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Parental divorce and adolescent excessive drinking

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General discussion, implications and conclusions

This thesis focused on the role of the family environment in adolescents' excessive drinking, which is one of the most frequent adolescent risk behaviours. The main aim was to contribute to the understanding of how different factors of family life might act as risk or protective factors with regard to this particular risk behaviour. The contribution of other factors (personality factors, well-being and peer influence) was also explored.

This final chapter provides a summary of the main findings of this study and a discussion of the main findings in the context of what is already known from research in this field. In addition, the strengths and limitations of the study are discussed and the implications for future research and for public health practice are addressed.

8.1. Main findings

Research question 1 (Chapter 3)

Do adolescents with different patterns of alcohol use (abstainer, consumer, and excessive drinker) differ in family characteristics (family structure, socioeconomic position), perceived social support, personality characteristics (extraversion, self-esteem, aggression) and well-being?

Adolescent abstainers and excessive drinkers differed in every explored characteristic except for positive self-esteem and social support from others. Moreover, differences were found between abstainers and consumers in extraversion, aggression and social support from family and between consumers and excessive drinkers in negative self-esteem, aggression, well-being and social support from friends. The higher the score in aggression, extraversion, perceived social support from friends and negative self-esteem and the lower the scoring in social support from family and well-being, the more risky the pattern of alcohol consumption was. Furthermore, adolescents from divorced families and those from families with higher affluence are significantly more likely to be excessive drinkers.

Research question 2 (Chapter 4)

Is there an association of parental divorce with adolescent drunkenness? How do socioeconomic position, family structure, social support from family and well-being contribute to this association?

Parental divorce increased the probability of drunkenness among adolescents. This effect remained significant even after the inclusion of other factors. Furthermore, high education level of parents, high family affluence, low level of social support from family and higher levels of the depression/anxiety dimension of psychological well-being increased the probability of drunkenness among adolescents.

Research question 3 (Chapter 5)

Is there an association between participation in risky leisure time activities, parental monitoring and adolescent drunkenness? Do adolescents who participate in risky leisure time activities and report having been drunk differ in the level of parental monitoring from those who participate without having been drunk?

Participation in risky leisure time activities increased the probability of drunkenness among adolescents. This effect remained significant after the inclusion of parental monitoring into the model. Moreover, a low level of mother's monitoring was found to increase the probability of drunkenness. Within the group of "risky participants" (adolescents who reported participation in at least one of the three risky activities daily or several times a week) those who reported having been drunk scored significantly lower in monitoring from the mother compared with those who did not.

Research question 4 (Chapter 6)

Is there an association between family structure, quality of communication with both parents and adolescent drunkenness? Is there an association between family structure, quality of communication with both parents and adolescent frequent alcohol drinking? Do age and gender contribute to these associations?

Living in an incomplete family and difficult communication with both parents increased the probability of both drunkenness and frequent alcohol drinking among adolescents when assessing the crude effects of these variables. When assessing the joint effects, all of them continued to show a statistically significant association with drunkenness, and all of them, except communication with father, continued to show a statistically significant association with frequent alcohol drinking. Moreover, male gender and higher age increased the probability of both drunkenness and frequent alcohol drinking.

Research question 5 (Chapter 7)

*Is there an association between parental divorce and adolescent drunkenness?
How do adolescents' feelings toward their parents contribute to this association?*

Parental divorce increased the probability of drunkenness among adolescents. This effect remained significant even after the inclusion of two dimensions of adolescents' feelings towards mother (positive and negative affect) into the analysis, while both of these dimensions (positive and negative feelings towards mother) were found to be associated with drunkenness. Inclusion of the dimensions of adolescents' feelings towards father (positive and negative affect) decreased the association of parental divorce with adolescents' drunkenness. Both of these dimensions (positive and negative feelings toward father) were associated with adolescents' drunkenness.

8.2. Discussion of the main findings

Family structure and possible pathways of influence

Family environment is one of the most significant contexts when it comes to adolescents' risk behaviour. One of the key findings of this thesis concerns the strong association between parental divorce (or living in an incomplete family) and adolescents' excessive alcohol use (Chapters 3, 4, 6, and 7). This finding is in line with several previous studies exploring the effect of divorce or family structure on adolescents' substance use (Paxton et al., 2007; Rodgers & Rose, 2002). Adolescents living in divorced or incomplete families are at higher risk of trying alcohol early and drinking hazariously (Kirby, 2006). This may have several explanations, such as lowered socioeconomic position after divorce, lowered social support, lowered parental monitoring, lowered adolescent's well-being or worsened relationship and quality of communication between parent and adolescent. Some of these possible pathways were covered by our research questions and are framed in the theoretical model presented in the Chapter 1; some of them need to be assessed in further research.

A first explanation of the effect of parental divorce (or living in an incomplete family) on adolescents' excessive drinking is that it is due to the lowered socioeconomic position (SEP) of the family after divorce. It may be expected that a family after a divorce (single-parent family) is at higher risk of living in poverty (one income instead of two, frequent moving, etc.). This socioeconomic disadvantage can intensify the effects of divorce. However, in this study socioeconomic position did not contribute very much to the association between parental divorce and drunkenness among adolescent (Chapter 4). Moreover, despite our assumption that a lower socioeconomic position would be connected with

a higher probability of adolescents' drunkenness, our results showed the contrary: higher socioeconomic position (higher education of the father and higher levels of family affluence) was related to an increased probability of drunkenness (Chapters 3 and 4). To explain this fact only by the possession of more financial resources (e.g. more pocket money from parents) available for buying alcohol is not sufficient, as the prices of alcohol in Slovakia are rather low, in some cases even lower than the prices of soft drinks: the average price of a beer (0.3 L) is €0.50 and of a soft drink (0.3 L) is €1 in a pub. One explanation might be that the roots of the association between higher SEP and the higher probability of excessive drinking are found in the particular youth subculture related to high SEP, particularly the attitude to alcohol use.

A second explanation of the effect of parental divorce (or living in an incomplete family) on adolescents' excessive drinking is the perceived amount of social support coming from the family. In our study perceived social support from the family partially mediated this effect of parental divorce, although to a rather limited extent (Chapter 4). This means that social support, as a part of the social capital of the family, functions as a risk buffer against the impact of divorce on adolescents' excessive drinking: thus, even if parents are divorced, an adolescent might be less likely to exhibit risk behaviour if he/she experiences emotional support from family members. In addition, social support was found to also have its own direct effect on adolescents' drunkenness – low levels of social support from family increased the risk of adolescents' drunkenness (Chapters 3 and 4). This is in line with the study of Catanzaro and Laurent (2004), who found that perceiving high levels of family support reduced the risk of alcohol use associated with the avoidance of problems as a coping strategy. And several other studies have shown an association between low levels of support from family and alcohol use in adolescents (Heimisdottir et al., 2010; Shucksmith et al., 1997; Windle & Miller-Tutzauer, 1997)

A third explanation for the fact that parental divorce (or living in an incomplete family) increased the risk of adolescents' excessive drinking might be the worsened relationship with parents after divorce. Our results confirm this explanation partially — we found that the association of drunkenness with parental divorce largely decreases if adjusted for affect toward the father, which can be interpreted as a mediating effect of the latter (Chapter 7). The reason for this could be that after divorce children more frequently live with their mother rather than with their father (Dunn, 2004). The quality of the relationship with the non-present father is very often poor (Amato & Gilbreth, 1999; Dunn, 2004). This is due to several reasons, such as the frequency of contact with him and the quality of the post-divorce relationship between the parents, but also economic support from the father (Amato & Gilbreth, 1999). The negative effect of divorce on adolescents' behaviour, including alcohol use, might

be enhanced by this low quality of the adolescent-father relationship. It suggests that keeping the father positively involved after a divorce might be a protective factor with regard to the higher probability of adolescent drunkenness in divorced families.

A fourth possible explanation of the effect of parental divorce (or living in an incomplete family) on adolescents' excessive drinking is the quality of the mutual parent-adolescent communication. In contrast with this explanation, in our study communication did not moderate the association between family structure and adolescents' drunkenness or frequent alcohol drinking (Chapter 6). However, communication with parents perceived as difficult by adolescents increased the risk of frequent drinking and drunkenness among them, which is in line with some other studies (Eickhoff, 2001; Griffin et al., 2000). Good quality of communication has been shown to act as a protective factor with regard to youth substance use (Currie et al., 2008). This might be partially explained by parental control, which is changing in this period of life. Control consists less from direct observation and more from communication between parents and the adolescent when compared to earlier years. Good quality communication might lead to effective parental control and thus to a decreased risk of substance use (Clark et al., 2008).

Parental control (or parental monitoring) is the fifth possible pathway of the effect of parental divorce (or living in an incomplete family) on adolescents' drunkenness. The majority of adolescents with divorced parents (nearly 60% in our sample) live in single-parent families, that is with one parent only, and this parent usually has to perform the functions of both parents. This could easily lead to a decrease in the control (monitoring) of adolescent behaviour, thus providing more opportunities for risk behaviour in general and for experimentation with alcohol in particular. Even though this hypothesis needs to be confirmed by further research, we already know that a lack of parental monitoring of the leisure time activities and peer relationships of adolescents is one of the risk factors for excessive drinking (Beck et al., 2004; Griffin et al., 2000; Marsden et al., 2005). This was partially confirmed also by the results of our study (Chapter 5). We found that only mother's monitoring has an affect on adolescent drunkenness – adolescents who are less monitored by their mothers are more likely to report having recently been drunk. Through adequate monitoring, parents become aware of situations or peer friends that may lead to exposure to alcohol, and such knowledge enables them to divert their children from potentially risky situations and friends (Bahr et al., 1998). Our results showed that unlike father's monitoring, mother's monitoring seems to be a protective factor with regard adolescent excessive drinking. This might have several explanations. One might be that a mother is usually the person to whom adolescents turn to with their daily problems, while a father is rather the person to talk

about more serious decisions and the future (Geckova et al., 2000). In addition, fathers tend to be home with the family less often than mothers, which might imply that primarily the mother obtains daily information about the whereabouts of an adolescent and can monitor the adolescent's behaviour properly through this information. These gender differences were identified in a variety of other parenting behaviours and attitudes (Cottrell & Liu, 2007). Mothers usually know more about their adolescent children's lives; they spend more time with them in joint activities and they converse more about personal topics (Bumpus et al., 2001; Crouter et al., 1990; Waizenhofer et al., 2004). Furthermore, mothers get information about their children in a more direct way, whereas fathers get it mostly indirectly from their wives (Waizenhofer et al., 2004).

The last possible route for the negative impact of parental divorce (or living in an incomplete family) on adolescents' excessive drinking might be the poor psychological well-being of adolescents due to this situation. Depression/anxiety (as a dimension of well-being) was found to have an effect on adolescent drunkenness (Chapters 3 and 4). Parental divorce might represent a stressful experience in an adolescent's life (e.g. inter-parental conflict, moving, less nurturing) (Armistead et al., 1990) and therefore might cause a worse sense of well-being (Spruijt & de Goede, 1997; Storksen et al., 2006). We found support for this in our study: adolescents with divorced parents scored significantly higher in depression/anxiety, and those who had experienced parental divorce recently (in the last 12 months) reported even higher levels of depression/anxiety. However, the possible mediating effect of low well-being should be explored in further research.

In summary, several pathways may explain the association of parental divorce (or living in an incomplete family) and adolescents' excessive drinking. Our findings indicate that in particular socioeconomic position of the family, an adolescent's well-being, maternal monitoring and affect towards the father contribute to this association. In general, a number of aspects of the parent-adolescent relationship might function as a buffer against the negative impacts of parental divorce, and should thus be included in prevention programmes.

Peer context of adolescent excessive drinking

Despite the fact that the main focus of this thesis is on various family characteristics, for a more integrated view aspects of peer context have also been taken into account. In this period of life, peers are becoming more important when compared to younger ages. Peers represent another significant source of social support after family (Kerr et al., 2003). These relationships and the social support gained from peers are not only necessary from a developmental point of view, but they are also

connected with a certain risk with regard to excessive alcohol use (Engels & ter Bogt, 2001). The results of this study confirmed this association: high levels of perceived social support from peer friendships increased the risk of adolescents' excessive drinking (Chapter 3). However, this does not necessarily mean that the relationships among peers themselves are risky; such relationships are an essential part of healthy socialisation during adolescence (Kerr et al., 2003). Unfortunately, these relationships take place mostly in places where alcohol is sold (bars, pubs, discos, etc.), so maintaining a social network in adolescence is strongly connected with places or situations in which alcohol is easily obtainable.

Therefore, participation in certain leisure time activities involving such places or situations puts adolescent at higher risk regarding alcohol use. Three leisure activities that are relatively common among Slovak adolescents (going out with friends, having parties, visiting sporting matches) were explored in this thesis as another aspect of the peer context. Engels et al. (1999) emphasised some positive functions of these activities (going out with friends) in particular in terms of adolescents' integration into a peer group. However, our results, in line with some other studies (e.g. Engels et al., 1999; Kuntsche et al., 2008), indicate that adolescents who reported participating in these activities are also more likely to report drunkenness.

The role of personality

Maintaining a network of various relationships in adolescence and establishing patterns of behaviour is not only influenced by factors of the social environment; personality traits play a role as well. Some of these have been also found to be associated with excessive alcohol use in adolescents (Petraitis et al., 1995; George et al., 2010). Extraversion is often found to be directly associated with risk behaviours, including drunkenness (Martsch & Miller, 1997; Merenakk et al., 2003). This may be due to the fact that extraversion stimulates participation in social activities, but as stated above, the real risk of excessive drinking is probably more related to the context in which these activities take place. Our results partially supported this association between extraversion and alcohol use — extraversion makes one more likely to be a consumer of alcohol, but not an excessive drinker (Chapter 3). This finding fits with the hypothesis that extraversion may play an important role in the development of alcohol-related problems, but it becomes more difficult to assess when confounded with more serious alcohol problems (George et al., 2010).

Another personality characteristic associated with adolescent excessive drinking is aggressiveness. Aggressive behaviour is, on one hand, a common result of problematic drinking, but on the other hand, aggressive tendencies in behaviour may also predict excessive alcohol use (Gerra et al., 2004). Our findings confirmed this association: the higher the

scores in the dimensions of aggressiveness (physical aggression, verbal aggression, anger and hostility), the more risky the pattern of alcohol consumption (consumer – excessive drinker) (Chapter 3). However, the cross-sectional design of this study did not provide sufficient information about the causal relationships between aggressiveness and excessive drinking.

8.3 Strengths and limitations of the study

The most important strength of this study is its use of a large, nationally representative sample covering the different regions of the country and focusing on the age group of young adolescents. A further strength is that due to the way the sample was drawn and due to a rather high response rate in this sample, selection bias was unlikely.

However, this study also has some limitations. A main limitation of the study is that it relied on the subjective self-report of respondents. Nevertheless, previous studies support the validity of self-reports (Reijneveld et al., 2003; Rebagliato, 2002). The questionnaires were filled out anonymously and in the absence of teachers, which has been shown to lead to rather valid self-reports and to decrease the probability of under- or over-reporting of health-related behaviour (Brener et al., 2003; Del Boca & Noll, 2000). A second limitation is that adolescents from small towns and rural areas were somewhat underrepresented in our sample. However, prevalence rates of drunkenness were similar among the adolescents concerned and the remainder of our sample, which makes it rather unlikely that this factor thus affected our findings. A third limitation is the cross-sectional design of this study, by which it is impossible to make conclusive statements about causality in our findings. They thus need to be further explored in a study with a longitudinal design.

8.4 Implications

8.4.1 Implications for future research

This study has shown the role of family environment factors in excessive alcohol use among adolescents. However, the findings are fully based on a cross-sectionally designed study. Our research should thus be repeated using longitudinally designed studies to also explore the causal relationships between adolescent excessive drinking and its family, social and psychosocial determinants. Such a study could also provide information about changes and trends in this particular health-related risk behaviour in adolescents. However, cross-sectional studies might

also be improved, for example, by international networking (e.g. Health Behaviour in School-aged Children Study), enabling international comparisons of the findings.

Moreover, some hypotheses for further research have arisen directly from our results. We have confirmed the strong association between parental divorce (or living in an incomplete family) and adolescent excessive drinking, but the mechanism of this association is not fully explained yet. Future research should focus on this mechanism and possible mediating and moderating effects. Qualitative design of such research (case studies, analysis of life trajectories) might be helpful in outlining the hypotheses about the families of adolescent excessive drinkers, which would be consequently verified in cross-sectional research. And finally, more intense research on divorced or single-parent families would also bring additional and valuable information about the impact on adolescent behaviour.

8.4.2 Implications for public health practice

Our findings may have several consequences for public health practice. The key finding indicates that adolescents from incomplete or divorced families are a vulnerable group with regard to excessive alcohol use. They should thus become, together with their parents, a particular target group for health promotion and prevention programs. In contemporary society, where the number of marriages ending in divorce is increasing (Mladek et al., 2006), this issue demands a great deal of attention.

Strengthening positive parenting practices and skills (like effective monitoring, etc.) and supporting the mutual emotional relationships between parents and their adolescent children (e.g. via quality communication) might help to prevent the negative side effects of parental divorce on adolescents. More specifically, our results indicate the need to focus attention on non-resident fathers (or the parent who is absent after divorce). As has been mentioned above, the negative effect of parental divorce on adolescent's behaviour is often enhanced by a low quality of the adolescent-father relationship. To keep the father positively involved after divorce might act as buffer against these negative effects.

Another important issue for public health practice arises from the findings on peer context. Peer relationships, an essential part of healthy socialisation in adolescence, usually take place in an environment with easy access to alcohol. Prevention strategies should therefore begin with the regulation of selling alcohol to those underage (under 18 years old). However, it is known from the practice that although such restrictions exist, they are not monitored effectively. Furthermore, prevention strategies should target the support of safe, alcohol-free places for peer interactions. These should be attractive to adolescents and at the same

time should not offer them the opportunity to use alcohol. A solution could also be to limit the availability of alcoholic drinks in environments that are frequented by young adolescents (e.g. to raise the age limit for selling alcohol to adolescents in public places from the current limit of 18). Last but not least, pricing policies should be changed as well in order to limit the availability of alcohol drinks for adolescents. It has been shown that an increase in the prices of alcoholic beverages is an effective policy for reducing alcohol consumption and its consequences, particularly in young people (Chaloupka et al., 2002).

5.5 Conclusion

No other part of the life is so characterised by changes and new developmental tasks as adolescence. Almost all risk behaviours start and occur particularly often during this period (Richter, 2009). Excessive alcohol drinking is one of the most common of these behaviours. There is a wide range of factors influencing excessive drinking in adolescence; understanding these factors and the mechanisms of their influence is an important part of prevention and health promotion.

Despite the growing influence of peers, family remains a strong factor affecting the behaviour and shaping the lifestyle of young people. The negative impact of parental divorce (or living in an incomplete family) on adolescent excessive drinking is relatively well-known from a number of studies (e.g. Fisher et al., 2007; Kristjansson et al., 2009; Kuntsche & Kuending, 2006). Some of them showed even a long-term impact of divorce on excessive drinking in adulthood (Huurre et al., 2010). The findings of this study are relevant in particular for countries with the increasing divorce rates. Slovakia is an example of such a country: in 2003 more than 41% of marriages ended in divorce in Slovakia compared with 32% in 1995 (Mladek et al., 2006), and it seems difficult to fully prevent its negative impacts. However, the results of our study showed that there are other aspects of family life and the parent-adolescent relationship through which the risks of parental divorce might be reduced and the negative side effects on adolescents' behaviour might be prevented.

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