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PARENTAL SUPPORT, PARENTAL CONTROL, STRESS AND EARLY ALCOHOL USE IN ADOLESCENT GIRLS: A NARRATIVE REVIEW WITH A FOCUS ON KAZAKHSTAN

Abstract: Girls and women are about twice as likely as boys and men to have depression, and the gap is widest at ages 13 to 15. At the same time, in the United States the difference between girls and boys in alcohol use has narrowed. This review asks how two sides of parenting, support and control, are linked to stress, depressed mood and early alcohol use in adolescent girls, and what is known about this in Kazakhstan. Twenty sources were selected from OpenAlex, Europe PMC and CyberLeninka, among them six systematic reviews and meta-analyses. Parental warmth and support were consistently linked to fewer depressive symptoms and to later and lower drinking. Control worked in two opposite directions. Behavioural control and monitoring, when parents know where and with whom their child is, were protective, while psychological control, which constrains and manipulates a child's feelings and thoughts, was linked to more depression and anxiety. One longitudinal study found that family conflict predicted depressed mood more strongly in girls than in boys, and that depressed mood then predicted heavy drinking. Girls in one study were monitored more than boys but did not drink less, which suggests that monitoring alone may not be enough. Studies in adults add a biological side: women have lower gastric alcohol dehydrogenase activity than men, so the same dose of alcohol produces higher blood alcohol levels. In Kazakhstan, a national survey of 9,111 students aged 13 to 18 found that 34.2% had ever drunk alcohol, with no significant difference between boys and girls, and that depressed mood scores were on average twice as high as in European adolescents. No study was found that tests these family pathways for girls in Kazakhstan, and no data were found on alcohol dehydrogenase in Kazakhstani adolescents; these are the main gaps identified by this review.

Keywords: adolescent girls, parental support, parental control, depression, alcohol use, alcohol dehydrogenase, Kazakhstan

1. Introduction

In spring 2026 the author took part in the Pioneer research programme, where a team of four students studied depression among adolescent girls in Kazakhstan. The team spoke with a girl living with depression, with teachers and with school psychologists. The teachers said that they did not have enough training to support a student with such problems. The psychologists said that help is most often stopped not by the teenager but by parents who do not accept that there is a problem, and that many adults still think of depression as something invented, so the teenager is left alone with it. After these conversations the author concluded that it is not enough to look only at the teenager, and that the family has to be studied too. A genetic test in the author's own family also showed lower than average alcohol dehydrogenase activity, which made the biological side of girls' vulnerability to alcohol a personal question and led her to look

at what the science says about it. This review therefore looks at how parental support and parental control are related to what happens to adolescents, and in particular to girls.

Two facts make girls the right focus. The first is depression. A meta-analysis of nationally representative samples from more than 90 countries found that women and girls are about twice as likely as men and boys to be diagnosed with major depression (odds ratio 1.95), that the gap is already present at age 12 (odds ratio 2.37), and that it peaks in adolescence, with an odds ratio of 3.02 at ages 13 to 15 [1]. The second is alcohol. In the United States, the gap in drinking between adolescent boys and girls has narrowed, mainly because drinking among boys has fallen faster than among girls [2]. Reviews of sex differences suggest that women and girls are more likely than men and boys to drink in response to stress and negative mood, while boys' risk is driven more by externalising behaviour [3, 4]. Adolescence is also a period when the brain is still developing, which may make young people more vulnerable to risky behaviour such as substance use, and heavy drinking at this age is associated with changes in the developing brain [5].

A third factor is biological. Alcohol dehydrogenase is an enzyme that breaks down alcohol, and part of this breakdown already happens in the stomach. In a study of 20 men and 23 women, the gastric activity of this enzyme in non-alcoholic women was 59% of that in men, and the share of alcohol broken down before it reached the blood was 23% of that in men; women had higher blood alcohol concentrations than men after comparable amounts of alcohol, even with allowance for differences in body size [19]. A later study of 65 healthy volunteers confirmed that women break down less alcohol in the stomach, which, together with a smaller volume of distribution, raises their blood alcohol levels [20]. Both studies were made in adults.

The family sits at the meeting point of these two problems. If the way parents support and control their children affects both girls' mood and their drinking, and if the same amount of alcohol affects girls more strongly, then family-focused prevention could be especially important for daughters. The question of this review is: what does the research say about how parental support and parental control are linked to stress, depressed mood and early alcohol use in adolescent girls, and what is known, and not known, about this in Kazakhstan?

2. Methods

This is a narrative review. Sources were searched in OpenAlex (api.openalex.org), Europe PMC and CyberLeninka between 2 and 18 October 2026, with combinations of the terms parental support, parental monitoring, parental control, psychological control, family conflict, adolescent, girls, depression, stress, alcohol, alcohol dehydrogenase, sex differences and Kazakhstan, in English and in Russian. Priority was given to systematic reviews and meta-analyses, to longitudinal studies, to studies that report results separately for girls, and to any study with data from Kazakhstan or Central Asia.

Twenty sources were included: five systematic reviews or meta-analyses on parenting [6, 7, 8, 9, 10], one theoretical and empirical paper on psychological control [11], one meta-analysis and three reviews on sex differences in depression, stress and drinking [1, 2, 3, 4], one review on adolescent brain development [5], three empirical studies on parenting and adolescent alcohol use [12, 13, 14], three studies from Kazakhstan [15, 16, 17], one multi-country focus-group study that included adolescents from Kazakhstan [18], and two studies on sex differences in how alcohol is broken down [19, 20]. For each source the abstract, and where available the full text, was read, and only results stated in the source are reported here.

3. Results

3.1. Parental support and warmth

The evidence on support points in one direction. A systematic review of 181 studies of young people aged 12 to 18 found sound evidence that less parental warmth, more conflict between parents, over-involvement and aversiveness increase the risk of both depression and anxiety; for depression, less autonomy granting and less monitoring were also risk factors [6]. A larger meta-analysis of 1,015 studies found that parental warmth, behavioural control, autonomy granting and authoritative parenting had very small to small negative associations with internalising symptoms such as depression and anxiety, both at the same time and over time [7].

Support also matters for alcohol. A systematic review of 77 longitudinal studies found that parental monitoring, the quality of the parent-child relationship, parental involvement and general communication predicted a later start of drinking, and that parental support, among other factors, predicted lower levels of later drinking [9]. A later meta-analysis of 131 longitudinal studies confirmed four protective factors for both the start of drinking and later use or misuse: parental monitoring, parent-child relationship quality, parental support and parental involvement. It also found three risk factors: parents providing alcohol, parents having favourable attitudes towards adolescent drinking, and parents' own drinking. The effects were mostly small, with correlations between -0.224 and 0.263 [8].

One study looked at support and monitoring by gender. Among 2,351 middle and high school students in the United States (48.5% female), both parental support and parental monitoring were linked to less alcohol and tobacco use for girls and boys and for younger and older students. Girls reported more monitoring than boys, but they did not report less substance use, and support was a stronger protective factor for older students than for younger ones [12]. What this difference in monitoring may mean for girls is discussed in Section 4.

3.2. Two kinds of control

Control is where the evidence divides. Barber (1996) distinguished behavioural control, which regulates what a child does through rules and knowing where the child is, from psychological control, which constrains, invalidates and manipulates a child's feelings and thoughts, for example through guilt or shaming. Across three studies, psychological control, especially as perceived by the adolescents themselves, consistently predicted depression, while behavioural control was linked mainly to externalised problems such as delinquency [11].

Later meta-analyses support this split. In the meta-analysis of 1,015 studies, behavioural control was linked to fewer internalising symptoms, while harsh control and psychological control were linked to more [7]. A meta-analysis of 95 studies of children and adolescents aged 10 to 20 found a moderate association between perceived parental psychological control and both depression and anxiety, and the size of this association differed by child gender and by culture, individualist or collectivist [10].

For alcohol, the protective side of control is monitoring. Monitoring appears as a protective factor in both systematic reviews of longitudinal studies [8, 9]. In a study that followed 4,067 high school students (49% female) for seven semesters, adolescents who received less monitoring from their mothers and experienced more family conflict were more likely to belong to the group with moderate drinking than to the non-drinking group [13].

So the answer to whether control is good or bad depends on the kind of control. Knowing where a daughter is and with whom is linked to less drinking. Controlling her feelings and thoughts, for example through guilt or shaming, is linked to more depression.

3.3. From family conflict to depressed mood to drinking in girls

One study connects these pieces in a single pathway for girls. In a three-wave longitudinal study of 886 students in Victoria, Australia (57% female), followed at modal ages 12, 13 and 14, family conflict at the first wave predicted depressed mood a year later, and this link was stronger for girls than for boys. Depressed mood at the second wave then predicted heavy alcohol use at the third wave, after controlling for school commitment, peers' drinking, whether parents lived together and ethnic background [14]. The order of the measurements, family conflict first, mood a year later and drinking a year after that, fits a pathway in which depressed mood links family conflict to later drinking, although this review could not confirm whether the authors formally tested this indirect path. The authors concluded that girls may be especially vulnerable to family conflict and called for gender-sensitive family-based prevention in late childhood and early adolescence [14].

The timing matters. The study followed students from about 12 to 14 years old, the same ages at which the gender gap in depression is widest, with an odds ratio of 3.02 at ages 13 to 15 [1]. Mills et al. found that parental support was a stronger protective factor for high school students than for younger ones [12]. Together these findings point to roughly ages 12 to 15 as a critical window for girls: the time when their risk of depression rises most, when the link from family conflict to mood and drinking was observed, and when parental support becomes more protective.

This pathway fits the sex differences described above. Girls are more likely to develop depression in early adolescence [1], and women are more likely than men to drink to manage stress and negative mood, with these differences starting to develop in adolescence [3]. A review of risk factors for binge drinking reached the same conclusion: girls are more susceptible to stress, depression and other internalising problems, and these symptoms in turn contribute to their risk of binge drinking [4].

3.4. Biological vulnerability: alcohol dehydrogenase

The family pathways above act on a body that, in adults, handles alcohol differently in women and men. Frezza et al. compared 20 men and 23 women and found that in non-alcoholic women the activity of alcohol dehydrogenase in the stomach lining was 59% of that in men, and the share of alcohol broken down before it reached the blood (first-pass metabolism) was 23% of that in men. In alcoholic women, first-pass metabolism was virtually abolished. The authors concluded that this greater availability of alcohol may contribute to women's greater vulnerability to the acute and chronic complications of drinking, and they noted that women are more susceptible to alcoholic liver disease [19]. Baraona et al. studied 65 healthy volunteers and found that women broke down less alcohol in the stomach when it was taken as 10% or 40% solutions, because of lower activity of one form of the enzyme. Alcohol also left the stomach 42% more slowly in women, while breakdown in the liver was 10% higher, and a 7.3% smaller volume of distribution added to women's higher blood alcohol levels [20].

Both studies were made in adults, so they do not show directly that adolescent girls already differ from boys in the same way. If they do, the psychosocial and biological sides would add up: a girl who starts drinking to cope with depressed mood [14] would reach higher blood alcohol levels from the same amount than a boy, at an age when the brain is still developing [5].

3.5. What is known in Kazakhstan

The most detailed source found is a national school survey carried out by the Ministry of Health, the Ministry of Education and Science, the Republican Scientific and Practical Centre of Mental Health and the United Nations Office on Drugs and Crime between December 2017 and June 2018 [15]. It covered 9,111 students aged 13 to 18 from all regions of Kazakhstan,

49.1% of them female. More than a third (34.2%) had ever drunk alcohol, 19.4% had drunk in the past 12 months and 6.9% in the past 30 days. Fifteen per cent reported binge drinking at least once, and 14.4% had their first beer at age 13. Importantly for this review, the survey found no statistically significant difference between boys and girls in alcohol use in any age group, while smoking was clearly more common among boys (about a quarter against about 17% of girls) [15].

The same survey found that Kazakhstani adolescents scored similarly to European adolescents on scales of self-esteem and antisocial behaviour, but their depressed mood scores were on average twice as high. In all, 21.1% said they had ever thought about harming themselves and almost 10% reported a suicide attempt [15]. Most adolescents described their families as supportive: more than 90% said they often or always received warmth and care from their parents, and about 85% said their parents knew where they spent their evenings. Still, insufficient social and emotional support from family and friends, and reduced parental control, were among the factors linked to substance use, as were depressed mood and low self-esteem [15]. These family analyses focused mainly on illicit drug use, not on alcohol, and the article does not report them separately for girls.

Two more recent Kazakhstan sources point to rising concern about mental health. Data from the Health Behaviour in School-aged Children surveys of 2018 and 2022 in Kazakhstan showed that problematic social media use among adolescents almost doubled, from 6.9% to 12.7%, and that problematic users had about two and a half times higher odds of depression (odds ratio 2.69 in cities and 2.42 in rural areas) [16]. A review of behavioural risks among Kazakhstani adolescents over the last ten years reported a decline in tobacco and alcohol use alongside an increase in obesity, vaping, depression and the use of digital devices [17].

4. Discussion

Across countries and study designs, the findings are consistent on four points. Warm and supportive parenting is linked both to fewer depressive symptoms and to later and lower drinking [6, 7, 8, 9]. Control is not one thing: monitoring is protective against drinking [8, 9, 13], while psychological control is linked to depression and anxiety [7, 10, 11]. And for girls in particular, family conflict may lead to drinking through depressed mood [14], which agrees with evidence that girls are more likely to drink to cope with stress and negative feelings [3, 4]. And in adults, women reach higher blood alcohol levels than men from the same amount of alcohol [19, 20].

This connects directly to what the Pioneer team heard from school psychologists. If parents do not accept that a daughter is depressed, she loses support exactly when she needs it, and the studies above suggest that this matters not only for her mood but also for her risk of drinking. The national survey shows that most Kazakhstani adolescents do feel supported at home [15], so the families of concern are likely to be a minority. But the same survey shows depressed mood scores twice as high as in Europe, and no difference between girls and boys in drinking [15], which means that the international pattern of girls catching up with boys may already be present in Kazakhstan. If the biological difference seen in adults also holds for adolescents, the same rate of drinking would mean more harm for girls.

The author also points to what can be called a monitoring paradox. In the study by Mills et al., girls were monitored more than boys but did not use less alcohol or tobacco [12]. In Kazakhstan, about 85% of adolescents said their parents knew where they spent their evenings [15], and yet girls drank as often as boys. Together these observations suggest that knowing where a daughter is may not be enough on its own. The study by Chan et al. offers one possible

reason: for girls, family conflict was followed by depressed mood and then by heavy drinking [14], a path that monitoring does not address. A prevention approach that only tracks a daughter's whereabouts may therefore miss part of the risk, while reducing family conflict and taking her low mood seriously could reach it.

Adolescents themselves ask for this kind of help. In focus groups with 91 adolescents in Belize, Kazakhstan and South Africa, young people said that they valued supportive interactions with adults and recommended that mental health programmes include training for teachers and parents on how to interact with adolescents [18]. This suggests that a prevention programme in Kazakhstan could combine two messages for parents: that monitoring, knowing where and with whom a daughter is, protects her, and that guilt, shaming and dismissing her feelings do the opposite.

4.1. Gaps

The review found no study that tests the pathway from parental support or control, through stress or depressed mood, to alcohol use specifically in girls in Kazakhstan or Central Asia. The monitoring paradox is also untested there: it is not known whether Kazakhstani girls are monitored more than boys while drinking as often. The national survey [15] measured family support, parental control, depressed mood and alcohol use in the same students, so such an analysis would be possible with data that already exists, if the results were reported separately for girls. The survey is also from 2017 to 2018, and more recent trends [16, 17] suggest that adolescent mental health in Kazakhstan has changed since then. Finally, no data were found on alcohol dehydrogenase activity, or on variants of the genes that code for it, in Kazakhstani adolescents, so it is unknown whether the biological difference described in adults applies to them.

4.2. Limitations

This is a narrative review, not a systematic review: the search was limited to three databases and to English and Russian, and studies were not scored for quality. For several sources only the abstract was available, so details such as effect sizes for girls could not always be checked. Most of the international evidence comes from the United States, Australia and Europe, and the meta-analysis of psychological control found that its effect differs between individualist and collectivist cultures [10], so the results may not transfer directly to Kazakhstan.

5. Conclusion

Parental support and the right kind of control, monitoring rather than psychological control, are consistently linked to better mental health and to less drinking in adolescents. For girls specifically, family conflict may raise the risk of heavy drinking through depressed mood, not primarily through reduced monitoring. Girls who receive high monitoring but live with family conflict may remain at risk through this mood pathway, a monitoring paradox that existing Kazakhstani data are consistent with but have not yet been used to test. A further biological dimension may make the stakes higher for girls: women have lower alcohol dehydrogenase activity in the stomach than men, so if this pattern found in adults also holds for adolescents, girls would sustain greater physiological harm from the same amount of alcohol as boys. Together, the psychosocial and biological evidence argues that parents need to understand not only where their daughters are, but what emotional state they are in. In Kazakhstan, where depressed mood scores are twice the European average and girls drink as often as boys, analysing existing national survey data separately for girls, including a test of whether depressed mood links family conflict and drinking, would be a practical and achievable first step.

Integrating education about the biology of alcohol into school and family prevention programmes would extend that step toward practice.

Author's contribution

The author chose the topic and the research question and wrote the introduction from her experience in the Pioneer programme. She read the two key studies on girls herself [12, 14] and the national survey of adolescent substance use in Kazakhstan [15]. She proposed connecting the monitoring paradox, the pathway through depressed mood and the biological side of alcohol into the central argument of the review, the last prompted by a genetic test in her family, and she wrote the conclusion. The search for and reading of the other sources and the drafting of the remaining text were carried out by her mentor with the help of a generative AI assistant (Claude, Anthropic). The author read and approved the final text.

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