences are strongly and clearly associated with a group of predictor variables or protective factors meant to index the degree to which different bands are engaged in community practices that work to help preserve and restore their Native cultures.

## CONCLUSION

Our aim in the present research report has been to demonstrate that the risk of suicide in First Nations youth is strongly associated with the ways in which these young persons undertake to construct and defend a sense of identity that allows them to survive as continuous or numerically identical persons despite often dramatic individual and cultural change. The evidence in favor of this view has unfolded in three steps, which we now briefly retrace by way of conclusion.

We began by focusing attention on what is presently understood about the place of selfcontinuity in the normal identity formation process and by detailing how young persons ordinarily progress through a common sequence of increasingly adequate self-continuity warranting practices. While we hold out some hope that this normative account of the developmental process, in which children come gradually and by degrees to a mature view upon the matter of self-continuity, might be of interest to developmentalists of almost any persuasion, nothing about this developmental course is directly concerned with the problem of youth suicide. The link that we have worked to forge between self-continuity and suicide hinges on the argument that young persons could, in the usual course of things, find themselves in awkward transitional moments during which they are especially vulnerable to acting upon selfdestructive thoughts—a view that finds empirical support in the fact that actively suicidal adolescents are unique in their inability to offer reasons as to how they or anyone else could lay claim to any form of self-continuity whatever (Chandler & Ball, 1989). Leaving aside, at least for the moment, the potential utility of this methodology for singling out those individual young persons who might be at immediate risk of self-harm, such evidence goes some distance toward explaining why it is that young persons, whose lives seem so full of promise, are so tragically and disproportionately prone to acts of self-destruction.

While all young persons can be expected to encounter moments of heightened risk during transitions from one self-continuity warranting practice to the next (Ball & Chandler, 1989; Chandler & Ball, 1989; Boyes & Chandler, 1992), certain groups of young people, our evidence suggests, find the period of adolescence and young adulthood more dangerous than do others. The sharply elevated rates of suicide shown here to characterize some groups of First Na-

tions youth constitute a clear instance of such group differences in relative risk. In our efforts to account for these differences, we worked to navigate around those often circular suggestions that youth suicide is the result of depression, or social isolation, or other personal or interpersonal factors that sometimes accompany (but poorly predict) suicidal behaviors, by searching more directly for possible connections between personal and cultural continuity. In doing so, we struggled to avoid the familiar traps of stereotypy and blame casting by first bringing out the variability in youth suicide rates that characterize different aboriginal communities, and then by working to identify possible protective factors against suicide contained within the various efforts of BC's First Nations communities to preserve and promote a sense of cultural continuity in their members.

The first of these demonstrations served to make clear that the much-publicized fact that youth suicide is more frequent among BC's First Nations is, at best, a statistical generalization that threatens to obscure the real variability in suicide rates between various native communities. In the present study, a total of 111 bands, containing just under half of all BC Native youth, experienced no youth suicides at all in a 5-year period. The simple but sovereign truth to be found in this variability in rates is that suicide among First Nations youth cannot be explained simply by pointing to those factors that serve to distinguish aboriginal from all non-aboriginal people. To be of real value, any candidate explanation of these findings must offer some conceptual means of accounting for both this within- and between-group variability, by presenting followable reasons as to how some First Nations communities have managed to do such a remarkably good job of insulating their members from any increased risk of suicide.

Our second set of findings—meant to demonstrate that some important measure of the variability in suicide rates across Native communities is associated with their different efforts to restore and rebuild a sense of cultural continuity—constitute what we hope is a step in the right direction of searching out variables that not only have some explanatory power, but also admit to some degree of potential for change. Each of the six markers of cultural continuity employed here was found to be associated with a clinically important reduction in the rate of youth suicide. Similarly, an overall index created by summing across these different cultural factors proved to be strongly and significantly associated with reduced suicide rates (e.g., the observed 5-year suicide rate fell to zero when all six of these protective factors were in place in any particular community). Taken together, these findings offer strong support for the contention that such protective factors not only help to define the structural parameters of cultural-continuity, but also constrain the form of all counterpart solutions to the self-continuity problem that must be worked out on a more personal level.

In addition, we have every reason to suspect that our particular collection of marker variables is only a subset of what is undoubtedly a much larger array of such protective factors, the promotion of which may also hold real promise of reducing the epidemic of youth suicide within First Nations communities. What, in our judgment, particularly recommends the set of variables selected for examination in the present study is that each of these protective factors are "plastic" insofar as they represent matters over which the communities in question are capable of exercising some measure of control. Is it of any real actionable benefit for First Nations people to be otherwise told, for example, that the frequency with which their children undertake to kill themselves varies as a direct function of the degree of poverty into which the community has fallen, or the extent to which their living conditions are sub-standard? If there were some immediate road leading out of such desperate circumstances it would have already have been taken. What is obviously required instead is some real handle on the problem of youth suicide that communities can successfully get hold of, and over which they can exercise some real control.

The clear message that is sent by the evidence brought out in this report is that the communities that have taken active steps to preserve and rehabilitate their own cultures are also those communities in which youth suicide rates are dramatically lower. It is possible, of course,

that this close relation between community action and youth suicide is not causal, and that both are somehow due to some third thing, we know not what. The fact remains, however, that every band in BC that has taken all of the protective steps outlined in this report have a youth suicide rate of zero, whereas bands in which all of these community actions are missing have youth suicide rates that are 5 to 100 times the provincial average. Whatever the ultimate causal links, what this research teaches is where those interested in the problem of youth suicide might begin to look for workable solutions.

Where all of this leaves us is with a deep conviction that a better understanding of the problem of suicide in First Nations communities can only be had by focusing attention on the interface between personal and cultural change. Toward that end, we have elected to concentrate our ongoing research efforts on better detailing the process of identity formation in First Nations youth. In brief, we are pursuing three new avenues of research. First, we are working to translate our current measures of self-continuity into other, more culturally sensitive, parallel forms. This has involved an attempt to both modify our existing procedures for measuring young peoples' understanding of their own and others' self-continuity, and to search out recurrent stories drawn from within the oral tradition of the First Nations to replace the Eurocentric narratives currently in use in this measurement approach. Second, we have begun the process of establishing just how it is that markers of cultural continuity, such as land claims litigation or control of health services, could ever work their way into the actual lives of particular adolescents. Here we intend to proceed along two simultaneous fronts: first by gathering new evidence on those actual community based activities that more explicitly match what are ordinarily thought of as "cultural" practices (e.g., language use, Native curriculum, rites of passage, etc.) and then marrying this data with accounts given by adolescents of the place of these cultural efforts within their own experience. Finally, we are also engaged in an effort to reconceptualize the possible meanings of self-continuity as they might differently unfold in the lives of young persons representative of Native and non-native culture. Coming to some better appreciation of these deep-running cultural differences is critical, we suggest, to understanding and hopefully reversing the trend toward steadily increasing suicide rates among First Nations youth.

### REFERENCES

- Ball, L., & Chandler, M. J. (1989). Identity formation in suicidal and nonsuicidal youth: The role of selfcontinuity. *Development and Psychopathology*, 1(3), 257-275.
- Barclay, C., & Smith, T. (1990). Autobiographical remembering and self-composing. International Journal of Personal Construct Psychology, 35, 59-65.
- Boyes, M. C., & Chandler, M. J. (1992). Cognitive development, epistemic doubt and identity formation in adolescence. *Journal of Youth and Adolescence*, 21(3), 277-304.
- Burd, M. (1994). Regional analysis of British Columbia's Status Indian population: Birth-related and mortality statistics : Division of Vital Statistics, British Columbia Ministry of Health and Ministry Responsible for Seniors.
- Cassirer, E. (1923). Substance and Function. Chicago: The Open Court Publishing Company.
- Chandler, M. J. (1994a). Adolescent suicide and the loss of personal continuity. In D. Cicchetti & S. L. Toth (Eds.), *Rochester symposium on developmental psychopathology: Disorders and dysfunctions of the self* (pp. 371-390). Rochester, NY: University of Rochester Press.
- Chandler, M. J. (1994b). Self-continuity in suicidal and nonsuicidal adolescents. In G. Noam & S. Borst (Eds.), *Children, youth and suicide: Developmental perspectives* (pp. 55-70). San Francisco: Jossey-Bass.
- Chandler, M. J., & Ball, L. (1989). Continuity and commitment: A developmental analysis of identity formation process in suicidal and non-suicidal youth. In H. Bosma & S. Jackson (Eds.), *Coping and self-concept in adolescence* (pp. 149-166). Heidelberg: Springer Verlag.

- Chandler, M. J., Boyes, M., Ball, S., & Hala, S. (1986). The Conservation of Selfhood: Children's Changing Conceptions of Self-continuity. In T. Honess & K. Yardley (Eds.), Self and Identity: Individual Change and Development. London: Routledge & Kegan Paul.
- Chandler, M. J., & Lalonde, C. E. (1994). Folk theories of mind and self: A cross-cultural study of suicide in native and non-native groups. In A. Marchetti & O. Sempio (Eds.), *The development of theories of mind and the construction of cognitive abilities*. Milano: Franco Angeli.
- Chandler, M. J., & Lalonde, C. E. (in press). Continuities of selfhood in the face of radical developmental and cultural change. In L. Nucci, G. Saxe, & E. Turiel (Eds.), *Culture, Thought, and Development*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Cooper, M., Corrado, R., Karlberg, A. M., & Pelletier Adams, L. (1992). Aboriginal Suicide in British Columbia: An Overview. *Canada's Mental Health*, 19, 19-23.
- Haber, H. (1994). Beyond Postmodern Politics. New York: Routledge.
- Habermas, J. (1991). The paradigm shift in Mead. In M. Aboulafia (Ed.), *Philosophy, social theory, and the thought of George Herbert Mead* (pp. 138-168). Albany, NY: State University of New York Press.
- Hallowell, A. I. (1955). Culture and Experience. Philadelphia: PA: University of Pennsylvania Press.
- Harré, R. (1979). Social Being: A Theory for Social Psychology. Oxford: Blackwell.
- Health-Canada. (1991). Statistical profile on native mental health (Background Report of the Statistical and Technical Working Group, Mental Health Advisory Services, Indian and Northern Health Services). Ottawa: Medical Services Branch Steering Committee on Native Mental Health, Medical Services Branch Health & Welfare Canada.
- Hendin, H. (1982). Suicide in America. New York: Norton.
- Kirmayer, L. (1994). Suicide Among Canadian Aboriginal Peoples. *Transcultural Psychiatric Research Review*, 31, 3-57.
- Lifton, R. (1974). Living and dying. New York: Praeger.
- Luckman, T. (1976). Personal Identity as an Evolutionary and Historical Problem. In M. v. Cranach (Ed.), *Human Ethology*. Cambridge: Cambridge University Press.
- MacIntyre, A. (1977). Epistemological crisis, dramatic narrative, and the philosophy of science. *The Monist*, 60, 453-472.
- Maris, R. (1981). Pathways to suicide: A survey of self-destructive behaviors. Baltimore: John Hopkins University Press.
- Nagel, J. (1995). American Indian ethnic renewal: Politics and the resurgence of indentity. *American Sociological Review*, 60(December), 947-965.
- Noam, G., Chandler, M. J., & Lalonde, C. E. (1995). Clinical-Developmental Psychology: Constructivism and Social Cognition in the Study of Psychological Dysfunction. In D. Cicchetti & D. Cohen (Eds.), *Developmental Psychopathology: Volume 1* (pp. 424-466). New York: John Wiley & Sons, Inc.
- Petzel, S., & Cline, D. (1978). Adolescent suicide: epidemiological and biological aspects. In S. Feinstein & P. Giovacchini (Eds.), *Adolescent Psychiatry* (pp. 239-266). Chicago: University of Chicago Press.
- Rorty, A. O. (1976). The Identities of Persons. Berkeley: University of California Press.
- Ross, C. P. (1985). Teaching children facts of life and death: Suicide prevention in the schools. In M. L. Peck, N. L. Faberow, & R. E. Litman (Eds.), *Youth Suicide*. New York: Springer.
- Rubenstein, J. L., Heeren, T., Housman, D., Rubin, C., & Stechler, G. (1988). Suicidal behaviour in "normal" adolescents: Risk and protective factors. *Paper presented at the Biennial Meeting of the Society for Research in Adolescence*. Alexandria, VA, March.
- Sakinofsky, I., & Roberts, R. (1985). The correlates of suicide in Canada, 1979-81. Paper presented at the Annual Meeting of the American Psychiatric Association. Dallas, TX, April.
- Shotter, J. (1984). Social Accountability in Selfhood. Oxford: Basil Blackwell.
- Titley, E. B. (1986). A Narrow Vision: Duncan Campbell Scott and the Administration of Indian Affairs in Canada, Vancouver: University of British Columbia Press.
- Wiggins, D. (1971). Identity and spatio-temporal continuity. Oxford: Blackwell.