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PARENTING INFLUENCES ON ADOLESCENT ALCOHOL USE



4 Parenting influences on adolescent alcohol use

It is widely believed that parents have little influence on adolescents' alcohol use, and there has been a common assumption that the influence of peers is more important than parental influence (Johnson and Johnson 2000). The research to be reviewed here does not support this notion. The findings reviewed are consistent with those of many other studies which have investigated associations between parenting behaviours or parental characteristics and a range of child and adolescent problems, and have shown links between several parenting factors and internalising and externalising behaviour problems in children and adolescents.

Framework for reviewing parenting literature

The purpose of this review is to identify the particular parenting factors that are linked to adolescent alcohol use. To do this, a theoretical model of parental influence developed by Dishion and McMahon (1998) will be used. This is a Social Interactional model of parenting and it provides a framework to demonstrate the relevance of parenting characteristics to adolescent behaviours. This conceptual model of parenting is developed from a large body of research, which has shown that several key parenting factors influence child and adolescent behaviour (for example the body of work in the Oregon Youth study, Patterson, Reid and Dishion 1992).

The Social Interactional model is shown in Figure 1. At the centre of the model is the parent–child relationship, which forms the foundation of effective parenting. Therefore, research that considers how parents may influence adolescent alcohol use should consider the contribution of quality of parent–adolescent relationships. The apex of this model is represented by a parent's motivations, and this is a compilation of parental beliefs, norms, values, and goals. It has been shown that parent's expectations of parenting, along with their expectations of their child, are critical to parenting behaviours (Patterson 1982). Finally, the social interactional model of parenting depicts the role of parental monitoring and parents' management of adolescent behaviour, but they are interrelated with parent–adolescent relationship quality and parental motivation, goals, values and beliefs. Using this framework, it becomes evident that parenting factors are dynamically interrelated, for example, parental values are likely to influence parenting behaviour management skills.

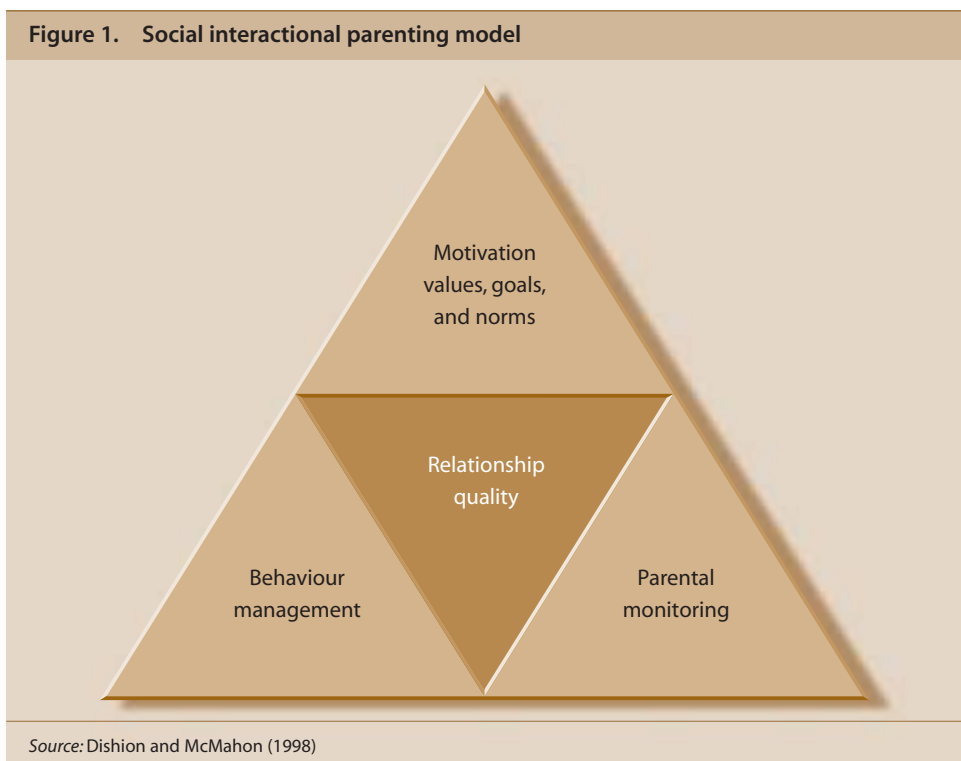
While Dishion and McMahon's model is used as a tool to organise the diverse array of findings, it should be noted that relationships are dynamic, and the importance of examining parent–adolescent interactions within a bi-directional paradigm should also be considered. Research has shown that parents influence the behaviour of their adolescents, but the reverse also occurs, with adolescents exerting influence that changes the behaviour of their parents. The longitudinal body of work by Capaldi (2003), Capaldi and Patterson (1989), Dishion,

Capaldi, Spracklen, and Fuzhong (1995), Patterson et al. (1992), and Patterson and Stouthamer-Loeber (1984), over an 11-year period, provides substantial evidence of the multi-faceted nature of parenting, and the bi-directionality of influences. Other researchers have also demonstrated the bi-directional nature of parent–adolescent relationships (Brody 2003), and more recently this has also been demonstrated in intervention work using rigorous experimental methodology (Dishion, Nelson and Kavanagh 2003).

In addition to the bi-directional nature of parent–adolescent relationships, the ecology of the family is also crucial, and the Social Development model (Hawkins, Catalano and Miller 1992) is used as a framework for understanding broader family and environmental influences.

This model is a general theoretical model of behaviour which integrates social learning theories and control theory, and has been developed to provide a framework for understanding the role of family, peers, and community in the development of various adolescent behaviour problems (Catalano and Hawkins 1996; Hawkins et al. 1992). Thus, the model proposes that adolescents who are poorly attached to families, schools and community, but are more strongly attached to antisocial peers, are more likely to engage in problem behaviours such as substance use and antisocial behaviour.

This model has been used to measure positive and negative influences using a risk and protective conceptual framework. Therefore, throughout this review, where parenting factors are examined, there is an underlying assumption that adolescents can and do change the behaviour and attitudes of their parents, and that the ecology surrounding the adolescent and parent exerts further influence.



Summary

Two theoretical models are used to provide a framework in which to understand parenting influences on adolescent alcohol use.

First, the Social Interactional model of Dishion and McMahon (1998) is used to understand the importance of a range of parenting skills and behaviours, in particular parent-adolescent relationship quality, parental monitoring, parents' management of adolescent behaviour, and parents' norms, goals and values.

Second, the Social Development model of Catalano and Hawkins (1996) is used to highlight the ecological context surrounding the parent and adolescent, focusing on broader aspects of family environment and the influence of peers.

Overview of findings

Tables 4 and 5 summarise the findings regarding the most consistent associations found between aspects of parenting and adolescent alcohol use. Other findings which emerged less frequently are described in the text, rather than displayed. Table 4 displays the results emerging from the cross-sectional studies, and Table 5 the results from the longitudinal studies. These tables present an overview of the results, and each parenting factor is discussed subsequently in this review.

In the tables, the arrows depict the effect that the parenting factor was shown to have on adolescent alcohol use. For example, in the parental monitoring column, the downward arrows indicate that high levels of this factor are associated with lower adolescent alcohol use. The final column in each table denotes whether the study was conducted with Australian participants, and reveals that there has been little Australian research on this issue to date. Following the Dishion and MacMahon (1998) model, the review begins with a discussion of the findings concerning parental monitoring, which is followed by a review of findings relating to parents' behaviour management, parent-adolescent relationship quality, and parental norms and attitudes. Broader aspects of the family environment are then reviewed, such as parental alcohol use and abuse, family structure, and family socio-economic background. The impact of cultural norms and laws, and findings emerging from indigenous samples, are described. Parenting influences are compared with peer influences, and gaps and deficiencies in the research are discussed. Finally, the results of intervention studies are reviewed.

Parental monitoring

The most widely accepted definition of parental monitoring is: parental awareness of the child's activities, and communication to the child that the parent is concerned about, and aware of, the child's activities (Dishion and McMahon 1998). Thus, the term "parental monitoring" describes parental efforts to influence adolescents' independent use of free time via the establishment of boundaries for appropriate behaviour and communications with adolescents about their activities when away from parents.

More recently the definition of monitoring has been fiercely debated in the literature with two opposing views presented. This debate centres on the direction of effects, and whether the greatest influence in monitoring is driven by parenting behaviours, or by adolescent willingness to be monitored. However, the complexities of this debate are beyond the scope of this present report (see Hayes, 2003 for a review), and the Dishion and McMahon view has been used because it provides a sound definition with an influential research base.

There are numerous cross-sectional and longitudinal studies linking poor parental monitoring with adolescent alcohol and substance use. Thus, 14 of the 26 cross-sectional studies, and 17 of the 30 longitudinal studies reported connections between parental monitoring and adolescent alcohol use. A recent

Table 4. Summary of cross-sectional research of parenting influences on adolescent alcohol use

Cross-sectional studies	Biological history of alcoholism	Familial alcohol abuse	Parents regular drinkers	Parents disapprove or negative norms	Parents provide alcohol	Higher parental monitoring	Parents permissive	Good parent-child relationship	Positive behaviour management	Harsh parenting or high conflict	Mother and father together	Responder	Australian participants
Baker et al. (1999)						^						A	
Beck, Boyle & Boekeloo (2003)						^		^ f				A	
Beck, Ko & Scaffa (1997)						^						P	
Bjarnason et al. (2002)											^	A	
Bonomo et al. (2001)			∨									A	3
Borawski, et al. (2003)						^	∨	^				A	
Brown et al. (1999)	∨	∨										AP	
Chassin et al. (1993)	∨		∨									AP	
DiClemente et al. (2001)						^						A	
Epstein, Botvin & Spoth (2003)						^ g						A	
Flannery, Vazsonyi, Torquati & Fridrich (1994)						^						A	
Hawthorne (1996)			∨									A	3
C. Jackson (2002)									∨			A	
Keefe (1994)				^								A	
Letcher et al. (in press)						^		ns				AP	3
X. Li, Feigelman & Stanton (2000)						^						A	
Neighbors, Clark, Donovan & Brody (2000)								^ ^ g				AP	
Quine & Stephenson (1990)			∨									A	3
Rai et al. (2003)						^						A	
Sale, Sambrano, Springer & Turner (2003)				^		^						A	
Smith & Rosenthal (1995)				^								A	3
Svensson (2000)						^						A	
Vicary, Snyder & Henry (2000)						^						A	
White & Hayman (in press)					^							A	3
P. S. Williams & Hine (2002)		∨		^			∨					A	3
Wood, Read, Mitchell & Brand (2004)				^		^	∨ ∨					A	
J. Yu (2003)			ns	^								A	

Note: ∨ ^ = direct predictive effect of parenting variable, ∨ ^ = indirect (mediational) effect of parenting variable, ^ ^ or ∨ ∨ = variable has direct effect and also an indirect effect by interacting with another factor (moderator). g = gender differences, a = age effects, f = father only, m = mother only, ns = not significant
P = Parent respondent, A = Adolescent respondent, 3 = Australian sample

Table 5. Summary of longitudinal research of parenting influences on adolescent alcohol use

Longitudinal studies	Biological history of alcoholism	Familial alcohol abuse	Parents regular drinkers	Parents disapprove or negative norms	Parents provide alcohol	Higher parental monitoring	Parents permissive	Good parent-child relationship	Positive behaviour management	Harsh parenting or high conflict	Mother and father together	Responder	Australian participants
Ary, Duncan, Biglan et al. (1999)						^ ^		^		∨		AP	
Ary, Duncan, Duncan & Hops (1999)						^ ^		^		∨		AP	
Barnes & Farrell (1992)		∨				^		^	^			AP	
Barnes, Reifman, Farrell & Dintcheff (2000)		∨				^		^				A	
Baumrind (1991)								^	^			AP	
Bray, Adams, Getz & Baer (2001)								^				A	
Bray, Adams, Getz & Stovall (2001)						^ ^		^ ^		∨ ∨		A	
Brody, Ge, Katz & Ileana (2000)				^								AP	
Brody & Ge (2001)								^	^	∨		AP	
Chilcoat & Anthony (1996)						^						A	
Dishion, Capaldi & Yoerger (1999)			∨			ns		^				AP	
Duncan, Duncan, Biglan & Ary (1998)						^				∨		A	
Ennett, Bauman, Foshee et al. (2001)				^								AP	
Guo, Hawkins, Hill & Abbott (2001)						^			^	ns		A	
Jackson, Henriksen & Dickinson (1999)						^	∨					A	
Kosterman, Hawkins, Guo, Catalano & Abbott (2000)				^		^			^			A	
F. Li, Duncan & Hops (2001)				^							^	A	
C. Li, Pentz & Chih-Ping (2002)		∨ ∨										A	
X. Li, Stanton & Feigelman (2000)						^						A	
Ouellette, Gerrard, Gibbons & Reis-Bergan (1999)		∨	∨									AP	
Oxford, Harachi, Catalano & Abbott (2001)						^			^			A	
Pedersen (1995)		ns	∨	^ g								A	
Prior, Sanson, Smart & Oberklaid (2000)			∨									AP	3
Reifman, Barnes, Dintcheff et al. (1998)						^						A	
Rodgers-Farmer (2000)						^ ^						A	
Steinberg, Fletcher & Darling (1994)						^						A	
Stice, Barrara & Chassin (1998)		∨		^		ns		^	ns			AP	
Thomas, Reifman, Barnes & Farrell (2000)						^					^	A	
Webb, Bray, Getz & Adams (2002)						^ g						A	
B. Williams, Sanson, Toumbourou & Smart (2000)			∨							^		AP	3

Note: ∨ ^ = direct predictive effect of parenting variable, ∨ ^ = indirect (mediational) effect of parenting variable, ^ ^ or ∨ ∨ = variable has direct effect and also an indirect effect by interacting with another factor (moderator). g = gender differences, a = age effects, f = father only, m = mother only, ns = not significant
P = Parent respondent, A = Adolescent respondent, 3 = Australian sample

review of 113 studies where parental monitoring was a key variable (Hayes 2004) revealed that lower monitoring has been correlated with externalising problem behaviours in adolescents, including antisocial behaviour, “deviant” peer associations³, substance use, and sexual risk-taking. Internalising problems and related behaviours have also been linked to poor monitoring, including psychological maladjustment, lowered self-esteem, and poor academic achievement. Furthermore, in studies of family functioning, poor monitoring is associated with parent–adolescent relationship difficulties, family dysfunction, and social disadvantage (Dishion and McMahon 1998, Patterson et al. 1992). The following studies have the most rigorous and relevant findings in relation to adolescent alcohol use and the role of parental monitoring.

The relationship between increased adolescent alcohol use and lower parental monitoring has been demonstrated consistently in several large longitudinal studies (Barnes and Farrell 1992; Barnes et al. 2000; Guo et al. 2001; Reifman et al. 1998; Thomas et al. 2000). Barnes and colleagues (2000) found high parental monitoring was associated with lower alcohol use across a 6-wave longitudinal study of randomly sampled adolescents, commencing with measures taken at 13 years of age. They also found higher monitoring reduced the upward trajectory of alcohol misuse across adolescence. Guo et al. (2001) followed 755 adolescents from age 10-21 years, and found high monitoring, as well as clearly defined rules at ten years of age, predicted lower alcohol abuse and dependence at 21 years. In this study higher monitoring was associated with lower rates of alcohol abuse (odds ratio of 0.78) using odd ratios⁴ adjusted for internalising and externalising behaviours at age ten years (Guo et al. 2001).

DiClemente et al. (2001) reported female adolescents, aged 14-18 years, with poor parental monitoring were 1.4 times more likely those who received closer monitoring to have a history of alcohol use. They also found lower parental monitoring increased the risk of alcohol use in the past 30 days by 1.9 times. In a cross-sectional analysis of the Australian Temperament Project dataset, Letcher and colleagues (Letcher, Toumbourou, Sanson, Prior, Smart and Oberklaid, in press) investigated the separate and combined influence of differing facets of temperament style and types of parenting behaviours in the prediction of adolescent problem behaviours.

With regard to multi-substance use, adolescents who were temperamentally low in persistence or high in negative reactivity were found to be at a greater risk if monitoring was low, indicating that low monitoring was particularly influential for those who were temperamentally at-risk. However, even when optimal parenting was evident (for example, high monitoring), prevalence of behaviour problems was generally higher among those at greatest temperamental “risk” or

3 The terms “deviant peers”, “deviant peer affiliations”, and “deviant peer associations” have been widely used in the research literature to refer to peers who engage in substance use or antisocial behaviour. These terms do not imply participation in more extreme types of deviant activities. While recognising that the terms are less than ideal, they will continue to be used here, as they are in such widespread use and no better alternatives could be found.

4 The odds ratio for a variable denotes the change in the odds of being in the outcome group (for example, alcohol use) for each change in the level of that variable (for example, parenting factor). An odds ratio of 1 represents no change in risk (odds are the same at any level of the variable). Odds ratios significantly greater than 1 indicate an increased risk at increased levels of the variable, while odds ratios smaller than 1 indicate a decreased risk at higher levels of the variable. Thus, with regard to parental monitoring, the odds ratios suggest that as monitoring increases, rates of alcohol use and abuse decrease.

vulnerability (such as high volatility, reactivity, intensity). However, for adolescents with an easier temperament style, optimal compared with adequate parenting seemed to have little impact and “good enough” parenting appeared to suffice. These findings suggest that it was particularly important for monitoring to be of high quality rather than merely adequate for more difficult adolescents, whereas the presence of high versus adequate monitoring was not so crucial for less difficult adolescents.

A four-year longitudinal study with a sample of 926 children of eight to ten years of age, used survival analysis to test the sustained impact of monitoring over time (Chilcoat and Anthony 1996). (Survival analysis investigates the time that elapses between the first point of measurement and the occurrence of a subsequent event, and allows an exploration of the factors that might influence the timing of the subsequent event). Estimates from this research indicated that children in the lowest quartile of monitoring began alcohol use at a younger age than children in the higher quartiles of monitoring. Children receiving the poorest monitoring were found to be two years ahead in terms of the commencement of alcohol use (Chilcoat and Anthony 1996). This study provided strong evidence that effective monitoring of pre-adolescents can delay the onset of alcohol initiation.

In a series of longitudinal studies, parental monitoring was shown to have a direct effect on problem behaviours (including alcohol use), but also to have an important indirect effect through deviant peers (Ary, Duncan, Biglan et al. 1999; Ary, Duncan, Duncan and Hops 1999). Duncan and colleagues (1998) used sophisticated modelling techniques (multivariate latent growth curve modelling) in a two-year longitudinal study to examine the relationship between monitoring, peer associations, and problem behaviours. They found that high levels of parent-child conflict and low levels of parental monitoring were associated with deviant peer relationships and a greater likelihood of adolescent substance use. In these studies the use of substances was found to co-vary, so that an increase in one substance over time also increased the likelihood of other substance use. Individuals who experienced increasing levels of conflict with parents over an 18-month period had faster acceleration of substance use. Additionally, increases in deviant peer associations over the two-year period were associated with faster increases in substance use. Other researchers have also found the interplay between monitoring and peer association is important (Baker et al. 1999; Dishion et al. 1999; Rai et al. 2003), and this research will be examined in detail later.

Parental awareness of adolescent alcohol use

While much of the research into parental monitoring has focused on parents' knowledge of their child/adolescent's whereabouts and activities, another important aspect of monitoring in relation to adolescent alcohol use is parental awareness of their adolescent's alcohol consumption. Findings regarding parental awareness of alcohol use are now reviewed.

Research has shown that adolescents tend to spend less time with their family than when they were children, and therefore there is a greater opportunity for them to consume alcohol without parental knowledge. From age of 10 to 18 years there is a dramatic drop in the time adolescents spend in family activities, with time typically decreasing from 35 per cent to 14 per cent across this age span (Larson, Richards, Moneta, Holmbeck, and Duckett 1996).

It appears that parents do not always know the level of alcohol consumed by their adolescent children; parents also consistently underestimate their children's level of alcohol use, and they tend to underestimate adolescents' smoking and other problem behaviours too. Data from the Australian Temperament Project on this issue are shown in Figure 2. These reveal that most parents (53.6 per cent) were very sure that their 17-18 year old children had not used alcohol to excess in the past month, there were 12.6 per cent of parents who were very sure their adolescent had drunk to excess, and 11.8 per cent who were somewhat sure they had.

Parental reports of how certain they were that their adolescent had consumed alcohol to excess in the past month were then compared with their adolescent children's own reports of their alcohol consumption. These comparisons, shown in Table 6, reveal a significant difference between parental reports and adolescent consumption patterns. The table shows that 84 per cent of 17-18 year old adolescents who were abstainers also had parents who reported that they



Table 6. Comparison of parental and adolescent reports of alcohol use within the past month

How certain are you that your teenager used alcohol to excess in past month?***	Pattern of alcohol use in past month reported by 17-18 year old adolescents (%)				
	No	Low	Moderate	High	Very high
Has - very sure	1.4	8.2	18.0	27.6	20.3
Has - somewhat sure	4.3	8.7	15.7	16.4	21.9
Unsure/don't know	0.0	5.0	5.5	5.2	12.5
Hasn't - somewhat sure	10.0	18.5	21.6	17.2	17.2
Hasn't - very sure	84.3	59.6	39.2	33.6	26.1

*** = $p < .001$
No use = no alcohol consumption in past month (N = 149, 13.1%). *Low use* = consumed alcohol on 1-4 days in past month (up to once a week) (N = 557, 48.8%). *Moderate use* = consumed alcohol on 5-8 days in past month (more than weekly, up to twice a week) (N = 256, 22.4%). *High use* = consumed alcohol on 9-14 days in past month (more than twice a week - that is, more than weekend use) (N = 116, 10.2%). *Very high use* = consumed alcohol on 15-30 days in past month (that is, every second day or more often) (N = 63, 5.5%)
 Source: Australian Temperament Project (2004).

were very sure their adolescents had not drunk to excess. Of note is the data from adolescents who reported they were consuming at very high levels (on 15 or more days in the past month). In total, almost half of their parents reported they were either “very sure” or “somewhat sure” that their adolescent had not consumed alcohol to excess in the past month (26.1 per cent and 17.2 per cent respectively), although it should be noted that the information sought was not identical and hence not expected to be entirely consistent.

A recent Canadian cross-sectional study compared the responses of a large sample of 854 parents and their adolescents, aged 12-18 years. It was found that of the adolescents who reported alcohol use, only 34 per cent of their parents were aware that their adolescent had consumed alcohol (Williams, McDermitt and Bertrand 2003). The difference in agreement was very powerful ($p < .00001$). Further investigation of the factors that might contribute to or detract from parental awareness of alcohol use showed that greater parental awareness occurred with increased adolescent age, increased communication, and increased parental alcohol use, perhaps indicating that parental tolerant attitudes towards alcohol enabled parents to gain knowledge of their adolescents’ use.

In a series of quantitative and qualitative Australian studies, it was found that parents tend to be more concerned about illicit drug use than they are about alcohol use (Taylor and Carroll 2001). Reporting on data from 404 telephone interviews with parents of teenagers, this study showed that only half the parents considered underage drinking to be a problem. Approximately half the parents reported that they found it difficult to talk with their adolescents about alcohol use, but most agreed that it is the parent’s responsibility to teach their children about sensible alcohol consumption (Taylor and Carroll 2001). It was suggested by these authors that there may be a reluctant acceptance among parents that underage drinking is becoming increasingly normalised, and that parents do not feel they have the power to change this.

Research suggests that parents who feel empowered are more likely to influence their adolescents. Beck et al. (1997) found that parents who accepted the potential for their adolescents to be involved in alcohol misuse and who felt confident about their ability to intervene, were more likely to believe that alcohol misuse was a serious issue, were less likely to report that their adolescent had come home intoxicated, and were also more likely to supervise adolescent parties.

Summary

There is a considerable body of research linking parental monitoring and adolescent alcohol use. Of all the parenting factors investigated, this aspect of parenting was most consistently associated with adolescent alcohol use across both longitudinal and cross-sectional studies. The findings show that adolescents who are poorly monitored begin alcohol consumption at an earlier age, they tend to drink more, and are more likely to develop heavier drinking patterns. A second effect is also seen in that poorly monitored adolescents are more likely to associate with “deviant” peers. Parental monitoring has been studied in relation to all aspects of adolescent alcohol use – initiation, differing levels of use, and risky use or misuse.

A more specific aspect of monitoring, parental awareness of their adolescents' alcohol use, was also reviewed. The findings reveal that parents are likely to be unaware of, or to underestimate, their adolescent's alcohol consumption and are more concerned about illicit drug use than alcohol use. Australian parents may feel pressured to accept alcohol use by adolescents as "normal". For many parents, knowing the "right age" to permit their adolescents to consume alcohol, or indeed if they should permit alcohol consumption at all, was a critical question that they felt ill equipped to answer.

The studies investigating this issue focused on adolescents' current patterns of use, including levels of use. No research was found concerning the age of initiation of use, or risky use or misuse. Parents who feel empowered are more likely to share decisions about adolescent alcohol consumption and are also more likely to intervene in order to reduce consumption.

Parental behaviour management

Behaviour management as depicted in Figure 1 encompasses parents' active efforts to shape the behaviour of their adolescent. This includes the use of incentives, positive reinforcement, setting limits for appropriate behaviour, providing consequences for misbehaviour, and negotiating boundaries and rules for appropriate behaviour (Dishion and McMahon 1998). Less effective behaviour management methods include harsh and punitive discipline, or conversely, lax, inconsistent and over-permissive approaches.

Parents' positive behaviour management practices

Somewhat surprisingly, the relationship between parents' positive behaviour management practices and adolescent alcohol use has been relatively understudied to date. Furthermore, it has been difficult to disentangle the measurement of behavioural management from that of parental monitoring and parental norms for alcohol use. The relationship between behaviour management and adolescent alcohol use is likely to be complex and change over the course of adolescence. However, the large volume of more general research on parenting attests to the importance of parents continuing to reinforce behaviours that are appropriate and providing consequences to deter inappropriate behaviours.

Nevertheless, the program of research from the Seattle Social Development Project, using a sample of 808 adolescents followed from childhood to adulthood (Guo et al. 2001; Kosterman et al. 2000; Oxford et al. 2001), has consistently demonstrated the importance of a range of positive parental practices. Thus, family standards and rules, parental monitoring, and adolescent family attachment were all found to be important in delaying alcohol initiation in early adolescence, even after the influence of deviant peers was taken into account. Furthermore, parental rules, rewards for good behaviour, a strong values system, and well developed negotiation skills when adolescents were aged 10-16 years, predicted lower alcohol abuse and dependence at the age of 21 years.

Harsh parenting/conflict

Research indicates that harsh parenting or discipline and high levels of conflict are connected to adolescent alcohol use, but that the links are often indirect and exerted through their impact on other parenting behaviours such as parental monitoring (Ary et al. 1999a; Ary et al. 1999b; Brody and Ge 2001). Two longitudinal studies by Ary and colleagues (1999a and 1999b), for example, showed that families with high levels of conflict tended to have lower levels of parent-child involvement, leading to lower levels of parental monitoring one year later. At this later time point, poor parental monitoring was a powerful predictor of adolescents' engagement in substance use. Using a 3-wave longitudinal study, Brody and Ge (2001) showed that harsh-conflicted parenting was relatively stable over time, and that youth self-regulation (an aspect of temperament) mediated the pathways between this type of parenting at wave 2 and adolescent alcohol use at wave 3. However, one study (Duncan, Duncan, Biglan and Ary 1998) has revealed direct and indirect connections between parent-child conflict (along with poor parental monitoring) and levels of substance use among 664 adolescents aged 14-17 years, as well as an escalation in the trajectory of substance use over time.

Parental permissiveness towards adolescent alcohol use

International research has found that parental permissiveness towards adolescent alcohol use is related to increased use. The term "parental permissiveness" is used to refer to parents who permit adolescents to drink when they are under the legal age and does not imply a more general lack of discipline across several parenting areas.

Wood et al. (2004) found that where parents were more permissive towards alcohol use (measured as "no permission for adolescents to drink alcohol at home" through to "no limits on adolescent alcohol use at home"), their adolescents were more likely to engage in heavy binge drinking. Parental permissiveness also appeared to influence peer associations, with a significant relationship between peer influence and alcohol use demonstrated when parents were permissive.

Similarly, in their Queensland study of 320 rural adolescents with an average age of 15.8 years, Williams and Hine (2002) measured the role of parental attitudes towards their adolescent's alcohol use in mediating the impact of more global parental permissiveness in the prediction of adolescent alcohol misuse. They found that parental permissiveness and family alcohol use were indirectly related to adolescent misuse, as they were mediated by parental and significant others' level of approval of the adolescent's alcohol use. Thus parental attitudes concerning alcohol use appeared in this research to have a more influential role than more general parental permissiveness.

Parental authority

Adolescents who rebel against parental authority (that is, when parental behaviour management is ineffective or fails) are very likely to use alcohol. In a cross-sectional study of 959 adolescents which measured adolescents' intention to use alcohol, Jackson (2002) found adolescents who denied parental authority were four times more likely to be current drinkers.

This research also showed that adolescents who received authoritarian parenting (high levels of direction, control, and punishment) were six times more likely to deny parental authority than adolescents who were parented in an authoritative style (high warmth and support together with appropriate limit-setting and explanation). Similarly, adolescents who experienced distant parenting (low engagement, low connectedness) were 2.5 times more likely than those who received authoritative parenting to deny parental authority. In this study, authoritarian or distant parenting was associated with greater adolescent rebelliousness, which in turn was related to alcohol use. Somewhat surprisingly, no significant relationship was found between a permissive parental style (high warmth but few demands or restrictions) and adolescent alcohol use.

Somewhat overlapping with the literature on monitoring, the importance of parental knowledge about adolescents' use of free time has been shown in a recent study which measured the use of negotiated unsupervised free time with 692 adolescents (average age of 15.7 years) (Borawski et al. 2003). Negotiated unsupervised time was where adolescents reported being able to stay out past curfew provided they call home first, or being allowed to have a friend at home when parents are not there, providing parents were asked beforehand. This study found that when male adolescents were able to negotiate more unsupervised time they were 1.85 times more likely to drink alcohol, while female adolescents were 1.58 times more likely to drink. While some aspects of parental behaviour measured in this study appear to indicate monitoring attempts (for example, the requirement for adolescents to inform parents of adolescents' activities), another aspect, the agreement to permit unsupervised free time, could indicate permissiveness or low behavioural management and emerged as particularly influential.

Parenting style

Parenting style is a term commonly used to draw together clusters of parenting behaviours that are thought to co-occur. These encompass aspects of parental behaviour management practices, and discussion of this type of parenting has therefore been placed in this section.

Four family-parenting styles are thought to relate to differing child outcomes (Mandara 2003). *Cohesive-Authoritative* families exhibit cohesion and low conflict in family interactions, and are not over controlling. *Conflictive-Authoritarian* families have low family cohesion, use authoritarian, harsh discipline, and are controlling. *Defensive-Neglectful* type families display chaotic family functioning, and have very little control, warmth, or cohesion. Finally, the *Permissive* type is highly responsive but low in control.

Cohesive-authoritative parenting is purported to be the optimal approach, and this style has been correlated with positive adolescent psychological adjustment across several studies (Baumrind 1991; Mandara 2003; Steinberg, Mounts, Lamborn and Dornbusch 1991). As reported earlier, Jackson (2002) showed that adolescents who were parented in an authoritative style were less likely to deny parental authority than adolescents who were exposed to authoritarian or distant parenting. Denial of parental authority was in turn associated with higher alcohol use.

The Australian Temperament Project has shown that some aspects of an authoritative parenting style interacted with adolescent temperament style to

predict substance use (Letcher et al., in press). This recent cross-sectional analysis of the Australian Temperament Project data at an adolescent age of 13-14 years, found that parental warmth was not significantly related to substance use, and only parental monitoring was a direct contributor. Hence, only one aspect of an “authoritative” parenting style appeared influential. Earlier United States research by Baumrind (1991) found that global parenting style was significantly associated with lower use. Thus, when parents were highly demanding as well as highly responsive there was a reduced likelihood that adolescents would exhibit problem substance use behaviours, compared to parents who were more likely to be lax, unsupportive, disorganised or under stress.

Parental supply of alcohol

Adolescents’ levels of alcohol use are related to their source of access, and the location in which alcohol is consumed. As well as introducing adolescents to alcohol in the relatively safe home environment, parents may provide adolescents with alcohol to take to social events as a means of controlling the amount consumed. Thus, parents may supply alcohol as a means to guide responsible alcohol use.

The ASSAD data shows that both younger and older adolescents drink significantly less alcohol when they obtain it from their parents than when they obtain it from friends or someone else. As shown in Table 7, when 12-15 year old adolescents obtained alcohol from home they consumed 3.6 drinks per week, compared with 4.9 drinks if alcohol was obtained from a friend. When 12-15 year old adolescents obtained alcohol from someone else they consumed a relatively high average number of 7.6 drinks per week, or 110 per cent more. Similar effects are seen for the 16-17 year old group, although to a lesser degree. At this age there was little difference in consumption according to whether alcohol was obtained from home or from friends, but consumption levels rose by 56 per cent when alcohol was obtained from someone else.

In terms of the location in which alcohol was consumed, the ASSAD data showed that students drank less when they consumed alcohol at home compared with at their friends’ homes or at parties. (White and Hayman in press). Table 7 shows that when 12-15 year old adolescents consumed alcohol at home, the average number of drinks per week was 3.4, compared with 6.4 drinks at a party or 6.3 at a friend’s home, representing an approximately 90 per cent increase.

	12-15 years	16-17 years	Overall 12-17 years
<i>Where obtained*</i>			
Parent's home	3.6	6.0	4.4
Friend's home	4.9	6.8	5.6
Someone else	7.6	9.4	8.5
<i>Where consumed*</i>			
Home	3.4	6.3	4.3
Party	6.4	8.9	7.5
Friend's place	6.3	9.1	7.5

* = p <.01
Source: White and Hayman (in press).

For the 16-17 year olds, a similar increase was evident, with adolescents consuming approximately 40 per cent more when they drank at a friend's home or at a party than when they drank in their own home. While these findings examine levels of use, it remains unknown whether the nature of drinking differs across the various locations. For example, drinking at home may be spread across a number of days and occur at low levels per day, whereas drinking at parties or friends' homes may occur on a smaller number of days and involve binge drinking.

In contrast, another study has shown that children who are allowed to drink alcohol at home when young may consume more alcohol later on. Jackson et al. (1999) used a predictive study design to measure connections between Grade 5 children's perceptions of their parent's socialisation practices concerning alcohol and children's subsequent alcohol use in Grade 7. The odds of the children consuming alcohol in Grade 7 were 2.1 times greater among those who perceived that they were allowed to have a drink of alcohol at home at the earlier age.

This finding demonstrated that parental socialisation that included disapproval of early age drinking was associated with a decreased likelihood that children would have commenced drinking two years later. However, with only one study to support this finding, further examination is required. Nevertheless, it appears that connections between young people's alcohol use at home and their more general propensity to use alcohol may be complex, and influenced by the age of the child, and parents' attitudes towards young people's alcohol use, among other factors.

Summary

Parental behaviour management encompasses positive practices such as the use of incentives, positive reinforcement, setting limits for appropriate behaviour, providing consequences for misbehaviour, and negotiating boundaries and rules for appropriate behaviour, as well as less effective strategies such as harsh and punitive discipline, high conflict, lax, inconsistent or over-permissive approaches.

While there has been limited investigation of positive parental behaviour management in relation to adolescent alcohol use, the research from the Seattle Social Development Project demonstrates that family standards and rules, rewards for good behaviour, and well developed refusal skills were associated with lower initiation of alcohol use in early adolescence, and lower rates of alcohol abuse and dependence in early adulthood.

Regarding less effective parent management approaches, harsh discipline and high conflict were associated with higher rates of alcohol and substance use, although the majority of research indicated that the effects of these practices were indirect, and exerted through their impact on parental monitoring. Further, the research showed that when parents were openly permissive toward adolescent alcohol use, adolescents consumed more alcohol.

Additionally, adolescents who rebelled against parental authority (that is, when parental management of adolescent behaviour was ineffective or failed) were found to more often consume alcohol. Adolescents who gained unsupervised free time (even with parental knowledge and permission), also tended to more frequently use alcohol.

Most research on the above parenting factors has focused on initiation, levels of use and high risk use.

Although research into broad parenting styles is richly descriptive and useful for considering the overall parenting environment, it can be difficult to determine which aspects of particular styles (authoritative, authoritarian, neglectful and permissive) are important for reducing adolescent alcohol use. However, it seemed that an authoritative style of parenting was associated with lower adolescent alcohol use, while authoritarian and distant parenting styles were associated with higher levels of use. It may be more advantageous to break parenting “style” down into those components that might be amenable to change when applying these findings to intervention programs designed to change parenting behaviours.

Australian research has shown that on occasions when parents are aware of their adolescents’ alcohol use and they actively engage with their adolescents in the purchase or provision of alcohol, then their adolescents consume less. Furthermore, adolescents tend to consume less alcohol when they drink at home, by comparison with at a friend’s home or other social occasion. However, it is as yet unknown whether adolescents’ drinking intentions and practices differ according to whether they are at home, or another venue. That is, do adolescent simply drink less at home because they have different drinking intentions? It is possible that consuming alcohol at home is more controlled, but this more moderate consumption may not generalise to consumption at parties or with friends. Additionally, the extent to adolescents’ alcohol consumption at home takes place under parental supervision is not known.

One study found that when children were not permitted to drink alcohol at home this appeared to have a subsequent protective effect, reducing the likelihood that they would have commenced alcohol use two years later in early adolescence. Thus, the association between adolescents’ alcohol consumption in the home environment and their more general propensity to consume alcohol may be complex, and likely to be affected by factors such as the child’s age, and parents’ attitudes towards adolescent alcohol use. The research concerning parental supply of alcohol has focused predominantly on levels of use, although one study investigated the initiation of alcohol use in early adolescence.

Relationship quality

Parent–adolescent relationship quality underpins all the aspects of parenting discussed above. Relationship quality is the product of an ongoing interplay between parents and adolescents, and affects, and is also affected by, these other aspects of parenting. For example, without a warm relationship, adolescents are more likely to resist monitoring, while authoritative parenting may contribute to and enhance strong parent–adolescent relationships. Thus, the findings concerning parent–adolescent relationship quality reviewed here will also reflect the contribution of other aspects of parenting, and vice versa. Whether intervention attempts should focus directly on the parent–adolescent relationship, other aspects of parenting, or both, is an important consideration, which is addressed in Section 9.

Parent–adolescent relationship quality forms the core of the Dishion and McMahon (1998) model, attesting to its fundamental importance. While it is often assumed that adolescence is a time of storm and stress, characterised by conflict with parents, research has shown that this level of disruption is not typical. Transformation, rather than storm and stress, is a more apt way of considering how parent and adolescent relationships might change during adolescence. Research has shown that while established patterns of family relations undergo change (Robin and Foster 1989), when adolescents report feeling close to their parents they consistently score higher on measures of psychological development, behavioural competency, self-reliance, and report lower rates of psychological and social problems (Armsden and Greenberg 1987; Steinberg 1990).

Australian Temperament Project findings show that both parents and adolescents report positive parent–adolescent relationships (Sanson, Letcher and Smart 2003). For example, 64 per cent of parents reported that they got on “very well” with their 13-14 year old adolescent and a further 26 per cent got on “well”, with similar rates of 53 per cent and 35 per cent reported by adolescents, respectively. Furthermore, at 16-17 years, approximately two-thirds of adolescents and parents reported that they “seldom” or “never” had disagreements (Prior et al. 2000). Steinberg (1990) found that only 5-10 per cent of families experience dramatic deterioration in the quality of relationships during adolescence, and that marked deteriorations in parent–adolescent relationships are highly correlated with prior family problems. These results therefore suggest that if relationships in the family are strong, parents should continue to have an influence on the alcohol consumption patterns of their adolescents.

Adolescent perceptions of parental care have been shown to influence their propensity to drink alcohol. In an Australian study with 493 Australian secondary students, with an average age of 16.2 years, adolescents who misused alcohol were significantly more likely to report lower parental care (Mak and Kinsella 1996). Because this was a cross-sectional study, it is not possible to tease apart the direction of effects – that is, whether perceived lower care preceded alcohol misuse or was a result of it.

International research has shown that good quality parent–adolescent relationships are associated with lower drinking. Bray, Adams, Getz and Baer (2001) used statistical modelling (Hierarchical Linear Modelling) in a

longitudinal study with 7540 adolescents over three years, to examine patterns of adolescent substance use alongside parent–adolescent relationships. They found that adolescents with increasing across-time levels of alcohol use more frequently experienced relationship difficulties (detachment, emotional separation, and emotional difficulties), and also reported more family conflict and higher stress. Conversely, adolescents characterised by decreasing across-time alcohol consumption had more positive relationships (greater emotional autonomy, less family stress, and less conflict). In this latter situation, parental monitoring became less influential.

Parent–adolescent relationship quality is also associated with adolescent temperament, and both were found to be predictive of adolescent alcohol use. Neighbours and colleagues (2000) tested the importance of parent–adolescent relationship quality, a difficult temperament style, and alcohol use disorders in a cross-sectional study involving 438 adolescents aged 12–18 years (average age 15.8 years). A difficult temperament style was found to predict problematic alcohol use for both males and females, and was also negatively associated with relationship quality.

However, there were specific associations between parent–adolescent relationship quality, gender, and alcohol misuse. For males, relationship quality mediated the effect of temperament on alcohol misuse (a good parent–adolescent relationship reduced the contribution of temperament to alcohol misuse); but for females, relationship quality and temperament separately predicted alcohol use disorder, and high quality relationships did not reduce the effect of temperament on alcohol use. The authors hypothesised that parents may have struggled to engage male adolescents who possessed a difficult temperament style in family activities and to maintain open communication, which may then have limited their capacity to influence their sons' alcohol use and association with deviant peers. However, high quality relationships with parents were not protective against high risk alcohol use for females who possessed a difficult temperament style, and the authors hypothesised that other intra-individual characteristics (for example, maladaptive coping, low self-esteem) may have been involved.

It was shown earlier that good parental monitoring is a key factor related to adolescent alcohol use. A recent Australian study involving parents and adolescents revealed that better quality parent–adolescent relationships were predictive of and appeared to underpin higher parental monitoring (Hayes 2004). This study suggested that good parent–adolescent relationships are a necessary prerequisite for monitoring to occur. The longitudinal work of Barnes and colleagues (2000) has also shown that broad parental support may directly contribute to parental monitoring, which in turn has a direct influence on adolescent alcohol use. Barnes and colleagues contend that children who are reared in supportive environments are likely to have better relationships, and they will therefore receive better monitoring and have lower rates of alcohol misuse.

Several longitudinal studies (Ary et al. 1999b; Barnes et al. 2000; Brody and Ge 2001) also suggest that parent–adolescent relationship quality has an indirect influence on adolescent alcohol use, through its impact on parental monitoring and deviant peer associations.

Summary

The quality of parent–adolescent relationships is a key factor that influences all interactions with between parents and adolescents. When parents are able to maintain a quality relationship with their adolescents, they are likely to communicate about alcohol use and experience less conflict surrounding adolescent behaviours. Further, key parenting behaviours such as parental monitoring and behaviour management skills are dependent on the quality of parent–adolescent relationships.

The reviewed research suggests that high quality parent–adolescent relationships are associated with lower levels of adolescent alcohol use, as well as lower rates of problematic use and misuse. Additionally, adolescents exhibiting escalating patterns of alcohol use report greater parent–adolescent relationship difficulties, while those who displayed decreasing patterns of alcohol consumption report more positive relationships. While these studies demonstrate links between relationship quality and levels of alcohol use and high risk patterns of use, there has been little research into connections between relationship quality and the initiation of alcohol use.

Parental norms

The final area of parenting highlighted by the Dishion and McMahon (1998) model is parenting norms, values and goals. These refer to parents' belief systems, attitudes and conceptions concerning adolescent behaviour. Patterns of adolescent alcohol use have been found to vary across Australia and the United States (see Section 3) and, as discussed later in Section 6, there is evidence of stronger anti-alcohol values and attitudes in the United States, which may contribute to differing alcohol use patterns across the two countries. These trends emphasise the potential importance of parental norms and values.

Parental attitudes towards adolescent alcohol use

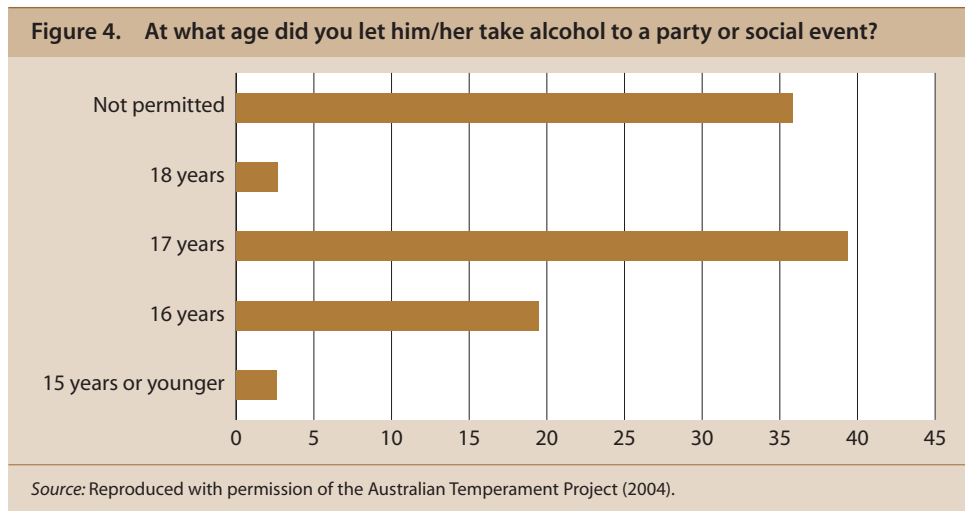
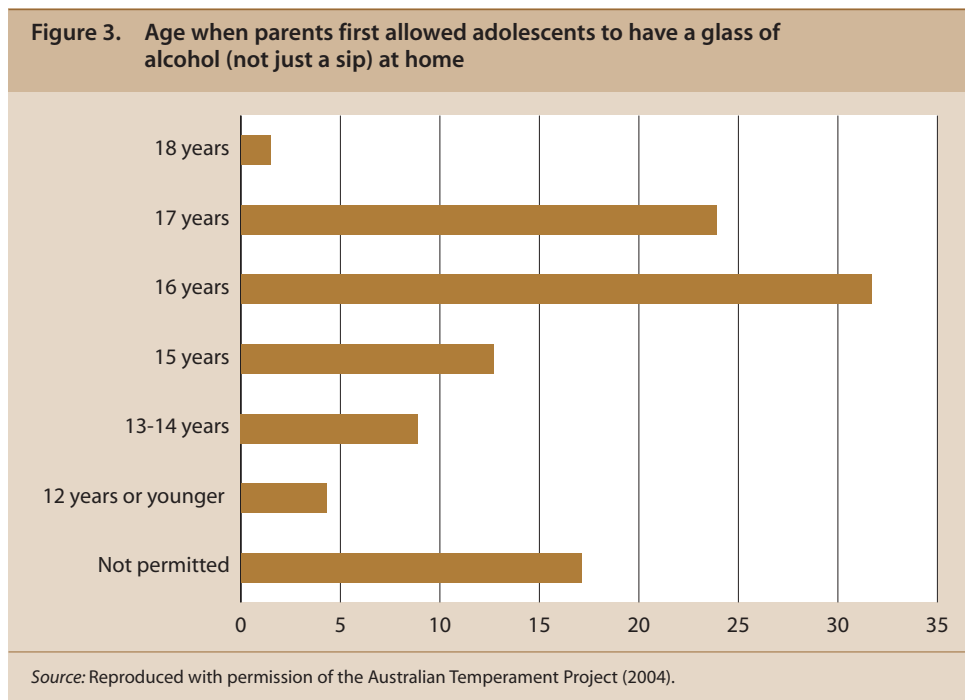
Data from the Australian Temperament Project show that the great majority of parents (83.5 per cent) of 17-18 year old adolescents reported that their adolescents were allowed to drink alcohol at home. The age that parents reported they first allowed their adolescents to drink alcohol at home is shown in Figure 3. Parents most frequently reported that adolescents had first been permitted to have a glass of alcohol (not just a sip) at home at 16 or 17 years.

The age that parents first allowed their adolescent to take alcohol to parties is shown in Figure 4. The most common age is also 16-17 years; however, a large number of parents (35.8 per cent) continued not to permit their adolescents to take alcohol to parties at the time the survey was completed (child age of 17-18 years), and very few (2.6 per cent) reported that they had allowed their adolescent to take alcohol to social events at 15 years or younger.

Other research shows that parents and adolescents differ on their perceptions of the appropriate age to drink alcohol. In a recent Australian study (Wilks and

McPherson 2002) with 290 parents and 196 adolescents, similarly to the Australian Temperament Project, it was reported that parents perceive male and female adolescents should be able to drink alcohol when they are around 18 years of age. Not surprisingly, adolescents reported a lower age, perceiving that they should be allowed to drink alcohol approximately 18 months earlier at the age of 16.5 years.

This study was a replication of a previous administration of this survey completed in 1986, with 771 adolescents and 1482 parents (Hudson, Bell, Hudson, and Houndoulesi 1986). Comparisons show there has been little change over this 12-year period in parental reports of the appropriate age in which adolescents should drink alcohol. However, the perceptions of adolescents appear to have changed. In the earlier 1986 data, adolescents perceived that males should be allowed to drink at 16.8 years, and females at 17.1 years. Although this change in age was not statistically significant, there is some indication in this data that adolescents may



be inclined to perceive that they should be allowed to drink alcohol at an earlier age than they had previously.

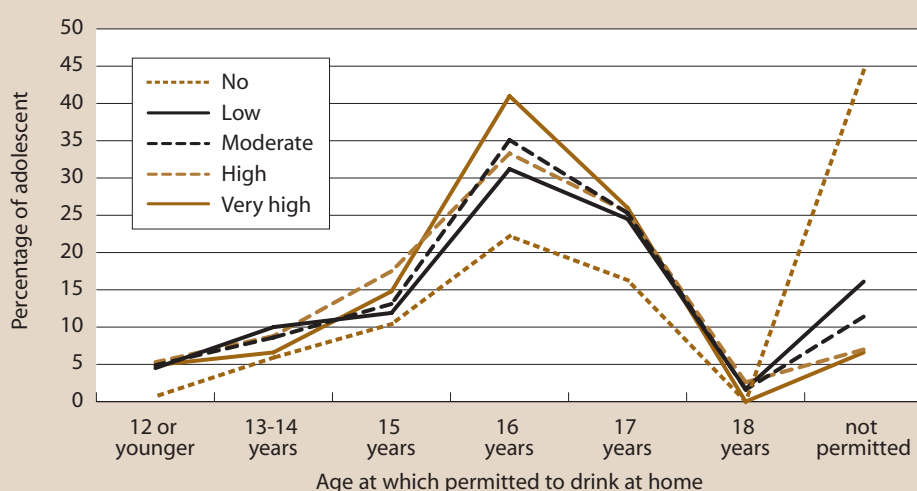
Parental approval or disapproval of adolescent alcohol use

Parental disapproval of alcohol use appears to result in lowered drinking patterns. In an Australian study with 650 students from Years 7, 9, and 11 (Smith and Rosenthal 1995), parental disapproval was found to have a significant negative effect on adolescent drinking behaviour. There were also age effects, with parents inclined to be more approving of adolescent alcohol use with the advancing age of the students (Smith and Rosenthal 1995).

The Australian Temperament Project asked parents to report their tolerance of their adolescents' alcohol use, and compared these to adolescents' reports of alcohol consumption. This data showed that adolescents who drank alcohol were significantly more likely to have parents who allowed them to drink at home. The great majority (93.5 per cent) of the adolescents who reported that they drank alcohol at very high levels were allowed to drink at home. Similarly, the great majority of low (84.5 per cent), moderate (89.0 per cent), and high drinkers (93.2 per cent) were also allowed to drink at home. Of note is the difference in parental tolerance amongst the abstainers, with only 58.6 per cent of parents of these adolescents reporting that their adolescent was allowed to drink alcohol at home.

Australian Temperament Project data also revealed that there was a significant relationship between the age at which parents first allowed their adolescents to drink alcohol at home and the amount of alcohol the adolescents consumed at 17-18 years of age. The pattern of alcohol use reported by adolescents was broken down into five categories ranging from "no use" to "very high use". Figure 5 shows that, compared with adolescents from the other four groups,

Figure 5. The age at which parents allowed adolescent to drink at home by patterns of adolescent alcohol use at 17-18 years of age



No use = no alcohol consumption in past month (N = 149, 13.1%). *Low use* = consumed alcohol on 1-4 days in past month (up to once a week) (N = 557, 48.8%). *Moderate use* = consumed alcohol on 5-8 days in past month (more than weekly, up to twice a week) (N = 256, 22.4%). *High use* = consumed alcohol on 9-14 days in past month (more than twice a week - that is, more than weekend use) (N = 116, 10.2%). *Very high use* = consumed alcohol on 15-30 days in past month (that is, every second day or more often) (N = 63, 5.5%).
Source: Reproduced with permission of the Australian Temperament Project (2004).

fewer of the group who were abstainers at 17-18 years had been permitted to drink alcohol at home over the period of 12-18 years, and many (44 per cent) were still not permitted to drink at home in late adolescence (17-18 years). Differences between the remaining groups were less marked, although a trend for a higher proportion of those who later drank at very high levels to be permitted to drink at home at 16 years was noticeable.

International research confirms the influence that parental norms have on adolescent alcohol use. Wood et al. (2004) compared the importance of parental and peer norms among a sample of 556 adolescents (mean age of 18.1 years) using a cross-sectional methodology. They found that when parents reported greater disapproval of heavy drinking among adolescents (and also higher parental monitoring), their adolescents were less likely to engage in heavy binge drinking. In a test of the Social Development model, Sale et al. (2003) found that parental attitudes toward substance use had a direct effect on adolescent substance use (cigarette, alcohol and marijuana), and were also related to the attitudes of their teenager's peers. A one-year study conducted using parent and adolescent telephone interviews found that parental communication about alcohol was not related to the initiation of drinking (Ennett et al. 2001) but instead parental approval was related to the escalation of drinking, with parents who showed less disapproval having adolescents who were 1.9 times more likely to also have escalating drinking behaviours.

It appears that for some adolescents, the opinions of their parents toward alcohol use are important mediators of their decision to use alcohol. Beck et al. (2003) found that parental monitoring had the strongest influence on adolescent drinking behaviours, but that the likelihood that adolescents had obtained alcohol without parent knowledge or had consumed alcohol in the past three months decreased when adolescents reported that their father's opinion was important to them (odds ratio .55, and odds ratio .50 respectively).

It is important to also consider that parental norms for alcohol use, like all previously mentioned parenting factors, are not static and are likely to change with adolescent development. Smith and Rosenthal (1995) found a significant inverse relationship between adolescents' age and their perceptions of parental disapproval of drinking. The studies investigating parental norms cited above did not investigate age effects. Recalling the assumptions adopted for this review, that parent-adolescent influence is bi-directional, this would suggest that over time the developmental changes and increasing independence of adolescents would exert some change on parents' attitudes toward alcohol use, although to date the relationship of parental norms and age has not been thoroughly investigated.

Parental concern about adolescent alcohol use

The majority of parents participating in the Australian Temperament Project did not worry about their adolescents' alcohol consumption. Table 8 compares parents' reports of how much they worry about their adolescent's drinking with adolescent reports of alcohol use at age 17-18 years. Overall there was a significant effect found. The majority (88 per cent) of adolescents who reported that they did not drink alcohol at all also had parents who did not worry about alcohol use. Of the adolescents who reported drinking at very high levels, 42 per cent of their parents reported that they did not worry about their adolescent drinking, and 53 per cent reported that they worried "a little". Very few parents

Table 8. Comparison of parental reports of whether they worried about their adolescent's alcohol use and adolescent consumption levels at 17-18 years

Do you worry about his/her drinking?***	Pattern of alcohol use in past month reported by 17-18 year old adolescents (%)				
	No	Low	Moderate	High	Very high
No	87.8	64.7	53.8	47.8	41.9
A little	12.1	32.6	42.5	44.2	53.2
A lot	0.0	2.7	3.6	8.0	4.8

*** = $p < .001$

No use = no alcohol consumption in past month (N = 149, 13.1%). *Low use* = consumed alcohol on 1-4 days in past month (up to once a week) (N = 557, 48.8%). *Moderate use* = consumed alcohol on 5-8 days in past month (more than weekly, up to twice a week) (N = 256, 22.4%). *High use* = consumed alcohol on 9-14 days in past month (more than twice a week – that is, more than weekend use) (N = 116, 10.2%). *Very high use* = consumed alcohol on 15-30 days in past month (that is, every second day or more often) (N = 63, 5.5%).

Source: Australian Temperament Project (2004).

reported that they worried “a lot”, irrespective of the alcohol use of their adolescents. These trends are consistent with the previously discussed Australian Temperament Project findings that parents tended to be unaware of the extent of risky alcohol consumption undertaken by their adolescents.

SUMMARY

Summary

Overall, the findings from Australian and international research suggest that parental norms, attitudes, and beliefs with regard to adolescent alcohol use have an important influence on adolescent alcohol consumption. When parents show disapproval, their adolescents are less likely to drink, and conversely, when parents are tolerant or permissive, their adolescents are likely to drink more. Parents tend not to worry very much about their adolescents' use of alcohol, even when adolescents reported high rates of use. This finding was consistent with earlier reviewed research which suggested that parents tended to be unaware of the extent of alcohol consumption undertaken by their adolescent.

Parents and adolescents differ somewhat in their perceptions of the appropriate age at which adolescents should be permitted to consume alcohol, with several studies suggesting that parents believed 17 years was an appropriate age for adolescents to begin consuming alcohol at home. Adolescents tended to believe this should occur earlier at approximately 16 years. These perceptions are somewhat inconsistent with actual trends, which suggest that alcohol initiation commonly begins at an earlier age.

The research concerning the impact of parental norms, attitudes and values has generally focused on their relevance for levels and rates of use, patterns of escalation, and associations with high risk use. Although there is research into parental and adolescent perceptions of the appropriate age at which adolescents should commence alcohol use, studies have not yet tested whether these attitudes align with the actual onset of alcohol use, and these beliefs are clearly inconsistent with population-level trends for most young people to have commenced using alcohol by 14-15 years of age (see Section 3).

Summary of parenting influences on adolescent alcohol use

Up to this point, this review has demonstrated that parenting behaviours can have a direct influence on adolescent alcohol use. The majority of research has shown that parental monitoring is the most proximal parenting behaviour associated with adolescent alcohol use. It has also been demonstrated that several other parenting behaviours are associated with alcohol use, with associations seen when parents express disapproval, set limits, or actively manage their adolescent's alcohol consumption.

This review has also shown that parental norms for adolescent alcohol use can have a significant impact on consumption; however, the research has not been clear on whether parental norms for drinking exacerbate risky drinking behaviours or reduce them. Finally, it was shown that the relationship of parents and adolescents can have a global impact, and is likely not only to influence adolescent alcohol use, but also influence parental behaviour management and monitoring.