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## Parental divorce and adolescent excessive drinking

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# Adolescents' drinking and drunkenness more likely in one-parent families and if communication with the mother is poor

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*Pending Revision*

## Abstract

Alcohol use, is a relatively common behaviour, particularly among adolescents, and has become a major public health concern. Family environment is one of the most significant factors that influence risky alcohol consumption in adolescents. This study explores the associations between family composition, the quality of adolescents' communication with parents and adolescents' recent frequent alcohol drinking and lifetime drunkenness. Data were obtained from the Slovak part of the 2005/06 Health Behaviour in School-aged Children (HBSC) study. The sample consisted of 3882 students (46.3% males; mean age 13.3;  $\pm 1.6$ ). Data on drinking alcohol in the past week, lifetime drunkenness, communication and family composition were collected via anonymous questionnaires, stratified for ages 11, 13 and 15 years and following the methodology of the HBSC study. The results showed that living in an incomplete family increased the risk of frequent drinking and drunkenness among adolescents as well as a low quality of communication between mothers and their children. Risks were higher for drunkenness than for frequent alcohol use and strongly increased by age, with the communication with parents worsening at increasing age. Our findings show the importance of the quality of communication between parents and adolescents in preventing the hazardous alcohol use among adolescents. Preventive interventions to reduce adolescents' use of alcohol should therefore also target the quality of communication in the family.

## Introduction

Alcohol use, specifically drunkenness, is a relatively common behaviour, particularly among adolescents, and has become a major public health concern. According to the most recent Health Behaviour in School-aged Children (HBSC) study Slovak children start drinking alcohol at a relatively early age: 9% of girls and 14 % of boys at age 11 years reported drinking alcohol at least once a week, and this proportion increases with age (Currie et al., 2008). The age of the first experience with drunkenness is also relatively low – at 15-years old 31% girls and 39% boys have already had the experience of being drunk. Most of these first experiences with alcohol take place at home; as it is a common part of any party to offer small alcoholic toasts to the children and adolescents.

Among the wide range of factors that influence risky alcohol consumption, the family environment is one of the most significant (Weinberg et al., 1998; Kuntsche & Kuendig, 2006). It is the developmental context in which the most important basic values, attitudes and patterns of behaviour are formed. One of the crucial parts of family functioning is adequate communication between parents and their children, which has been shown to be an important protective factor (Currie et al., 2008). Good communication with parents is an indicator of social support from parents and of family connectedness (Laursen, 1995). Poor parent-child communication was found to be associated with a higher prevalence of youth substance use (Griffin et al., 2000; Currie et al., 2008). Adolescence is a unique period regarding communication with parents – children speak less often with their parents about themselves and communication becomes generally more difficult (Barnes & Olson, 1985). Typically, for both adolescent boys and girls communication with the mother is better than with the father (Noller & Callan, 1988).

Another important aspect of family life is family composition, which is defined in HBSC studies as a configuration of people living in one household. Basically, family composition consists of family members, their common relationships and their presence or absence. During the last decades, the family has undergone very important changes – inter alia, the number of one parent families and of families with step parents has increased. The former in particular represents a great risk regarding a child's development, as children and adolescents living in one-parent families are more often involved in risk behaviour, including alcohol use (Hoffmann 2006; Tomcikova et al., 2009). This might be due to reduced parental control (Marsden et al., 2005), a reduced socioeconomic position, both of which often occur in one-parent families (Rodgers & Rose, 2002), or due to different parenting (e.g. parental warmth) (Broman et al., 2008).

The aim of this study is to explore the association between family composition and the quality of the adolescent's communication

with parents with adolescent frequent alcohol drinking and lifetime drunkenness, and differences regarding this by age and gender.

## Methods

### *Participants and procedure*

Data were obtained from the Slovak part of the 2005/06 Health Behavior in School-aged Children (HBSC) study, a multinational study that was conducted in collaboration with the World Health Organization.<sup>1</sup> The total Slovak sample consisted of 3882 students (46.3% males) aged 10 to 16 (mean age 13.3;  $\pm 1.6$ ). Respondents were divided into three age categories – 11, 13, and 15 years old. The students completed the questionnaire on a voluntary and anonymous basis without the presence of the teacher in the classroom, according to the methodology of the HBSC-study.

### *Measures*

*Frequent alcohol drinking:* Respondents were asked how often they had drunk five different types of alcoholic drinks (beer, wine, spirits, alcopops (low-alcohol flavoured drinks) and other) in the past month, with possible responses *never / rarely / every month / every week / every day*. A dichotomized variable was constructed for the analysis – *never, rarely or monthly/ every day or every week (=frequent alcohol drinking)*.

*Lifetime drunkenness:* Respondents were asked whether they had ever, during their lifetime, had so much alcohol that they were “really drunk”. Possible responses ranged from *never* to *yes, more than 10 times*. A dichotomized variable was constructed for the analysis - *never / at least once*.

*Communication with parents:* Respondents were asked how easy it is for them to talk to their mother and father, respectively, about “things that really bother you,” with possible responses: *very easy / easy / difficult / very difficult*. A dichotomized variable was constructed for the analysis - *easy / difficult*.

*Family composition:* To assess family composition the following indicator was used: “*All families are different and we would like to know yours. Here is a list of some of the people that can make up a family. Please tick one box for each line to show if you live with the person or, if you don't live with them, how often you see them.*” In this particular study only the information on parents was used. Respondents were divided into two groups – a complete family (living with two parents or step parents) and a single-parent family. \_

### *Statistical analysis*

All data were analyzed using SPSS, version 16. We first assessed the characteristics of the sample across the three age categories. Next, a binary logistic regression (enter method) was performed leading to odds

ratios (OR) with associated 95%-confidence intervals (CI). First, three models were constructed analyzing the associations with frequent alcohol drinking, and then the same analyses were performed for the associations with lifetime drunkenness. In the first model we assessed the crude effects of family composition, communication with father/mother, gender and age. In the second model we analyzed the association of the family composition, the quality of communication with each parent and gender with frequent alcohol drinking/drunkenness. In the last model, age was added to the previous variables.

## Results

A description of the sample and its characteristics can be found in Table 6.1.

Table 6.2 shows the results of the logistic regression analysis for the association of family composition, communication with father, communication with mother, gender and age with frequent alcohol drinking among adolescents. The first model assessed the crude effects of all the mentioned variables. All of them were found to be associated with frequent alcohol drinking: living in an incomplete family, difficult communication with parents, male gender and higher age increase the probability of frequent alcohol drinking among adolescents. In the next model we assessed the joint effects of family composition, communication with mother/father, and gender. Family composition and communication with mother continued to show a statistically significant association, but the communication with father did not. A significant effect of gender was found in this model: male gender increases the probability of frequent alcohol use. In the last step, age was added to the model. Family composition and gender were found to be significantly associated with alcohol drinking, but communication with parents was not. A significant effect of age was found in this model: the risk of frequent drinking increased with the age.

**Table 6.1** Characteristics of the study sample by age and gender

		11 years		13 years		15 years	
		Male	Female	Male	Female	Male	Female
		N=608	N=690	N=595	N=732	N=591	N=661
<b>Frequent alcohol drinking</b>	yes	13.8%	9.1%	16.3%	12.2%	33.5%	21.7%
<b>Lifetime drunkenness</b>	at least once	11.6%	9.2 %	30.7%	26.3 %	58.3%	48.1 %
<b>Family composition</b>	incomplete	7.4 %	9.6 %	10.6%	12.4 %	14.2%	14.2 %
<b>Communication father</b>	very easy	42.4%	28.5 %	33.5%	13.8 %	24.3%	11.7 %
	easy	39.4%	43.9 %	43.7%	41.9 %	42.9%	37.8 %
	difficult	14.0%	18.5 %	16.9%	31.4 %	22.3%	30.9 %
	very difficult	4.2 %	9.2 %	5.9 %	12.9 %	10.5%	19.6 %
<b>Communication mother</b>	very easy	53.5%	55.1 %	46.4%	40.0 %	35.2%	33.0 %
	easy	36.8%	33.7 %	10.4%	46.5 %	45.2%	47.7 %
	difficult	7.6 %	10.0 %	10.5%	11.5 %	16.4%	15.3 %
	very difficult	2.1 %	1.3 %	2.7 %	2.0 %	3.1 %	4.0 %

**Table 6.2** Binary logistic regression estimates for the effect of family composition, communication with mother, communication with father, gender and age on frequent alcohol drinking

		Frequent alcohol drinking		
		Odds ratio (95% confidence interval)		
		Model 1	Model 2	Model 3
		crude effects	adjusted effects#	adjusted effects#
<b>Family composition</b>	complete	1 (Reference) **	1 (Reference) **	1 (Reference) *
	incomplete	<b>1.43 (1.11-1.84)</b>	<b>1.56 (1.12-2.18)</b>	<b>1.44 (1.02-2.01)</b>
<b>Communication father</b>	easy	1 (Reference) *	1 (Reference) ns	1 (Reference) ns
	difficult	<b>1.24 (1.02-1.50)</b>	<b>1.19 (0.95-1.48)</b>	<b>1.05 (0.83-1.32)</b>
<b>Communication mother</b>	easy	1 (Reference) ***	1 (Reference) *	1 (Reference) ns
	difficult	<b>1.50 (1.18-1.91)</b>	<b>1.39 (1.06-1.83)</b>	<b>1.30 (0.98-1.72)</b>
<b>Gender</b>	female	1 (Reference) ***	1 (Reference) ***	1 (Reference) ***
	male	<b>1.61 (1.36-1.92)</b>	<b>1.64 (1.34-2.00)</b>	<b>1.63 (1.33-1.99)</b>
<b>Age category</b>	11 years	1 (Reference) ***		1 (Reference) ***
	13 years	<b>1.27 (0.99-1.63)</b>		<b>1.25 (0.94-1.67)</b>
	15 years	<b>2.93 (2.34-3.66)</b>		<b>3.00 (2.31-3.88)</b>

\*\* p < 0.01, \*\*\* p < 0.001; ns = not significant; Ref=reference category

# The odds ratios for each variable have been adjusted for the effects of the other variables in the model

Table 6.3 shows the results of the logistic regression analysis for the association of family composition, communication with father, communication with mother, gender and age with lifetime drunkenness among adolescents. In the first model the crude effects of all mentioned variables were assessed. All of them were found to be associated with drunkenness: living in an incomplete family, difficult communication with parents, male gender and higher age increased the probability of drunkenness among adolescents. In the second model we assessed the joint effects of family composition and of communication with mother/father and gender. All of them continued to show a statistically significant association. In the last model, age was added to the model. Family composition, communication with mother and gender remained significantly associated with drunkenness, but communication with father did not. A significant effect of age was found in this model: the risk of drunkenness increases with the age.

**Table 6.3** Binary logistic regression estimates for the effect of family composition, communication with mother, communication with father, gender and age on drunkenness

		Drunkenness		
		Odds ratio (95% confidence interval)		
		Model 1	Model 2	Model 3
		crude effects	adjusted effects#	adjusted effects#
<b>Family composition</b>	complete	1 (Reference) ***	1 (Reference) ***	1 (Reference) ***
	incomplete	<b>1.88 (1.52-2.32)</b>	<b>2.34 (1.77-3.09)</b>	<b>2.17 (1.60-2.94)</b>
<b>Communication father</b>	easy	1 (Reference) ***	1 (Reference) ***	1 (Reference) ns
	difficult	<b>1.46 (1.25-1.71)</b>	<b>1.39 (1.16-1.67)</b>	<b>1.13 (0.93-1.37)</b>
<b>Communication mother</b>	easy	1 (Reference) ***	1 (Reference) ***	1 (Reference) **
	difficult	<b>1.67 (1.37-2.04)</b>	<b>1.46 (1.16-1.84)</b>	<b>1.38 (1.08-1.77)</b>
<b>Gender</b>	female	1 (Reference) ***	1 (Reference) ***	1 (Reference) ***
	male	<b>1.32 (1.14-1.51)</b>	<b>1.47 (1.25-1.73)</b>	<b>1.49 (1.25-1.78)</b>
<b>Age category</b>	11 years	1 (Reference) ***		1 (Reference) ***
	13 years	<b>3.43 (2.74-4.30)</b>		<b>3.48 (2.70-4.50)</b>
	15 years	<b>9.76 (7.84-12.16)</b>		<b>9.64 (7.51-12.37)</b>

\*\* p < 0.01, \*\*\* p < 0.001; ns = not significant; Ref=reference category

# The odds ratios for each variable have been adjusted for the effects of the other variables in the model

## Discussion

The current study explored the associations of family composition and communication with parents with frequent alcohol drinking (at least once a week) and lifetime drunkenness among adolescents. Living in a single-parent family increased the risk of both frequent alcohol drinking and drunkenness among adolescents, and this effect remained after adjustment for communication with parents, gender and age. Secondly, poor communication with parents increased the risk of frequent alcohol drinking and drunkenness among adolescents. Regarding frequent drinking, the association with communication with the father disappeared after adjustment for communication with the mother, family composition, gender and age. The association with communication with the mother decreased in strength. Regarding lifetime drunkenness, the same occurred but almost all associations are somewhat stronger. The associations as found were not significantly modified by gender or age.

Our findings regarding the association of living in a single-parent family with both frequent alcohol use and drunkenness in adolescents confirms the findings of several previous studies (Rodgers & Rose, 2002; Paxton et al., 2007; Tomcikova et al., 2093). Adolescents living in single-parent families are at a higher risk of trying alcohol earlier and drinking



more hazardously (Kirby, 2006). This might be inter alia related to lowered parental control (Marsden et al., 2005). When there is only one parent who has to perform the tasks of both parents, this could lead to decreased control of adolescent behaviour, thus opening up more opportunities for risk behaviour in general and for experimentation with alcohol in particular. Adequate parental control has been shown to have both a direct and indirect impact, through affecting associations with peers who drink, on adolescent behaviour regarding alcohol use (Freisthler et al., 2009).

Another main finding of our study is that when communication with parents is perceived as difficult, the risk of frequent drinking among adolescents and drunkenness increases, which is in line with certain other studies (Griffin et al., 2000; Eickhoff, 2001). Good quality communication has been shown to act as a protective factor with regard to youth substance use (Currie et al., 2008). One possible pathway for this effect might be again via parental control, which is changing in this period of life. It becomes less about direct observation and more about communication between parents and the adolescent when compared to earlier years. Good quality communication might thus lead to effective parental control, and thus to a decreased risk of substance use (Clark et al., 2008).

The fact that communication with parents was associated stronger with lifetime drunkenness than with frequent drinking might be explained by the outcome measures themselves. To drink alcohol is relatively highly tolerated in Slovak society, and as we have already mentioned, the first experiences with alcohol often take place at home in the presence of parents. On the other hand, getting drunk is not tolerated, particularly in this age. Communication with parents matters more from the perspective of being drunk, because drunkenness is considered to be more risky than only alcohol consumption. Another interesting aspect of our findings is the fact that communication with the mother is associated stronger with particular drunkenness than communication with the father and that age seems to play an important role in this aspect - with increasing age, communication with the father becomes less important regarding frequent alcohol drinking and drunkenness. The same holds true for communication with the mother, but only in the case of drunkenness.

The fact that age had a strong effect on both adolescent frequent drinking and adolescent drunkenness is not surprising; it is a well known fact from the literature (Currie et al., 2008). With increasing age adolescents have more opportunities to experiment with alcohol because of their growing independence from their parents, and they spend an increased amount of time unsupervised outside the home (Loukas & Prelow, 2004; Moreno et al., 2008). In addition the association between both outcome measures and communication with the father largely decreases if age is added to the model, so the age-effect might be explained also by poorer quality of communication of adolescents with the father in particular when they grow older.

### *Strengths and limitations*

The present study has several strengths and limitations. A first strength is the size of the study sample and its representativeness for the regions of Slovakia. Selection bias was unlikely due to the way the sample was drawn. A main limitation of our study is that it relied on the self-reporting of respondents. However, the questionnaires were filled out anonymously, which has been shown to lead to rather valid self-reports (Del Boca & Noll, 2000).

### *Conclusion*

Our findings show the importance of the quality of communication between parents and adolescents in preventing the hazardous alcohol use among adolescents. At higher adolescent ages, this communication tends to deteriorate, which is associated with higher risks. In contemporary society, when the rates of excessive drinking in the European Union are increasing, this issue requires research attention. Our results show that particular groups (in particular adolescents living in incomplete families) run a higher risk of both frequent alcohol use and drunkenness and thus need particular attention in prevention. Since the design of this study was cross-sectional, the implication for further research might be to study longitudinal data to confirm the hypothesized causal mechanisms with regard to frequent alcohol use and drunkenness.

## **References**

1. Barnes HL, Olson DH. Parent-adolescent communication and the circumplex model. *Child Dev* 1985; 56: 438–447.
2. Broman CL, Li X, Reckase M. Family structure and mediators of adolescent drug use. *J Fam Issues* 2008; 29: 1625–1649.
3. Clark DB, Kirisci L, Mezzich A, Chung T. Parental supervision and alcohol use in adolescence: Developmentally specific interactions. *J Dev Behav Pediatr* 2008; 29: 285–292.
4. Currie C, Gabhainn SN, Godeau E *et al.* Inequalities in young people's health. Health behaviour in school-aged children (HBSC) study: International report from the 2005/2006 survey. Health Policy for Children and Adolescents 2008, Report No. 5.
5. Del Boca FK, Noll JA. Truth or consequences: the validity of self-report data in health services research on addictions. *Addiction* 2000; 95: 347–360.
6. Eickhoff C. Protection or risk? *Family environments reflected in communication between parents and their children*. In: Research and Practice of Health Promotion, Volume 10. Cologne: Federal Centre for Health Education; 2001: 34–39.

7. Freisthler B, Byrnes HF, Gruenewald PJ. Alcohol outlet density, parental monitoring, and adolescent deviance: A multilevel analysis. *Child Youth Serv Rev* 2009; 31: 325–330.
8. Griffin KW, Botvin GJ, Scheier LM, Diaz T, Miller NL. Parenting practices as predictors of substance use, delinquency, and aggression among urban minority youth: Moderating effects of family structure and gender. *Psychol Addict Behav* 2000; 14: 174–184.
9. Hoffmann JP. Family structure, community context, and adolescent problem behaviors. *J Youth Adolescence* 2006; 35: 867–880.
10. Kirby JB. From single-parent families to stepfamilies - Is the transition associated with adolescent alcohol initiation? *J Fam Issues* 2006; 27: 685–711.
11. Kuntsche EN, Kuendig H. What is worse? A Hierarchy of family-related risk factors predicting alcohol use in adolescence. *Subst Use Misuse* 2006; 41: 71–86.
12. Laursen B. Conflict and social interaction in adolescent relationships. *J Res Adolescence* 1995; 5: 55–70.
13. Loukas A, Prelow HM. Externalizing and internalizing problems in low-income Latino early adolescents: Risk, resource, and protective factors. *J Early Adolescence* 2004; 24: 250–273.
14. Marsden J, Boys A, Farrell M *et al*. Personal and social correlates of alcohol consumption among mid-adolescents. *Brit J Dev Psychol* 2005; 23: 427–450.
15. Moreno C, Borup I, Smith B *et al*. HBSC Research Protocol for 2005/06 Survey. 2008; Section 2, Scientific rationales for focus areas: Family Culture.
16. Noller P, Callan VJ. Understanding parent-adolescent interactions: Perceptions of family members and outsiders. *Dev Psychol* 1988; 24: 707–714.
17. Paxton RJ, Valois RE, Drane JW. Is there a relationship between family structure and substance use among public middle school students? *J Child Fam Stud* 2007; 16: 593–605.
18. Rodgers KB, Rose HA. Risk and resiliency factors among adolescents who experience marital transitions. *J Marriage Fam* 2002; 64: 1024–1037.
19. Tomcikova Z, Madarasova Geckova A, Orosova O, van Dijk JP, Reijneveld SA. Parental divorce and adolescent drunkenness: Role of socioeconomic position, psychological well-being and social support. *Eur Addict Res* 2009; 15: 202–208.
20. Weinberg NZ, Rahdert E, Colliver JD, Glantz MD. Adolescent substance abuse: a review of the past 10 years. *J Am Acad Child Psy* 1998; 37: 252–261