The origins of a suicidal cohort: 1970-2007

Bruce Curtis  
University of Auckland  

Cate Curtis  
University of Waikato  

Increasing rates of youth suicide have been an issue of great concern in many western countries over recent years. This has especially been the case in New Zealand, due to our having the highest rate of youth suicide among OECD countries in the mid-1990s. However, while attention is drawn to the now declining youth suicide rate by politicians and policy-makers, what is obscured is a cohort effect. In this paper we will argue that a cohort effect is clearly visible; suicide rates among 15-24 year olds came to the fore in the mid-1980s, peaking ten years later, and were displaced by that among 25-35 year olds by the late 1990s. Further, this century has been characterised by the rise of suicide rates among 35-44 year olds. This effect correlates with a dramatic downturn in the New Zealand economy in a five-year period bracketing 1970.

Approach and aim
This paper offers a sociological argument about the social causes underlying the suicide statistics. Our argument provides a breakdown of suicide statistics into age cohorts and the identification of a suicidal cohort (born circa 1970). We then extend a sociological analysis of suicide, that disputes individualising arguments about depression and suicide, and instead looks to broad correlations with the economy for causality. Our main aim in this paper is to enhance the understanding and prevention of suicide. We argue that a wider focus on socio-economic factors can assist in such amelioration.

Moving beyond the total rate of suicide
The total rate of suicide in New Zealand for 1948-2008 (Figure 1) shows no immediate trend beyond an uneven cycling between historically low rates of around 10 suicides per 100,000 people and high rates of 16 per 100,000 people.
The reportage and classification of death by suicide in New Zealand (and most other jurisdictions) includes the variable of age (for example, Stockard & O’Brien, 2002). This allows the reporting of suicide by age group, and the following of a group (cohort) over time. Figure 2 shows the rates of suicide for age cohorts of 10 years (we have excluded the 0-4 age group). These data are derived from Ministry of Health statistics, sourced from annual mortality data.

Figure 2 demonstrates the diversity of age rates that underlies the total rate shown in Figure 1. It is difficult to discern a master trend from this material other than a spike in the rate of
suicide among the very elderly in the decade after World War 2 and perhaps a narrowing of the disparate rates toward the total rate (a greater central tendency) across the period reported – the difference between the age groups is far smaller in 2007 than at any other time. However, clear distinctions remain and there is much to be gained from a focus on specific age cohorts.

Youth suicide

Unsurprisingly, youth suicide has become a major area of concern to the public, policymakers and academics.

The policy focus on youth suicide came to the fore in 1998. Among other initiatives, in early 1998 the Ministry of Youth Affairs commissioned a suicide prevention resource for young people. In late 1998 the Ministry of Youth Affairs issued a request for proposals to establish a national youth suicide prevention information service. Suicide Prevention Information New Zealand (SPINZ) was launched in June 1999. SPINZ has developed a website, a prevention service provider database, information collection, a community information kit and a series of workshops. More recently, the service broadened to an all-ages service in accordance with the Government's Suicide Prevention Strategy 2006-2016 (Associate Minister of Health, 2006).

Also in 1998 In Our Hands (Ministry of Youth Affairs, Ministry of Health, & Te Puni Kokiri, 1998) and Kia Piki te Ora o te Taitamariki (Lawson-Te Aho, 1998) were released. These documents collectively form the New Zealand Youth Suicide Prevention Strategy (NZYSPS). In Our Hands provides a framework for youth suicide prevention in the general youth population; Kia Piki te Ora o te Taitamariki presents a framework from a Maori perspective. These initiatives occurred against a background of public concern, frequent media reports and numerous government reports.
Figure 3: Total and youth rates of suicide: 1948-2007

Figure 3 demonstrates the dramatic rise of youth suicide (the age cohort 15-24) in New Zealand. From the mid-1980s the youth rate has clearly exceeded that of the total rate.

Moving beyond youth suicide?
The efforts underlying the Youth Suicide Prevention Strategy are to be commended, and it seems likely that the decline in the youth rate of suicide from the mid-1990s owes something to these efforts. However the focus on the causation and combating of youth suicide suffers from two related ‘blind-spots’. These blind-spots are (1) a continuing focus on the individualistic factors behind youth suicide, rather than more compelling social (we would argue socio-economic) drivers and (2) the discounting of a cohort effect of which the spike in youth rates is a transitory expression. Whereas Stockard and O’Brien (2002) retain a direct Durkheimian fascination with integration insofar as they argue that ballooning rates of youth suicide are linked to larger and therefore less integrated cohorts (i.e., the baby boomers), we proffer a correlation with socio-economic conditions in the end of the long boom.
The main risk factors for suicide are typically regarded as (1) depression, (2) hopelessness and (3) deprivation. However, these causes are treated primarily as proximate causes. Proximate causation tends toward individualistic / subject understandings. We can see this in the suicide literature which overwhelmingly treats depression and other ‘mood disorders’ such as anxiety as pathologies – illnesses – rather than reactions to stressful events or social circumstances.
When attempts are made to analyse the impact of factors beyond the strictly psychological, the focus on the individual is usually maintained. While the social origins of depression and hopelessness may be acknowledged, many suicidologists privilege individualistic notions of risk and psychopathology, particularly in terms of intervention and prevention. As a corollary to this, key risk factors are conceptualized clinically: depression and hopelessness as mental illness rather than reactions to life circumstances, and while the correlation to economic deprivation has recently been acknowledged there has been little attempt to analyse it. This reflects the dominance of a fundamentally asocial understanding of suicide. At best these proximate factors are understood in terms of social psychology, the operation of small groups and networks.

For example, depression has received the most attention of all the risk factors (Blau, 1996), and it is believed to be the most common mental illness associated with suicidal behaviour in New Zealand (Ministry of Health, 1996). Lonnqvist (2000) reported that more than half of clinically depressed individuals experience suicidal ideation. Social psychological factors associated with suicidal behaviour include reduced support from friends, hopelessness and conflict with parents. It appears that these factors feed on each other. The depressed person may isolate herself, and friends may begin to withdraw their support, leading to increased depression. Blau (1996) identified the following themes as being significant in depression:

- exaggerated feelings of worthlessness and lowered self-esteem
- feelings of powerlessness and external locus of control
- a negative view of the world, and of the future.

It is clear that the themes discussed by Blau may combine in a feeling of hopelessness. Blau suggested that it is the desire to relieve these negative feelings that culminates in the suicide attempt, rather than a desire to die per se. It is also easy to see how these three themes may be relevant to a person who is unemployed or otherwise suffering the effects of socio-economic deprivation.

However, we are interested in social explanations or, more precisely socio-economic explanations as underlying factors for suicide. These underlying factors underpin and link the proximate elements of depression, hopelessness and deprivation. The long run economic trends provide an a dynamic framework to understand the differing rates of suicide for differing age cohorts.
Identifying a suicidal cohort

A useful focus on specific age cohorts is to look at the working age population. In many countries, graphs of suicide rates by age show a u-shaped distribution: suicide rates are highest in the young and elderly. Among other things this broadening beyond a youth focus opens up possibilities for a better appreciation of the cohort data in a dynamic manner, one that allows temporal affects.

Figure 4: Total and working age rates of suicide

Figure 4 shows the total rate of suicide and those of the working age population including youth (ages 15-24, 25-34, 35-44, 45-54, 55-64).

We suggest that a cohort effect can be discerned in the rise and fall of successively aged cohorts. In 1988 the 15-24 cohort (average age 20) became the most suicidal. The suicide rate in this cohort appears to be falling. In 1998 the 25-34 cohort (average age 30) became the most suicidal. In 2007 35-44 cohort (average age 40) became most suicidal and it seems that this rate is trending upward. Further the 45-54 cohort seems also to be trending up. The timing and average age of the displacement of the most suicidal cohort is highly suggestive: every ten years the next oldest 10 year cohort becomes the most suicidal. The average ages of 20 in 1988, 30 in 1998 and 40 in 2007 begs the question ‘what happened in 1969-1970 to create this suicidal prone cohort?’ We believe that rather than any disintegrative effects of the baby boom, as suggested by Stockard and O’Brien (2002), a more plausible answer might be found in the end of the long economic boom. This transition from decades of post-war prosperity to decades of relative decline and stagnation seems to us to be a clear socio-
economic marker and a plausible driver behind the cohort effect that is apparent in the suicide data.

Unfortunately there is relatively little work done on the socio-economic origins of suicide, including in New Zealand, though it must be acknowledged that the relatively recently released New Zealand Suicide Prevention Strategy does mention economic disadvantage as a risk factor. Links are made in the suicide literature and in other government reports between suicide and economic deprivation, as well as emotional states. For example, the Ministry of Health report, *Suicide Facts: Death and Intentional Self-Harm Hospitalisations 2006*, notes that suicide rates among the most socioeconomically deprived are significantly higher than for those who are the least deprived and those from the most deprived area are approximately two and a half times more likely to be hospitalised for suicidal behaviour than those from the least deprived area (Ministry of Health, 2008).

Of particular interest, given concern over New Zealand’s high rates of youth suicide, is that despite a large body of clinical literature on youth suicide there is a dearth of material that considers a possible association between rising unemployment and youth suicide. A noted by the Ministry of Health in 2005, it appeared that only two studies had been conducted in New Zealand prior to its own: Hassall (1997) noted that the abrupt rise in youth suicide coincided with major economic restructuring, while Blakely and colleagues found an association between unemployment and youth suicide (cited by the Ministry of Health, 2005). Our analysis is self-limiting insofar as we wish to (1) highlight the existence of a cohort effect in suicidality among those born in around 1970, (2) note a correlation with the major transformation in socio-economic circumstances around this at this time, and (3) suggest that the typical social psychological drivers of suicide, depression, hopelessness and deprivation, might be enhanced with a better appreciation of this socio-economic transformation and the long run impacts it may have had on a cohort who may have felt its affects most keenly.

**Measuring a socio-economic transition?**

The authors of this paper are not economists but rather a sociologist and social psychologist. As naive researchers, or economic historians, we confess surprise at the lack of long-run data that might encapsulate the transition following the end of the long boom.
Figure 5 demonstrates the monotonic decline in New Zealand’s relative prosperity compared with the member nations of the Organisation for Economic Co-operation and Development (OECD). The data is collated from the OECD website (Organisation for Economic Co-operation and Development, 2010). The graph shows two measures of relative prosperity. Relative Gross Domestic Product compares New Zealand with the average of OECD member nations. Gross Domestic Product (GDP) is a measure of a nation’s overall economic output. Relative consumption similarly compares NZ and the OECD in terms of household and government expenditures on such categories as health and education. The results are startling bad for New Zealand. Unfortunately the data series begins in 1970, so there is no measure of a possible transition resulting from the end of the long boom’.

As a result of the temporal limits to the OECD data we cast around for a long run economic series that could capture the 1948-2007 period for which suicide data is readily available and in particular one that might use broad measures of the economy such as GDP and the Consumer Price Index (CPI). The CPI is an annual measure of the average price of goods and services purchased by households. It is the measure of inflation facing households. These data series are available at the New Zealand Department of Statistics website (Department of Statistics, 2010). However the problem for us with both the data on GDP and CPI is that any cyclical and transitional changes in the series are obscured by generalised increases over time. Annual growth in both indices tends to swamp all other, counter-tendencies. Conversely, charting year on year changes, as positive or negative growth on the previous year results in a series of oscillations that are also not readily amenable to analysis. We determined to deflate
the real (inflation adjusted) GDP and the CPI indices by our deflator. The deflator we decided
upon was the end of year price of gold in New York modified by the exchange rate between
NZ and US dollars (ER*NY Gold). Our rationale is that this calculation simulated the world
price of gold as faced by New Zealand and allowed a contextualisation of what was occurring
domestically. The data to construct this deflator is available at the MeasuringWorth website
(MeasuringWorth, 2010).

Figure 6: Comparing CPI and GDP: 1948-2007

Figure 6 shows the series for the CPI and GDP when deflated by the end of year price of gold
in New York modified by the exchange rate between NZ and US dollars (ER*NY GOLD).
We feel it dramatically encapsulates the end of the long boom and the transition to stagnation
around around 1970.

Discussion.

The contribution we hope to make to the study of suicide and its prevention is modest and
centres on the identification of a suicide-prone age cohort and, to a lesser degree, making a
correlation with the end of the long boom. We accept that this is a contentious set of claims
and indeed the latter linkage with socio-economic circumstances runs against the dominant,
individualist, psycho-social discourse in the literature. However we feel that there is room for
a brief discussion around some implications of our claims.

1. While the Youth Suicide Prevention Strategy initiative is laudable, a broader
appreciation of the temporal effects on suicide may be beneficial. Clearly youth rates will
also receive considerable focus if only because of its impact on lost quality of life years from
suicide. However, an interrogation of the youth strategy may be worthwhile in the light of an aging cohort / population prone to suicide.

2. We argue for a suicide-prone cohort among those born around 1970 that is exceptional rather than typical. This raises the question of whether it is effective to constitute social policy around this cohort. In this respect we echo the concerns of Rea and Callister (2009). Rea and Callister have also noted a significant number of negative indicators among the cohort of people born from the mid-1960s to the mid-1970s. This group experienced many of the long-term social changes experienced by the 10-year cohorts before and after them, such as increased participation in education, and a decline in fertility and marriage. However, this particular cohort also had the lowest rate of employment (and highest rate of unemployment and benefit receipt) and left New Zealand in the largest numbers, as well as the highest rates of youth suicide.

3. We have suggested a link between socio-economic circumstances that has produced a suicide-prone cohort. Insofar as this correlation has any validity we feel the contemporary situation is in many respects analogous to the end of the long boom. That is, if the socio-economic transition of the late 1960s/ early 1970s created a vulnerable and enduring suicide-prone cohort does the current ‘financial crisis’ have a similar capacity to generate a new suicidal cohort. Is it likely that in 15-20 years we will be facing a new upswing in youth suicide and if so is there anything we can do to ameliorate this?

**Conclusion**

The spectre of youth suicide has been at the forefront of policy and popular debate in New Zealand for more than a decade, as a result of New Zealand having the highest rate of youth suicide among OECD countries in the mid-1990s. This culminated in the New Zealand Youth Suicide Prevention Strategy which was released by the Ministry of Health in 1998. This strategy and the Suicide Prevention Strategy which followed it in 2006 draw appropriate attention to the drivers of depression, hopelessness and deprivation in rates of suicide. However, it is based on the twin discourses of risk and recovery, both centred on individualistic notions of mental health. As a corollary to this, key risk factors are conceptualized clinically: depression and hopelessness as mental illness rather than reactions to life circumstances, and while the correlation to economic deprivation has been acknowledged there has been little attempt to analyse it. In this paper we have argued that the group of young people who captured New Zealand’s headlines and hearts in the mid-1990s
were in fact a suicidal cohort, the result of rapidly changing socio-economic circumstances begun circa 1970. As youth suicide rates have declined, rates in the next age bracket have risen (though not to the same levels).

We suggest that the analytical focus should be socio-economic rather than psycho-social. Our analysis suggests that long-run changes in the economy will continue to shape suicide statistics and that efforts toward the prevention of suicide should be cognisant of this wider focus.

References


