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PSYCHO-SOCIAL PROBLEMS AND CAUSES: INDEXES OF CHANGE

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Abstract

Social scientists see a pervasive crisis in our society yet also sense now a new willingness to face our problems of rapid change. This study first examines the rate and direction of change in social problems by developing indexes (comparable to the Consumer Price Index) for major problem areas. These measures show a period of relative stability in the 1950's and early 60's then worrisome inflation accompanied by out-of-control financial costs. The data on family issues particularly raise questions of future trends. The author then discusses a major cause of our difficulties, our seeming lack of strength to survive, and identifies crucial life stages where help is required.

Résumé

Les chercheurs en sciences sociales voient notre société dans un état de crise et, en même temps, ils croient déceler une nouvelle volonté de faire face à nos problèmes occasionnés par des changements rapides. Sur la base d'indices comparables à celui des prix à la consommation, on trouve ci-après une analyse du taux et de la direction du changement enregistré quant à des aspects déterminants de la problématique sociale. Les mesures dénotent une période de relative stabilité au cours des années 1950 et au début des années 1960, suivie d'une inflation inquiétante qui correspond à des coûts financiers débridés. Les données sur les problèmes familiaux soulèvent de façon particulière des questions quant aux tendances à venir. L'auteur analyse une cause importante de nos difficultés – un manque apparent de force de survie – et identifie des étapes de vie cruciales pour lesquelles une aide s'avère nécessaire.

Introduction

This is a time of great discontent, of frustration and of anger. It is a time when people are even thinking that our society may well end in a nuclear holocaust. Yet, from this sense of despair there is emerging a new willingness to face our problems and to forge better answers – a recognition that a crisis can trigger an acceptance of different realities and solutions. As a society we are seeking a fresh consensus – a process that will involve our total community. As a social scientist, I welcome this debate and will focus on:

 Indexing the rate and direction of change of social problems.

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- Exploring a major cause of our difficulties.
- Identifying life stages where people need help.

The Problem

We are in the middle of three revolutions; our society is being catapulted into a new age – and we are not sure we will make the transition successfully. First, jobs are changing quickly as we move from the industrial to the technological age. Work will demand more skill and less muscle, more intelligence and flexibility, more career changes. Many people are worried that it will mean fewer jobs and they may end up unemployed – or unemployable.

Secondly, we are moving from a sturdy pioneering orientation to a world of big business and big government - a world requiring that the two sides work together to further the economy and prevent disasters. And many people fear faceless management, bureaucratic power and indifference to them as individuals.

Lastly, we are moving from a time when women were considered property and were dependent to a society based on human rights and equality where women will have viable choices. And many fear a consequent break-up of the family.

There are massive, fundamental revolutions affecting everyone's self-concept and sense of direction. It is a period of confusion, of bewilderment, of anger and there are worrisome signs of both economic and personal-social instability. However, it is difficult to gauge our level of functioning under these stresses; we lack a thermometer to tell us the reaction of our body-politic – a reassuring, mild fever or one raging out of control.

In the economic area we have some measures that should tell us how we are doing the Gross National Product, the Consumer Price Index, the Unemployment Rate — yet in the personal social area Statistics Canada does not provide comparable indexes. It is imperative that we develop such measures to indicate the rate and direction of change in people's reactions; we must find out the level at which people are coping and whether action is needed to counteract the trends. We need a psychosocial price index to tell us the cost of living in our society in a period of rapid transition.

Indexing problem areas

Ability to Cope

When people are not dealing successfully with the issues they face, they tend to seek escape routes or hit out at society. Logical areas where we might find useful data on these reactions would be in the alcohol, in suicide rates, in mental illnesses and in criminal behaviours.

The Abuse of Alcohol. Canadians have always used alcoholic beverages socially and have resisted the thought that they might be harmful but we are now becoming aware that there are indeed problems. It is important that we measure the rate of alcohol abuse and the direction of change. Then, we must seek data on the effect of the level of consumption.

Statistics Canada provides an estimate of the percentage of the population considered to be alcoholic; they start with the number of deaths from cirrhosis of the liver then use the Bellinek formula to estimate the number of alcoholics 14 years of age and over. This process seems to provide data that are both valid and reliable.

Table 1 gives the data on the number of deaths from cirrhosis of the liver from 1955, the estimated number of alcoholics, the per cent of the population involved and an index of change based on the comparison of the rate in any given year with the rate for 1971 which is 100. This comparison is the one used in the Consumer Price Index and it allows us to get a feel for the meaning of inflation in psycho-social areas as well. The Alcoholism Index and the Consumer Price Index are both shown in Figure 1.

After a period of relative stability from 1955 to 1965, there has been a steady increase in the rate of alcoholism and the number of alcoholics (as a percentage of the population) has doubled since the mid-sixties.

The rate is indeed increasing but one must now ask if the level is serious enough to be a drain on our psychic and financial resources. We find increasing anger in our society at the number of traffic fatalities where alcohol has been involved but how extensive is our use of alcohol? The data are disturbing. We start young - at an average age of 12- and by the mid-teens 60°/o of us use alcohol (Alcohol-Drug Education Service, December 1982, p. 6). By the time we reach our twenties, $90^{\circ}/\circ$ are drinking and $40^{\circ}/\circ$ have at least four drinks a week (MacGregor, 1978). When we are compared to other western countries, only the French and the West Germans drink more and we surpassed the American rate about ten years ago (Brown, 1978). The level

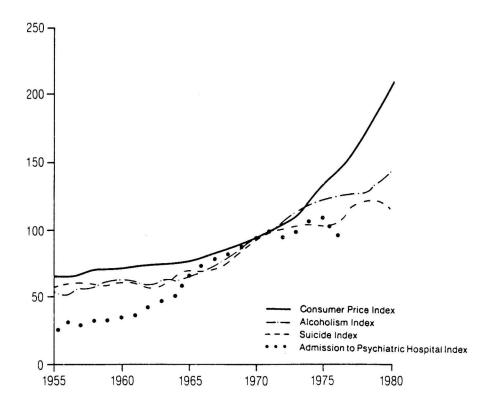


Figure 1. Ability to Cope Indexes for Alcoholism, Suicides and Admissions to Psychiatric Hospitals and The Consumer Price Index Rate of Change with 1971 = 100

of the use of alcohol is now worrying the World Health Organization which reported "Evidence suggests that alcohol-related problems may even constitute an important obstacle to socio-economic development and may well threaten to overwhelm the health services unless appropriate measures are taken" (Alcohol-Drug Education Service, October 1982, p. 5). The overuse of alcohol in Canada has now resulted in deaths from cirrhosis of the liver ranked third after heart disease and accidents for men in the 45-49 year age (Statistics Canada).

Hospital care is an important and costly component of our society and the abuse of alcohol drains our financial resources. Not only do we have hospitalization costs for people suffering from cirrhosis of the liver and from motor vehicle accidents involving drinking drivers, we also have people in psychiatric hospitals as a result of too much alcohol. In 1975 alcoholic psychosis and alcoholism accounted for 11,626 (19°/o) of first admissions to in-patient psychiatric facilities in Canada (*Canada Year Book*, 1978-79, p. 216). The abuse of alcohol seems to cost us dearly in many areas – hospitalization cost, economic productivity levels, family tragedies – and an index for alcoholism provides useful data in gauging the level of our ability to cope.

Suicides. We seem to be hearing more and more about suicides — the tragedy of a young person, the grief of an older person who is ill — but again, we need accurate data. Statistics Canada can provide figures on the deaths and from those we can gauge the rate and direction of change.

Table 2 includes the rate (per 100,000 of the population or age group) for all ages and for selected younger groups plus the index for the rate of change for each of these; Table 3 gives combined data for young adults aged 15-29. Figure 1 indicates the index for all ages and Figure 2 the actual rates for young people.

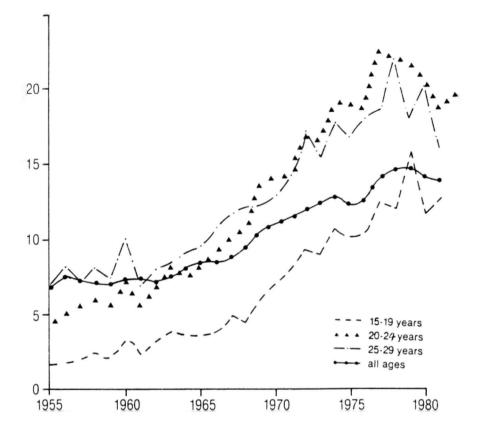


Figure 2. Suicides in Young Adults Rates per 100.000 for Selected Age Groups

The suicide rate for all ages has doubled since 1955 but for the 15-19 year age group it has gone up seven times and is now 12.7 per 100,000 of people that age. Rates for the 10-14 age group have gone up by $40^{\circ}/\circ$ and now stand at 1.8. In Figure 2 we can see that the rates for the 25-29 year olds reflect the relative stability from 1955-1965 that we found in the alcoholism and in the rates for suicides of all ages but the rates for the younger groups, 15-19 and 20-24, show a steady increase since 1955. Rates declined somewhat from their high peaks in the late 1970's but two have already started up in the 1980's.

Any suicide brings sadness to family and friends but is the rate at a serious level for the society? In a joint publication of Statistics Canada and the Canadian Mental Health Association (1981), suicide was noted as the second most frequent cause of death among Canadians between the ages of 15 and 39. Additionally, it is generally believed that for everyone who commits suicide ten try, and that some of the fatalities from motor vehicle accidents could also be suicides. People seem to consider the suicide rates too high, especially among young people facing high unemployment and uncertainty about the ability to get and hold a job now. The indexes for alcoholism and for suicides in the 15-29 year group are combined as the Trouble Index in Figure 6.

Mental Illness. The classification of mental illness covers a range of disorders, some with chemical implications, some with psycho-social determinants and some related to the abuse of alcohol. However, in this complex area there is a statistic that can give a measure of the rate of illness, that of admissions to psychiatric hospitals. Table 4 gives this data and also the per patient daily cost. Figure 1 shows the rate of change for admissions and Figure 7 for costs.

From 1955 to 1976, the last date for

directly comparable figures (and the start of the emphasis on community care rather than hospitalization in large institutions), there was over a three-fold increase in admissions per 100,000 of the population, a steady rise since 1955. The daily cost per patient in public mental hospitals has increased eighteen times in the past 20 years (from \$5.21 to \$93.66) – at a rate faster than that of the Consumer Price Index (see Figure 7); it reflects an improved level of care but still a staggering cost increase.

But again, though the rates are rising quickly, is the level one of serious concern? It

seems yes. According to a joint Statistics Canada – Canadian Mental Health Association report (1981) based on 1978 figures, one in eight of us can expect to be hospitalized for a mental illness at least once during our lifetime and between $10^{\text{O}}/\text{o}$ and $30^{\text{O}}/\text{o}$ of us have some form of mental illness (depending on the perceptions and definitions of the various disorders). By far the most frequent diagnosis for women hospitalized was neurosis; for men, alcoholism. It is essential to have a measure of the rate and direction of change for mental illnesses but the problem is so pervasive and ranges from crippling illness and ineffective behaviour of the so-called normal person that

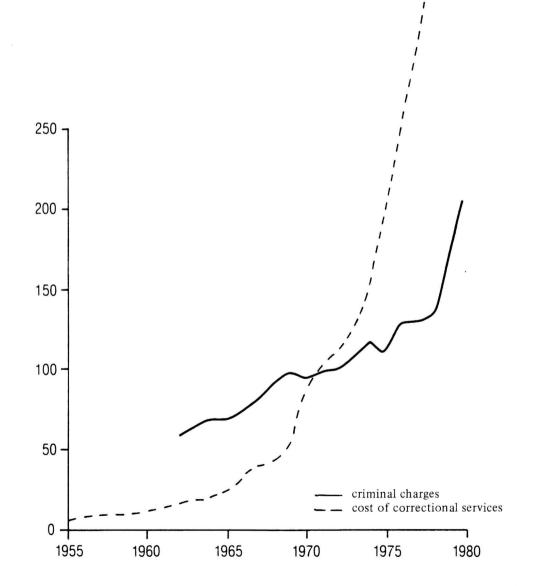


Figure 3.Crime Indexes Criminal Charges and Cost of Correctional Services Rate of change with 1971 = 100

it is difficult to define clearly and to gather objective data.

Crime. The level of crime is now touching most of us whether it is the cost of goods elevated by shop lifting, the breaking into of one's own home or the violence against people. Aggression against others is undoubtedly important and the rates of criminal charges do provide a usable measure over time. Rather than using data for juveniles and adults separately (Nevison, 1969), only the one measure, criminal charges, will be used: the data on juveniles from year to year lately are not comparable as age definitions have been changing. Table 5 contains the number of charges per 100,000 of the population and the total costs of correctional services plus the two indexes; Figure 3 compares the rates of change for these.

Comparable figures for criminal charges started in 1962-63 and rates increased over three hundred per cent by 1980; the costs for correctional services have gone from \$8.4 million in 1955 to \$374.7 million in 1980, an increase of 44 times.

But again, how serious is this level? In considering this, we must review the evidence of these costs but we must also try to look at the disturbing - and, as yet, not fully documented - evidence of violence within the home.

The incidence and cost of crime so alarmed the Canadian Senate that their Standing Committee on Health, Welfare and Science undertook study to determine what preventive action might be taken so that children could get a better and more constructive start in life and thus, hopefully, cut down on the number of criminals.

The report, *Child at Risk* (Standing Committee on Health, Welfare and Science, 1980) noted "Crimes of violence are a source of great suffering to many individuals and their families, and pose a threat to the stability of our society... The cost of building and operating prisons and penitentiaries has become a serious charge on the taxpayer (p.X)."

It also pointed out that there has been an alarming increase in violent juvenile delinquency - an increase probably related to the exposure of children in their formative years to 17,000 murders on television (p.44). And, most discouragingly, "Eighty percent of persons admitted to federal institutions have

been previously convicted. Our prison popution continues to grow in spite of improvtraining programs, psychiatric treatment, couselling services and more permissive granting paroles (p. X)."

But the Senate report went on to open 1 the subject of violence and criminal acts with the family, acts usually unreported. "Violen in the home is a far more serious problem th violence in the streets, in the classrooms, anywhere else... Domestic violence is increasir ly being recognized as the most dangero element in our society, with the potential f terrific disaster... Various studies have show that a very high percentage of all murd victims are related to their assailants, mc frequently as husband and wife ... Betwe 1968 and 1974... 60°/o of all female murd victims were killed within a family contex and "it has been recently estimated that eve year in Canada one in ten women who a married or are living common-law is the vict: of a physical assault (p. 43)."

The Senators were also concerned abo the cost of building new penitentiaries: ' constant drain on public funds (for penite tiaries) which are over-crowded, and what more important, do little to rehabilita successfully the offenders who are sent to the (p.XI)."

The ability to cope seems to be threatened f many, particularly among the younger adul according to these measures of problem are. It is now important to try to get a feel for wh is happening in the family - that basic soc unit in our society.

The Family

Questions concerning the family a difficult to answer - indeed, increasingly, pose. We can start with data from Statisti Canada on marriage dissolution, a centi concern in family stability, then consider da on seemingly related areas: therapeutic abc tions, illegitimate births and federal paymer under the Canada Assistance Plan (started 1966 to help people in need, in special ca homes, for child welfare programs and f welfare services by paying half the costs every province). Several factors complica these data (in Table 6 and 8 and Figure 4) and legislation in 1968 changed the bases f gauging divorce and therapeutic abortior Also, in 1975 and 1976 one province did n ask new mothers for information on marit status thus making data for those two yea unusable. Still, there is a pattern of rap increase in the rates of all four indicators at

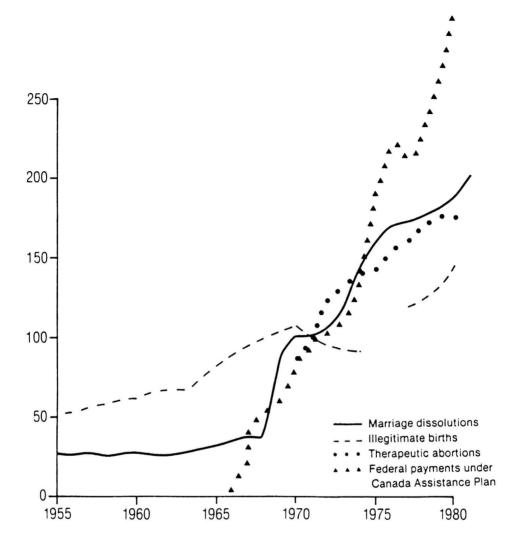


Figure 4. Family Indexes Marriage Dissolutions, Illegitimate Births, Abortions, Canada Assistance Payments

the only significant decrease, that in 1970 in the rate of illegitimate births, occurred when the legislation allowed more access to therapeutic abortions.

In the past ten years when rates might have been expected to stabilize somewhat, the rates for divorce doubled, abortions increased fivefold and illegitimate births $50^{\circ}/o$. In that same ten years, payments under the Canada Assistance Plan (which now carries costs formerly borne in large measure by the extended family) have gone from \$597.4 million to \$2,205.6 million, an increase of $370^{\circ}/o$. These indexes point to worrisome trends but they do not touch the core of the issues relevant to family stability and a satisfying social unit. We must look at the implications of the estimate mentioned in the Senate report that one woman in ten, married or living common-law, is the victim of physical assault each year. In addition, mental battering is a recognized problem (MacLeod, 1980) and in petitions for divorce $30^{\circ}/\circ$ charged physical or mental cruelty (Statistics Canada). With this level of violence toward women in the home, if women do develop viable options we can expect increasing numbers of divorces.

Throughout the ages women have seldom

had any real option because they have not been economically independent. The Status of Women report (MacLeod, 1980) offered some historical perspective: there were two periods when women were not viewed primarily as property and dependents without rights, in ancient Rome during the Punic Wars and in France prior to Revolution. In both periods wife beating diminished and, in Rome, divorces initiated by women became more common (p. 28). In Rome during the wars the women managed the city and afterwards kept their new economic independence. For women to have viable options there must be a climate of respect for all people and opportunities for economic independence.

In Canada the conditions are now right. For a century we have had universal education, about 1917 women started to get a vote and a say politically and during both wars they demonstrated job skills. But more than these fundamentals, in the new technological era brains and skills have become more important than brawn and, as a society, we have now accepted constitutionally the equality of mer and women.

If ten percent of married women are battered and if increasing members feel economic independence is possible, then indeec we can expect the divorce rates to climb Already twice as many women as men petitior for divorce and, although as a group womer earn only 60⁰/o of the average wage for men already over half of women 15 years and over work outside the home. In 1967 it was $36.5^{\circ}/^{\circ}$ in 1976, 45.0°/o and now it is 51.2°/c (Statistics Canada and Canada Year Book. 1978-79). The rate of therapeutic abortions is considered serious by some people but a comparison with rates in other countries is important to get perspective on what might happen in Canada. Among the western

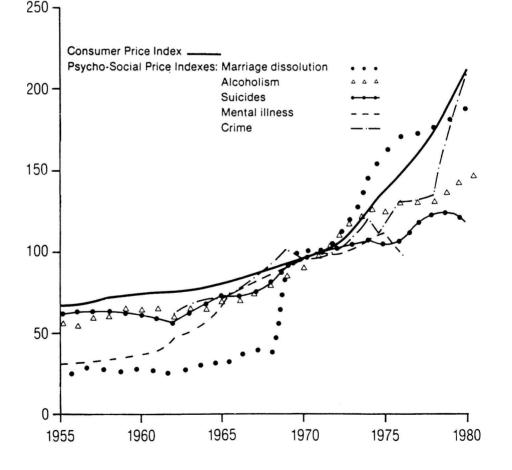


Figure 5. Consumer Price Index Psycho-Social Price Indexes Rate of Change with 1971 = 100

countries only the Norwegians, with 11.4 abortions per 1000 live births, have a lower rate than ours (17.7). The American rate is over twice as high (42.8) (Tietze, 1981) and we follow American patterns.

It seems that we can expect higher rates in both marriage dissolutions and therapeutic abortions but there is no agreement in our society on what these trends mean: a higher level of freedom and opportunity or the breakup of the family. Probably everyone will agree on the need for a stable social unit – and probably the family – and everyone will have reservations about its seeming difficulties but the challenge will be to build units that are more satisfying – not to bemoan the current statistics.

Psycho-social Indexes

To permit a more direct comparison of various indicators of difficulties resulting from living in a period of tumultuous change, the indexes for the rates of alcoholism, suicide, mental illness, crime and marriage dissolution are considered together in Table 7 and Figure 5; the Consumer Price Index is included to help convey the meaning of the increases.

In figure 6 the five indexes are grouped together (with equal weighting) as the Psychosocial Price Index. In addition, two indicators of self-destruction, alcoholism and suicide of yound adults (15-19), are combined together as a Trouble Index.

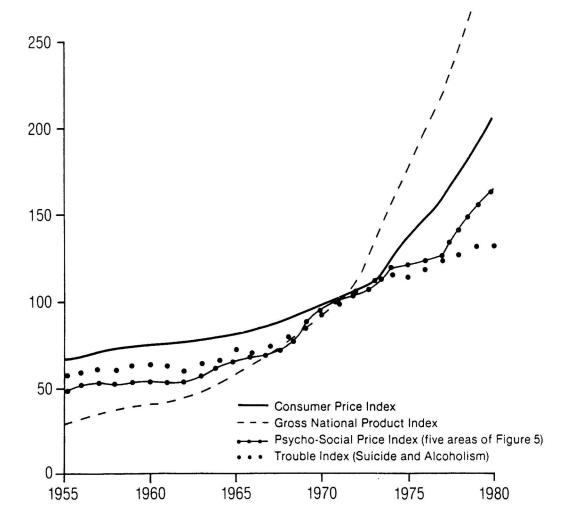


Figure 6. Gross National Product, Consumer Price Index and Psycho-Social Indexes, Rate of Change with 1971 = 100

To get a feel for the meaning of our affluence as a nation compared to the incidence of difficulties, the data for the Gross National Product (Table 8) are included. It is interesting to note that the indexes indicating problems started to rise after the measure of our affluence had been steadily increasing for some years.

Economic and Financial Concerns

Our society needs money to invest in

research and development and in job retraining in order to meet the challenges and the opportunities of the technological age with its global markets and we cannot afford unnecessary expenditures. The rate of increase in some of the costs associated with the malfunctioning of our society — prisons, mental hospitals and assistance — are shown in Figure 7 and Table 9. Some of these costs are inevitable and part of a human society but some appear to be a product of our inability to cope — and preventable.

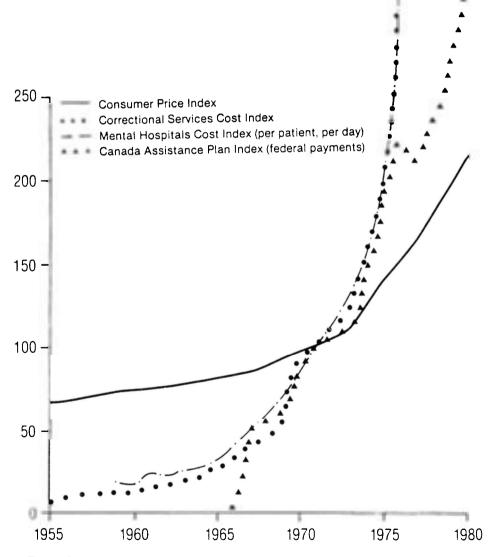


Figure 7. Expenditure Indexes, Rate of Change with 1971 = 100

A Major Cause of our Difficulties

The data and indexes indicate a drain on both our psychic and financial resources and a level of trouble that is high and still rising. We must turn our attention to the prevention of these enormous costs.

In many respects we are still like the three fishermen (Nevison, 1969) who noticed a body floating in the stream toward them. While attempting to rescue it, another body and yet another appeared. Their frantic efforts at rescue became pitifully inadequate and one of the fishermen started upstream. When his companions asked why he was leaving when they needed him so, he replied he was going to find out what was pushing them in. The story usually stops there but it is incomplete as it assumes that we can prevent their being pushed in. We cannot, for it is the instability inherent in a society in rapid evolution - a pace never before experienced - that overwhelms the people without adequate strengths. The crucial question we must ask ourselves is why are they not stronger swimmers. The urgent task we must set ourselves is the development of people who can cope, who face life with confidence and who are willing to move ahead into the future.

Life Stages Where Help is Required

As we take a broad view of our society we can start to understand where we have gone wrong. We used to be a pioneering society where the family was a working as well as a social unit. The extended family helped the young mother and taught the children the skills they would need as adults. The traditional ways of coping were handed down from generation to generation and the rate of change was slow enough that people learned to deal with it. At each stage of life there was help.

But not now. Our society is changing so quickly that we do not even know what jobs to prepare for. The choices are so many that we wonder if we are doing the right thing. Our mobility is so great that we have fewer family and lifetime friends nearby. As a result, we have not prepared people for each stage of life.

Young mothers too often lack the experience to nurture a baby successfully; the Senate report, *Child at Risk*, documents our inadequacy. Schools are expected to teach the skills we need yet the failure rates document their inability to fulfill their mandate. While we are aware of the anger among so many people we tend to forget that it often comes from a sense of inadequacy and we do not carefully examine the degree of failure prevalent in our schools. Of the men about 35 - that crucial stage when one wonders about really making it $-39^{\circ}/\circ$ of them have failed by the time they are in grade nine; for the women, $29^{\circ}/\circ$ (Statistics Canada, 1965). These tend to be people who lack confidence and feel inadequate. All too often our adolescents use drugs, become pregnant, wreck cars – and themselves. We have failed to help them make a successful transition from dependence through the illusion of independence to interdependence and their tragedies document our inadequacy.

We are failing to ensure that the young adult obtains a job – any work – and we can expect real trouble from this. We have not prepared young people to be good parents and have certainly not helped them to cope with children in their early teens making adult choices. We have not helped our middle-aged adults change careers as needed and we have segregated our older people. No wonder we have so many people in difficulty. The rates of social problems document our inadequacies in helping adults at crucial stages.

It is in these very fundamental tasks that we have failed. We must now build a society that nurtures the individual at each crucial stage in his life so that he will be prepared to make his contribution and to find life fulfilling. For this age he must be self-reliant, courageous and flexible. We must help each person move from the childhood years of dependence through the adolescent period of seeming independence to the maturity of interdependence.

These are the crucial developmental stages where we must give special help:

- 1. We must provide the baby, both prior to and after birth, with the nutrition, shelter, care and love required for optimum development.
- 2. We must ensure that the child's first years among peers and in the classroom are satisfying and lead to good relationships and work habits.
- 3. We must allow the adolescent several years to make the transition from childhood to adulthood to understand and value the coming status; we must not allow a young person to imitate adult behaviours until ready to accept the responsibility for the actions.
- 4. We must help the young adult to make a successful transition into the world of work and into parental responsibilities.

- 5. We must help the middle-aged adult to anticipate and prepare for career changes and to cope with the new parenting responsibilities in assisting adolescents to understand and appreciate the dimensions of maturity.
- 6. We must encourage the older adult to be vitally involved in the community.

As we ponder the scope of our three revolutions -jobs, interdependence of business and government, and the full equality of women - and as we gain perspective in our

reactions to the resulting stress, we can see that the solutions are not quick and easy and cannot just be handed to us. But as we move beyond that pervasive anger that is looking for targets, we can define what needs to be done to produce the strong swimmers for today's eddying waters – and together we can do it. It means that as a society we must leave behind that false sense of independence and work together interdependently.

A crisis can be destructive but it can also trigger a readiness for better solutions.

	Table 1 Number of Alcoholics (Canadian Version of Bellinek Estimation Formula)						
Year	Cirrhosis ¹ Deaths	Total ¹ Alcoholics	⁰ /o of ¹ population (14 yrs. & over)	Index ²			
1955	773	164,847	1.1	55.0			
1956	851	181,481	1.1	55.0			
1957	936	199,608	1.2	60.0			
1958	978	208,565	1.2	60.0			
1959	1,024	218,375	1.3	65.0			
1960	1,073	228,824	1.3	65.0			
1961	1,079	230,104	1.3	65.0			
1962	1,070	228,184	1.2	60.0			
1963	1,117	238,207	1.3	65.0			
1964	1,199	255,695	1.3	65.0			
1965	1,268	270,409	1.4	70.0			
1966	1,351	288,110	1.4	70.0			
1967	1,446	308,369	1.5	75.0			
1968	1,535	327,349	1.6	80.0			
1969	1,653	352,513	1.7	85.0			
1970	1,796	383,009	1.8	90.0			
1971	1,978	421,821	2.0	100.0			
1972	2,230	475,562	2.2	110.0			
1973	2,468	526,317	2.4	120.0			
1974	2,617	558,092	2.5	125.0			
1975	2,175	578,991	2.5	125.0			
1976	$2,767^{3}$	590,000	2.6	130.0			
1977	$2,788^4$	594,559 ⁴	2.6	130.0			
1978	$2,900^{4}$	618,443 ⁴	2.6	130.0			
1979	3,086 ⁵	658,443 ⁴	2.8 ⁵	140.0			
1980	3,273 ⁵		2,9 ⁵	145.0			

1. From Alcohol and Drug Statistics for Canada and British Columbia 1955-1976, Alcohol and Drug Commission, Ministry of Health, British Columbia, Table 14, p. 41.

- 2 Incidence (as percentage of population) changed to scale with percentage in 1971 as 100.
- 3 Correction in Table from Commission, January, 1983.
- 4 Updating by Commission, January, 1983.
- 5 Estimated using British Columbia rates.

	All ages		10-14 yrs		15-1	19 yrs	20-2	24 yrs	25-29 yrs	
	Rate	Index ²	Rate	Index ²	Rate	Index ²	Rate	Index ²	Rate	Index ²
1955	7.3	61.3	0.2	20	1.8	22.5	4.1	28.5	7.1	50.4
1956	7.6	63.9	0.4	40	1.8	22.5	5.1	35.4	8.2	58.2
1957	7.5	63.0	0.1	10	2.1	26.3	5.7	40.0	7.2	51.1
1958	7.4	62.2	0.7	70	2.5	31.3	6.0	41.7	8.0	56.7
1959	7.4	62.2	0.3	30	2.1	26.3	5.7	40.6	7.5	53.2
1960	7.6	63.9	0.3	30	3.3	41.2	7.3	50.7	10.0	70.9
1961	7.5	63.0	0.4	40	2.3	28.8	5.8	80.3	7.0	49.2
1962	7.2	60.4	0.6	60	3.2	40.0	6.8	47.2	8.1	57.4
1963	7.6	63.9	0.7	70	3.9	48.8	8.1	56.2	8.3	58.9
1964	8.2	68.9	0.7	70	3.6	45.0	7.7	53.5	9.1	64.5
1965	8.7	73.1	0.8	80	3.7	46.3	8.3	57.6	9.5	67.4
1966	8.6	72.3	0.9	90	3.7	46.3	9.1	63.2	10.8	76.6
1967	9.0	75.6	0.6	60	5.0	62.5	10.1	70.1	11.6	82.3
1968	9.8	82.4	0.8	80	4.6	57.5	10.9	75.7	12.3	87.2
1969	10.9	91.6	0.7	70	6.2	77.5	13.9	96.5	12.4	87.9
1970	11.3	95.0	0.7	70	7.0	87.5	14.1	97.9	13.8	97.9
1971	11.9	100.0	0.7	70	8.0	100.0	14.4	100.0	14.1	100.0
1972	12.2	102.5	1.0	100	9.3	116.3	16.9	117.4	17.0	120.6
1973	12.6	105.9	1.0	100	9.1	113.8	16.6	115.3	15.5	109.9
1974	12.9	108.4	0.7	70	10.8	135.0	19.0	131.9	17.6	124.8
1975	12.3	103.4	0.9	90	10.2	127.5	18.9	131.3	16.9	119.9
1976	12.8	107.6	1.0	100	10.7	133.8	18.7	130.0	18.1	128.4
1977	14.2	119.3	1.4	140	12.6	157.5	22.6	157.0	18.6	131.9
1978	14.8	124.4	1.4	140	12.0	150.0	22.2	154.2	22.1	156.7
1979	14.9	125.2	1.1	110	15.9	198.8	21.7	150.7	18.8	133.3
1980	14.0	117.6	1.1	110	11.8	147.5	18.8	130.6	20.3	144.0
1981	14.0	117.6	1.8	180	12.7	158.8	19.6	136.1	16.1	114.2

Table 2 Suicides Rate per 100,000 of Population¹

From Statistics Canada, General Mortality. Catalogue 84-531.

1 2 Incidence (as rate per 100,000 of age groupe) changed to scale with 1971 = 100.

Year	Average Rate	Index
1955	4.3	34.4
1956	5.0	41.0
1957	5.0	41.0
1958	5.5	45.1
1959	5.1	41.8
1960	6.9	56.6
1961	5.0	41.0
1962	6.0	49.2
1963	6.8	55.7
1964	6.8	55.7
1965	7.2	59.0
1966	7.9	64.8
1967	8.9	73.0
1968	9.3	76.2
1969	10.8	88.5
1970	11.6	95.1
1971	12.2	100.0
1972	14.4	118.0
1973	13.7	112.3
1974	15.8	129.5
1975	15.3	125.4
1976	15.8	129.5
19 77	17.9	146.7
1978	18.8	150.1
1979	18.8	150.1
1980	17.0	139.3

Table 3 Suicides Rates per 100,000 for 15-29 year Group¹

1 Rates for 15-29 year group obtained by taking the average of the age groups (15-19, 20-24, 25-29). Rate of change with 1971 = 100.

Year	Admissions per 100,000 ¹	Index ³	Cost per patient per day ²	Index ³
1955	73.4	29.8		
1956	81.2	33.0		
1957	83.4	33.9		
1958	87.3	35.4		
1959	94.1	38.2	5.21	22.2
1960	93.3	37.9	4.67	19.9
1961	100.0	40.6	5.90	25.2
1962	116.2	47.2	5.56	23.7
1963	127.3	51.7	6.50	27.7
1964	141.2	57.4	6.67	28.5
1965	189.6	70.0	7.97	34.0
1966	195.5	79.4	9.73	41.5
1967	202.6	82.3	11.70	49.9
1968	213.2	86.6	14.34	61.1
1969	220.6	89.6	16.95	72.3
19 70	238.3	96.8	20.12	85.9
1971	246.2	100.0	23.43	100.0
1972	243.1	98.7	27.52	117.5
1973	252.8	102.7	31.57	134.7
1974	270.5	109.9	38.38	163.8
1975	277.0	112.5	47.53	202.9
1976	241.4 ⁴	98.1	68.12	290.7
1977			80.71	344.5
1978-79			90.58	386.6
1979-80			93.66	399.7

 Table 4

 Mental Illness

 Admissions to Psychiatric Hospitals and Patient Cost in Mental Hospitals

1 Data from Statistics Canada, Mental Health Statistics, Catalogue 83-20⁴.

2 Data for cost per day for public mental hospitals is from Statistics Canada, Mental Health Statistics: Institutional Facilities, Services and Finances, Catalogue 83-205. Data for years before 1959 are not based on all public mental hospitals.

- 3 Rate of change with 1971=100.
- 4 Method of keeping data changed after 1976.

Year	Total cost of Programs (\$000) ¹			Index
1954-55	8,460	9.4		
1955-56	9,076	10.1		
1956-57	10,299	11.4		
1957-58	11.157	12.4		
1958-59	11,964	13.3		
1959-60	13,220	14.7		
1960-61	15.224	16.9		
1961-62	17.351	19.3		
1962-63	9.524	21.7	3338.6	61.9
1963-64	20,419	22.7	3637.5	67.4
1964-65	25,338	28.2	3900.2	72.3
1965-66	28,309	31.5	3831.0	71.0
1966-67	39,348	43.7	4183.4	77.6
1967-68	41,775	46.4	4529.6	84.0
1968-69	49.315	54.8	5045.7	93.6
1969-70	84.693 ⁴	94.1	5465.6	101.3
1970-71	89.973	100.0	5205.1	96.5
1971-72	101,239	112.5	5392.8	100.0
1972-73	109,183	121.4	5464.3	101.3
1973-74	135,615	150.7	5897.1	109.4
1974-75	177,206	196.9	6490.5	120.4
1975-76	227,344	252.7	5955.4	110.4
1976-77	268,723	298.7	7086.6	131.4
1977-78	335,323	372.7	7101.5	131.7
1978-79	371,353	412.7	7300.7	135.4
1979-80	374,713	416.5	9293.1	172.3
1980			11257.4	208.7

Table 5 Crime and correctional services

1 Data from Receiver General of Canada, Public Accounts of Canada, Volume II, Details of Expenditures and Revenues, 1980.

2 Data from Statistics Canada, Crime and Traffic Enforcement Statistics, Catalogue 85-205.

3 Rate of Change With 1971 = 100.

4 Bases for Reporting changed.

5 Comparable data not available before 1962.

Year	Marriage dissolution Rat per 100,000 of population ¹	Dissolution Index	Therapeutic abortions rate per 1000 females ²	Abortion index	Illegitimate births ³	Birth index ⁴
1955	38.6	28.5			17,034	52.1
1956	37.3	27.1			17,510	53.6
1957	40.3	29.3			18,629	57.0
1958	36.8	26.7			19,027	58.2
1959	37.4	27.2			20,221	61.9
1960	39.1	28.4			20,413	62.4
1961	36.0	26.2			21,490	65.7
1962	36.4	26.4			22,443	68.6
1963	40.6	29.5			24,458	68.7
1964	44.8	32.6			26,556	81.2
1965	45.9	33.4			28,078	85.9
1966	51.2	37.2			29,391	89.9
1967	54.7	39.8			30,915	94.6
1968	51.8	37.6			32,629	99.8
1969	123.8	90.0			34,041	104.1
1970	139.8	101.6	2.4 ⁵	36.4	35,588	108.1
1971	137.6	100.0	6.6	100.0	32,693	100.0
1972	148.4	107.8	8.2	124.2	31,257	95.6
1973	166.1	120.7	8.8	133.3	31,005	94.8
1974	200.6	145.8	9.5	143.9	30,362	92.9
1975	222.0	161.3	9.5	143.9		
1976	235.8	171.4	10.3	156.0		
1977	237.7	172.7	10.6	160.6	39,707 ⁶	121.4
1978	243.4	176.9	11.3	171.2	40,870	125.0
1979	251.3	182.6	11.6	175.8	43,552	133.2
1980	259.1	188.3	11.5	174.2	47,624	145.7
1981	278.0	202.0				

Table 6 The family unit Marriage dissolutions, abortions, illegitimate births

1 Data from Statistics Canada, Vital Statistics: Marriages and Divorce, Catalogue 84-205.

2 Data from Statistics Canada, Vital Statistics: Hospital Morbidity, Catalogue 82-206.
3 Data from Statistics Canada, Vital Statistics: Births and Deaths, Catalogue 84-204.

4 Rate changed into scale with 1971=100.

5 Law governing abortion changed in 1969.

6 Data from 1975 and 1976 not based on same criteria.

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Year	Mental health index	Suicide index	Alcohol index	Marr. diss. index	Crime index	Psycho- social index ²	Trouble index ³
1955	53.6	58.8	55.0	28.5		49.0	56.9
1956	60.0	63.9	55.0	27.1		51.5	59.5
1957	59.2	63.0	60.0	29.3		52.9	61.5
1958	60.0	63.0	60.0	26.7		52.4	61.5
1959	61.9	62.2	65.0	27.2		54.1	63.6
1960	58.1	63.9	65.0	28.4		53.9	64.5
1961	58.8	63.0	65.0	26.2		53.3	64.0
1962	61.9	60.5	60.0	26.4	61.9	54.1	60.3
1963	61.5	63.9	65.0	29.5	67.4	57.5	64.5
1964	75.0	68.9	65.0	32.6	72.3	62.8	67.0
1965	76.2	73.9	70.0	33.4	71.0	64.9	72.0
1966	74.6	72.3	70.0	37.2	77.6	66.3	71.1
1967	76.9	75.6	75.0	39.8	84.0	70.2	75.3
1968	80.8	81.5	80.0	37.6	93.6	74.7	80.8
1969	84.6	91.6	85.0	90.3	101.3	90.5	88.3
1970	92.7	95.0	90.0	101.6	96.5	95.2	92.5
1971	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1972	95.0	102.5	110.0	107.8	101.3	103.3	106.3
1973	95.4	105.9	120.0	120.7	109.4	110.3	113.0
1974	103.1	108.4	125.0	145.8	120.4	120.5	116.7
1975	105.8	103.6	125.0	161.3	110.4	121.2	114.3
1976	83.1	107.6	130.0	171.4	131.4	124.7	118.8
1977		119.3	130.0	172.7	131.7	125.9	124.7
1978		124.4	130.0	176.9	135.4	141.7	127.2
1979		125.2	140.0	182.6	172.3	155.0	132.6
1980		117.6	145.0	188.3	208.7	164.9	131.3

Table 7Psycho-social price indexes(Mental health¹, suicide, alcoholism, marriage dissolution and crime)

1 Mental Health Index is the index for admissions to psychiatric hospitals.

2 Index based on all five indicators weighed equally. In years where data from all five are not available, then only the remaining four were used.

3 Index based on suicides and alcoholism only.

Year	In millions of Current dollars	In millions of constant (1971) dollars	Index ²
1955	28,528	43,891	30.2
1956	32,058	47,599	33.9
1957	33,513	48,718	35.5
1958	34,777	49,844	36.8
1959	36,846	51,737	39.0
1960	38,359	53,231	40.6
1961	39,646	54,741	41.9
1962	42,927	58,475	45.4
1963	45,978	61,487	48.7
1964	50,280	65,610	53.2
1965	55,314	69,981	58.6
1966	61,828	74,844	65.5
1967	66,409	77,344	70.3
1968	72,586	81,864	76.9
1969	79,815	86,225	84.5
1970	85,685	88,390	90.7
1971	94,450	94,450	100.0
1972	105,234	100,248	111.4
1973	123,560	107,812	130.8
1974	147,175	111,766	155.8
1975	165,445	112,955	175.2
1976	190,027	118,484	201.2
1977	207,714	121,566	219.9
1978	230,490	126,191	244.0
1979	261,576	129,850	276.9
1980	291,869	130,467	309.0
1981	331,338	134,540	350.8

Table 8 Gross national product

1 Data from Statistics Canada, Income and Expenditures Accounting, Catalogue 13-531 and *Quarterly Publication* 13-001. 2 Rate of Change with 1971 = 100.

Table 9 Financial indicators

Year	Federal payments to Canada assistance plan (\$000) ¹	Index ⁴	Consumer price Index	Unemployment rate (⁰ /0) ³	Index ⁴
1955			67.6		
1956			68.5		
1957			70.7		
1958			72.6		
1959			73.4		
1960			74.3		
1961			75.0		
1962			75.9		
1963			77.2		
1964			78.6		
1965			80.6		
1966	10,494	1.4	83.5	3.4	54.8
1967	342,711	47.1	86.6	3.8	61.2
1968	406,153	55.8	90.1	4.5	72.6
1969	450,129	61.9	94.1	4.4	71.0
1970	597,432	82.1	97.2	5.7	92.0
1971	727,377	100.0	100.0	6.2	100.0
1972	768,230	105.6	104.8	6.2	100.0
1973	824,775	113.4	112.7	5.5	88.7
1974	1,056,069	145.2	125.0	5.3	85.4
1975	1,378,110	189.5	138.5	6.9	112.9
1976	1,602,129	220.3	148.9	7.1	114.5
1977	1,541,717	212.0	160.8	8.1	130.6
1978	1,683,784	231.4	175.2	8.4	135.5
1979	1,894,871	260.5	191.2	7.5	121.0
1980	2,205,609	303.2	210.6	7.5	121.0

1 Data from Statistics Canada, Social Security, Catalogue 86-201.

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4 Rate of change with 1971 = 100.

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Myrne B. Nevison received her B.A. from the University of British Columbia and her Ph.D. from the University of Minnesota and was a secondary school counsellor before teaching at the university level, first at the University of Northern Colorado then at the University of British Columbia. When she retired in 1982, she was head of UBC's Department of Counselling Psychology.

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