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EFFECTS OF SOCIAL CHANGE ON WELL-BEING:  
BOOM AND BUST IN A WESTERN CANADIAN CITY

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**ABSTRACT.** Drawing from surveys done over a eight year period, we find some important effects on well-being coming from economic boom and bust in a Western Canadian city. This effect is buffered, however, by the important role that family and friends play for young people and health and non-working activities play for the adjustment of older people. Because of these factors, difficulties in the objective condition of economic downturn has had less impact on the general social well-being of the public than previously reported.

There has been increased attention paid, in recent years, to the effects of rapid social change on individuals, especially under the conditions of boom and bust (Finsterbusch, 1982). These conditions often arise in areas of resource development where sudden increases in the demand for certain commodities, such as oil and gas, create vast incentives for exploration. The labor force requirements of these developments can bring large numbers of people to man the machinery needed in constructing sites and extracting the resource. These areas are vulnerable to changes in world markets, however, and the cyclical demand for these commodities can suddenly lead a rapidly booming economy to a fast downward spiral into recession and economic hard times.

Questions have been raised about the forces bringing about societal change that occurs in these boom and bust cycles. One view of these relationships is provided by research on social indicators. In this tradition, there has been a recognition that any real measure of social condition must include the subjective evaluation of the individuals involved in this experience (Angrist, 1976). This subjective state can then be examined in the context of objective conditions, measured through such means as economic indicators. The social well-being perspective that emerges from this research problem focusses on adjustment of individuals, from the point of view of what is right with the world rather than what is wrong (Kennedy *et al.*, 1978). The incremental improvement or decline in individual condition over time can be measured through a global treatment of social adjustment, rather than concentrating on

social problems or on individuals who have specific difficulties. This type of evaluation is ideally applied then to conditions of rapid social change, where the instability in population size and composition, as well as shifting economic conditions, can lead to major social disruption.

A number of communities in Western Canada have undergone important economic and social changes in the last decade with the oil boom turning into deep recession. During this time large population changes have taken place. This has led to some rather significant changes in the age composition of communities and in the structural character of their residential and economic sectors (Tepperman, 1984). What is unclear are the effects that these changes have on the social well-being of different groups in the population who have gone through these social and economic changes.

It is evident that in times of boom, there is a compression of the effects that social factors have on the fabric of society. The changes that occur are sudden and disrupting. Freudenberg (1984) points out that there are two bodies of literature that are relevant for the study of this problem of social change. He points out that classical sociological writings, such as those of Durkheim (1933), suggest that rapid growth would result in substantial disruption for local residents. This view is echoed by others such as Louis Wirth (1938) who saw the rapid changes coming about as a result of urbanization having a destabilizing effect on residents, with alienation and normlessness occurring from the effects of rapid social change.

The contrary view offered by the modernization literature points out that this change, occurring as a result of rapid population and economic growth, creates a loosening up of traditional systems. As a result, greater economic and social opportunities appear. The effect on the individual is positive and leads to greater expectations. This, of course, may vary by the characteristics of the individuals involved. As Freudenberg points out, younger people should be especially likely to benefit from rapid social change (Freudenberg, 1984, p. 698).

In this analysis of boom towns in western Colorado, Freudenberg reports that there is no evidence that rapid economic development is liberating and beneficial to persons experiencing it. His study provides support, he argues, for the Durkheimian notion that development would change the social patterns and be disruptive to local residents. This disruption is concentrated, further, in a group that one would not expect to feel negative effects of this change, that is, young people (Freudenberg, 1984, p. 703).

Freudenberg's analysis concentrates on the comparison of boom towns to towns not undergoing rapid social change. An equally pertinent question relates to the nature of the social change over time in a community. Do the positive or negative aspects of social change as outlined above pertain regardless of whether or not we are in the boom or the bust part of an economic cycle? Are certain groups, such as young people, more likely to be vulnerable to the forces of change than other groups? We will examine the impact of rapid social change on individual well-being with these questions in mind. First, let us look at some of the issues raised in the social indicator research literature concerning the measurement problems involved in this type of research.

#### MEASUREMENT OF SOCIAL WELL-BEING

Objective statistics (e.g. crime rates, housing vacancy rates, unemployment rates) are readily available and widely used in interpreting the course of social change. It is tempting, therefore, to assume these statistics actually provide a complete picture of the social adjustment necessary to deal with rapid changes in the social structure. There has been a very convincing argument put forward by Schneider (1975), among others, that these objective aggregate statistics are, in fact, unrelated to the personal social well-being of individuals measured through the use of subjective social indicators.

Seashore (in McCall, 1975, p. 237) points out that being satisfied is a common coping response — a means of coming to terms with objective conditions and a means of defining them in an acceptable light. McCall argues that the same objective conditions may elicit different evaluative responses or the same response may be elicited by different objective conditions. Given the fact that these two processes may be simultaneously ongoing in a social system, it is not surprising that the relationship between the objective and the subjective is obscure.

As pointed out in an earlier paper, we argue that a better understanding of these relationships can be obtained through the use of demographic groupings, classifying individuals into categories whereby the relationship between objective state and subjective response is made more clear by differences in life circumstances (Kennedy *et al.*, 1978). This tactic provides us with a mechanism whereby we can test the effects of objective social change on subjective states measured across different groups. Using this strategy, we will be

able to confront the problem of positive and negative adjustment to change outlined by Freudenberg, as summarized above. We will examine differences across age groups to determine whether or not the adjustment process over time works differently for the young, middle aged, and the old. This analysis will present us with the ability to assess rapid social change effects on quality of life in times of boom and bust.

#### THE STUDY

The data presented are drawn from eight annual surveys, the Edmonton Area Studies, 1977 to 1984. These studies were conducted by the Population Research Laboratory at the University of Alberta. The studies involved a personal interview with a random sample of Edmonton residents 18 years of age and older. In each study, which ranged in size from 341 to 507 respondents for a combined sample of 3440, respondents were asked to provide information on themselves and the characteristics of their household. In addition, each study contained a series of questions measuring quality of life as first done in the 1974 Michigan Quality of Life Survey.

#### THE CITY

In 1977, the City of Edmonton could be described as booming. There was a considerable increase in the demand and price for oil resulting in a sudden flow of capital into the city. With this came a upswing in job opportunities, leading to sudden migration from outside, especially from Eastern Canada. As is shown in Table I, the population increases from the spring of 1976, when the population stood at 461,559, have led to an overall growth of over twenty per cent up to the spring of 1983 (the last time that the City compiled census figures). The growth peaked in the spring of 1982 at 5.8 per cent and then suddenly dropped off to 1.6 per cent the next year.

In 1978, in the middle of the boom, we wrote the following: "Edmonton has become a city facing some uncertainty about the effects it will feel from rapid growth. While the 'boom' has kept taxes low, rents and housing prices have soared. Increased housing costs have put the single family home unit out of reach of many and resulted in the construction of increasing numbers of multiple dwellings to satisfy a pressing housing demand. In short, while there

TABLE I  
Annual percentage increase in population, city of Edmonton<sup>a</sup>

	Year	Population	Increase	Yearly % increase	Cumulated % increase since 1976 as base year
Spring	1976	461,559			
Spring	1977	471,444	9,885	2.14	2.14
Spring	1978	478,066	6,622	1.40	3.58
Spring	1979	491,359	13,293	2.78	6.46
Spring	1980	505,773	14,414	2.93	9.57
Spring	1981	521,205	15,432	3.05	12.92
Spring	1982	551,314	30,109	5.78	19.45
Spring	1983	560,085	8,771	1.59	21.35

<sup>a</sup> Source: City of Edmonton Civic Census Records.

is a general euphoria, the quality of life remains an open question" (Kennedy *et al.*, 1978, p. 459).

When world prices for oil dropped in 1981 and the Canadian economy turned down with the rapid increases in interest rates, things in Edmonton changed dramatically. No longer was there talk of low unemployment and unlimited job opportunities. Instead, unemployment soared. Housing dropped in value but not commensurate with the costs of purchase incurred because of high interest rates. There was a general loss of confidence in the economy, in general.

#### MEASURES

Our attention will focus specifically, in this analysis, on the relationship between respondent characteristics and their assessments of social well-being with global measures of satisfaction over the time period covering both boom and bust in Edmonton. Our dependent variables include a question asking people overall how satisfied they are with life (measured on a seven point scale from (1) very dissatisfied to (7) very satisfied). A second dependent variable measures how people assess whether or not they are better off or worse off financially now than they were in the previous year (measured on a three point scale from (1) are better off (2) same (3) are worse off). These two questions provide us with a way at looking at global well-being in general and financial progress, in particular.

As we are interested in how these assessments of well-being will be affected across groups, we include measures of demographic characteristics of respondents. These include gender (male = 1; female = 2); level of education (measured in years); marital status (single – never married = 1; widowed = 2; divorced = 3; separated = 4; common-law = 5; married = 6); age (measured in years); and household income (measured in dollars). In addition to these variables, we have included a measure of length of residence as Freudenberg (1984) points out its importance in affecting the adjustment that people make to rapidly changing urban conditions.

Our measures of subjective state include a series of satisfaction questions asking about different parts of individual's experiences. These questions were all coded as (1) very dissatisfied to (7) very satisfied. They included questions about satisfaction with one's job, house, non-work activities, family life, health, things one wanted to do, friendships, standard of living, and neighbourhood. In addition, a question asking about the respondent's view of financial well-being in the year to come was included in the analysis (better off now = 1; same = 2; worse off = 3).

Our final set of measures relate to objective changes in the social environment over time. As we have argued that the boom and bust can be tracked over time, we have included a series of variables which are created by separating each year from the others in dummy variable form. We are assuming that the objective conditions that we outlined above will appear in isolating certain years as important in creating changes in our dependent variables.

Finally, we have broken our sample into three categories according to age grouping (17–25; 26–45; 45+). This breakdown allows us to examine the finding presented by Freudenberg that younger people are more likely to respond negatively to rapid social change than older people. Although he included adolescents in his study, the principle of age graded differences should hold. We can set as our goal the answer to the question whether or not different age groups in our sample respond to the effects of rapid social change based on different criteria and on a varying time schedule.

## RESULTS

Looking first at the predictors of global life satisfaction, it is apparent from Table II that overall, life satisfaction is higher as age increases. Across the years, however, there does not seem to be a clear pattern of rise and fall in

TABLE II  
Means for life satisfaction over seven years by age group

Age	1977	1978	1979	1981	1982	1983	1984	Total
17-25	5.42	5.73	5.43	5.75	5.39	5.38	5.70	5.55
<i>N</i>	53	125	103	87	125	94	94	681
26-45	5.65	5.79	5.63	5.64	5.68	5.72	5.56	5.67
<i>N</i>	161	177	173	182	222	210	218	1343
45+	5.60	5.82	5.96	5.74	5.74	5.99	5.65	5.79
<i>N</i>	121	145	162	130	159	115	136	968
Total	5.60	5.78	5.70	5.70	5.62	5.72	5.62	5.68
	335	447	438	399	506	419	448	2992

values of these measures consistent with changes taking place in the economy, as outlined above. For example, we would expect the life satisfaction value to be the highest at the peak of the boom, 1981. In only one case, the 17-25 year olds, does this appear to be the case. In fact, for the middle age group, the values of life satisfaction actually climb from 1981 to 1983 to finally drop off only in 1984. These findings can be viewed as demonstrating the complexity of social well-being, resting on a number of factors in an individual's life which go beyond conditions in the economy.

To investigate this point more closely, we present in Table III, results from multiple regression analysis where life satisfaction is the dependent variable and the demographic, subjective measures, and years are entered as independent variables for each age group separately. In all three groups, the strongest predictor of life satisfaction, surprisingly, is standard of living satisfaction. This seems a surprising finding as we would have expected other factors such as health or family to play a more prominent role in life satisfaction. The changes in the economy may make vulnerability to standard of living changes a salient factor in considering how well one is faring overall.

Differences across groups begin to appear when we look at the next important factors in predicting life satisfaction. For young and middle age groups, friends, family, and job satisfaction predict the greatest variation in life satisfaction. For the older group, 45 and over, health and non-working activities satisfaction are the most important factors in life satisfaction. The divergence of this latter group from concerns about friends and family to health and leisure, is reflective of the changing attitudes that people develop as they age.

TABLE III  
Reduced form step-wise regressions by age group on  
life satisfaction

<i>17-25</i>	<i>B</i>	<i>Beta</i>
Standard of living satisfaction	0.19	0.23
Friendship satisfaction	0.17	0.17
Family satisfaction	0.14	0.16
Job satisfaction	0.12	0.15
Neighbourhood satisfaction	0.08	0.10
Better/worse than a year ago	-0.14	-0.10
Health satisfaction	0.10	0.10
1978	0.26	0.09
1984	0.27	0.09
Education	0.02	0.07
Things wanted to do satisfaction	0.05	0.07
(constant)	0.90	
	$R^2 = 0.37$	$N = 628$
<i>26-45</i>	<i>B</i>	<i>Beta</i>
Standard of living satisfaction	0.20	0.23
Friendship satisfaction	0.15	0.17
Family satisfaction	0.16	0.18
Job satisfaction	0.16	0.18
Health satisfaction	0.14	0.16
Non-work activities satisfaction	0.08	0.09
Neighbourhood satisfaction	0.05	0.07
Better/worse off than a year ago	-0.10	-0.07
Sex	0.13	0.06
Year 1981	-0.16	-0.05
Things wanted to do satisfaction	0.03	0.05
(constant)	0.29	
	$R^2 = 0.43$	$N = 1185$
<i>45 and Over</i>	<i>B</i>	<i>Beta</i>
Standard of living satisfaction	0.28	0.26
Health satisfaction	0.21	0.26
Non-work activities satisfaction	0.11	0.12
Better/worse off than a year ago	-0.24	-0.13
Job satisfaction	0.14	0.10
Friendship satisfaction	0.07	0.06
Family satisfaction	0.08	0.08
Things wanted to do satisfaction	0.06	0.08
Sex	0.16	0.07
Year 1982	-0.19	-0.06
	$R^2 = 0.41$	$N = 858$

Of note for these three age groups is the additional finding that changes in the city, as represented by year of the study have small, albeit significant effects on life satisfaction. The effects that do appear present an interesting



pattern of change. For the young age group the years in which satisfaction is significantly different from all other years are 1978 and 1984. These are times of relatively high levels of satisfaction for this group, looking back at Table II. For the middle age group, 1981 is significantly different from all others in satisfaction. This is the time of the peak of the economic activity in Edmonton and these findings may reflect the response of this group to the high level of optimism encountered in that year. For the older group, 1982 is significantly different from all others in terms of satisfaction perhaps reflecting a delay in the impact of the change in the economy on this age group. These findings are certainly not conclusive, as the predictive values are quite low. However, they do point to some differences in the way in which different age groups will respond to change. Of course, these effects must be considered in the context of the levels of satisfaction experienced in other areas of life, including the standard of living that one is enjoying.

Turning next to a presentation of descriptive results for the question better off/worse off than a year previous (Table IV), we find that overall there is an increase in mean values from the younger to the older age groups. In addition, there appears to be some pattern of increase over time for groups in their determination that things are worse than in the previous year. Table V presents multiple regression results which reflect the importance of different variables in explaining the feeling of positive financial adjustment that people are experiencing relative to the previous year. In all age groups, reflection of economic well-being is related to optimism about improvements for the next year. The differences that emerge relate to the emphasis that younger people

TABLE IV  
Means for better off/worse off than a year ago over eight years by age group

Age	1977	1978	1979	1980	1981	1982	1983	1984	Total
17-25	1.35	1.49	1.50	1.46	1.51	1.73	1.88	1.83	1.61
<i>N</i>	54	125	101	82	87	125	94	94	762
26-45	1.54	1.60	1.54	1.59	1.51	1.68	1.86	1.86	1.66
<i>N</i>	162	178	170	193	181	223	209	219	1535
45+	1.71	1.78	1.74	1.63	1.76	1.83	2.03	2.05	1.81
<i>N</i>	123	147	162	150	131	158	115	134	1120
Total	1.57	1.63	1.61	1.58	1.59	1.74	1.91	1.91	1.70
	339	450	433	425	399	506	418	447	3417

TABLE V  
Reduced form step-wise regression by group with dependent variable 'better/worse off than a year ago'

<i>17-25</i>	<i>B</i>	<i>Beta</i>
Better/worse off than a year from now	0.18	0.14
Overall life satisfaction	-0.11	-0.16
Year 1983	0.39	0.19
Year 1984	0.34	0.16
Friendship satisfaction	0.08	0.12
Standard of living satisfaction	-0.04	-0.08
Year 1982	0.00	0.11
Income	-5.20	-0.10
(constant)	1.77	
	$R^2 = 0.12$	$N = 628$
<i>26-45</i>	<i>B</i>	<i>Beta</i>
Better/worse off than a year from now	0.28	0.23
Standard of living satisfaction	-0.04	-0.06
Income	0.00	-0.14
Year 1983	0.35	0.18
Year 1984	0.30	0.16
Sex	0.13	0.09
Overall life satisfaction	-0.06	-0.09
Year 1982	0.14	0.07
(constant)	1.69	
	$R^2 = 0.15$	$N = 1185$
<i>45 and Over</i>	<i>B</i>	<i>Beta</i>
Better/worse off than a year from now	0.31	0.28
Overall life satisfaction	-0.10	-0.19
Year 1984	0.29	0.17
Year 1983	0.29	0.15
Income	0.00	-0.12
Job satisfaction	-0.07	-0.09
Things wanted to do satisfaction	0.03	0.08
Standard of living satisfaction	-0.04	-0.07
(constant)	2.37	
	$R^2 = 0.22$	$N = 858$

place on life satisfaction and friendship satisfaction over standard of living when compared to the middle age group for which standard of living satisfaction is a strong predictor of economic well-being. The emphasis on life satisfaction over standard of living satisfaction or income is repeated again with the older respondents.

It is evident in these tables that there is some effect of change in the economic conditions over time which influences views of economic well-being. The significant differences in responses to this question appear in all age groups for the years 1983 and 1984. This indicates a clear reaction to the change in economic conditions that occurred in 1982.

In addition, the findings in Table V provide an interesting insight into the different emphasis exhibited by younger versus middle aged groups in dealing with rapid change. Where actual economic standard will influence the middle age group in assessing their economic well-being, for younger people the inter-twinning of life satisfaction with friendship satisfaction creates a propensity to feel that one is doing better financially than in the previous year.

Freudenberg argues that economic growth and the expansion of opportunities did not lead, in his study, to an improvement in the quality of life of boomtown's youth (Freudenberg, 1984). We can see that, for young people, when quality of life is high, the perception of economic improvement will be high, regardless of objective conditions of personal income or changes in economic growth over time. This is not in contradiction to Freudenberg's findings but is an extension of his reasoning. He argues that younger people are more vulnerable to disruption in social support and transiency in booming economy. We find that the importance this support plays in creating feelings of life satisfaction and economic well-being transcends actual measures of economic sufficiency and changes in objective economic conditions.

#### SUMMARY AND CONCLUSIONS

We can draw two important conclusions from these findings. First, the objective conditions of boom and bust have some effect on well-being but this is clearly buffered through the adjustments made on an individual level to one's own personal circumstances. Standard of living satisfaction is important for all groups in predicting life satisfaction, a finding also reported by Michalos (1983), but the role of the family and friends for young and middle aged groups and health and non-working activities for older people outline a pattern of adjustment that can be made by individuals regardless of what occurs in the economy at large. This is further support for the view expressed by Greeley (1981) that people tend to make individual adjustments unrelated to the general impact of large scale forces, such as economic change, that operate around them. As he says, an increase in unemployment is un-

likely to have any effect on the job satisfaction of those who are still employed. As Kennedy *et al.* (1978) point out, previous research shows there is only a slight tendency for malaise to generalize beyond specific problem areas. This is further supported by an extensive review of studies done on quality of life by Michalos (1985). Difficulties in the objective condition of economic downturn obviously has had less impact on the general social well-being of Edmontonians than has been portrayed in the media.

Secondly, in terms of the specifics of economic well-being, there is a relationship between changes from boom to bust and views of personal economic improvements. This economic dimension seems to be buffered from affecting overall life satisfaction, however, by other factors (e.g. health satisfaction). As a result, age groups can display steady responses over the years to life satisfaction while varying over time in how they respond in economic well-being terms. We have found that these differences across age groups, in addition, derive from changes in social support for young people versus improvements made in actual income for older people.

These findings have illustrated the point of differences in specificity versus diffuseness in the responses that people make to objective changes in their economic and social environment and how these can be influenced by life circumstances (measured in this study by age). What lessons can we learn from this investigation for further application of social indicators research to the study of social change? Most importantly, we can agree with Freudenberg that the effects of rapid social change on young people has more to do with the effects of changes in their social worlds and less to do with the change in the economic infrastructure. Greeley summarizes this point as follows: "... what we are measuring in surveys of happiness and psychological well-being is intimate, personal, private. It will change in the country as a whole only when the public and impersonal becomes so threatening as to destroy intimacy." (Greeley, 1981, p. 16).

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