

# Pathways to social and emotional wellbeing: Lessons from a 24-year longitudinal study

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**Australian Government**

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# Overview of presentation

- Overview of Australian Temperament Project - aims and methods
- Snapshot of how young people in their mid twenties are faring
- Precursors and outcomes of teenage alcohol use
- Risky driving in early adulthood: patterns and antecedents
- Relationships between young people and their parents
- Reflections on the value of this longitudinal research project



# Australian Temperament Project 1983-2008+

- contribution of temperament to emotional, behavioural and school adjustment
- contribution of family and environmental factors to development and well-being
- child, adolescent, and adult adjustment difficulties (e.g. aggression, hyperactivity, anxiety, depression, antisocial behaviour, substance use) – precursors and pathways
- development of socially competent functioning, satisfying personal relationships, civic mindedness and social responsibility
- negotiating adulthood:
  - occupational and educational participation
  - becoming partners and parents



# Methodology

- Representative sample of 2443 4-8 month old infants & families from urban and rural areas of Victoria
- Two-thirds still participating after 25 years
- 14 waves of data collected since 1983
- 1-2 yearly intervals
- Mail surveys (most recent in 2006, at 23-24 years)
- Parents, MCH nurses, primary school teachers and child informants



# Major domains assessed

- Temperament style
- Child health, behavioural & emotional problems
- Adolescent/adult substance use, antisocial behaviour, anxiety, depression, risky driving
- School adjustment & achievement, tertiary education
- Social competence & civic engagement
- Peer & romantic relationships
- Parent-child relationships, parenting style & family environment
- Socio-demographic characteristics (family structure, SES, rural/ regional/ urban)
- Employment & career development
- Marriage & parenthood aspirations

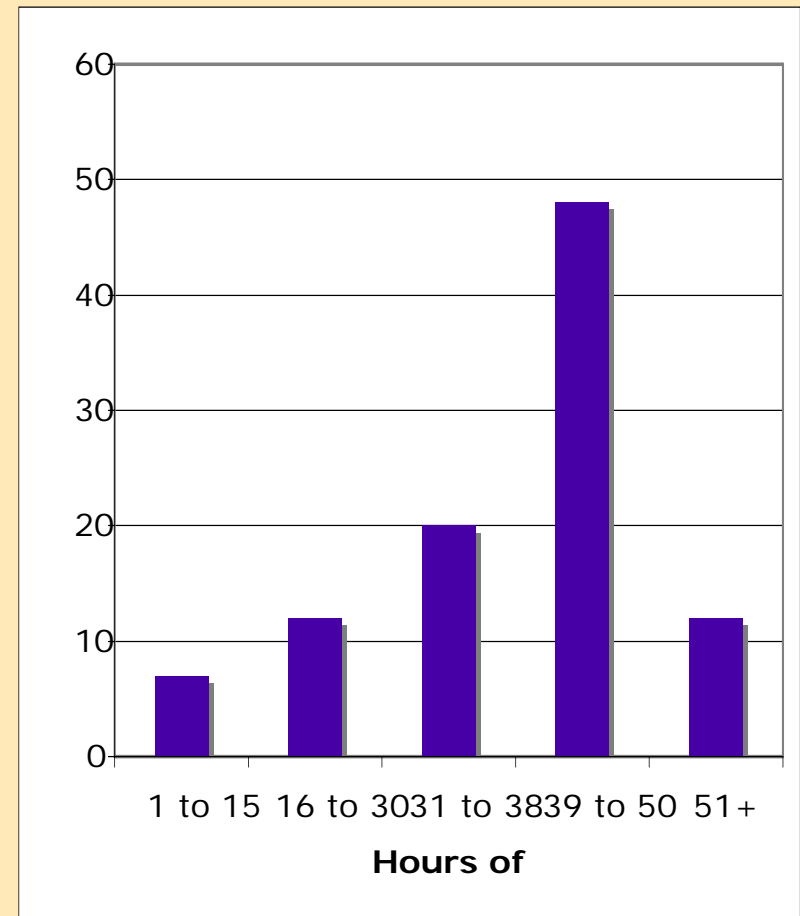
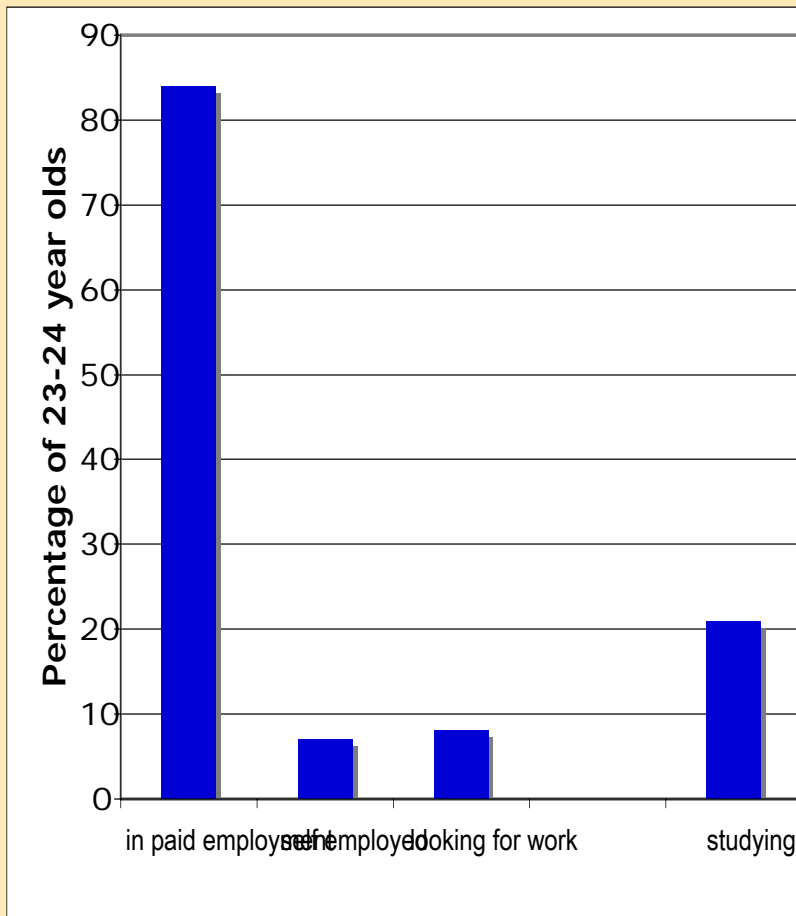


# Question 1 - How young people in their mid twenties are faring

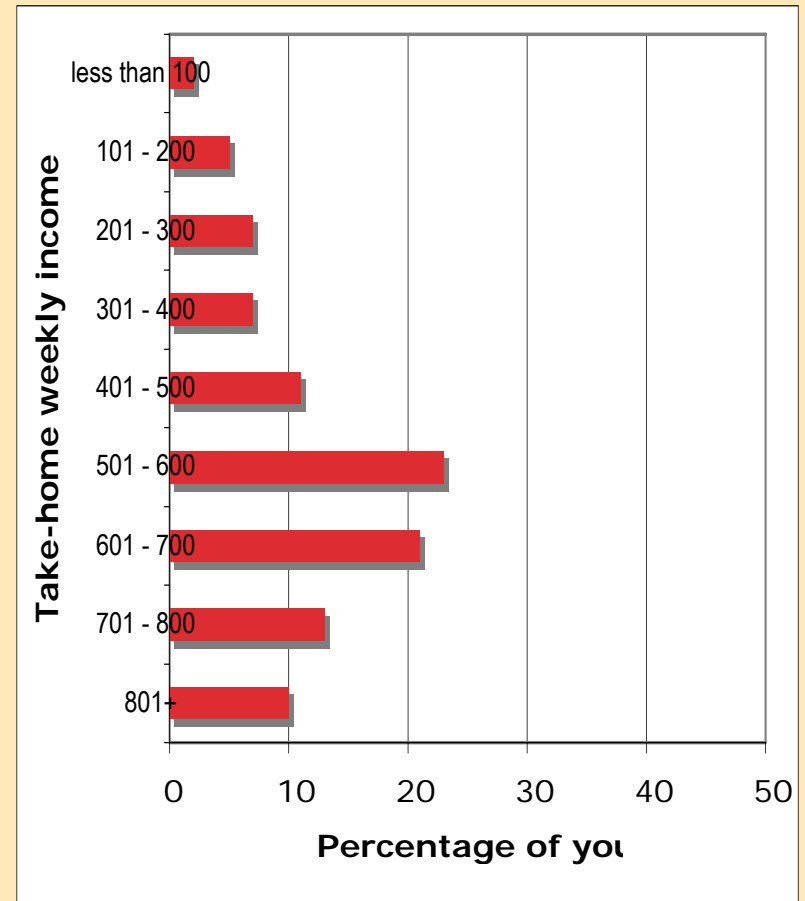
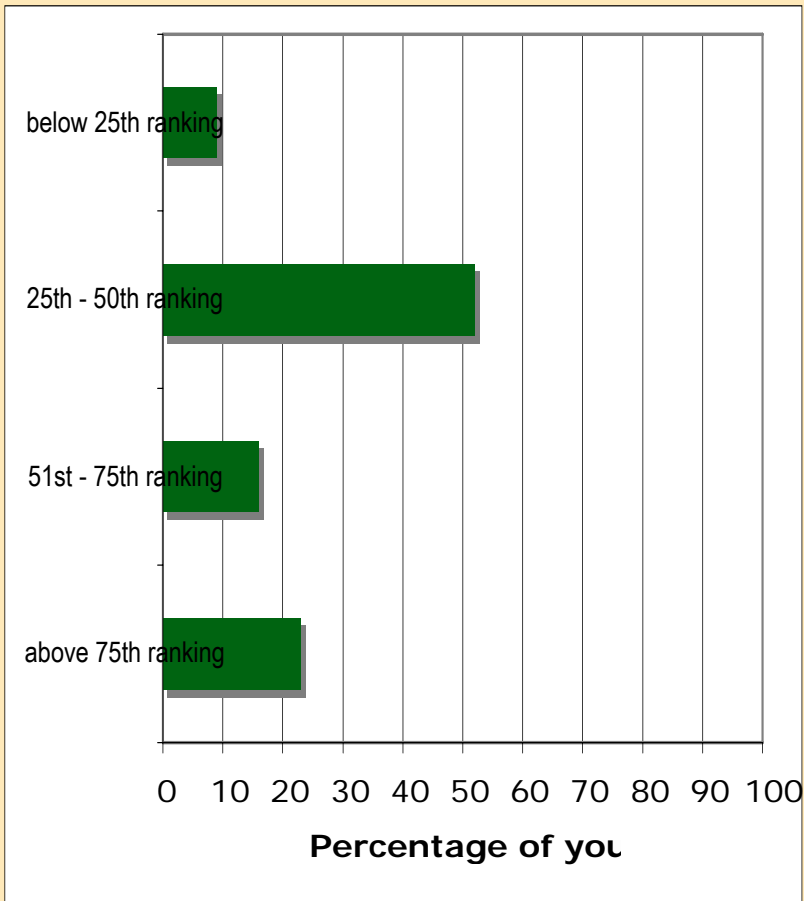
- There has been a marked change in young people's circumstances and lifestyle
- The early 20s can be a period of risk taking and mental health difficulties that impact on young people's wellbeing
- Opposing views of how young people are progressing
- Australian Temperament Project (ATP) data can shed light on how young Australians are faring



# Employment and educational participation at 23-24 years, hours of work



# Occupational status and weekly income (after tax)

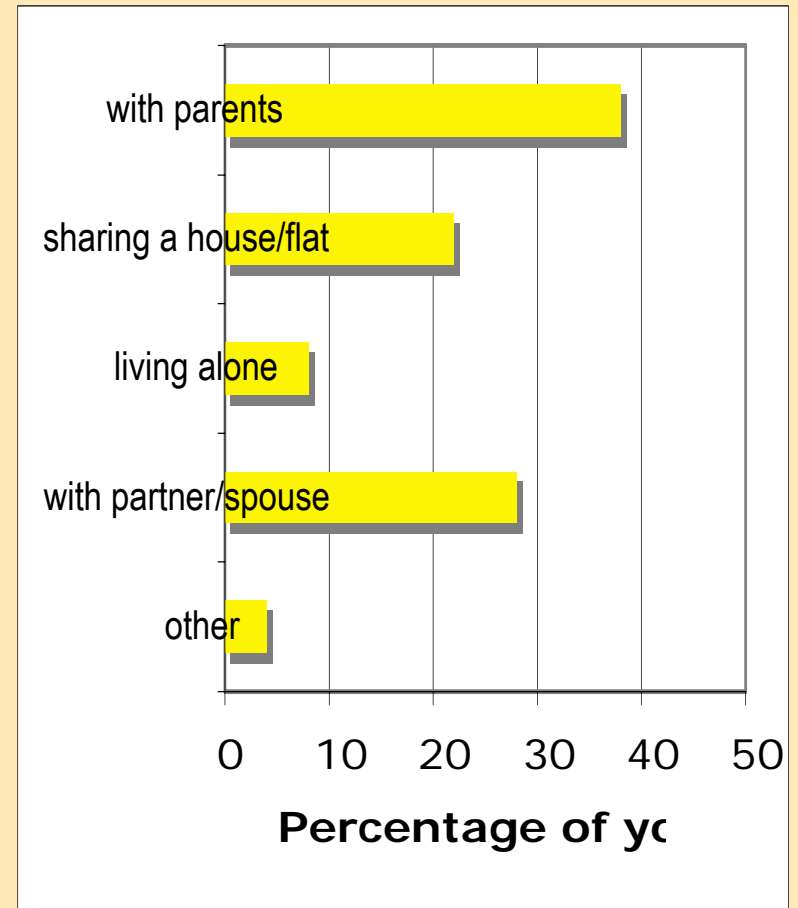
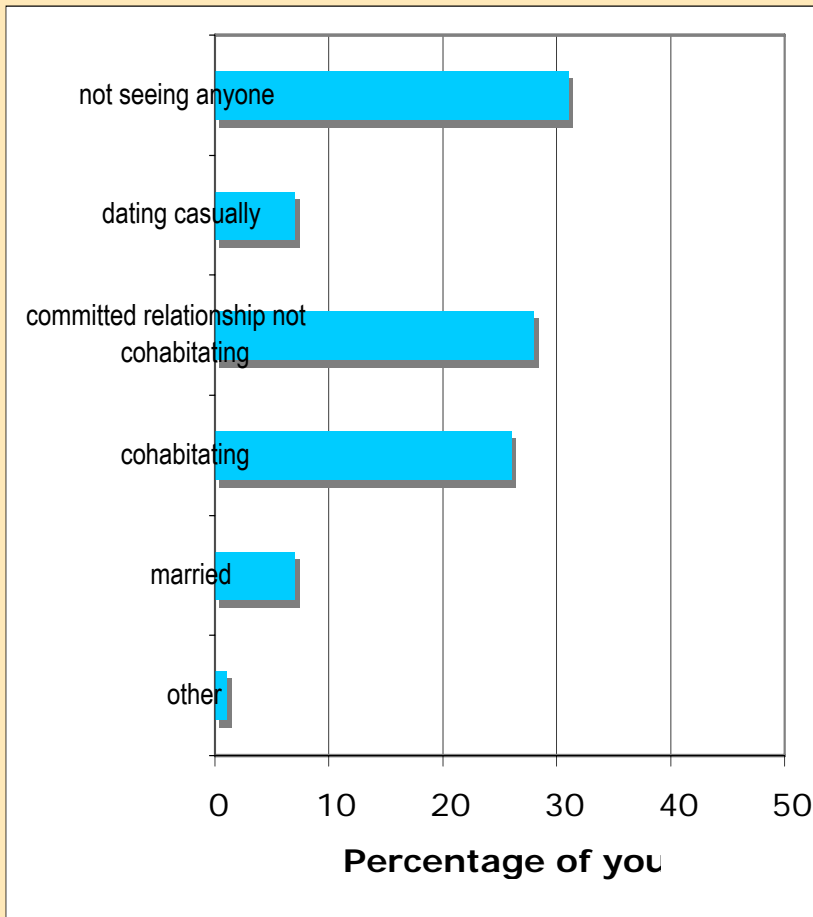


# Highest educational level attained

Tertiary (45%)	1% Postgraduate degree 3% Graduate diploma/certificate 40% Undergraduate degree
Other Post-Secondary (25%)	9% TAFE advanced diploma 16% TAFE certificate/other post-secondary qualification
Secondary (23%)	23% Yr 12
Some Secondary (7%)	3% Yr 11; 3% Yr 10; 0.8% ≤Yr 9



# Relationship status and living arrangements



# How were they faring - problems and difficulties

## Depression

- 16% moderately or severely depressed

## Anxiety

- 16% moderately or severely anxious

## Antisocial

- 10% highly antisocial (3+ antisocial acts, excludes illicit substance use)

## Health

- 21% had a long-term physical or mental health problem



# Substance use in past month

- Cigarettes 31% daily smokers - 14%
- Alcohol 90% drink every 2nd day or more - 19%  
binge drink more than weekly - 20%
- Marijuana 14% weekly users - 4%  
more than weekly users - 2%
- Other illicit 12% ecstasy - 9%; amphetamines - 7%;  
cocaine - 4%; LSD/ h'gens - 1%;  
ice - 1%



# Cumulation of problems (depression, anxiety, antisocial behaviour, illicit substance use)

- No problems 60%
- One problem type 24%
- Two problem types 11%
- Three problem types 3%
- All four problems 1%



# Conclusions

- an engaged, hard working group of young people
- a substantial minority were experiencing problems or engaging in risk taking
- not 'either - or', highlights the differing layers of young people's lives



# Question 2 - Adolescent alcohol use

- growing concern about teenage alcohol misuse and binge drinking
- effects on the developing body and brain
- evidence that delaying the onset of drinking is associated with fewer alcohol harms in early adulthood
- are distinct developmental profiles associated with particular adolescent alcohol use patterns (individual factors for high use, social factors for moderate use)?
- what are the later outcomes of youth who were low, moderate and heavy drinkers in adolescence?
- this work was undertaken by Dr. Katherine Waters



# Adolescent alcohol use groups

- At all adolescent survey waves participants asked:  
“Thinking back over the last 30 days (month), on how many days did you have an alcoholic drink?”
- Cluster analysis of these responses revealed 5 groups:

Abstainers                      7% of sample, 46% male

Stable low                      19% of sample, 45% male

Stable moderate              60% of sample, 44% male

Increasers                      12% of sample, 55% male

Heavy                              2% of sample, 53% male

} Groups combined in  
later analyses



# Summary of findings - Childhood individual characteristics

Domain	Aspect	Mid childhood	Late childhood
Temperament	Higher Reactivity	✓ P, T	✗
	Lower Persistence	✓ P, T	✓ P, T
	Lower Sociability	✗	✓ P
Social skills	Total	✓ T	
	Lower Self Control		✓ P, T, C
	Lower Cooperation		✓ P, T, C
	Lower Assertiveness		✓ P, C
	Lower Empathy		✓ P, C
	Lower Responsibility		✓ P
Behaviour problems	Higher Aggression	✓ P, T	✓ P, T, C
	Higher Hyperactivity	✓ P, T	✓ T
	Higher Anxiety	✗	✓ P, T
	Higher Depression	--	✓ P, T

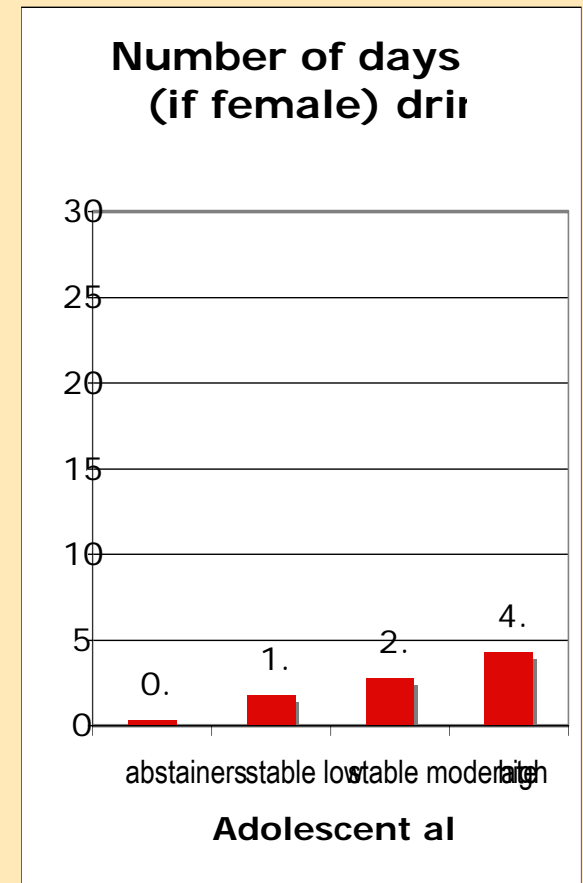
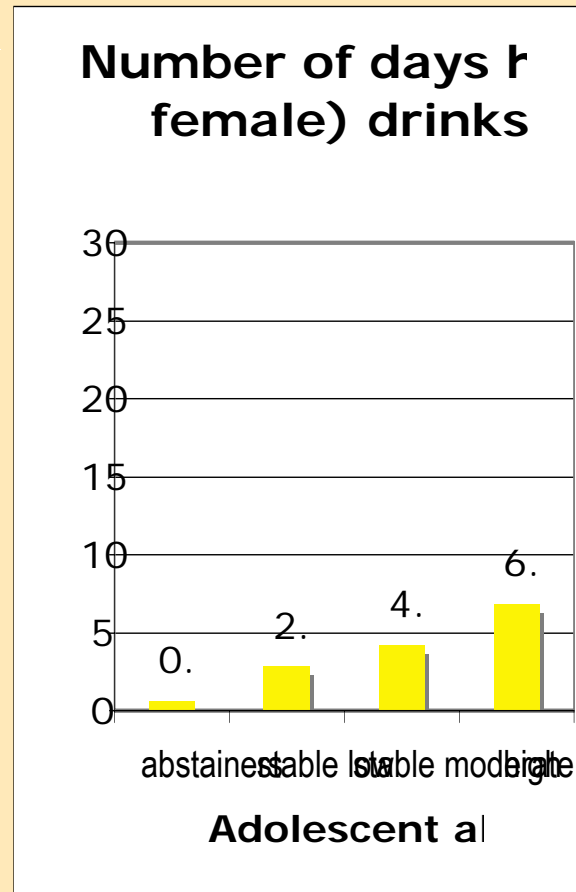
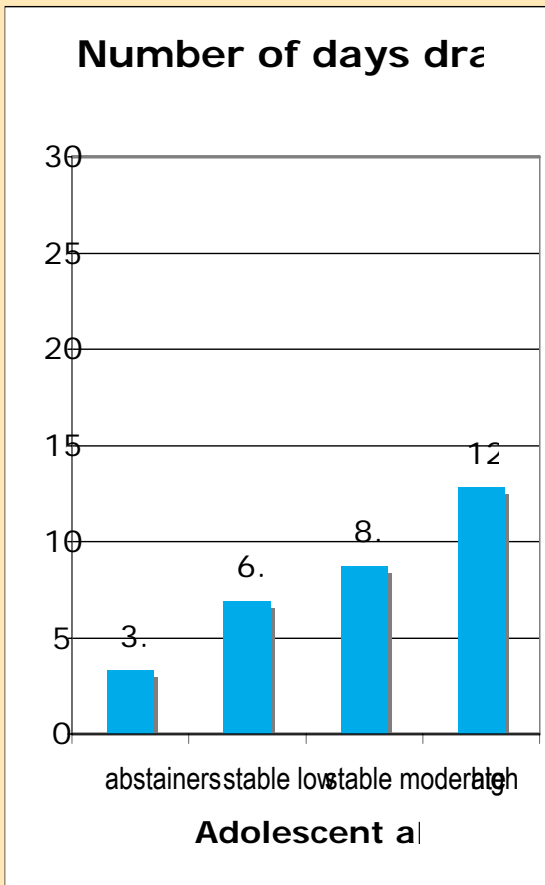


# Summary of findings - Adolescent social factors

Domain	Aspect	Early - late adolescence	
Parent-teenager relationships	Lower Attachment to parents	✓	C
	Lower Warmth of relationship	✓	P
	Higher Alienation	✓	C
	Higher Conflict	✓	P
Family environment	Lower Family Cohesion	✓	P
	Higher Mothers' drinking	✓	P
	Higher Fathers' drinking	✓	P
Antisocial peer affiliations	Higher affiliations	✓	P, C
School & academic success	Lower levels	✓	P, C



# Outcomes at 23-24 years



# Conclusions

- heavy drinking teenagers tended to have been more aggressive and hyperactive, and showed lower task persistence, in childhood
- teenagers who were abstainers tended to have been shyer, less self confident and more anxious in childhood
- heavy and moderate drinkers had the highest levels of social difficulties in adolescence
- different patterns of use persist into adulthood. Teenage abstinence seems protective against harmful later use.
- intervention implications: early intervention for behaviour problems and social skills deficits, social focus in adolescence



# Question 3 - The ATP Young Drivers study

A collaborative project between AIFS, RACV and TAC

- young people make up only 14% of the Victorian licensed driving population  
however....
- they make up 25% of those killed in road crashes (TAC, 2004)
- risky driving - an important contributor
- small sub-group of “young problem drivers”
- little known about the earlier characteristics or circumstances that may contribute to driving behaviour



# Risky driving indicators at 19-20 years

**Number of trips in past ten in which:**

Drove up to 10km/h over limit	Did not wear a seatbelt / helmet at all
Drove b/w 10 & 25km/h over limit	Did not wear a seatbelt / helmet for part of trip
Drove more than 25km/h over limit	Drove when affected by alcohol
Drove when very tired	Drove when affected by illegal drug



# Risky driving groups

## Identified by cluster analysis:

Low risky driving group (Low)

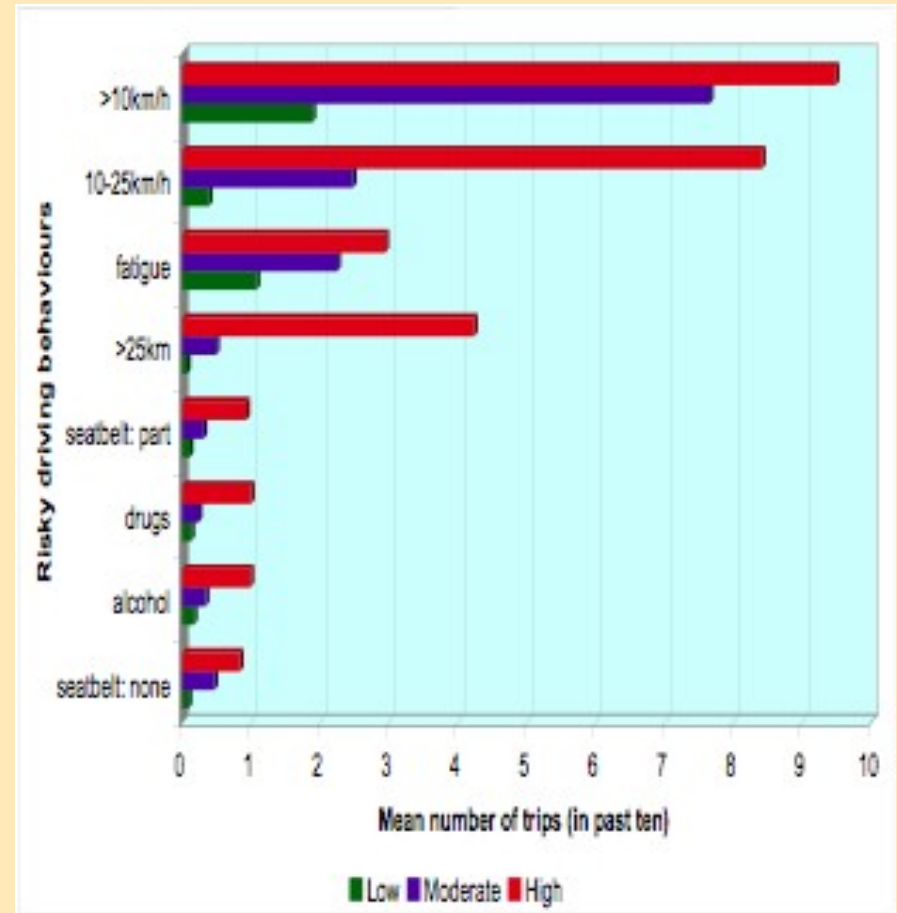
(64% of sample, 39% male)

Moderate risky driving group (Moderate)

(29% of sample, 50% male)

High risky driving group (High)

(7% of sample, 77% male)



# Summary of across-time trends

- First significant differences emerged in mid childhood
- Differences typically between high group & the other two groups
- Most consistent differences on:
  - temperament style (persistence/task orientation)
  - behaviour problems (aggression & antisocial behaviour)
  - social skills (cooperation, responsibility & empathy)
  - school adjustment
  - relationships (antisocial peers, parent-child relationship)



# Summary of findings by domain

Domain	Aspect	5-8	9-12	12-14	15-18	19-20
Temperament	Lower task orientation/persistence	✓ T	✓ T	✓ P		
Behaviour Problems	Higher aggression	✓ T		✓ S	✓ S	✓ P
	More antisocial			✓ S	✓ S	✓ S
	More hyperactive	✓ T			✓ S	
	More multi-substance use					✓ S
Coping	More likely to cope by using drugs or by reacting explosively				✓ S	



# Summary of findings by domain (cont.)

Domain	Aspect	5-8	9-12	12-14	15-18	19-20
Social skills	Lower cooperation		✓ T	✓ P,S		
	Lower responsibility			✓ P		✓ P,S
	Lower empathy			✓ S		✓ P,S
	Lower self-control			✓ S		
School	Lower school readiness	✓ T				
	Lower school adjustment			✓ P,S		



# Summary of findings by domain (cont.)

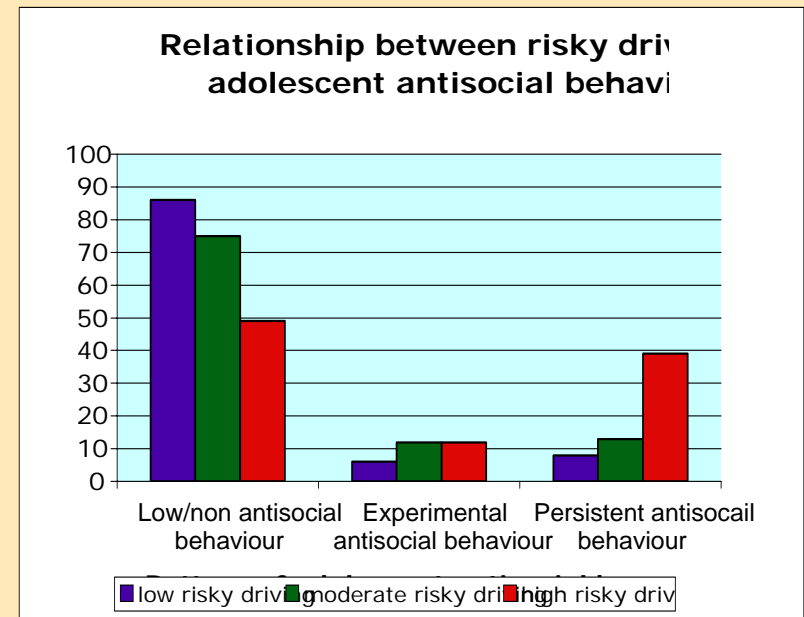
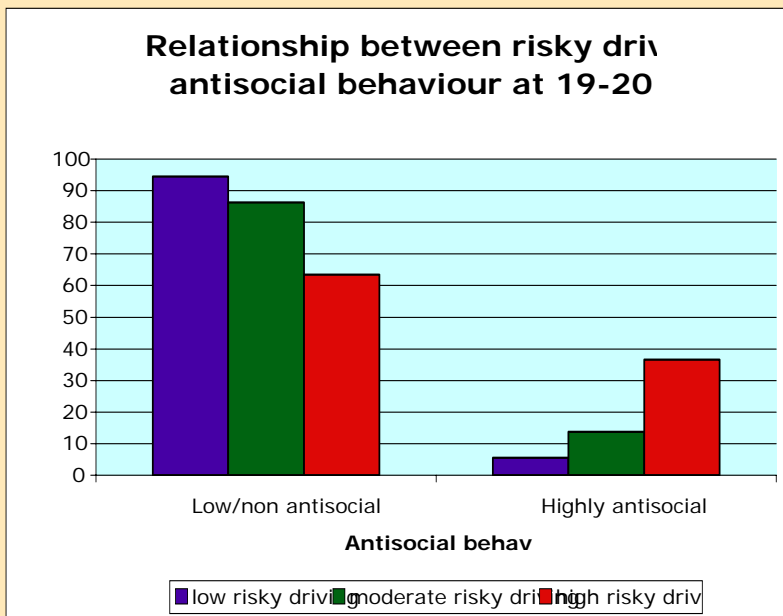
Domain	Aspect	5-8	9-12	12-14	15-18	19-20
Parent-child relationship	More difficulties in relationship			✓ S		
	Less warmth in relationship				✓ S	
Peers	More affiliation with antisocial peers			✓ S	✓ S	✓ S
	Poorer friendship quality			✓ S		
Community Involvement	Lower civic engagement					✓ S
Driving	More time driving & driving offences					✓ S



# Co-occurrence of problem behaviours

High group 9 x more likely to be highly antisocial at the same age  
(OR = 9.63; C.I. = 5.42 - 17.12)

High group 8 x more likely to be persistently antisocial across adolescence  
(OR = 8.44; C.I. = 4.34 - 16.39)



# Conclusions

- differences noticeable from mid-childhood
- recognising the links between personal style & driving
- overlap in problem behaviours
- potential value of early intervention & prevention



# Question 4 - Relationships between parents and young people

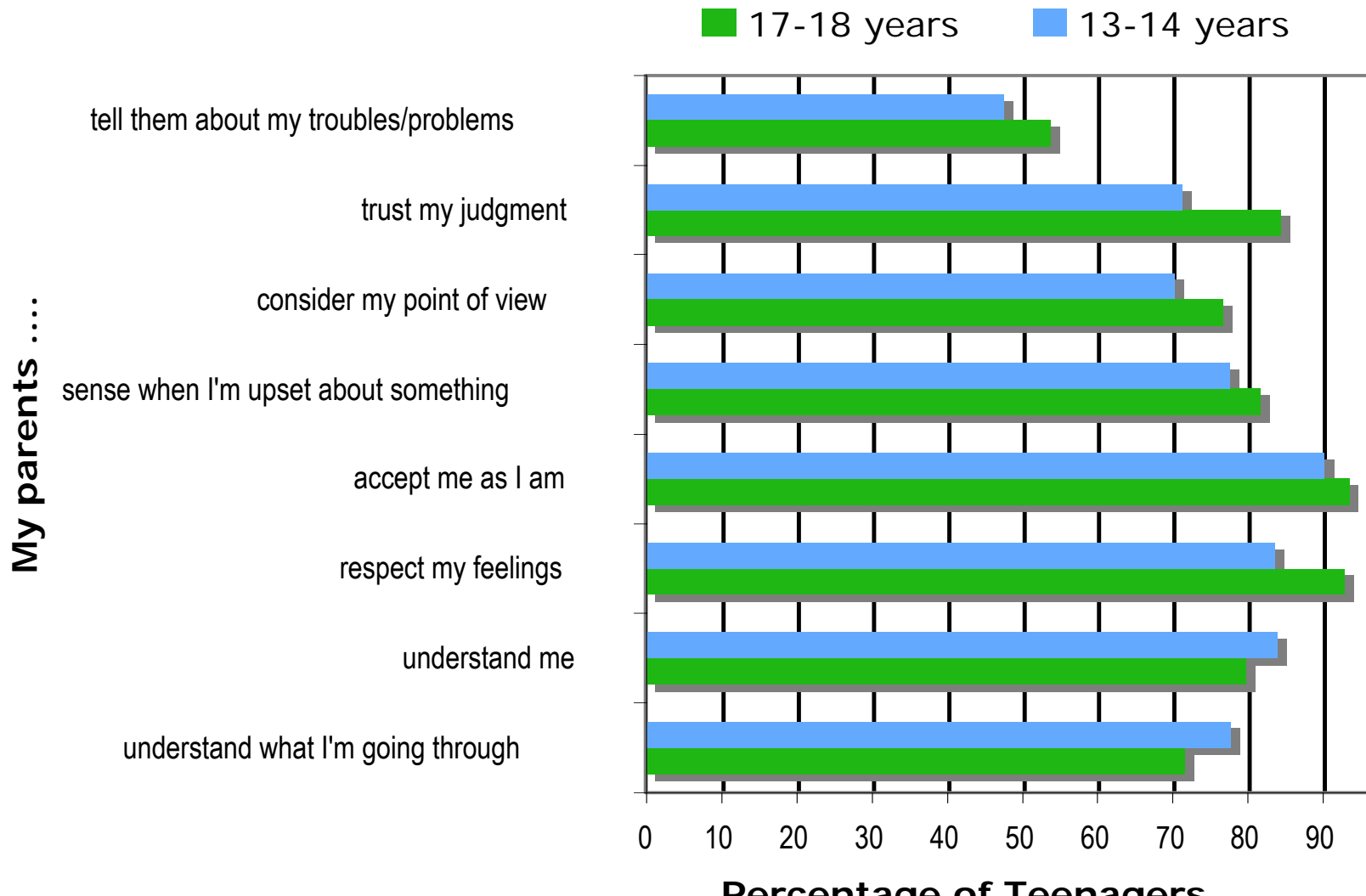
## Changes in the parent-child relationship during adolescence and young adulthood

- Move from dependent relationship to more equal relationship between two adults
- Reliant upon:
  - parental acceptance of child as a maturing individual
  - child's recognition of parent as a person
- Young people's competing needs for independence & support

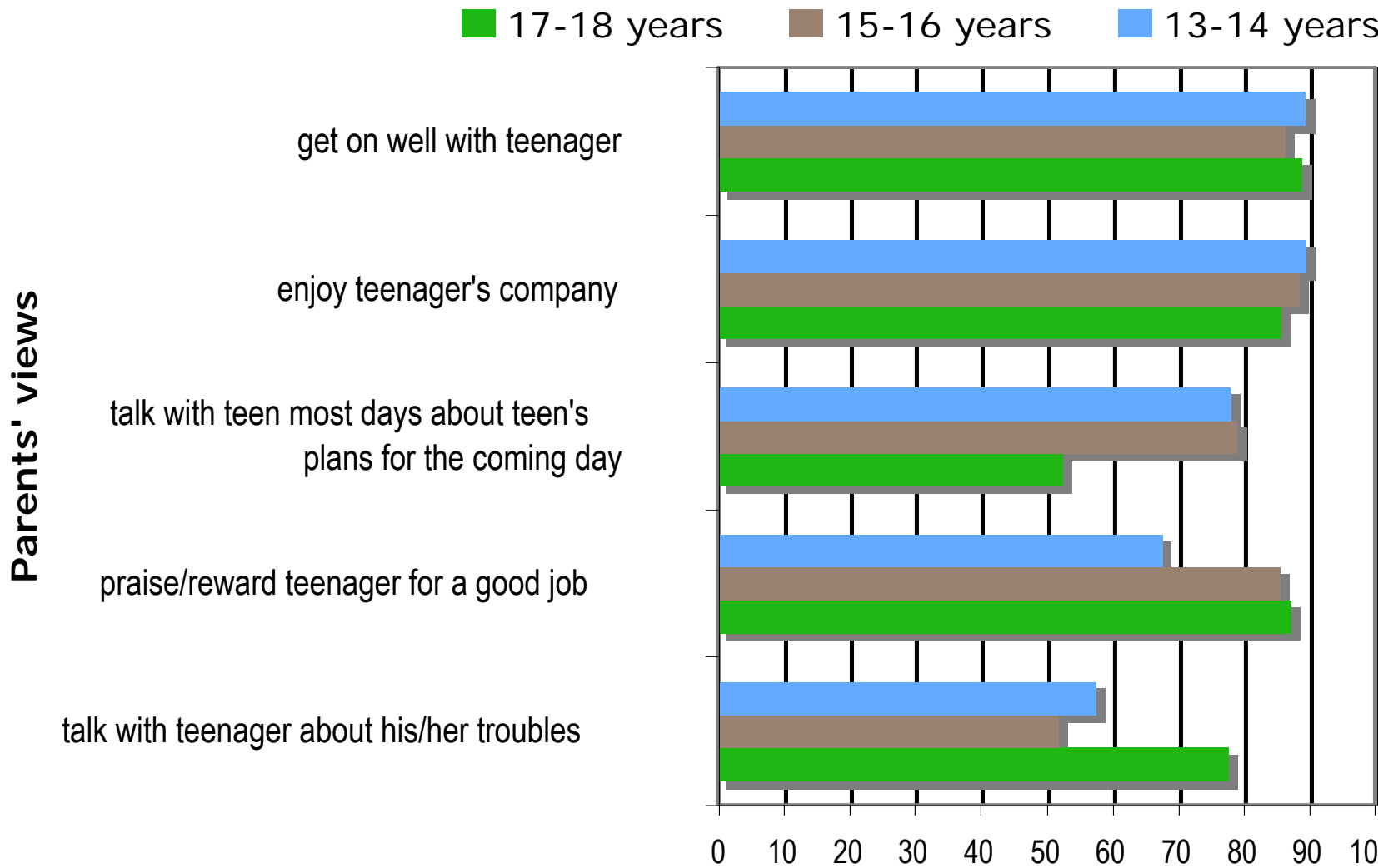
**Adolescence popularly seen as a time of 'storm and stress';  
not much known about relationships in early adulthood**



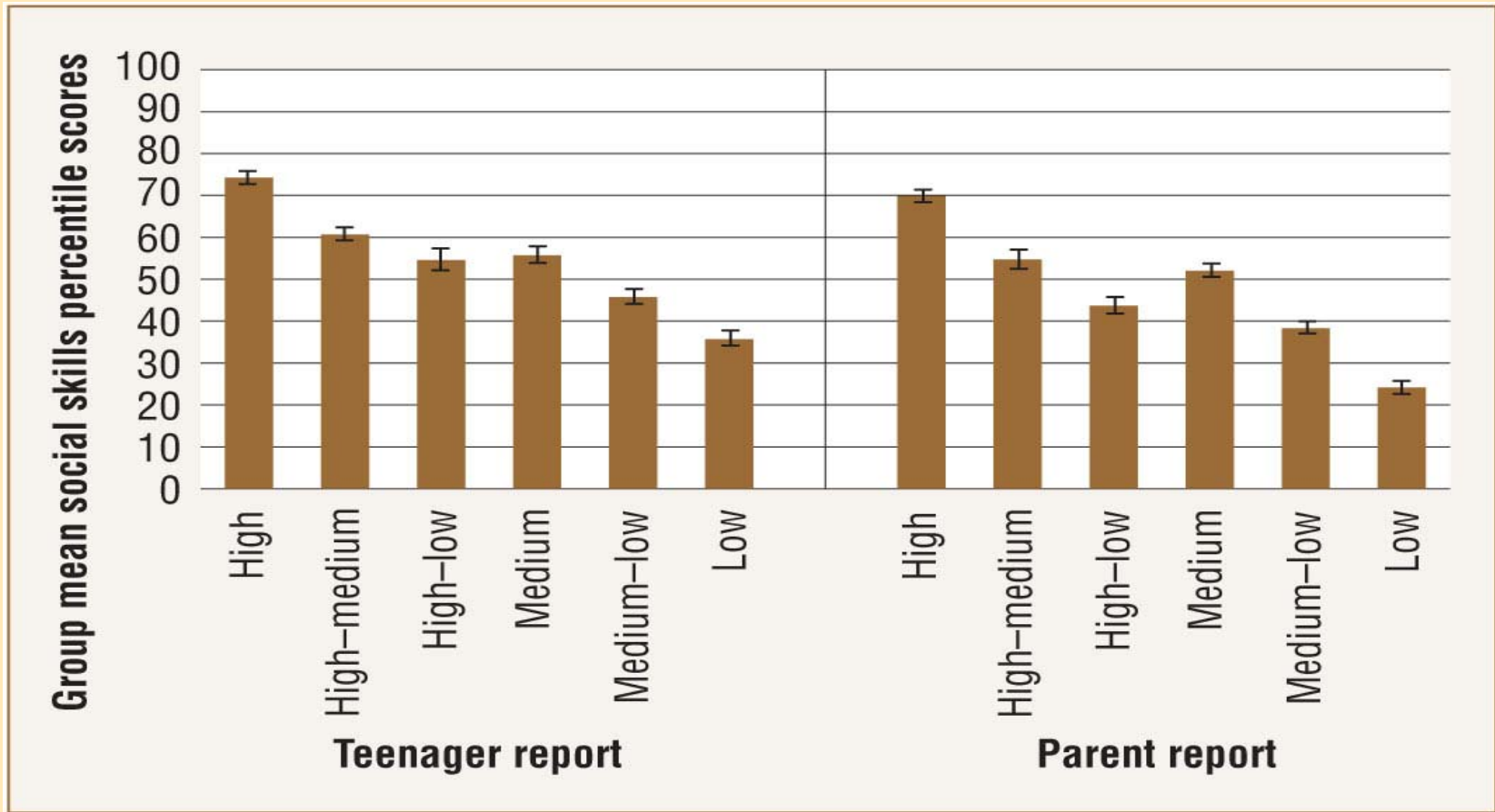
# How parents and adolescents get along together, according to teenagers



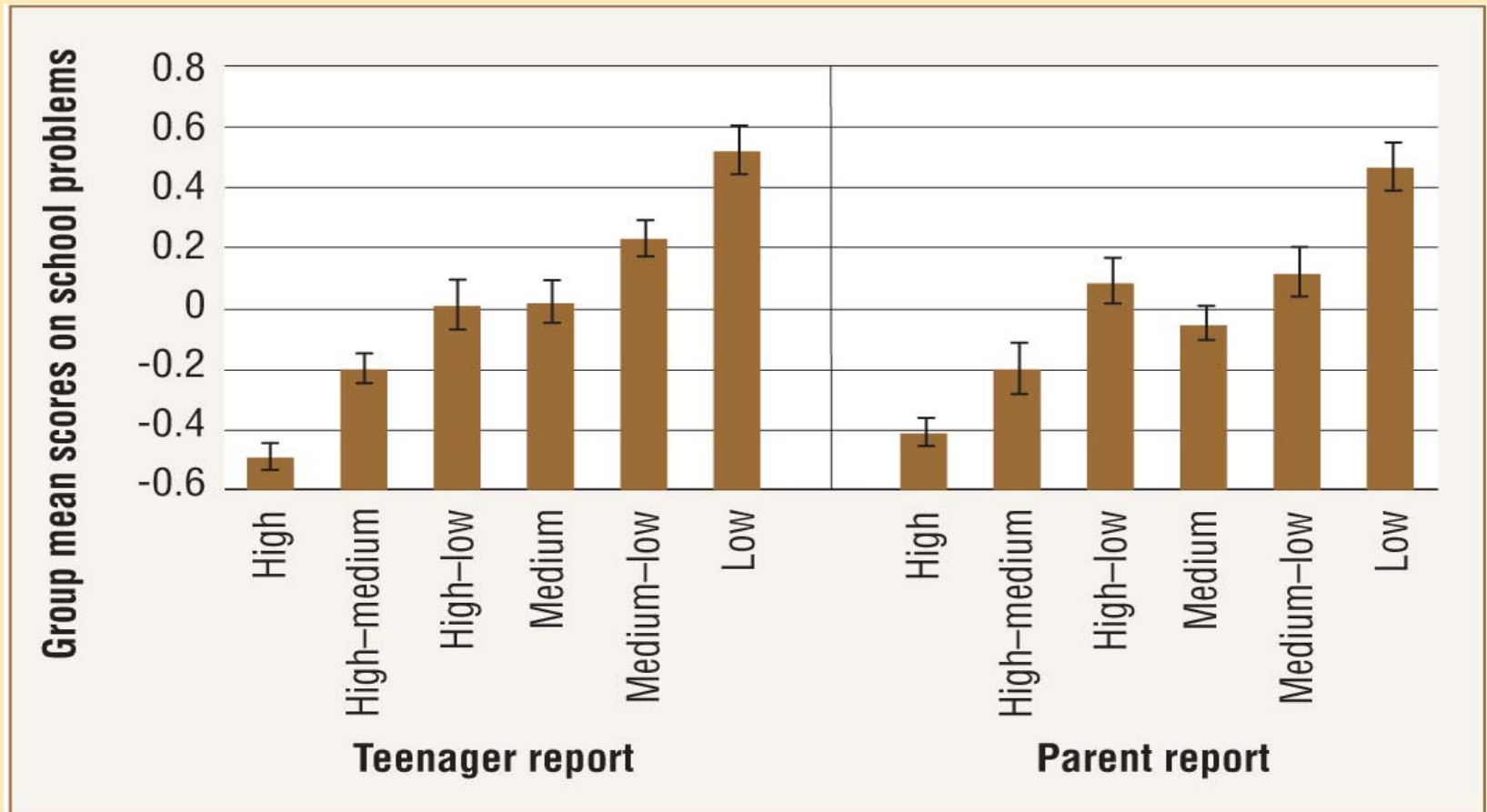
# How parents and adolescents get along together, according to parents



# How differing relationship quality groups were faring - social skills



# How differing relationship quality groups were faring - school problems



# Parent-adolescent conflicts - common issues in mid adolescence

Teenagers' views	%	Parents' views	%
School grades, homework	18	School grades, homework	22
Fighting with brothers or sisters	18	Chores	17
Chores	11	Fighting with brothers or sisters	14
Money	8	Attitudes, respect	6
Attitudes, respect	7	Money	5
Transportation	5	Swearing, talking back	4



# How severe were these conflicts?

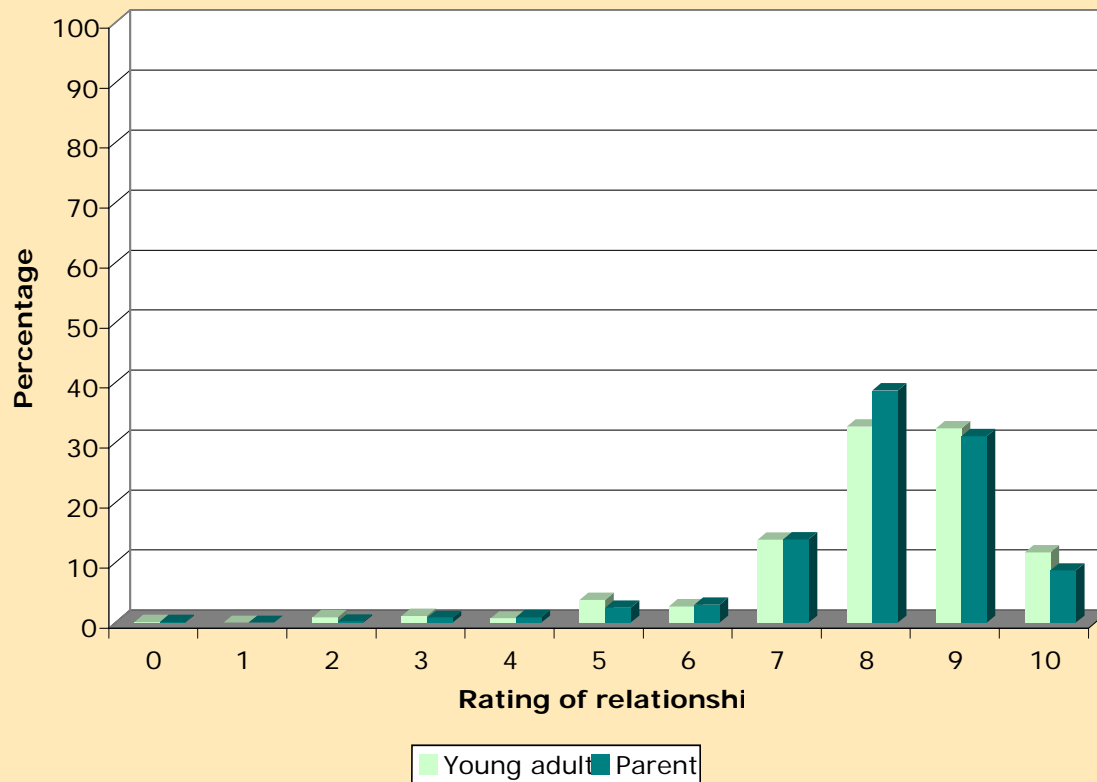
- Percentage who disagreed 'quite often' or 'all the time':

	Teenagers	Parents
School grades, homework	25%	33%
Fighting with brothers or sisters	30%	25%
Attitudes, respect	25%	20%
Chores	30%	33%
Money	20%	20%
Transportation	20%	
Swearing, talking back		15%



# Relationships in early adulthood

Over 75% parents & young adults rated relationship at least an '8'



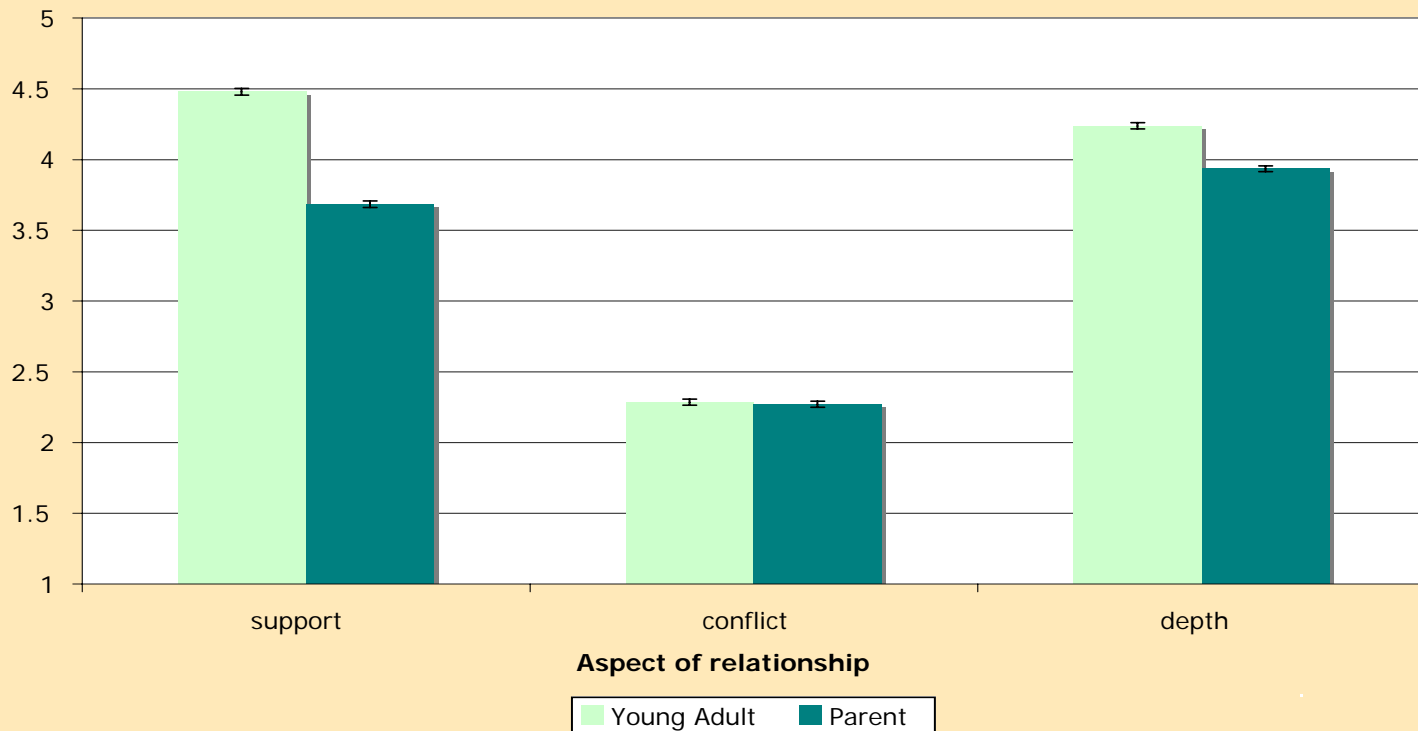
Parent: M = 8.11 (1.28)

Young adult: M = 8.10 (1.47)



# Relationships in early adulthood (cont)

Young adults reported higher levels of support and relationship closeness than did parents



# Conclusions

- most parents & young people are getting along well together, according to both sources of report
- parent-adolescent relationship quality was related to adolescent wellbeing over a range of aspects of life
- cause and effect difficult to determine
- many parents underestimate the extent to which young people value their relationships with them
- difficult parent-adolescent relationships are atypical and should be taken seriously
- need for realistic view of parenting over the teenage years



# ATP

## Key findings and implications

### How young people are faring

- Most young people developing well **but** adjustment difficulties and risk taking still evident
- Co-occurrence of problems

### ATP findings provide valuable insight into:

- The ages/developmental stages at which developmental pathways commence
- Risk and protective factors for different outcomes



# ATP

## Key findings and implications

Findings suggest:

- Differing trajectories of problem behaviours over time
- Importance of childhood characteristics to later outcomes
- Key points of change (coincide with school entry or school transitions)
- Multiplicity of influences - individual, family and broader environmental levels
- Common and unique risk and protective factors
- The strength of relationships and their potential to support young people into the future



# Where to from here?

- Positive development
- Attitudes towards, and experiences of, marriage and parenthood
- Harmful alcohol use in early adulthood
- Risky driving behaviour (at 23-24 yrs)
- Experiences while growing up e.g. achievements, child abuse and neglect, bullying (retrospective data)



# Want to know more?

- Visit the ATP website: [www.aifs.gov/atp/](http://www.aifs.gov/atp/)



# Effects of attrition - 1

SES quartile in 1983	Original cohort	Retained sample in 2002
<b>Highest</b>	<b>25.9%</b>	<b>31.7%</b>
<b>Medium high</b>	<b>28.4%</b>	<b>29.9%</b>
<b>Medium low</b>	<b>23.7%</b>	<b>23.9%</b>
<b>Lowest</b>	<b>19.2%</b>	<b>14.6%</b>



# Effects of attrition - 2

Maternal country of birth	Original cohort	Retained sample
<b>Australia</b>	<b>79.9%</b>	<b>83.4%</b>
<b>UK</b>	<b>6.0%</b>	<b>5.6%</b>
<b>Other</b>	<b>14.1%</b>	<b>11.0%</b>
Paternal country of birth		
<b>Australia</b>	<b>73.2%</b>	<b>77.2%</b>
<b>UK</b>	<b>7.3%</b>	<b>6.8%</b>
<b>Other</b>	<b>19.5%</b>	<b>16.0%</b>



# Effects of attrition - 3

	<b>Original cohort</b>	<b>Retained sample</b>
<b>Infant behaviour problems</b>	<b>1.73</b> <b>(S.D. 0.69)</b>	<b>1.72</b> <b>(S.D. 0.68)</b>
<b>Infant easy-difficult temperament</b>	<b>2.46</b> <b>(S.D. 0.63)</b>	<b>2.44</b> <b>(S.D. 0.63)</b>

