

THE BEST OF TIMES AND THE WORST OF TIMES FOR YOUNG PEOPLE: A TALE OF TWO SURVEYS

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Abstract. This paper compares information obtained from two surveys of school students. The national Youth2000 survey and the local Whatuora investigation contribute complementary quantitative data on the characteristics and behaviour of young people in New Zealand. As well, there are particular insights about students who are at risk and questions are raised relating to the delivery of human service interventions and regarding further research.

The publication of Youth2000 (Adolescent Health Research Group, 2003) was a significant event as it is the first national survey of youth health and wellbeing. The data were obtained throughout 2001 by enhanced Computer Assisted Self Interview (M-CASI) from 9,699, 12-18 year-old secondary students (school years 9-13) attending 114 schools throughout the country. The sampled students were 24.7% Maori, 8.2% Pacific Nations, 7.2% Asian, 55.3% New Zealand European, and 4.6% other ethnicities. The survey topics were culture and ethnicity, home, school, injuries and violence, health and emotional health, food and activities, sexuality, substance use, neighbourhood, and spirituality.

The major findings of Youth2000 are that most secondary school students are healthy, but that health services are not meeting the needs of young people, and that there are significant numbers of youth whose healthy development is at risk. The report makes recommendations regarding support for parents, advice to families about harmful risk behaviours, and the need for school policies on violence, pupil retention, and student welfare services. As well, there are recommendations that youth should be involved in planning community amenities and that health providers need to develop the knowledge and skills to deliver services that are appropriate for young people.

A previously unpublished investigation by Stanley, Rodeka and Eden (1999) provides a complement to the Youth2000 information and gives important additional perspectives on young people's development. A 56-item survey was administered by the Whatuora Research Centre to 615, 10-13 year old children (Years 7 and 8) attending eight decile 1 and 2 schools in May 1998. The questionnaire followed the format of the Listening Comprehension Progressive Achievement Test (New Zealand Council for Education Research, 1994) and it was read to the students by their class teachers. With respect to ethnicity, combined school rolls were 28% Maori, 53% Pacific Nations, 4% Asian, and 15% New Zealand European. The Whatuora questionnaire, which functioned as a pretest and posttest for a drug education programme as well as a general survey (Stanley, 2003a), focused on substance use with additional items on antisocial behaviour, school, and personal and social skills.

POINTS OF COMPARISON

The Youth2000 and Whatuora surveys investigated similar topics and in this

section comparisons are made across the following areas; relations with caregivers and friends, attitudes to school and study, substance use, affect in girls and young women, and help seeking.

RELATIONSHIPS

The majority of the students in Youth2000 (females 69.6%; males 72.4%) felt close to at least one of their parents most of the time, although almost 40% of the respondents wanted more time with their parents. In the Whatuora investigation, 65% of the boys and 69% of the girls indicated that they got on well with their main caregiver/s all or a lot of the time. With regard to friendships and the Youth2000 sample, 95.5% of the males and 94.5% of the females had more than four friends at school. Amongst the Whatuora children, 80% of the males and 71% of the females had four or more close friends. The smaller study also asked about social acceptance and 18% of the respondents felt unwanted by other children their age a lot or all of the time.



The results of the two local surveys concerning relationships with parents are in keeping with an international study which showed that adolescents in countries as diverse as Bangladesh, Taiwan and Australia were happy and had positive feelings about their families (Offer, Ostrov, Howard & Atkinson, 1988). These findings challenge the popular conception of there being a generation gap between teenagers and their caregivers. Nevertheless, the findings are consistent with recent research and theorising on resilience, which have given new emphasis to the importance of the parent-child relationship to young people's competence and adjustment (Masten & Coatsworth, 1998; Masten, 2001; Luthar & Zelazo, 2003). Essentially, children and youth need to be connected to other people and this applies to age mates as well as to caregivers (Stanley, 2003b). John Santrock, a leading human development textbook author, comments that most parents are taken by surprise by the strength of their teenage sons and daughters' desires to be with their peers (Santrock, 2003). Potentially, however, there is so much for the young people to gain in terms of stimulation, skill development, support, companionship and intimacy.

SCHOOL

It is not surprising, perhaps, that Youth2000 found that most secondary school students may go to school simply for the social life. In response to the question about what they enjoyed most about school, 64.1% of females and 57.8% of males said hanging out with friends. By contrast, doing schoolwork was an unpopular third choice, after sport, for 8.8% of females and 7% of males. When asked how they felt about school, many liked it a lot or a bit (females 44.9%; males 40.4%), comparable numbers thought it okay (females 41.5%; males 44.1%), and some disliked it or disliked it a lot (females 13.6%; males 15.5%). These young people reported that the best time at secondary school is Year 13 and the next best time is Year 9.

Overall, the younger Whatuora sample seemed to have liked school more. Almost two-thirds (62%) indicated that they felt good about school all of the time or a lot of the time. There were 35% of students in the some of the time category and 3% chose none of the time. The boys and girls, and the year 7 and 8 students in this study, were similar in their feelings about school.

More than 90% of the Youth2000 young people said it was important or somewhat important for them to be proud of their schoolwork. As well, they appeared to be subjected to high levels of expectations from parents and from people at school. However, less than half of the males (48.3%) and 55.4% of the females reported usually doing their best at school. Further, there was a decline in application across the year levels and particularly for males. Comparison with the Whatuora data shows that a quarter of the younger students tried to do their best all of the time (females 31%; males 20%) and another 41% of both the boys and the girls said they did so a lot of the time. It may be, of course, that the secondary students have sharper self-perceptions, but the impression is that the primary and intermediate pupils were generally more conscientious. However, the data also show a slight falling off as these students move from Year 7 into Year 8.

ALCOHOL

Approximately two thirds of the youngest students in Youth2000, who would have mostly been 13 years of age, had consumed alcohol at sometime (females 60.4%; males 71.3%). At 16 years, the respective figures were males 91.1% and females 89.8%. Amongst the Whatuora sample (10-13years), 59% of males and 47% of females had drunk alcohol one or more times. There was a minor increase across Years 7 and 8 for these children.

Information about regular use of a drug is at least as significant as introductory or occasional use and excessive use or bingeing is probably more noteworthy again. Weekly alcohol consumption increased for the national sample from 8.5% for males and 5.5% for females at around 13 years of age, to 32.3% for males and 26.8% for females when 17 years or older. Binge drinking is a feature of adolescence, accelerating from 14.5% for males and 17.0% for females in Year 9, to 62.7% for males and 54.3% for females in the last year of school.

Whereas the Adolescent Health Research Group survey asked about weekly alcohol use, the Whatuora questionnaire probed alcohol consumption in the last month. One fifth (21%) of the younger sample reported any use in this time. Among the imbibers, most had drunk one to four times, but 3% of all students (usually males and typically Year 8s) drank 10-20 times or more.

TOBACCO

Tobacco use is not as ubiquitous as alcohol consumption, at least among the Youth2000 sample. A third of the year 9s (females 36.5%; males 36.2%) had smoked a cigarette at some point, and by age 16, the majority had tried smoking (females 62.9%; males 56.9%). By contrast, 48% of the Whatuora 10-13 year olds (equivalent numbers of boys and girls) had used tobacco and there was a 6% increase in initiation across Year 7 and Year 8.

At every level of the secondary school, young women outnumber young men as regular smokers. In sum, 12.6% of teenage males and 19.3% of teenage females are weekly cigarette smokers and, respectively, 7.9% and 10.6% do so daily. Twenty percent of the children attending the eight low decile schools had smoked in the last month. The heaviest users (20-50+ cigarettes) represented 4% of all students, and they tended to be girls in Year 8.

The Whatuora survey asked pupils why they did or did not smoke. The main motivation for smoking was wanting to be like friends (females 40%; males 41%) and the principal reason for not smoking was health concerns (and females 48%; males 38%). The survey also questioned students about how they obtained cigarettes and alcohol. Tobacco was typically sourced outside the family, whereas a parent or other family member mainly provided any alcoholic drinks.

MARIJUANA AND OTHER DRUGS

About 20% of secondary students 13 years or younger had tried marijuana and this figure increases to half of all 16 year olds attending school. Eleven percent of the primary and intermediate students admitted to any marijuana use and, predictably, there was marginally more engagement with this substance in Year 8. Secondary males are more regular users of marijuana, and weekly use peaks for all students at age 15 (females 8.3%; males 10.2%). Five percent of the Whatuora sample said they had used marijuana in the last month.

Youth2000 explored the use of a variety of substances other than alcohol, tobacco, and marijuana. Amongst the Year 9s, 6.6% of females and 6.3% of males indicated that they had used other drugs and overall more than ten percent of all secondary students had done so (11.0% of females, 11.5% of males). Whatuora only asked about glue and 8% of the boys and 5% of the girls had sniffed glue once or more, and the figures for frequent use were low. The personal use of glue by the secondary students was reported to be 4.9% of males and 3.5% of females.

A major US survey that was conducted around the time the Youth2000 and Whatuora data were gathered (Johnston, O'Malley & Bachman, 2001, cited by Santrock, 2003, p. 456) suggests comparable levels of drug use elsewhere, at least across some indices. Amongst eighth grade (Year 9) students, 17% had been involved in binge drinking in the last year, 37% had smoked a cigarette at some point, 15% had used marijuana in the previous twelve months, and 9% reported use of inhalant drugs (glue, aerosols, butane) in the prior year. Of course, evidence of similar levels of drug use in another country represents no form of reassurance and it is of no consolation to those teenagers who sustain lasting damage from their consumption. In the later regard, research by Wiencke, Thurston, Kelsey, Varkonyi, Wain, Mark & Christiani (1999) found permanent genetic alterations in the lungs of cigarette smokers, and these changes increased the risk of lung cancer irrespective of whether a person was a current smoker or had ceased. It was also found that the earlier that people began smoking the more likely it was that they would sustain genetic damage and age of onset was a more certain predictor than the amount that individuals smoked. Santrock (2003) contends that it is a special concern when any drug is used by young people to cope with stress and when it interferes with other self-management skills. This is an important point, but it needs to be put alongside the fact that many adults rely on prescription pharmaceuticals to deal with stress, and drugs such as Ritalin are regularly administered to children by adults as a behaviour management strategy.

AFFECT IN GIRLS AND YOUNG WOMEN

The abiding impression of the Youth2000 data is that young women are less happy and satisfied with life than young men. Sixty percent of female participants said they had generally been feeling in a bad mood or up and down (males 40.7%) and 17.2% indicated that they were unhappy (males 10.1%). A third of the females reported feeling stressed or pressured, compared with a quarter of the males, and a fifth of them (males 14.9%) generally felt tired or worn out. Twice as many young women have a significant number of depressive symptoms (female 18.3%; male 8.9%), suicidal thoughts are fairly common (females 29.2%; males 16.9%) and one in ten had tried to kill themselves in a twelve-month period (males 4.7%).

Being 15 years of age appears to be a particularly perilous time to be a female as an array of adversities peak at this point. Comparatively, Year 10 students report the worst relationships with their teachers

and daughter/parent relations are at a low ebb. At age 15, young women are most unhappy with their weight (36.6%). Risk taking behaviour increases and females are most likely to travel with a potentially drunk driver. A number become sexually active, but condom use actually drops. Spiritual beliefs and religious attendance decrease. Finally, and perhaps not surprisingly, the fifteenth year is the worst time for suicidal thoughts and suicide attempts (33.9% and 13.9% respectively).

Santrock (2003) reports that 15 year old females in the US also have twice the rate of depression of teenage males and he lists some of the reasons that have been proposed for this sex difference. Included here is earlier puberty for girls associated with other significant life events, greater vulnerability to hormonal changes, poorer body images, and a propensity to ruminate and intensify depressed moods. However, other explanations of this difference between males and females are possible, and these are outside of biologically-based and individual-deficit theorising. For instance, if we consider the everyday settings of home and school, or microsystems in terms of ecological theory (Bronfenbrenner, 1979), then there is typically a fall-off in both parent and teacher support in early adolescence (Falbo & Glover, 1999; Midgley & Maehr, 1999; Wang, Haertel & Walberg, 1999). Arguably, this occurs at the very time that young people need enhanced connections and engagements. As well, at the structural or macrosystem level, our society does not provide scripts or rites of passage for adolescents (Drewery & Bird, 2004). There is little agreement, for instance, on how sexual identity is to be achieved and how the transition is to be made from asexual child to sexually self-accepting adult (Santrock, 2003). Moreover, there are larger social and economic forces that conspire to deny and exploit young people and in our country the abandonment of apprenticeships and the introduction of student loans probably fall in this category.

Interestingly, the affective issues for young women that are evident in the Youth2000 data were reflected to some degree in the Whatuora results. The primary and intermediate students were asked how challenging it was for them to communicate personal qualities and feelings. More boys than girls found it easy or very easy to tell other people what they were good at (73% of males compared with 66% of females) and to say what made them a special or unique person (males 50%, females 47%). All pupils found it difficult to describe how they felt, but more girls found it hard or very hard to do so (74% of females relative to 65% of males).

The discrepancies across the genders in confidence and communication were not necessarily apparent in the self-appraisals of other areas. Performance at school was a particular case in point. More of the Whatuora girls than boys considered that they did a bit better or much better than others in their class in terms of achievement (females 42%; males 29%) and the girls saw themselves as harder working, and as better behaved in class. However, as we have seen, the girls were not any more positive than the boys about school. Another contradictory result pertained to social behaviour. The young students did not generally consider themselves as capable of dealing with negative comments from other children, and this applied to females more than males. Nevertheless, more girls than boys (females 69%; males 60%) said it was likely or very likely that they would resist being pressured to do something they did not want to do by their friends.

HELP-SEEKING

Youth2000 established that the family general practitioner was the principal health care provider for more than 80% of the young people attending school. Half of the sample (females 50.3%; males 45.9%) identified barriers to obtaining health care although not wanting to make a fuss and couldn't be bothered were fairly frequent choices. However, there were also gender differences in obstacles to accessing health care, with more females feeling fearful, being worried about confidentiality, and/or uncomfortable with the person. Additionally, Youth2000 found that many students (females 60.6%; males 55.8%) had an adult outside the family who they felt okay talking to about a serious problem, and many more (females 89.4%; males 72.8%) had a close friend that they could turn to.

The Whatuora survey addressed three topics in help-seeking as well. The intention was to find out whether 10-13 year olds knew who to go to for help with personal problems, who they would be most likely to approach, and how comfortable they were in asking for help. Three quarters of the sample (72% of girls; 78% of boys) were sure or very sure who to go to for help and the preferred source of assistance was an adult in the family for half of them (49% of females and males), and secondly a friend (female 27%; male 20%), and the third choice was a teacher

(female 11%; male 17%). For most of the children it was hard or very hard to ask for help with personal problems (girls 69%; boys 58%) and it became a little more difficult across Years 7 and 8.

POINTS OF CONTRAST

As indicated, the Youth2000 and Whatuora surveys investigated different topics as well as similar matters and they also approached the same subjects from alternative angles. The Adolescent Health Research Group investigated violence from the viewpoint of victims whereas the Whatuora team surveyed antisocial behaviour more generally and from the perspective of the perpetrator.

VIOLENCE

Many of the Youth2000 students reported being hit or physically harmed by another person in the previous year (females 39.7%; males 51.1%). More than a fifth of the young people (females 21.3%; males 22.7%) described school as being a safe place only sometimes or as unsafe, and about 5% of them had recently not gone to school because it was not safe or because it was considered to be unsafe travelling between school and home. Almost ten percent of the teenage boys reported being bullied once a week or more (teenage girls 5.2%), and of those students who were bullied at school, approximately one third said it was a pretty bad, really bad, or terrible experience.

ANTISOCIAL BEHAVIOUR

The Whatuora study asked about four aspects of antisocial behaviour: truancy, involvements with the police, theft, and willful damage. In response to the question as to how often they had waggged school to the present point in the year (May), the majority (81%) said they had not truanted, and amongst the wagggers 1-4 times was the favoured response category. Truancy did not appear to be gender related. As well, a greater number of the students (females 80%; males 60%) had never been spoken to by the police about something they might have done wrong. A quarter of the boys indicated that they had been spoken to once (14% of girls) and another 11% of the boys reported that this had occurred 2-4 times (4% of girls).

Over half of the young people (females 59%; males 50%) recorded that they had never stolen another person's property. About the same numbers of boys and girls (38% and 35% respectively) admitted stealing something 1-4 times. Similar sorts of figures were obtained for willful damage. In relation to this behaviour, 56% of males and 68% of females said they had never damaged another person's property on purpose, and 35% of males and 28% of females said they had done so on 1-4 occasions.

DISCUSSION

There are clearly some difficulties in comparing a national sample of secondary students with a local contingent of primary and intermediate pupils. Apart from being concerned with different developmental periods, the two samples differed in the ethnicities of the participants and in magnitude (numbers, age ranges, representativeness). Nonetheless, Youth2000 and the Whatuora research had similar purposes, and it was to understand the health and wellbeing of young people. As well, both investigations examined a variety of risk and protective factors and there was substantial overlap on individual items. For these reasons, the Whatuora and Youth2000 studies might be considered as complementary, and as collectively contributing to a better understanding of children and youth and of the ways to respond to those in need.

The two studies show the major importance of friends to young people, and the relatively low importance accorded to schoolwork by secondary students. It is interesting that 10-13 year olds in a low socioeconomic area enjoy school more, and see themselves as working harder, than high school students in general. It probably should be of concern that there is a successive fall off in application across the secondary school years. The findings about school work may be in keeping with research cited by the Ministry of Education (2002), which found that 62% of New Zealand students thought school was boring and 35% did not want to be there.

To a degree, alcohol is the male substance of choice while females use tobacco. As well, levels of student smoking appeared to be related to school socioeconomic status. These patterns have been confirmed in other research (Alcohol and Public Health Research Unit, 2002; Ministry of Health, 2003). Initiation and extent of

marijuana use has some resemblance to cigarette consumption but the regular users of the former drug are more often males. Binge drinking by adolescents is now an established characteristic in this country, as it is that family members provide the alcohol that young people drink (Alcohol Advisory Council of New Zealand, 2003). The features of the primary and secondary school drug scenes have obvious implications for intervention targets and the role of the family in providing alcohol suggests one avenue for effecting change.

It is more perplexing to know how to respond to the personal issues experienced by teenage girls and to the likely precursors of these problems at younger ages. Females see themselves as doing better academically than males and these impressions are confirmed by the statistics. For instance, in Level 1 Achievement Standards in 2003, 10.4% of females attained excellence awards compared to 7% of males, and female students also excelled in merit credits (New Zealand Qualifications Authority, 2004). However, the higher levels of achievement do not correlate with females feeling better about themselves.

Luthar and Zelazo (2003) contend that existing forms of personal assistance, such as psychological services, are overwhelmingly oriented towards externalizing issues (e.g., conduct problems) at the cost of internalizing problems, like anxiety and depression. These authors say that this is short sighted because emotional distress that is unchecked can lead onto a number of other problem behaviours including substance abuse and relationship difficulties. Whatever the origins of the distress that is experienced by young women and by students in Year 10 in particular, additional help needs to be made available. Nevertheless, service providers will need to be aware that help-seeking is more complex for females and they should acknowledge the considerations that have been identified.

It is questionable whether many of the behaviours recorded by the two research projects are of concern or merely the expressions of normal development. Bullying at school, like the emotional difficulties experienced by young women, is an aspect about which there is no uncertainty, and the Youth2000 data make clear that for some teenagers secondary school is a terrifying place to be. By contrast, the antisocial behaviours sampled by the Whatuora investigation can be approached on two levels. It is probably normative to steal and break things in the process of growing up but these behaviours are likely to have an altogether different significance when they are done

repetitively. In this second category are the 6% of boys and girls attending the eight primary and intermediate schools who had truanted up to 20 or more times in a four-month period. The other high incidence antisocial behaviours were male preserves, and 5% of them had been spoken to by the police five times or more about something they might have done wrong, 9% had willfully damaged property 5-20 times or more, and 12% of them had taken other people's belongings on 5-20 plus occasions.

It is argued that the inclusion of the antisocial items in the Whatuora questionnaire added a critically important dimension to the data. The path from childhood noncompliance to an assortment of problem behaviours in adulthood (e.g., criminal offending, substance abuse, psychiatric disorders, higher rates of deaths and injuries) has been well charted (e.g., Broidy et al, 2003; Patterson, Reid, & Dishion, 1992; Walker & Sprague, 1999). For instance, we know that children who are destined for deviant careers, compared to other young people, engage in antisocial acts earlier, more intensely, and in different settings (Coie, 1996). The offending and maladaptation of the small group of 10-13 year-olds, who are regularly truanting, stealing, damaging property and coming to official attention, is likely to be life-course-persistent rather than adolescence-limited (Moffitt, 1993), whereas the majority of the deviance recorded by Youth2000 would tend to be in this second category.

Youth2000 identified six behaviours as health risks: anytime consumption of alcohol, ever having smoked a cigarette, ever having used marijuana, experience of sexual intercourse, having been in a fight in the last year, and contemplation of suicide in the last year. The report says that 11.8% of the students were engaging in multiple health risks; that is, five or six of the identified behaviours. There are difficulties with this categorisation. The six behaviours are not of equal severity or significance and they contain a gender bias. For example, as time passes most young people have an alcoholic drink but few girls are involved in a physical fight.

The Youth2000 data would have been richer if some more significant psychosocial markers, such as antisocial involvements, had been included. However, sampling issues may still have reduced the validity and utility of the impressions that are provided. The Youth2000 report emphasizes that the research results may not reflect the experiences of all youth and there are at least four factors that limit the findings. Firstly, those who had already left school were not included, and there are substantial losses of senior secondary students with approximately 40% leaving

by 17 years of age (Ministry of Education, 2002). Secondly, young people from low decile schools were underrepresented in this investigation and youth from more advantaged socioeconomic areas exceeded the national averages.

A third restriction on the results was a gender imbalance in the Youth2000 sample. Of the surveyed students, 46.2% were male and 53.8% were female. The other limitation on the information was that a quarter of the students who were invited to take part in the research did not do so. As the report states, these non-participants may have been very different from the participants, and this conclusion could have also applied to the early school leavers, those from disadvantaged social circumstances, and the missing males. The Whatuora survey, in comparison, while obviously being restricted to low decile schools, did not have the issue of school leavers. The genders were more equally balanced, with a slight preponderance of boys (51.2% males, 48.8% females). Exemptions from participation in the research were negligible.

There are major advantages in being able to stratify a sample in terms of high, moderate, and low risk status. Firstly, we can make more accurate determinations and comparisons about the health and wellbeing of our young people. A sizeable proportion of children and youth who are at high risk of a negative life course are a serious concern because the damage that these people do to themselves and to others is totally disproportionate to their numbers. Across various items, the Whatuora data suggest that the most at risk students represent about 6-7% of boys and 4% of girls. Overall, it is likely that New Zealand has an elevated percentage of at risk young people and this is suggested by our high international rankings across a range of problem behaviours including drownings, falls, and other injuries (Ministry of Health, 2002), child maltreatment causing death, and adolescent suicide (Ministry of Social Development, 2005).

A second advantage of knowing more exactly the relative incidences and the characteristics of risk categories is that we can allocate professional expertise and other resources more effectively and efficiently. Currently, we do not know how much should be assigned to each level of prevention or how it should be best applied. For instance, should we respond to bullying and school violence with universal (school-wide) programmes or would it be better to systematically target violent young people and provide them with a dedicated intervention? Questions such as these can involve more than the rationalization of services because iatrogenic effects can ensue. For example, drug education has been found to reduce use amongst nonsmokers and experimenters but increase the consumption of established smokers (Hawkins, Catalano, & Miller, 1992). There has to be a careful matching of programme intensity and duration to problem populations and to do this we need to know more about them.

It would be very useful to have access to a broadly based national survey of young people's health and wellbeing immediately before the secondary school years. The Whatuora research has indicated that, when all the members of the age group are present, it is possible to discern differences in risk status prior to adolescence. Nonetheless, the contributions of Youth2000 are substantial. At the least, we now have some baselines for the behaviour of teenagers at school. Of special value is the publication of an assortment of positive indications, and the identification and confirmation of particular problems to be addressed. Other studies will hopefully answer the many questions that Youth2000 has raised and it would be highly appropriate to hear from the students themselves as to how the advantages in their lives might be enhanced and the difficulties dealt with.

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REFERENCES

- Adolescent Health Research Group (2003). *New Zealand youth: A profile of their health and wellbeing*. Auckland, New Zealand: University of Auckland.
- Alcohol Advisory Council of New Zealand (2003). *Youth and alcohol: 2003 ALAC youth drinking monitor*. Wellington, New Zealand: Author.

- Alcohol and Public Health Research Unit (2002). *Drug use in New Zealand*. Auckland, New Zealand: University of Auckland.
- Broidy, L. M., Nagin, D. S., Tremblay, R. E., Bates, J. E., Brame, B., Dodge, K. A., Fergusson, D., Horwood, J. L., Loeber, R., Laird, R., Lynam, D. R., Moffitt, T. E., Pettit, G. S., & Vitaro, F. (2003). Developmental trajectories of childhood disruptive behaviors and adolescent delinquency: A six-site, cross-national study. *Developmental Psychology, 39*(2), 222-245.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Coie, J. D. (1996). Prevention of violence and antisocial behaviour. In R. D. Peters & R. J. McMahon (Eds.), *Preventing childhood disorders, substance abuse, and delinquency* (pp. 1-18). Thousand Oaks, CA: Sage.
- Drewery, W., & Bird, L. (2004). *Human development in Aotearoa: A journey through life* (2nd ed.). Boston: McGraw-Hill.
- Falbo, T., & Glover, R. W. (1999). Promoting excellence in American adolescents. In A. J. Reynolds, H. J. Walberg & R. P. Weissberg (Eds.), *Promoting positive outcomes* (pp. 229-251). Washington, DC: CWLA Press.
- Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin, 112*(1), 64-105.
- Luthar, S. S., & Zelazo, L. B. (2003). Research on resilience: An integrative review. In S. S. Luthar (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities* (pp. 510-549). Cambridge: Cambridge University Press.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*(3), 227-238.
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favourable and unfavourable environments: Lessons from research on successful children. *American Psychologist, 53*(2), 205-220.
- Midgley, C., & Maehr, M. L. (1999). Using motivational theory to guide school reform. In A. J. Reynolds, H. J. Walberg & R. P. Weissberg (Eds.), *Promoting positive outcomes* (pp. 129-159). Washington, DC: CWLA Press.
- Ministry of Education (2002). *New Zealand schools, Nga kura o Aotearoa: Report of the Minister of Education on the compulsory schools sector in New Zealand, 2001*. Wellington, New Zealand: Author.
- Ministry of Health (2002). *New Zealand youth health status report*. Wellington, New Zealand: Author.
- Ministry of Health (2003). *Tobacco facts 2003*. Retrieved 7 July, 2004, from <http://www.moh.govt.nz/moh.nsf>
- Ministry of Social Development. (2005). *The Social Report 2005: Indicators of social wellbeing in New Zealand*. Wellington, New Zealand: Author.
- Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: A developmental taxonomy. *Psychological Review, 100*(4), 674-701.
- New Zealand Council for Education Research (1994). *Listening Comprehension Progressive Achievement Test*. Wellington, New Zealand: Author.
- New Zealand Qualifications Authority (2004). *National qualifications framework statistics 2003: Learning area results distribution by gender*. Retrieved 7 July, 2004, from <http://www.nzqa.govt.nz>
- Offer, D., Ostrov, E., Howard, K. I., & Atkinson, R. (1988). *The teenage world: Adolescents' self-image in ten countries*. New York: Plenum.
- Patterson, G. R., Reid, J. B., & Dishion, T. J. (1992). *Antisocial boys*. Eugene, OR: Castalia.
- Santrock, J. W. (2003). *Adolescence* (9th ed.). New York: McGraw-Hill.
- Stanley, P. (2003a). Drug education: A deceptively simple answer to a complex question. *Teachers and Curriculum, 6*, 69-73.
- Stanley, P. (2003b). Risk and resilience: Part 2, Applications. Kairaranga. *The Journal of New Zealand Resource Teachers of Learning and Behaviour, 4*(2), 25-32.
- Stanley, P., Rodeka, P., & Eden, P. (1999). *A survey of drug use and related variables and an evaluation of a drug education programme in Porirua* (A report to Ministry of Education). Porirua, New Zealand: Whatuora Research Centre, Specialist Education Services.
- Walker, H. M., & Sprague, J. R. (1999). The path to school failure, delinquency, and violence: Causal factors and some potential solutions. *Intervention in School and Clinic, 35*(2), 67-73.
- Wang, M. C., Haertel, G. D., & Walberg, H. J. (1999). Psychological and educational resilience. In A. J. Reynolds, H. J. Walberg & R. P. Weissberg (Eds.), *Promoting positive futures* (pp. 329-365). Washington, DC: CWLA Press.
- Wiencke, J. K., Thurston, S. W., Kelsey, K. T., Varkonyi, A., Wain, J. C., Mark, E. J., & Christiani, D. C. (1999). Early age at smoking initiation and tobacco carcinogen DNA damage in the lung [Electronic version]. *Journal of the National Cancer Institute, 91*(7), 614-619.