## Problem Alcohol Use in Ukrainian Children: Association with Family Factors, Peer Drinking and Child Externalizing Behavior Problems

by

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#### Dedication

I dedicate my dissertation to my family and friends. I am extremely thankful to my parents, Volodymyr and Halyna. Thank you, Mom, for teaching me to read—every book reminds me of you. I will always be grateful to my English teacher, Petro Honcharenko, for making me a global citizen. I also dedicate this dissertation to my colleague and dear friend Lennart Lundquist for sharing his wisdom and introducing me to social work. Most important, I dedicate this dissertation to my wife, Iuliia, and my daughters, Valeria, Liza, and Anna.

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#### Abstract

The purpose of this three study dissertation was to assess risk and protective factors associated with child alcohol problems. Family systems theory and Bronfenbrenner's ecological model constituted the framework used for building and testing analytic models. Quantitative data were collected during face-to-face interviews with 320 parent-child dyads in 11 communities in Eastern, Southern and Central Ukraine. Children were 9-16 years of age and 50% were males.

The first study assessed the association between parent sociodemographic variables, alcohol use, domestic violence and family cohesion and flexibility, and parenting behaviors. Results indicated that higher violence in the home, higher alcohol use and unbalanced family functioning were related to more frequent use of negative parenting and less frequent use of positive parenting practices. Additionally, lower parent education was associated with negative parenting. The second study estimated the relationship between parenting practices and child externalizing behaviors, such as aggression, delinquency and attention problems. Results revealed that positive parenting, child monitoring and avoidance of corporal punishments were associated with fewer child externalizing symptoms. Results also indicated that child male gender, parent unemployment and single parenting had significant and positive association with child externalizing behaviors. The third, final study assessed child alcohol problems and their association with child gender and age, externalizing behaviors, parental IPV, parenting

practices, and peer and parent alcohol use. Children reported that they had alcohol related problems in multiple areas of life and mostly alcohol use affected their relationships with other people, school life and led to rule-breaking behaviors. Alcohol problems were more prevalent among males than among females. Results also revealed that children's alcohol problems were significantly related with older child age, higher peer drinking and more symptoms of externalizing behavior. This dissertation made an important contribution to the global psychosocial research on children and families. These findings can be used to design alcohol prevention programs and policies in Ukraine.

#### Chapter I

#### Introduction

Alcohol users in Ukraine consume, on average, 20.3 liters of pure alcohol per year, bringing the level of alcohol consumption in Ukraine 28% higher than in Europe and 124% higher than the average alcohol consumption level in the world (World Health Organization [WHO], 2014). Although globally, 48% of people abstain from alcohol use (WHO, 2014), in Ukraine only 1.0% of men and 4.7% of women report never having used alcohol (Webb et al., 2005). In a nationally representative sample of Ukrainian adolescents aged 15–17 years, the lifetime alcohol use was 93.1%, the last 12-month use was 78.1%, and the last month use was 56.3% (Balakireva et al., 2011). In this study, 30.8% of adolescents reported current binge drinking, defined as five or more drinks consumed on a single occasion during the last 30 days. Horachuk, Dudka, Skrypka, Smyrnova, and Pyankova (2011) studied adolescent social behavior and risks for health in a sample of 403 school children (males = 53%), aged 15–17, in the capital of Ukraine, Kyiv. In this study, 12% of the adolescents indicated that they did not try alcohol, 25% initiated drinking before age 11, 50% initiated drinking between the ages of 12 and 15, and 20% had alcohol for the first time when they were older than 16 years of age. Presently, no study has reported on alcohol use among younger children in Ukraine. Without

this information, it is impossible to estimate at what age children in Ukraine begin harmful consumption of alcohol on such a regular basis.

To address this gap, I have designed a study of factors associated with the development of alcohol-related problems among Ukrainian children. Specifically, in this Introduction section, I provide a summary of the literature on alcohol problems worldwide and a summary of comorbidity, theoretical models, and cultural contexts related to alcohol use in Ukraine. Next, I will use empirical data from Ukrainian children and parents to examine three research questions. In Chapter II, I will explore the effect of parent and family-level correlates on positive and negative parenting (RQ1). In Chapter III, I will examine the relationship between parenting practices and child externalizing problems (RQ2). In Chapter IV, I will analyze the association of child alcohol problems with parenting practices, child externalizing problems, and parent and peer drinking behaviors (RQ1). And finally, in Chapter V, I will discuss the results and limitations of this study, make conclusions, and present recommendations for practice and further research.

# Historical and Contextual Correlates of Alcohol Use in Ukraine Alcohol and Historical Trauma of the Ukrainian People

Although alcohol plays an important role in the lives of Ukrainians and is used for celebrations, religious practices, and medicinal purposes, as well as to enhance a sense of well-being, it is also used as a means to cope with trauma (Ingram, 1998; Marsh, 1996; Rouhier-Willoughby, 2008). People suffer because they have experienced a traumatic event as individuals or as community members, and this suffering leads to increased mental health and addiction problems (Fassin, 2009). This relationship became particularly evident in research

involving U.S. victims of terrorist attacks who increased their alcohol consumption as a result of exposure to traumatic events (e.g., Wu et al., 2006). Yuriev (2004) observed that poor mental health and high rates of alcohol addiction in Ukraine can be related to historical trauma, prolonged prohibition of religion, poverty, family problems, environmental issues, and general feelings of fear that many Ukrainians have experienced in their lives. The effects of such traumatic experiences as cultural oppression, war, and acts of genocide live in families and are passed on through generations.

Such trauma is particularly relevant for Ukrainian families who have been subjected to violence for hundreds of years. For example, the forced Russification of Ukraine was implemented by Russian tsars between 1700 and 1917 (Kononenko & Holowinsky, 2001).

During this period, people were not allowed to use their native language and were coerced to use the Russian language in schools and at work. Following the Russian Revolution of 1917, Ukraine enjoyed 5 years of independence, which ended when the Communist Red Army occupied Ukraine in 1922 and joined the republic to the Soviet Union, with the capital in Moscow (Roseberry, 1997). Once again, the Russian Communist Party enforced Russification, limiting the use of the Ukrainian language between 1923 and 1991 (Farmer, 1978; Kononenko & Holowinsky, 2001). Ukrainian families who chose to use their mother tongue were treated as inferiors.

In addition to systematic efforts to eliminate Ukrainian culture, in the 1920s Moscow's communists initiated a genocide policy of confiscating all food from Ukrainian homes (Conquest, 1987; Dolot, 1987). As a result, by 1933, 7.5 million people died of hunger in Ukraine. Communists also confiscated private property, factories, and land, killing or resettling

the owners to other Soviet republics. A few years later, Germany attacked Ukraine, leading to the deaths of an additional 6.8 million Ukrainians (Erlikhman, 2004). After World War II, Ukrainian families started to raise their communities from ruins while suffering another famine. Furthermore, between 1922 and 1953, under the rule of Joseph Stalin, every family member lived in fear of being arrested, imprisoned, or executed by the communist authorities. In fact, between four million and almost 10 million artists, researchers, army and government officials, peasants, and intellectuals were killed during the repressions of Stalin's era, in addition to those who died in famines (Getty, Rittersporn, & Zemskov, 1993; Wheatcroft, 1990, 1996, 1999).

In the 1960s and 1970s, the West experienced booming cultural and economic growth. Meanwhile, the Soviet people had to conform to a boring ideology and were forced to live in a gloomy totalitarian society with limited access to modern entertainment and a failing economy; consequently, they used alcohol as a coping mechanism and as an enjoyable activity (Laqueur, 1994). In the 1970s and 1980s, the Soviet communist regime sent young military men to fight in Afghanistan, and tens of thousands of wounded or killed soldiers were returned to their families (Krivosheev, 1993). Soviet authorities destroyed Christian churches and banned all forms of religion (Rouhier-Willoughby, 2008). In 1986, a disaster in the Ukrainian city of Chornobyl led to fallout of nuclear waste that was "200 times that of the combined releases from the atomic bombs dropped on Hiroshima and Nagasaki" (Fairlie, Sumner, & Nyagu, 2006, p. 7). Fairlie et al. (2006) estimated that this accident will result in up to 60,000 deaths as a result of cancer. Hundreds of thousands of people lost their homes and were resettled in other communities. With this miserable quality of life and so many traumatic events that incessantly impacted practically every Ukrainian home, it is little wonder that during the last years of its existence, the Soviet

Ukraine was drenched with profound political demoralization. During the late 1980s, alcohol abuse reached staggering levels, which were likely the result of the pervasive societal processes.

Although a majority of Ukrainians expected a better life after the collapse of the Soviet Union in 1991, the newly independent Ukraine entered another period of instability and economic recession. The government-owned economy became privatized and a majority of Ukrainians lost their savings. During 23 years of independence, Ukraine experienced a number of political transformations, many of which led to painful and traumatic experiences, including the Orange Revolution and Russian occupation of parts of Ukrainian territory (United Nations Office for the Coordination of Humanitarian Affairs [OCHA], 2015). The concurrent alcohol use in Ukraine is one of the highest in the world (WHO, 2014). In sum, Ukrainian people were exposed to extraordinary levels of trauma, and for many, alcohol use was the only way to cope with stressful experiences. Unfortunately, to my knowledge, there are no studies that have tested this relationship using empirical data.

#### **Alcohol-Related Policies and Legislation**

Vague and half-effective Ukrainian policies can provide another possible explanation for alcoholism in this country. For example, in Ukraine, there is no criminal responsibility for selling alcohol to minors under 18 years of age. If caught by authorities, the seller is required to pay UAH6,800, a negligible fee equal to approximately US\$200 (Verkhovna Rada, 2010a). In addition, it is legal to openly advertise alcohol in Ukraine, albeit with certain limitations such as, for example, a ban on featuring models who are younger than 18 years of age using alcohol (Cabinet of Ministers of Ukraine, 2004). And although the consumption of alcohol has been recently prohibited in public places, such as educational establishments and health care

facilities, children's playgrounds, and government offices (Verkhovna Rada, 2010b), the punishment for violation of this law is a warning or a trifling fee. Besides, there is no punishment for possession or use of alcohol by minors. Overall, the most severe punishment related to alcohol use is stipulated for driving under the influence of alcohol. This violation is punished with a fee of US\$110 or suspension of a driver's license for up to 2 years, 40 to 50 hours of public works, or confinement for seven to 10 days (Ministry of Internal Affairs and Ministry of Health of Ukraine, 2009).

#### **Definitions and Conceptualizations of Alcohol-Using Behaviors**

Although most people do not experience problems related to alcohol use, it is estimated that 4.1% of adults ages 18 and older in the world have an alcohol use disorder (AUD; WHO, 2014). According to the 10th edition of the *International Classification of Diseases* (ICD-10; WHO, 1992), an AUD may be indicated by the harmful use of alcohol and by alcohol dependence. Although a harmful use of alcohol happens when alcohol use leads to damages in mental and physical health, alcohol dependence (also known as alcoholism or alcohol dependence syndrome) develops as a result of a repeated intake of alcohol. Dependence is associated with behaviors, cognitions, and physiological experiences that promote the continued consumption of alcohol despite harmful consequences. These consequences include the impaired ability to control alcohol use and prioritizing alcohol use over important life activities and responsibilities as well as the craving for alcohol, a heightened tolerance of alcohol, and the occurrence of withdrawal symptoms when alcohol use is suspended (WHO, 2014).

In the United States, the main tool used for classification and diagnoses of mental disorders is the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* 

(DSM-5), which was developed by the American Psychiatric Association (APA; DSM-5; American Psychiatric Association, 2013). The DSM-5 sets criteria for AUD, alcohol intoxication and withdrawal, and other alcohol-induced and alcohol-related disorders. The AUD is considered to be *mild* when an individual has experienced 2–3 symptoms during the last 12 months, moderate when there have been 4-5 symptoms, and severe when there have been 6 or more symptoms out of the total 11 diagnostic criteria for the AUD. The first AUD symptoms described in the DSM-5 refer to people who lose control over the amount of alcohol consumed and the time spent on consumption (Criterion 1) or who have the desire but fail to reduce or control alcohol consumption (Criterion 2; APA, 2013). The next AUD symptom describes individuals who reshape their lives in ways that accommodate their efforts aimed at securing, using, and recovering from alcohol intoxication (Criterion 3). Craving is a strong desire to use alcohol and is the fourth criterion of AUD. Craving is an external manifestation of an underlying neurocognitive response that involves activation of the brain's reward mechanisms that coax individuals with AUD into repeated alcohol use (Miller, Westerberg, Harris, & Tonigan, 1996). The DSM-5 (APA, 2013) also specifies a set of criteria pertaining to social impairment as a result of alcohol use. The social impairment is seen as an inability to combine alcohol use with obligations at home, in school, or at work (Criterion 5); continued alcohol involvement despite knowledge that it causes or aggravates social or interpersonal problems (Criterion 6); and a partial or complete disengagement from social, family, and professional life, as well as hobbies, because of alcohol consumption (Criterion 7). The eighth DSM-5 criterion for AUD describes repeated use of alcohol in situations that can lead to physical risks, whereas the ninth criterion is characterized by the continued alcohol involvement despite knowledge that it causes physical or psychological problems. Finally, the DSM-5 criteria for AUD identification include tolerance (i.e., the need to consume increased amounts of alcohol to achieve desired effects or the inability to experience the same effect with continued intake of the same amount of alcohol; Criterion 10) and withdrawal (i.e., the presence of alcohol-specific withdrawal symptoms or use of alcohol to alleviate or evade such symptoms following discontinued alcohol use; Criterion 11).

#### Alcohol Use Disorder and Somatic and Mental Health

Alcohol is known to cause problems across various areas of life and is linked to increased mortality. It is estimated that 3.3 million people die each year in the world as a result of alcohol consumption (WHO, 2014). In a meta-analysis of 34 prospective studies that involved over one million participants and 94,533 deaths, Di Castelnuovo et al. (2006) found that drinking less than one to two drinks per day for women and two to four drinks per men is associated with higher probability for survival, whereas drinking in excess of the aforementioned amounts has a significant relationship with a staggering increase in death rates. The authors conclude with a strong message that low to moderate drinking is beneficial for health. At the same time, the study fails to control for other health-promoting behaviors. For example, it is possible that individuals who choose to moderate their drinking are the same individuals who choose to exercise, avoid risky situations, and maintain a balanced diet.

Although moderate involvement with alcohol might contribute to an increase in the survival rate, the intake of more than 20–72 grams of ethanol per day is associated with significant increases in the risk for cancers of the esophagus, pharynx and larynx, and oral cavity (Corrao, Bagnardi, Zambon, & La Vecchia, 2004). Additionally, in a meta-analyses of

156 studies, Corrao et al. (2004) reported a strong link between alcohol use and cancers of the rectum, colon, liver, and breast. Finally, results of that study indicate that increased alcohol consumption is related to acts of violence and injuries, hypertension, chronic pancreatitis, and liver cirrhosis. This is particularly worrying in countries such as Ukraine, where on a typical drinking occasion, Ukrainian adult women consume 80 grams and men consume 120 grams, and this heavy alcohol use is common among 22% of adults (Webb et al., 2005). However, only 4.9% of adults (9.3% men and 1.1% women) are estimated to have AUD in Ukraine (WHO, 2014). Although not all people who consume large amounts of alcohol receive an AUD diagnosis, heavy drinkers tend to have shorter lives. Death is one of the main contributors to the declining prevalence of the alcohol disorder among older Ukrainians who mostly begin to die because of circulatory system illnesses, liver cirrhosis, cancer, and alcohol-related poisoning and injuries when they are in their 40s (Mesle, Vallin, Shkolnikov, Pyrozhkov, & Adamets, 2012).

In addition to severe and life-threatening health consequences, there exists a robust link between alcohol abuse and a range of mental illnesses and pathological behaviors. Researchers believe that genes are primarily responsible for the co-occurrence of substance use disorders, other mental illnesses, and rule-violating behaviors. According to Volkow (2008), substance use co-occurs with mental illnesses in three ways: (a) substance use leading to mental health symptoms; (b) mental illnesses promoting substance use as self-medication; and (c) development of both substance use and other mental illnesses because of the underlying brain structure and functioning, traumatic and stressful experiences, and genetic factors.

Research shows that genetic liabilities might explain 40 to 60% of the risk for addiction (Volkow, 2008).

The AUD often co-occurs with mental illnesses. Alegría et al. (2010) reported results from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC; N = 43,093) that points to a strong link between alcohol use disorder and generalized anxiety disorder (GAD). The patterns of comorbidity between AUD and GAD are similar in U.S. and South Korean samples (Chou et al., 2012), suggesting that this relationship remains significant across culturally diverse environments. Fenton et al. (2012) analyzed two waves of the NESARC data, and their results indicated that alcohol dependence was a significant predictor of drug use disorder (related to consumption of such drugs as cannabis, inhalants, cocaine, sedatives, hallucinogens, stimulants, heroin, opioids, tranquilizers, and others). In another prospective study with 814 adolescents, alcohol use, abuse, and dependence were among significant predictors of the onset of nicotine dependence (Griesler, Hu, Schaffran, & Kandel, 2011). Hasin et al. (2007) used a nationally representative dataset to understand correlates of alcohol abuse and dependence among U.S. adults. In this study, the male gender, a young age, an unmarried status, and White and Native American races, as well as a low income, were associated with a higher risk for alcohol use and dependence. The authors also reported the high frequency with which alcohol disorder co-occurred with other substances as well as mood (depression, bipolar, dysthymia), anxiety, and personality disorders. O'Neil, Conner, and Kendall (2011) reviewed the empirical literature on the temporal relationship between internalizing disorders such as depression and anxiety and substance use disorders in youth.

This study found that, to a large extent, internalizing problems precede and increase the risk for subsequent development of substance use disorders.

In addition to internalizing and externalizing behavior problems, AUDs have a high comorbidity with antisocial personality disorder (APD; APA, 2013; Ball, Tennen, Poling, Kranzler, & Rounsaville, 1997), because they may have shared etiology related to the inability to self-control that leads to alcoholism as well as rule-breaking behaviors (Sher & Trull, 1994). Indeed, individuals who receive a diagnosis of APD tend to exhibit the following behaviors, referred to as "Cluster B": (a) violate societal rules and norms, (b) engage in repeated illegal behavior, (c) cheat for personal gains, (d) act impulsively and without careful planning, (e) exhibit aggression and show complete indifference to personal safety and the safety of others, (f) be consistently irresponsible at work, and (g) have an impaired ability to feel guilt or remorse for hurting or mistreating other people (APA, 2013). Thus, individuals with APD and AUD have similarities in diagnostic criteria in that both diagnoses include maladjustment with regard to performance of social roles and following societal norms. Additionally, similar to individuals with APD, people with AUD may experience difficulties in regulating negative emotions (Sher & Grekin, 2007). Tragesser et al. (2008) explored this relationship and reported that Cluster B antisocial personality disorder influences AUD through mediatory mechanisms in which alcohol use allows individuals with APD to cope with negative feelings and enhance their positive emotions. Other features of the APD diagnosis require that symptoms do not occur during schizophrenia or bipolar episodes and that these individuals must be at least 18 years of age and show a pattern of disruptive and rule-breaking behaviors since the age of 15 (APA, 2013). This means that all adult individuals who are diagnosed with antisocial personality

disorder have a long-standing history of norm violating and rule-breaking behaviors that begin in childhood and adolescence. Such behaviors, referred to as conduct disorder (CD), often violate the rights of other people and include destruction of property, theft and deceitfulness, and aggression to people or animals (APA, 2013). Developmentally, CD is often preceded by oppositional defiant disorder (ODD; Pardini, Frick, & Moffitt, 2010), and the presence of callous—unemotional (CU) traits predicts criminal involvement and APD even after controlling for ODD and CD symptoms (McMahon, Witkiewitz, Kotler & The Conduct Problems Prevention Research Group, 2010).

Impulsivity is another characteristic that is often linked to conduct disorder in children and antisocial behavior in adults (Kendler, Prescott, Myers, & Neale, 2003). Additionally, impulsivity is associated with alcohol abuse and attention-deficit/hyperactivity disorder (ADHD; Congdon & Canli, 2005). It is believed that impulsivity has a neural basis that influences an individual's ability to perform response inhibition tasks (Congdon & Canli, 2005). Research has shown that individuals who self-reported higher impulsivity needed more time to stop the initiated processes in a stop-signal experiment (Logan, Schachar, & Tannock, 1997). Additional dimensions of impulsivity include a lower ability to premeditate (carefully consider things before doing them), greater positive or negative urgency (propensity to make hasty decisions while being in a positive or negative mood), sensation seeking (risk-taking, pursuit of pleasures and new sensations), and lack of perseverance (not finishing projects or tasks; Dick et al., 2010; Whiteside & Lynam, 2001, 2003; Zuckerman, 1994). Impulsivity is known to be related to externalizing behaviors and alcohol abuse (Whiteside & Lynam, 2003). Consumption of alcohol that leads to problems in various areas of life is by itself an example of such

behaviors as lack of premeditation and sensation seeking. Furthermore, some research suggests that alcohol use can set off impulsive behaviors through its pharmacological impact, leading to biological changes in the areas of prefrontal cortex responsible for decision making and impulse control (Goldstein & Volkow, 2002; Jentsch & Taylor, 1999). Yet, studies with pathological gamblers whose brains are not affected by substances show addictive behaviors similar to individuals who abuse alcohol and drugs (Bechara, 2003; Potenza, 2001). Additionally, a study with individuals involved in pathological gambling and people with alcohol dependency showed that they share between 12% and 20% of genetic vulnerability (Slutske et al., 2000) due to dopamine polymorphisms largely present in people with both types of addictive behaviors (Comings et al., 1996). Furthermore, similar changes in dopamine neurotransmission are associated with conduct disorder and ADHD, which require treatment with psychostimulant medications influencing the dopamine system (Aron & Poldrack, 2005). Thus, the aforementioned studies represent robust evidence that alcohol abuse has a shared neurocognitive foundation that explains its high comorbidity with attention problems, conduct disorder, and antisocial personality disorder. Furthermore, this comorbidity has behavioral similarities; for example, when underage youths break rules while abusing alcohol and violate other societal norms and engage in aggressive acts.

#### Developmental Framework of Alcohol-Use Disorder and Co-Occurring Psychopathology

Alcoholism is a developmental condition that begins with identifiable risks at birth and progresses from childhood through adolescence to the SUD endpoint. In a classical study of genetic risk for alcoholism, Goodwin, Schulsinger, Hermansen, Guze, and Winokur (1973) compared adopted Danish children born to parents with alcoholism with children of parents

who did not have a history of SUD. These researchers found that children of alcoholic parents had significantly more alcohol disorder symptoms than children without genetic risks, albeit both groups were raised in nonalcoholic environments. This research indicates that having at least one biological parent with AUD constitutes a significant marker that is present at birth for some children and sets these children on a life trajectory with increased risk of developing AUD later in their life. Although there is a significant risk to inherit AUD from parents, a recent meta-analysis of 42 published studies of common six candidate genes (BDNF, DRD1, DRD3, DRD4, GRIN2B and MAOA) involved in neurotransmission of AUD did not confirm the consistent role of any of these genes in the increased risk for AUD (Forero, López-León, Shin, Park, & Kim, 2015). This finding stresses the importance of social and behavioral research for identification of risk factors and treatments for AUD.

Scientists observed that some children were at increased risk for other problem behaviors that co-occurred with alcohol abuse. For example, Costello, Mustillo, Erkanli, Keeler, and Angold (2003) conducted analyses of the longitudinal data from 1,420 children who were initially assessed at ages 9–13 years and then annually until age 16 for mental health disorders. In this study, substance use disorder was among mental illnesses that showed high homotypic continuity both for boys and for girls. However, as for heterotypic continuity, the presence of anxiety earlier in life significantly increased the risk of substance use disorder in older adolescent age. In another study, Donovan and Jessor (1985) used four waves of U.S. longitudinal data spanning from adolescence to early adulthood that advanced an understanding that some adolescents shared a broadband common factor of antisocial externalizing behaviors. In this study, this common factor accounted for correlations with such problem behaviors as

alcohol and drug abuse, delinquent and deviant actions, and precocious sexual intercourse. Later, in addition to antisocial alcoholism, another type, with low antisocial continuity, has been identified using data from male participants of the first wave of the Michigan Longitudinal Study (Zucker, Ellis, Fitzgerald, Bingham, & Sanford, 1996). In this study, participants who had an antisocial type of AUD with antisocial traits had a longer history and intensity of involvement with alcohol, lower social adjustment, and more marital problems and symptoms of depression than participants with a non-antisocial type of AUD. More important, people who developed an antisocial type of AUD were more likely to report a family history of alcoholism, early onset of alcohol use, greater socioeconomic disadvantage of their family of origin, depression, and lower academic success during their development. Interestingly, participants with a non-antisocial type of AUD were raised in families with higher involvement with alcohol than a third group identified in this study—non-antisocial nonalcoholic participants. Moreover, non-antisocial AUD status was correlated with having the first drink earlier in life and having a lower education, income, and social status than those in the group that had no antisocial tendencies and no AUD. Although this study relied on cross-sectional analyses and prior life experiences that were reconstructed from participants' memories, these results raised the importance of distinguishing between groups of alcohol users who had either higher or lower co-occurring antisocial tendencies. Also, the authors proposed a set of correlates that accounted for participants' membership in one category or another, such as level of education, degree of wealth, individual mental health, and family's involvement with alcohol. The finding that lower socioeconomic status during child maturation has such a strong impact on development of the

end-stage AUD in adulthood is particularly important for future studies of alcoholism in countries with developing economies.

The knowledge that broadband externalizing and alcohol-specific genetic risk factors are related led researchers to the question regarding developmental patterns of these influences. To estimate these patterns, Kendler, Gardner, and Dick (2011) used twin data from the first two waves of the Virginia Adult Twin Study of Psychiatric and Substance Use Disorders. Researchers used a life history calendar interview (Freeman, Arland, Camburn, Alwin, & Young-DeMarco, 1988) to elicit information about genetic risk (based on data on parent or cotwin alcohol abuse and dependence) and information about genetic risk for externalizing disorders. The risk for externalizing disorders was based on the total externalizing score derived from the co-twin's symptoms of conduct disorder and antisocial personality disorder as well as on the report of the co-twin about antisocial personality disorder in twin and biological father. Other covariates were involvement with deviant peers, prosocial behaviors, parent-child bonding, and parental monitoring. The study showed that both alcohol-specific genetic risks and externalizing genetic vulnerability predicted increased consumption of alcohol, but there were different developmental patterns. The general externalizing genetic vulnerability had a stronger relationship with increased alcohol consumption in adolescent age (15–17 years), and thereafter its influence on alcohol use steadily declined. However, the alcohol-specific genetic risks had their strongest association with increased involvement with alcohol between ages 30 and 33. Parental monitoring was the strongest environmental predictor of increased alcohol consumption followed by association with deviant peer groups and alcohol availability. Involvement in prosocial behaviors and good parental bonding had a smaller protective effect

on alcohol using behaviors. Another important finding reported in this study was that the extent of involvement with deviant peers moderated the genetic risks for increased alcohol consumption. For participants who had less interaction with deviant peers, genetic risk had no significant impact on alcohol involvement. However, for those participants who had more contacts with peer deviance, genetic risk had a strong association with the quantity of alcohol consumed.

In a more recent study, Meyers et al. (2014) used prospective, longitudinal Finnish twin data to confirm divergent impact of risk factors on developmental trajectories of alcohol use. Specifically, researchers collected data from participants at ages 12, 14, 17, and 22. Consistent with the findings reported by Kendler et al. (2011), Meyers et al. (2014) found that externalizing genetic risks had a strong association with alcohol use during adolescent age, whereas alcohol-specific genetic risks revealed their impact on alcohol using behaviors in young adulthood.

Researchers also reported that alcohol-specific genetic risks had a greater impact on early alcohol use among female adolescents than among male adolescents. Adolescent girls aged 14–17 with twin brothers were at particularly high risk for alcohol intoxication.

Weichold, Wiesner, and Silbereisen (2013) specifically studied gender differences in association with problem alcohol use and childhood and mid-adolescent correlates using five waves (N = 1,619) of the Younger Cohort of the Leipzig Schüler-Intervall, Eastern Germany adolescents' prospective, longitudinal data. In this study, four classes of alcohol-use trajectories were identified for male participants: *early peakers, regular users*, *late escalators*, and *rare users*. Although none of the variables differentiated between membership in the early peaker and regular user classes, a single factor—involvement with the risky peer context—was related

to increased levels of alcohol use for the regular user class at age 15.5 years. Late escalators (in comparison with regular users) were likely to have more educated parents and parents who had lower involvement with alcohol, and they hailed from larger communities. Likewise, rare users were more likely than regular users to be from large communities and have good relationships with their parents and fewer conduct problems at school. For females, these researchers identified four trajectories of alcohol involvement: rare users, decreasers, increasers, and regular users. Predictors for the rare user group (vs. baseline regular use group) were higher impulsivity, lower parent alcohol use, lower involvement with a risky peer context, and fewer conduct problems at school. For the decreaser group (vs. regular use group), there was a significant association with higher impulsivity and lower parent alcohol use. Increasers (in comparison with regular users) were more likely to have higher impulsivity, higher parent education, lower parent alcohol use, lower body mass index, and lower involvement with a risky peer context. This research showed that males and females have different drinking trajectories, although regular users were present among both genders. The regular users had rather high levels of use between the ages of 14 and 18, unlike the male group of late escalators and the female group of increasers who had normal or low alcohol consumption levels. Grouping adolescents in such a way represents a great value for effective alcohol prevention programs that must rely on the identification of gender-specific trajectories of AUD.

Monahan, Rhew, Hawkins, and Brown (2014) also reported on the impact of peer delinquency and substance-use behaviors on adolescent pathways to co-occurring problem behaviors with the data from 2,002 control group participants of the Community Youth Development Study conducted in seven U.S. states. These participants were public school

students who completed surveys in five waves between grades 5 and 10 with questions on delinquent behavior, substance use, peer delinquency, and peer substance use. In this study, analyses using a variable of peer substance use (including alcohol, cigarettes, smokeless tobacco, marijuana, inhalants, and prescription drugs that were not prescribed by a doctor) returned identical results as analyses using a variable limited only to alcohol use. Using delinquent behaviors and substance use as binary indicators, researchers estimated a solution with four latent classes of youths: (a) youths who were at low risk for delinquent behavior and substance use (abstainers), (b) youths who were at increased risk for delinquent behavior and decreased risk for substance use (delinquent-only), (c) youths who had an increased risk for substance use and decreased risk for delinquent behaviors (substance-use-only), and (d) youths who had co-occurring high risk both for substance use and delinquent behaviors (co-occurring problem behavior). There were changes in the membership in these classes over time, with the abstainers class declining over time from 67% in the sixth grade to 42% in the 10th grade; the delinquent-only class increasing from 22% in the sixth grade to 26% in the 10th grade; the substance-use-only class increasing from 2.3% to 8% by the 10th grade; and the co-occurring problem behavior group increasing from 7.6% to 24% in the 10th grade. The abstainer class was the most stable class in this study. However, some youths did transition from this class, mostly to the delinquent-only class (up to 25%) rather than to the substance-use-only group (less than 5% over time). Of members of the delinquent-only class, just 3–5% were likely to transition to the substance-use-only class, but only between grades 8 and 9 and 9 and 10. Monahan et al. (2014) further reported that participating youths were likely to transition from the substanceuse-only class to the abstainer class only between sixth and seventh grades. In general, the

probability of this type of transition decreased with age. In fact, youths were more likely to transition to the co-occurring class over time. The transition to the delinquent-only class was improbable except between eighth and ninth grades. Results of this study indicated that once youths were in the co-occurring class, there was a small chance for them to transition to either the class with increased substance use risk or the class with increased risk for delinquency. Results of this study illuminated important sex differences for the likelihood of youths transitioning from both delinquent-only or substance-use-only behaviors to the abstainer class, with males being more likely to make such a reverse transition than females. Interestingly, higher involvement with delinquent peers was associated with transitioning from abstinence to delinquent-only behaviors. Peer substance use did not predict transitioning from abstinence to delinquent-only behavior but had a significant impact on transitioning from abstinence to substance-use class. Likewise, associating with delinquent peers led to transitioning to delinquent behaviors. Moreover, youths who had fewer delinquent peers were more likely to transition to abstainer class from delinquent, substance-using, and co-occurring classes. Transitioning from co-occurring class to delinquent class was associated with greater involvement with delinquent peers, whereas those who transitioned from co-occurring class to substance-use-only class were more likely to have peers with lower delinquency. Peer substance use was not a significant predictor for this transition. In sum, results of this study indicate that adolescents have multiple problems and that some youths transition between different types of problems or return to a problem-free life. Additionally, the study produced clear evidence of the developmental progression from delinquency to substance use. Additionally, females who transitioned to substance use or delinquency were less likely to transition to abstinence.

Similarly, the youths with co-occurring problems were less likely to return to abstinence or only one problem. The authors warrant that interventions should begin before youths progress to co-occurring substance use and delinquent behavior problems. Finally, the most striking developmental pattern observed in this study is related to the influence of peers in association with increases in corresponding behaviors in youths.

## Conceptual Understanding of Family as a Context for Children's Development and Adjustment

Klagsbrun and Davis (1977) defined *family* as "a relatively stable living group, a distinct psychosocial unit, that comprises at least some form of the 'nuclear' family and may include other members not necessarily blood-or marriage-related" (p. 1). An understanding of family as a basic unit of social organization, its influences on people's patterns of behavior, and its pivotal role in making change was rooted in social work (Collins, Jordan, & Coleman, 2009). In her classic text, Mary Richmond (1917) stressed the importance of treating the whole family rather than its individual members. Richmond understood and called on the necessity to consider family systems in casework. After World War II, Ludwig von Bertalanffy (1950) published the outline of the general systems theory (GST). Bertalanffy believed that the world consists of systems organized in a hierarchical order. In his view, foundation elementary particles are a part of a larger system of atomic nuclei, which are included in atoms making molecules present in cells organized in larger systems, organisms, sociocultural systems, and symbolic systems (Bertalanffy, 1969). An adolescent with an alcohol abuse problem belongs to all these levels, being a living organism aware of the self and the world and belonging to a family system, school, and neighborhood and a symbol-determined culture with language, morals, and logic.

Bertalanffy's GST provides a useful opportunity to see such an adolescent as a part of the organized whole—a system—rather than a social atom—an elementary and isolated psychosocial unit.

Bertalanffy (1969) recognized the importance of boundaries for human beings, linking weak ego boundaries with mental health problems and rigid boundaries with limited potentialities. The "closed" systems limit input from the environment by maintaining impermeable boundaries, and because it is impossible to completely eliminate environmental input to human systems, such systems should generally be considered "open" (Bertalanffy, 1969). However, some limitations of openness, or the maintenance of the semipermeable boundaries, can have a protective function. For instance, families can encourage their adolescents to build relationships outside of the family, yet they may help their offspring select prosocial friendships and avoid alcohol-abusing peers.

The development of the system's components (e.g., individual family members), their differentiation, often signifies renegotiation of previously established boundaries. The adolescent age is a major developmental period of intensive differentiation from the nuclear family system, a process in which functions, thoughts, feelings, and language transform over time from being general to being more articulated, specific, hierarchically ordered, and, importantly, distinct from those of others in the family. Bertalanffy (1969) stressed that regression in human behavior was associated with the loss of organization and impaired differentiation. Bowen (2004) seconded the importance of differentiation for family members' well-being. He perceived a family as an "undifferentiated family ego mass" (Bowen, 2004, p. 107) and believed that, ideally, children were to achieve self-differentiation from this mass by

clearly shaping their ego boundaries, thus becoming mature and emotionally independent. According to Bowen, when well-differentiated from their own families, children are very likely to meet well-differentiated spouses as adults for a relationship that would allow them to maintain their own identity, individuality, and a comfortable degree of emotional closeness. In fact, Bowen proposed to "put the entire range of human functioning on a single scale with the highest self-differentiation level on the top" (p. 109). Interestingly, self-differentiated members of the family are better at family cohesion; that is, maintaining strong emotional bonds with each other (Bowen, 2004), a quality that has long been associated with protection of family members against disruptive behaviors and with the reconstruction of such behaviors (Richmond, 1917). Indeed, research shows that low family cohesion predicts adolescent addictive behaviors (Tafa & Baiocco, 2009).

The role of the parent and degree of cohesion are intimately related with adolescent alcohol abuse. Undifferentiated parents run the risk of having a drinking adolescent child, who, by doing so, improves cohesion between parents and protects the family from disintegration (Bowen, 1974). Poor parenting, including low levels of parental involvement with their offspring and dysfunctional attachment patterns (Zucker et al., 2006), as well as a lack of positive parenting, such as consistent discipline and monitoring and positive guidance and reinforcement of the desired behaviors

(Brody & Forehand, 1993; Cohen et al., 1990; Gilvarry, 2000), are some of the mechanisms found in the research on alcohol-abusing adolescents' family systems. Furthermore, the success of the parenting role is mediated by "attitudes toward the child that are communicated to the child and create an emotional climate, in which the parent's behaviors are expressed" (Darling

& Steinberg, 1993, p. 493). Indeed, helping the adolescent child eliminate drinking problems calls for cooperation from the adolescent. Darling and Steinberg (1993) suggested that adolescents' willingness to openly provide parents with information on their lives, thus enabling parents to influence their behaviors, depends on whether parental styles are characterized by sufficient closeness and warmth. Contrary to Darling and Steinberg's belief that parenting styles provide the context for socialization of parents and adolescents, other researchers suggested that adolescents' willingness to self-disclose varies depending on specific issues or domains of their social life and the presence of trust and positive communication in their relationship with their parents (Nucci, 1981; Smetana et al., 2009). Many adolescents are not willing to disclose information on imprudent behaviors, such as their sexual activity and substance abuse, because of concern of being punished by parents or because they do not think that their behavior is harmful. Still, those who have high-quality relationships with parents (measured on an attachment scale), tend to more openly disclose with parents their imprudent, peer-relation, and personal information (Smetana et al., 2009). These adolescents can truly benefit from the larger family system, which provides them with nurturance and feedback they are able to receive and use in their decision making related to involvement with alcohol. This interaction becomes possible if, when in communication with the adolescent, the parental subsystem recognizes the boundaries of the child, actively listens, and tries to understand the story of the adolescent, and encourages the child to become independent in the process of her or his growth by seeding and nurturing positive and self-guided behaviors.

Research is unequivocal on the direct impact (Emery, 1982), as well as the indirect influence through disturbance of parenting behaviors (Faircloth, 2012), of interparental conflict

on adolescents. Conflict in the parent subsystem often leads to dysfunction or impairment in a child, contributing to internalizing and externalizing behaviors problems, including alcohol abuse (Cummings, Ballard, & El-Sheikh, 1991; Zucker et al., 2006). Bowen (2004) proposed that "the triangle, a three-person emotional configuration, is the molecule or the basic building block of any emotional system, whether it is in the family or any other group. The triangle is the smallest stable relationship system. A two-person system may be stable as long as it is calm, but when anxiety increases, it immediately involves the most vulnerable other person to become a triangle. When tension in the triangle is too great for the threesome, it involves others to become a series of interlocking triangles" (p. 373). This view is consistent with Anderson and Henry's (1994) idea that family systems with ineffective boundaries between subsystems and excessive involvement with the child of one parent and distancing of another parent, may benefit from adolescent alcohol abuse, which distracts parents from their unresolved relational problems.

The relationship between adolescents and their parents can have a varying degree of closeness, from over-involvement to emotional "cutoff." Cutoff is defined as a "process of separation, isolation, withdrawal, running away, or denying the importance of the parental family" (Bowen, 2004, p. 382). Consistent with this is a tendency of undifferentiated young persons to handle unresolved emotional attachment by avoiding being with the parents (e.g., running away), emotional isolation (e.g., abuse of psychoactive substances, internalized symptoms, and the like), or both.

One theme that lacks self-evident understanding concerns the fact that in the same family, one child develops alcohol problems while another does not. Bowen (2004) argued that this happens due to the family projection process, in which parents can project their lack of

differentiation, anxiety, and immaturity to children by either neglecting them or overfocusing on them. Most often one child becomes a focus of parental over-involvement and deep emotional attachment and ends up developing symptomatic behavior, such as alcohol abuse, whereas the other children stay outside of this process and receive a chance to self-differentiate beyond the level of parents. However, the child who is the focus of the family projection process will develop to be less differentiated. Bowen could observe progressively lower self-differentiation levels from generation to generation, which he called the "multigenerational transmission process" (p. 205).

Another concept, "emotional process in society," which was included in Bowen's (2004) theory, recognized an important connection between increased anxiety in society and the corresponding augmentation of emotional disruptions in the family. This idea of social and cultural influences of different contexts on the child's and family's functioning and development extends the limits of the family system theory and is consistent with Vygotsky's social development theory (Vygotsky & Cole, 1978). According to Vygotsky, children's learning and development happens due to social interaction with the specific sociocultural environment. Vygotsky believes that children first encounter new functions interpsychologically and then intrapsychologically. The child learns from a more knowledgeable other (MKO), who can be a parent, a teacher, a friend, or a computer program. This learning happens through adult or peer guidance (scaffolding) in what Vygotsky called a "zone of proximal development" (ZPD; p. 86), representing a learning space for tasks that still require mastering. Once children master a new skill in the ZPD, they will proceed to use this skill without external support. For example, when children learn to use alcohol and drugs, they initially lack the specific knowledge and skills

required for use. Additionally, they may feel reluctant to use them because they lack knowledge about dosage and the effects of substances. At this initial stage of substance use, they often receive guidance from their peers and even some parents, who may comfort them, share use-related skills, and provide necessary paraphernalia. When a child feels comfortable around alcohol, drugs, or cigarettes, he or she can continue using them independently.

Urie Bronfenbrenner's ecological model (1981) represents another useful tool for understanding the development of substance abuse. In this model, children can learn maladaptive behavior patterns such as conduct problems and substance use in the immediate setting in which they live. Furthermore, the child's conduct problems may depend in part on the quality of the interactions in the home but also on the nature of the ties between the family and peers as well as between the child's family and a school. The next level of the ecological environment suggests that the child's development is profoundly affected by the exosystem, a set of environmental elements that influence a child's development even though that child is not directly involved with them. For example, parents working long hours for little pay might have fewer opportunities to enhance their children's knowledge and help them engage in recreational activities. They might experience social injustice and have more limited psychological and economic resources to steer their child's development or to deal with mental health issues than wealthier and more educated people (cf., Burlaka, Bermann, & Graham-Bermann, 2014). Such parents might also have smaller and less powerful social networks and receive less social support to cope with daily stress. Factors in the exosystem can have a powerful influence on both mesosystems and microsystems. Finally, there are cultural influences that represent blueprints for the organization of schools and families, neighborhoods and communities, and

even whole countries. Bronfenbrenner argued that these blueprints can change over time and that such changes in society can lead to remarkable changes in people's behaviors. Research suggests that changes in national alcohol policy can reduce alcohol use and alcohol-related problems on an individual level (e.g., Chaloupka & Wechsler, 1996).

### Families and Adolescent Alcohol Abuse in Ukrainian Sociocultural Context

In Ukraine, family functions are believed to include reproduction, recreation, economic support, socialization, and the upbringing of children (Hryshchuk, 2011). Ivanova (2009) assumed that the Soviet Revolution affected family values and diminished the role of parents in children's upbringing. Communists created social movements for children of three age groups. First, children aged 6 to 9 were accepted to the Oktiabriata ("Little Octobrists"). At the age of 10, children who behaved well and were academically successful were accepted to the Young Pioneer organization. Children who misbehaved or had lower grades were accepted to Pioneers during the next year. At the age of 15, Young Pioneers joined the Komsomol, the youth division of the Communist Party of the Soviet Union, where they continued learning communist values. Ivanova has pointed out that these children's movements robbed parents of their ability to select for their children food, clothes, occupations, health care, and the content of cultural education, which had been centrally designed and provided to all children in a uniform manner in Ukraine. Furthermore, Soviet authorities systematically eliminated national Ukrainian identity, including language and family traditions and fostered the socialist, collective identity (Ivanova, 2009). According to Ivanova, the post-Soviet Ukrainian government failed to continue providing appropriate behavior norms while families have not yet developed them, which left young people unprotected against the influences of mass culture and economic interests.

Denysiuk, Belenka, and Bohinich (2003) studied knowledge, attitudes, and practices of child-rearing in five Ukrainian regions in a sample of 756 parents (mothers = 80%). In this study, 76% of the parents indicated a need for additional information on parenting. In addition, parents from rural areas experienced a need in parenting knowledge twice as often as parents from the urban neighborhoods. The areas of particular interest for parents were first aid (46%), cognitive development (44%), health care (41%), and education and the upbringing of a healthy child (41%). In this study, every third family reported having their child by chance. For many, the pregnancies were unwanted because of, for example, poverty or because impregnation happened outside of wedlock or because a family already had several children. Denysiuk et al.'s study further revealed that half of the parents planned to restrain themselves from using alcohol before pregnancy, but only 14% of mothers and 12% of fathers could give up drinking before conception of the child and 25% began maintaining sobreity during pregnancy.

A study by Horachuk et al. (2011) indicated that only 6% of Ukrainian children are not satisfied with their relationships with their parents, even though, according to Denysiuk (2004), Ukrainian parents tend to select the authoritarian style when parenting their children. These parents use emotional or psychological violence, physical violence, or threaten their children with mythical creatures who can come and punish them. Parenting by alcohol-abusing parents creates additional problems, including insecurity, poverty, and lack of a structured life and warmth and trust, and exposes children to frequent and severe domestic violence (Dovgopol, 2009). Dovgopol (2009) reported that adolescents in these families tend to have greater internalizing and externalizing behavior problems, lack social skills, experience academic problems, run away from home, and frequently abuse alcohol and other drugs.

Bezhenar and Yablonska (2010) also examined the ways in which 64 Ukrainian adolescents perceived their families. Specifically, two family system characteristics—cohesion and adaptability—were measured with the Family Adaptation and Cohesion Scales (FACES-III; Olson, 1985), a widely used 20-item self-report instrument. Participants were 13- to 17year-old schoolchildren who reported considerably more problematic cohesion and adaptability patterns than those observed in the normative study among 1,315 "normal" parents and their 12to 19-year-old children in the United States (Olson, Russell, & Sprenkle, 1983). As for adaptability, the majority of Ukrainian children (59%) perceived their families as chaotic (vs. 14% in the U.S. sample), 31% thought that their families were flexible (vs. 33% in the normative U.S. sample), and 10% reported that their families were structured (vs. 37% in the U.S. sample). On the cohesion subscale, adolescents characterized their families as disengaged (39% vs. 19% in U.S. sample), separated (46% vs. 30% in the U.S. study) and connected (15% vs. 36% in the U.S. sample). These findings point out the striking differences between Ukrainian and U.S. families in that Ukrainian families demonstrate less unity and are more disorderly than U.S. families. However, more in-depth research with a larger Ukrainian sample would need to be done for higher reliability of any conclusions regarding intercultural differences.

Bowen's concept of differentiation has been examined in a study by Bolkun (2010), who described individual differences of identification and differentiation of adolescents from vulnerable families. According to this study, differentiation is a basic ontogenetic feature of a human being, which begins with separation from the mother during birth. However, adolescence marks the most intensive period of differentiation and lays the foundation for personality

development. According to Bolkun, identification and differentiation have rarely been a subject of research in Ukrainian psychology, and even though these concepts have been extensively studied internationally by various domains of psychology, there are very few studies in Ukraine that would examine initial differentiation and the way it develops in different ages and depending on people's individual qualities. Bolkun suggested that a healthy and harmonic personality may evolve in a healthy environment, particularly within a family. The vulnerability of Ukrainian families can reveal itself in conflicts, brutal relations, a mismatch of interests and needs, hostility, and lack of partnership and emotional support between family members. Every member has his or her own agenda and does not show any interest in supporting the others. Single parenthood, often motherhood, illness, homelessness, lack of food and clothes, or the imprisonment of one family member tend to influence parents who then have inadequate parental feelings and become more inclined to neglect or reject their children. Unable to find models with which they can self-identify, adolescents from such families try to identify with other people in the environment, including peers, teachers, neighbors, or actors from the movies. Adolescents may have internalizing behavior problems or become excessively aggressive. Bolkun hoped that future research will be able to address the meaning and the function of the identification and differentiation and define measurement criteria for these processes in Ukrainian society.

While modern Ukrainian psychologists are struggling with the meaning of problematic behaviors, one prominent Ukrainian humanistic educator has proposed a promising way of working with troubled teenagers (Sukhomlynsky, 1978). Sukhomlynsky argued that family influenced current behavior problems of the child and advocated for the use of interventions that

would begin with empowerment, focus on positive qualities the teenager has, promote academic success, and foster skills that would increase future employability of the adolescent (Sukhomlynsky, 1978). He suggested that the family should be on track with these school efforts, even though schools often lacked adequate mechanisms for cultivating change within the family and would concentrate on activities with the child.

Modern researchers recognize that the child is imitating the parents, as well as their relationship, use of agreement, respect, attunement, problem-solving styles, and communication patterns (Chumak & Tkachenko, 2008). Furthermore, socialization of the child depends on parenting styles (authoritarian, liberal, and democratic). Authoritarian families raise insecure, fearful children with low self-esteem. They learn to be aggressive with the weaker self and tend to submit to the more powerful individuals. Liberal parents have no control over their children and can be neglectful. This leads to children being less developed emotionally, egoistic, and infantile. Democratic parenting promotes development of the child's personality and selfresponsibility. Chumak and Tkachenko (2008) argued that success of the child also depends on the family's socioeconomic status and the psychological climate in the home, including family anxiety, mutual understanding, respect, compassion, and support. Another component that Chumak and Tkachenko pointed out is the education of the parents and their cultural level. These authors underlined that successful parenting feeds from building constructive and respectful relations with the child; the child receives high status in the home, and the parents take the child's needs seriously and give them overriding priority. Consistent with earlier described research, Chumak and Tkachenko suggested that family conflicts, lack of cohesion, and neglectful parenting are typical of vulnerable parents and lead to multiple negative behavior outcomes in children. In their study of 120 adolescent families, they found that 15% of children lived in vulnerable families and 4% lived in asocial families.

Denizhna and Sova (2010) described family as being structured in a systemic way.

According to Denizhna and Sova, families share such important qualities as a sense of cohesion, hierarchy, external and internal boundaries, and subsystems. The authors maintain that excessively rigid or unclear boundaries may lead to dysfunctional relations between family members. Likewise, reversed hierarchy and inclusion of children in the parental subsystem can create problems. In problem families, stability can be regained when one family member develops a dysfunction. Denizhna and Sova further concluded that communication patterns between family members and rules can instigate or maintain problematic behaviors. Although the authors described the family system characteristics in a way that is consistent with their understanding in the West (Anderson, Sabatelli, & Kosutic, 2013), robust empirical research would need to confirm validity of these relationships in Ukrainian families.

# Prevention and Treatment for Alcohol Use Disorder in Ukraine

It is estimated that alcohol use is the third leading risk factor for disease in Ukraine (Institute for Health Metrics and Evaluation, 2013). Indeed, alcohol abuse can lead to health and social problems; therefore, sobriety fellowships started to function in Ukraine in response to such problems beginning in 1874. Thirteen years later, the first congress of psychiatrists in Moscow decided that alcoholism was a disease, and it had to be treated in specialized hospitals (Bolotova & Minko, 1996). According to Bolotova and Minko (1996), alcohol-related mental health problems such as alcohol-induced psychosis were treated in psychiatric wards, and the

first specialized addiction treatment units, narcologic dispensaries (*Narkolohichny dyspanser*), were opened in Ukraine in 1959.

In many Western countries, social workers are the primary providers of treatment services for mental health and addiction problems. In Ukraine, social work as a profession only started to emerge at the end of the 1990s (Burlaka et al., 2001). In the absence of professional social workers, other sectors, including education, health care, and militia (police), have traditionally been responsible for the delivery of social services. Also, jail-like alcohol treatment centers existed under police jurisdiction, to which (following the model of forced labor camps) addiction doctors confined people with perceived alcohol problems without any court decision (Pervomaiski, 2001). These camps not only violated basic human rights but also offered very inefficient forms of treatment. Most often, after serving their term, citizens returned to their homes and resumed drinking. In 1986, the leader of the Soviet Communist Party, Mikhail Gorbachev, initiated a very unpopular antialcohol campaign that, nonetheless, led to a significant reduction of alcohol use, improved live expectancy and mental health (Samokhvalov et al., 2009), and significantly reduced suicidality (Wasserman, Varnik, & Eklund, 1994).

Ukraine inherited from the Soviet Union a highly specialized network of health care centers with 5,000 psychiatrists (Martsenkovsky, Martyniuk, & Ougrin, 2009). After acquired independence, however, government-funded health care shrank, which limited people's access to treatment. In Ukraine, addiction treatment services are still included in the general domain of psychiatric services that are heavily stigmatized and segregated and require compulsory registration and follow up of psychiatric patients (Martsenkovsky et al., 2009). Results of a recent mixed-method study suggest that alcohol use is one of the key help-seeking behaviors for

mental illness among young Ukrainian adults (Burlaka, Churakova, Aavik, Staller, & Delva, 2014). Exploratory research of the barriers to professional mental health services revealed a number of structural barriers, including limited availability of treatment services, inconvenient locations and times of service, and inadequate professional skills of the providers, who often failed to protect patients' confidentiality (Burlaka, Churakova, Aavik, & Goldstein, 2014). Furthermore, participants of this study identified a set of attitudinal barriers. For example, participants commented on the high stigmatization associated with the services and on the fact that these services are not commonly accepted as a viable treatment option because many consumers do not trust the providers and do not see the services as useful or needed. Because of such barriers, only 20–25% of Ukrainians with serious mental illnesses seek professional help (Bromet et al., 2005).

The Constitution of Ukraine (Verkhovna Rada, 1996) guarantees people's rights for free health care services in the government-funded health care settings. The health care legislation specifies that Ukrainian citizens must take care of their health and the health of their children (Verkhovna Rada, 1992). In the Ukrainian state policy, expectations for healthy lifestyles are laid on the person, state, family, and the community (Bezhenar & Yablonska, 2010). Safiullin (2010), the minister of Family, Youth and Sports in Ukraine, stated that the state is expected to motivate people to adhere to the healthy lifestyle, implement information campaigns, encourage employers to create healthy conditions for workers, prioritize preventive health care, and create infrastructure. The national policy further specifies that health promotion workers must be trained at universities before they can gain employment in the health care sector. Their work should be subject to monitoring and evaluation, and results of the work must be made public.

The national policy expects the family to educate children to maintain healthy lifestyles. Parents should demonstrate positive behavior and also prepare moral grounds for the family-based upbringing of children. The community must assume responsibility for the health and development of youths and ensure that activities of various organizations centered on health promotion work are done in a systemic manner. The community is also expected to support health promotion initiatives for young people. Finally, in Ukraine, schools are also expected to educate children about healthy lifestyles. The minister detailed that 15 national programs are currently funded by the government to address lifestyle-related diseases, including substance abuse. However, these programs lack a systemic approach and often overlap (Safiullin, 2010). According to Safiullin, in Ukraine, there is a shortage of trained staff while the health care system lacks coordination and methods, standards of care, and resources at the national and regional levels.

Substance abuse researchers agree that these problems exist, confirming that substance abuse prevention work is implemented as a mere formality and methods resemble old propaganda work (Borysyuk & Lyazhko, 2010). Among public, the general idea prevails that youths are healthy by default and that it is the responsibility of the school social pedagogue (i.e., social worker) to devise projects that would convey ideas about ideal health and a happy life to schoolchildren and that based on these ideas, adolescents will apprehend how harmful for the body and mind tobacco, alcohol, and drugs can be. Borysyuk and Lyazhko (2010) pointed out that no research is currently implemented to study factors that influence development of healthy life choices among Ukrainian adolescents and that adequate educational content for professionals in the field is missing. Also, if any activities are implemented, they would target

schoolchildren, but not parents. Still, other researchers argue that factors that may truly affect development of the child's personality reside in the family and include poor parenting skills, conflicts between family members, aggression and cruelty, alcohol abuse and corrupt morals, criminality, and mental health problems (Denizhna & Sova, 2010; Kalmikova, 2010). Furthermore, for parents to be able to influence development of their children in the best way, partnership with the school is crucial (Denysiuk, 2004).

Still, some work to improve the effectiveness of interventions has been implemented in Ukraine. For example, Kharchenko et al. (2009) tested the effectiveness of group therapy, which combined features of a 12-step model, gestalt therapy, communication training, cognitive behavioral therapy, transaction analysis, and relaxation techniques. The study involved 106 participants, ranging in age from 18 to 70 years. The authors reported that as a result of the treatment, 36.1% of participants in the treatment condition remained in remission for alcohol and drug use for 6–12 months, and 16.7% became free from substance abuse for at least a year. Although the results of this therapy seem to be promising, its replication is highly problematic because no manual has been developed for this intervention.

In another study, Kohut (2008) reported on the elements of prevention of deviant behavior such as alcohol abuse. According to this study, effective prevention should include psychoeducation for parents to prevent child abuse in families, foster parenting skills, and help parents to self-organize in support groups. The study did not include, however, any information on the extent to which this work has already been implemented and whether there was any positive effect of this intervention.

Another substance-abuse prevention strategy was described by Melnychenko (2012). This strategy proposed to establish interaction between schools and vulnerable families by beginning with an extensive psychosocial evaluation of families by the school. If antisocial families are found, the schoolteachers and leaders would follow up on these families and involve them in psychoeducation activities. Melnychenko proposed that parents should build trustful relationships with their children, model good behavior for them, teach them to be independent, praise their good work, be available for talks, and be interested in their interests. Nikitenko (2006) stressed that to protect children from substance abuse, police officers need to work closely with the schools administrators, teachers and schoolchildren to prevent illegal activities by the minors while government-funded social services emphasize the importance of achieving harmony in the adolescents' relationship with their parents.

A peer-to-peer education approach is another way to prevent substance abuse among adolescents (Popov, 2001; Pryhodko, 2006). Popov (2001) suggested that prevention work should be done by the joint effort of families, schools, militia, psychologists, and health care workers. Popov also underlined that schoolteachers should deliver regular educational talks to parents on problem behaviors of the adolescents and effective parenting. However, Borysyuk and Lyazhko's (2010) study concluded that in the absence of knowledge about effective methods, the school-based prevention work should include health lessons, teaching children self-regulation techniques, promoting sports, monitoring truancy, and implementing annual health checkups. Other methods used at schools are role-playing games, contests, and the screening of documentary films about the harmful effects of alcohol and other drugs.

Suprisingly, Borysyuk and Lyazhko have not listed school activities aimed at parents. Popov

also suggested that teachers should motivate substance-abusing adolescents to seek professional help. If the adolescent does not listen to this advice, teachers should inform his or her parents. Another important task for the school is to implement active antidrug propaganda about the harmful effects of alcohol and drugs (Popov, 2001). In the health care sector, brief interventions, such as a series of motivational questions are considered for implementation among general practitioners (Tabachnikov, Ihnatov, Kharchenko, Prib, & Synitska, 2009).

#### **Conclusions**

This brief review suggests that several theories can contribute to enhance the understanding of adolescent alcohol abuse. Still, the family system theory (FST) appears to offer one large and multilevel framework, reflecting the true complexity of the substance use problem and setting the stage for research and practice (Bergman, 2000; Liddle, 1999). In addition to biological factors, families produce and maintain multiple psychosocial elements that all contribute to the child's inclination to abuse substances (Tarter et al., 1999). However, the quality of the relationships in the family and the psychopathology of the parents and the child can have a great impact on adolescent alcohol abuse (Kaminer & Bukstein, 2008). Although the FST provides a useful scheme for understanding adolescent alcohol abuse, this theory fails to account for influences from multiple other systems that may impact adolescent drinking behavior at any given time. First, the FST does not take into account the fact that some decision-making processes around alcohol consumption are rooted in the genetics of the adolescents. Genetic vulnerability may seriously undermine thinking and decision making through a greater craving for substances. Another important factor to consider is co-occurring psychopathology. For many, alcohol consumption is an important coping mechanism for dealing with anxiety, depression, and insomnia. Weak impulse control, aggression, and poor judgment also often coexist with drinking adolescents. Research is unambiguous about the social determinants of adolescent drinking, such as association with peers who abuse alcohol. Finally, the complexity of the family system dynamics may present potential problems in measurement of the confounding effects of the family system components on adolescent drinking. According to the systemic model, relationships and causality in the family are circular, whereas researchers tend to fit linear models and often do not even search for circular processes at multiple levels of the system, including individuals, dyads, and whole family units (Cox & Paley, 1997, 2003).

Furthermore, as social workers, we need to ask ourselves, Whose agenda is promoted by the family system, who is benefitting from a certain family organization, and who has to pay for it? And whose opportunities and rights are fueled into the maintenance of the family balance? Moreover, according to the FST, the family environment nurtures its members and compels them to behave in a certain way. This deterministic approach invites us to believe that human beings are no more than puppets, unaware of their free will. This approach seems to be particularly inappropriate to explain such complex behaviors as love, hate, and spirituality. In addition to being useless, the mechanistic approach to human behaviors can be dangerous and even ethically unacceptable. For instance, one must be very cautious in the use of the family system theory for treatment of domestic violence. Although violence can, indeed, be triggered by the mutually circular processes, treatments that employ this model may falsely contribute to a belief that victims share responsibility for being abused. This example illustrates that social workers have to assume a broader perspective than a single theory. In many ways the FST is a

helpful framework; still, the repercussions that can result from limiting oneself to behavior interpretation and modification can undermine the basic social work values.

Thus, Bronfenbrenner's ecological systems theoretic framework is a very useful addition to the FST because it permits analyses across broader contexts that influence human behavior. Consistent with this approach, the abovementioned studies of alcohol use disorder suggest that alcohol use disorder is an example of the equifinal mental health problem. Cicchetti (1990) proposed that "the principle of equifinality offers a more complex and reasonable approach to understanding the course of psychopathological disorders and anticipates the failure to identify unique predictions or correlates of psychopathology" (p. 18). It is clear that current research conducted in developed countries taps into multiple theoretical frameworks to analyze and combine knowledge that can explain paths to the development of alcohol-related problems. Still, these paths need to be confirmed with Ukrainian participants who might behave differently because of socioeconomic disadvantages or cultural norms. Because of differences in societal levels, social workers need to adjust their methods of helping individuals who have not yet experienced symptoms of alcohol abuse or addiction. Research on young people's substance abuse indicates that consumption patterns can partly be explained by ethnic differences (McCabe et al., 2007; Siebert, Wilke, Delva, Smith, & Howell, 2003). Therefore, transformation of Ukrainian social work practices should be informed by data that emanate from local Ukrainian contexts.

In the proposed three-study dissertation, I seek to contribute to such knowledge by exploring the association between family factors, parenting, externalizing behavior problems, peer influences, and increased alcohol problems among Ukrainian children 9–16 years of age. In

the first study, I will examine positive and negative parenting styles and their relationship with family systems and caregiver characteristics. In the second study, I will explore whether these positive and negative parenting styles are associated with child externalizing behavior problems, including delinquency, aggression, and attention problems. In the final study, I will assess the association of parenting, child externalizing psychopathology, child age and gender, and parent and peer alcohol use with the child's alcohol-related problems.

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# Chapter II

Effect of Parent- and Family-level Predictors on Positive and Negative Parenting

Every human being was born to parents and most people have some sort of experience with parenting (Bornstein, 2001). As children, we receive support from our parents when we master physical social, emotional skills. Parents teach us facts and promote our intellectual curiosity. They pay for our clothes, food and education and they also teach us how to become financially independent. Our parents teach us their values and attitudes. And when we become parents, we repeat the same cycle with our children. Parenting has been well-studied in developed countries (e.g., Ainsworth, Blehar, Waters, & Wall, 1978; Anderson & Henry, 1994; Anderson, Sabatelli, & Kosutic, 2013; Belsky, 1984; Darling & Steinberg, 1993). However, very little is known about parenting in Ukraine. In this study, I aim to review the literature on factors that can influence the choice of parenting skills in Ukraine.

### Historical and Cultural Perspectives on Parenting in Ukraine

The ecological systems theoretical framework posits that children grow in environments that influence their growth and individual development (Bronfenbrenner, 1981). The family systems theory regards parenting as one of the family's basic tasks (Anderson, Sabatelli, & Kosutic, 2013). In Ukraine, family is a primary environment for children's socialization. Family functions include reproduction, recreation, economic support, socialization and the upbringing

of children (Hryshchuk, 2011). For 70 years, however, the role of parents in child upbringing was affected by the communist values enforced by the Moscow government. The communist approach aimed at eliminating regular parenting traditions while imposing state collective forms of child socialization (Ivanova, 2009). These forms included membership in political organizations for minors and child upbringing by the schools, boarding institutions and summer camps. Moscow communists at the Central Planning Department decided everything that was to be built, manufactured and consumed in the entire country (Wiles, 1953). The communist ideologist workers who were employed at local communities and at regional and central government levels, defined soviet ways for all life rituals, including gender and identity. Their carefully planned goal "designed ultimately to bring about a communist state based on the ideas of Engels and Marx, was not limited to political transformation, but was also accompanied by sweeping social changes" (Rouhier-Willoughby, 2008, p. 6). The Soviet machine aggressively controlled even individual mentality, emotions and thoughts of the citizens (Shlapentokh, 1989). Russian communists staged massive hunger-killings, incarcerations and executions of Ukrainians who expressed alternative ideas (Dolot, 1987; Lindy & Lifton, 2001; Mackenbach, Murphy, & McKee, 2014; Morgan, 2010) and, eventually, many people learned to only show conformist ideas and beliefs. According to Shlapentokh (1984), the "majority of Soviet people did routinely observe most of the norms imposed from above" (p. 248). In relation to parenting, the state began to communicate its paramount role to women beginning during pregnancy. The power of structure, which still prevails in post-Soviet societies, began with routine debasement of pregnant women in the government-run healthcare settings. Women often felt humiliated because of brutal treatment they received from the medical personnel and because they had to

deliver children in shabby clinics where they were not allowed to wear underwear and needed to stand in line in the hallway with other women holding diapers when they had to take a shower or go to the bathroom (Rivkin-Fish, 1997, 2005).

Furthermore, for Soviet ideologists, men were expected to work while women were supposed to raise children; therefore, men were systematically excluded from childcare (Rouhier-Willoughby, 2008). For example, fathers were not allowed to participate in the childbirth and were discouraged from participation in discussions of their spouses' healthcare needs related to parenting. Rouhier-Willoughby (2008) describes that in the Soviet maternity clinic, children were removed from mothers and kept at separate premises. Breastfeeding was discouraged during first days. Eventually, ceremonies were held at which "a state representative could formally bestow the child on the family, as though the state had created it" (Rouhier-Willoughby, 2008, p. 107).

From this research, it seems clear that many families in post-Soviet Ukraine experienced interaction with the healthcare system designed to communicate to them a feeling of powerlessness and inferiority. It is possible that these fears of the system are deeply routed in the psychology of modern Ukrainians. The idea that a doctor knows what is best for parents and their children can influence parents in ways that undermine their sense of faculty and self-efficacy. Since its independence, Ukraine has been on the path of reforms. While many things changed in the country, frequent political perturbations hindered Ukraine's transformation into a developed country. For example, the recent illegal Russian annexation of parts of Ukrainian territory and conflicts in the Eastern Ukraine have led to the loss of thousands of lives and caused enormous socioeconomic damage (Dews, 2014; OCHA, 2015).

# **Conceptual Understanding of Parenting**

In the Western world, active parenting research has been implemented for decades. Diana Baumrind (1967) identified three types of child-rearing behaviors. The first type, authoritative parental behavior, encompasses controlling and demanding parenting that also includes warmth and responsiveness to the child's needs. Baumrind found that authoritative parents are likely to raise self-reliant, content, explorative and self-controlled children. The second-type of parental behavior, authoritarian style, refers to a detached, controlling and less warm parenting style. These parents raise children who lack trust, are withdrawn and less content than other children. The third group of parents includes permissive parents who are less demanding, noncontrolling and warm. Baumrind discovered that children of permissive parents tend to be less self-sufficient. In another study, Darling and Steinberg (1993) delineated differences between parenting practices and parenting styles. These researchers postulated that parenting practices are limited to specific domains of socialization, such as cooperation with peers or schoolwork whereas parenting styles refer to parents' goals and values. While parenting practices are goal-oriented, parenting styles also include emotional attitudes. Yet other researchers have focused on particular elements of parenting that were hypothesized to have a relationship to certain child outcomes. These experts observed that the use of positive parenting techniques, consistency in discipline, supervision and monitoring, parental involvement, and avoidance of harsh discipline are the elements of parenting that have been strongly related to lower levels of child behavior problems including substance use (Frick, Christian, & Wootton, 1999).

In his paper on the determinants of parenting, Belsky (1984) proposed that the child's self-esteem, academic achievement and ability for self-control are positively correlated with parental warmth and consistent discipline. Because positive parenting is a set of techniques designed to reinforce child's desired behaviors, effective parenting begins with setting rules, routines and predictable schedules (Webster-Stratton, 2012). These routines support parent interactions with children of any age. For example, babies will benefit from expecting bath and feeding times and particular procedures related to them. Toddlers will function better when they learned routines around playtime with parents. School age children will be more successful at school if the family has a plan with expectations regarding homework and family chores. Finally, adolescents and older children need to be a part of established routines regarding their whereabouts, and interactions with parents and peers. One of the most important routines for children is the quality time they spend with their parents, for example, playing games and learning new things. Parents who schedule special times for playing with their children teach their offspring that they are available for them and that they care for them without jeopardizing their other important obligations. These regular parent-child interactions enhance children's sense of attachment and trust, and provide the best space for teaching children persistence, academic, social and emotional skills. Research shows that even for high-risk families, effective parenting is a key component in raising resilient children that mediates and moderates the impact of adversity on child behavior outcomes (Masten, 2001). Hence, effective routines serve as reference points for children's decision-making as well as help parents supervise their offspring's development toward independence and success in life and away from substance use.

International studies of parenting suggest that parental involvement with the child's daily activities, such as attending parent-teacher conferences and attending extracurricular activities, is related with children's higher academic achievement (Spera, 2005; Stright & Yeo, 2014). In contrast, neglectful parents may provide very little supervision, fail to establish norms or provide emotional and practical support. Monitoring and supervising child behavior is an important component of the authoritative approach (Baumrind, 1967). Parent monitoring can mitigate harmful influences of peer deviancy training and reduce development of such conduct problems as rule breaking and aggression (Snyder, Schrepferman, Bullard, McEachern, & Patterson, 2012). It is important, however, that parents monitor behaviors and know where and with whom their children are, and what they do without using psychological control mechanisms that include, for example, love withdrawal, shaming and guilt induction. In fact, prospective, longitudinal and multi-informant research in three U.S. states showed that parents' use of psychological control was associated with more symptoms of delinquent behavior while increased monitoring led to decreased delinquency among adolescents (Pettit, Laird, Dodge, Bates, & Criss, 2001). However, because of the history of systematic control and oppression of parenting, many Ukrainian families may not feel they have a full authority over their own children. Many parents may, in fact be more comfortable with handing the responsibility for parenting over to the public schools, which can still be perceived as institutions of societal control.

Parenting consistency is another parenting element that relates to teaching children independent decision-making and responsibility (Webster-Stratton, 2012). When behavior expectations are communicated to children, it is the parents' responsibility to apply natural and

logical consequences when children make mistakes or violate rules and misbehave. U.S. researchers found that failure to consistently follow up with consequences was associated with significant increases in child conduct problems (Frick et al., 1999). Sometimes, parents use physical punishment as a logical consequence of misbehavior. Early research reported that evidence regarding effects of physical punishment on child adjustment was not strong (Loeber & Stouthamer-Loeber, 1986). More recent studies in U.S. and Chile, however, reported significant associations between the use of corporal punishment and increased externalizing psychopathology and other mental health problems in children (Gershoff, 2010, 2013; Gershoff, 2002; Ma, Han, Grogan-Kaylor, Delva, & Castillo, 2012). There is a strong consensus globally, that corporal punishment "...directly conflicts with the equal and inalienable rights of children to respect for their human dignity and physical integrity" and that "corporal punishment and other cruel or degrading forms of punishment are forms of violence and States must take all appropriate legislative, administrative, social and educational measures to eliminate them" (UN Committee on the Rights of the Child, 2007, p. 6). The UN Committee on the Rights of the Child further urges member States to address "any level of legalized violence against children" (UN Committee on the Rights of the Child, 2007, p. 6). Presently, almost all United Nations member states (except Somalia and the United States) have ratified the Convention on the Rights of the Child (United Nations, 2015). Although Ukraine has ratified this Convention, its implementation has not been very successful. Denysiuk (2004) found that 7% of Ukrainian parents threaten and 10% actually use physical discipline with their children.

## Parents and Family Characteristics Related to Parenting Behavior

Parent sociodemographic characteristics and parenting. Several sociodemographic characteristics were found to influence the quality of parenting in developed countries. For example, poverty has a profound negative impact of parenting behaviors. A series of analyses conducted with 205 white middle-class families with adolescent children living in U.S. Midwest revealed that lower income, unstable work and high debt led to depressive parent symptomatology. Next, in this study, mothers' depression was associated with hostility in the homes, which in turn negatively influenced women's ability to provide nurturing, warm and involved parenting and subsequently led to children's problems at school and problem relations with peers, and low self-confidence. Ukrainian researchers Chumak and Tkachenko (2008) also believed that successful child development depends on family socioeconomic status and the psychological climate in the home, and education of parents. These researchers argued that these qualities enhance parents' ability to build constructive and respectful relations with the child. Furthermore, prior research suggests that parent age is another important factor associated with the quality of parenting. For example, Belsky (1984) argued that only parents who are mature and psychologically stable could provide quality care for their children. A study with mothers of young children showed that older mothers felt more pleasure from taking care of their infants and they spent more time with their children (Ragozin, Basham, Crnic, Greenberg, & Robinson, 1982). Interestingly, in a longitudinal study, Fergusson and Woodward (1999) found that children who were born to younger mothers had significantly higher risks of poor academic performance, delinquency, mental health problem and substance use problems at age

18. In this study, such adverse outcomes were 1.5 to 8.9 times higher for children of teenage mothers compared to children of mothers were older than 30 when they delivered their children.

Child rearing and parent alcohol use. Alcohol use disorder (AUD) is a genetically inherited, chronic, recurring illness (McLellan, Lewis, O'Brien, & Kleber, 2000). Adult people with alcohol dependence and antisocial personality disorder are often those who started using alcohol during childhood and adolescence and had a history of greater involvement with alcohol than their peers (Englund, Egeland, Oliva, & Collins, 2008; Hicks & Zucker, 2014). AUD is associated with multiple negative outcomes including health, academic, occupational and interpersonal problems. Additionally, AUD can significantly impact the ability to parent children. Misuse of alcohol is an important individual-level factor that can set the stressful dynamics in the entire family (Loukas, Fitzgerald, Zucker, & von Eye, 2001) and limit parents' personal psychological resources and the ability to parent (Levendosky & Graham-Bermann, 2001). In one study, U.S. children of parents with alcoholism had increased internalizing behavior symptomatology that was mediated by negative parenting (Burstein, Stanger, Kamon, & Dumenci, 2006). In another longitudinal study conducted in Michigan, U.S., with 125 families with an alcoholic father, child externalizing psychopathology was mediated by parentchild conflict as well as by family conflict (Loukas et al., 2001).

Hence, it is particularly important to estimate alcohol use as a risk factor for parenting in the context of Ukraine, the sixth highest drinking nation in the world (World Health Organization, 2014). Parenting studies are very rare in Ukraine and studies that test the impact of alcohol use on parenting behavior are practically non-existent. Still, previous research revealed that poverty and parent alcohol use had a negative impact on parenting (Dovgopol,

2009). In one study, suboptimal parenting practices measured by the scale that consisted of items on rule-setting, control and support, had a significant relationship with risky alcohol use among Ukrainian adolescents (Iakunchykova & Andreeva, 2012). In another study with 756 Ukrainian parents, 86% of mothers and 88% of fathers reported not being able to abstain from using alcohol during child conception and 76% of parents believed they lack knowledge about proper ways of parenting (Denysiuk, 2004). Future research needs to test this relationship using a psychometrically sound measure of parenting that measures a full spectrum of parenting behaviors. Hopefully, such research will estimate the current, baseline use of different parenting practices and their relationship with various family factors. This knowledge can be helpful for future interventions with parents.

Alcohol use, family violence and parenting. According to the conflict theory, conflicts are an inevitable part of family life (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). While some families can negotiate the solutions, others use violent tactics to resolve their conflicts. Alcohol use has a strong relationship with intimate partner violence (IPV). Still, in a recent meta-analytic study, Devries et al. (2014) noted a temporal uncertainty of the relationship between SUD and IPV. These researchers found that in seven longitudinal studies, SUD predicted IPV while in nine other longitudinal studies, IPV increased the odds of the subsequent use of alcohol.

Regardless of directionality, alcohol use and IPV can have detrimental effect on parenting ability. Levendosky and Graham-Bermann (2001) used the ecological model to study parenting in a sample of 120 Michigan women who were abused by intimate partners. In this study, women's exposure to intimate partner violence (IPV), the history of child abuse, negative

life events and lack of social support led to more mental health symptoms. The increased psychopathology and IPV also predicted lower marital satisfaction. Poor mental health of the women had a negative impact on their parenting abilities while women who reported higher marital satisfaction were more skilled as parents, which subsequently lowered the incidence of child abuse and decreased child psychopathology. This study clearly illustrates the importance of environment for parenting ability and later child adjustment outcomes. IPV is a significant social problem in Ukraine (O'Leary, Tintle, Bromet, & Gluzman, 2008) that may also affect parenting ability of Ukrainian parents, therefore, it is important to include IPV in the studies that examine predictors of parenting in this country.

Relationship between parenting and family cohesion and flexibility. A balanced cohesion exists in families where members are neither overly enmeshed nor disengaged in relationships with each other. Likewise, a family with a balanced flexibility has a healthy "amount of change in its leadership, role relationships, and relationship rules" (Olson, Russell, & Sprenkle, 1983, p. 519). Balanced family cohesion and flexibility represent basic family systems processes frequently associated with better psychosocial functioning of the parents and higher quality of parent-child interactions (e.g., Anderson et al., 2013; Huth-Bocks & Hughes, 2008). Prior research showed that poor emotional bonding and problem power and role structure in the family were related with increased risks for adolescent addictive behaviors in a study with 252 Italian families (Tafà & Baiocco, 2009). Moreover, targeting unbalanced family cohesion and flexibility in treatment programs has been related with decreased adolescent short-term and long-term criminal behaviors and substance abuse in the U.S., Norway and Sweden (Ogden & Halliday–Boykins, 2004; Olsson, 2010; Schaeffer & Borduin, 2005). Redmond and Spooner

(2009) used country level data on youth mortality related to alcohol and other drug use in former Soviet Union countries. In this study, 15-29 year old people had increased risk of substance use-related death if they lived in environments with increased availability of alcohol and drugs and with lower community and family cohesion. The authors of this study argued that additional research is needed to investigate specific family processes responsible for decreased risks of youth mortality from substance abuse. Therefore, it is critical to test the relationship between cohesion and flexibility and parenting approaches in the Ukrainian families.

## The present study

The current study seeks to test the influence of parent- and family-level factors on parenting behaviors in a sample of Ukrainian parents. This study analyzes empirical data on parent alcohol use, IPV, family functioning and parenting with the following specific aims:

- 1. Evaluate direct effects of parent- and family-level factors on parenting practices.
  - a. It is hypothesized that use of positive parenting practices will be significantly associated with older parent age, higher parent education and income, lower parent involvement with alcohol, less IPV, and balanced family cohesion and flexibility.
  - b. It is hypothesized that use of negative parenting practices will be significantly associated with younger parent age, lower parent education and income, higher parent involvement with alcohol, more frequent IPV, and unbalanced family cohesion and flexibility.
- 2. Conduct analyses of indirect effects of parent education, age, family income, IPV and alcohol use on positive and negative parenting.

- a. It is hypothesized that there will be a significant indirect effect of parent education on parenting mediated by alcohol use. Specifically, higher number of years that parents spent in school will be significantly related with lower alcohol use and lower alcohol use will be significantly related with higher scores on positive parenting and lower scores on negative parenting.
- b. It is hypothesized that there will be a significant indirect effect of parent education on parenting mediated by balanced family functioning. Specifically, higher number of years that parents spent in school will be significantly related with more balanced family functioning and more balanced family functioning will be significantly related with higher scores on positive parenting and lower scores on negative parenting.
- c. It is hypothesized that there will be a significant indirect effect of parent education on parenting mediated by IPV. Specifically, higher number of years that parents spent in school will be significantly related with fewer incidences of intimate partner violence and lower IPV victimization will be significantly related with higher scores on positive parenting and lower scores on negative parenting.
- d. It is hypothesized that there will be a significant indirect effect of family income on parenting mediated by IPV. Specifically, higher family income will be significantly related with fewer incidences of IPV and lower IPV victimization will be significantly related with higher scores on positive parenting and lower scores on negative parenting.

- e. It is hypothesized that there will be a significant indirect effect of family income on parenting mediated by family functioning. Specifically, higher family income will be significantly related with more balanced family functioning and more balanced family functioning will be significantly related with higher scores on positive parenting and lower scores on negative parenting.
- f. It is hypothesized that there will be a significant indirect effect of family income on parenting mediated by parent drinking. Specifically, higher family income will be significantly related with lower parent involvement with alcohol and lower frequency of parent alcohol use will be significantly related with higher scores on positive parenting and lower scores on negative parenting.
- g. It is hypothesized that there will be a significant indirect effect of parent alcohol use on parenting mediated by IPV. Specifically, higher frequency of alcohol use will be significantly associated with more frequent incidence of IPV and more IPV experiences will be significantly related with lower scores on positive parenting and higher scores of negative parenting.
- h. It is hypothesized that there will be a significant indirect effect of parent alcohol use on parenting mediated by family functioning. Specifically, higher frequency of alcohol use will be significantly associated with more unbalanced family functioning and lower balance in family functioning will be significantly related with lower scores on positive parenting and higher scores of negative parenting.
- i. It is hypothesized that there will be a significant indirect effect of IPV on parenting mediated by family functioning. Specifically, lower frequency of

domestic violence will be significantly associated with more balanced family functioning and better balance in family functioning will be significantly related with higher scores on positive parenting and lower scores on negative parenting.

#### Method

# **Participants**

This study will use a cross-sectional, community-based sample of parents participating in the Ukrainian Child and Family Study (UCFS). The data were collected in three Ukrainian regions. Participants were invited to the study and interviewed by the school psychologists if they had a child of 9 to 16 years of age. Families were recruited to the study to form an age- and sex- clustered sample of children. Recruitment was terminated when the sample reached a total of 320 parents with 40 children of each age year, the initially desired sample. In the final sample, there were 40 children (50% boys) in each year of age, from 9 to 16. Parents signed a written consent form to endorse their participation and participation of their children, and children signed the assent form. The sample included two adoptive parents, six grandmothers, 18 fathers and 294 mothers. The mean age of the parents was 37.76 years (SD = 6.52), 92% of respondents self-identify as Ukrainian, and others are Russian, Roman, Polish and Armenian. Nineteen percent of participants completed 11 grades of school or less, 49% had vocational training, 6% had a few years of college and 26% had a university degree. Sixty percent were married or lived with a partner and others were single, widowed, divorced or married and living separately.

### Measures

**Demographic characteristics**. As part of this study, parents answered questions about their age (measured in years), level of education (measured in total number of years spent at educational establishments), ethnicity and family income (measured in US \$).

Parenting practices. The Alabama Parenting Questionnaire (APQ; Frick, Christian, & Wootton, 1999; Frick, 1991) has been widely used for the purpose of measuring parenting skills in the families with children who have behavior problems (Dadds, Maujean, & Fraser, 2003; Essau, Sasagawa, & Frick, 2006; Hawes & Dadds, 2006). The APQ consists of 42 items assessing positive and negative parenting practices grouped within six areas: (a) involvement, (b) positive parenting, (c) poor monitoring/supervision, (d) inconsistent discipline, (e) use of corporal punishment, and (f) use of discipline practices other than corporal punishment. Parents rated the frequency with which the parenting practices typically occurred in their home on a 5point scale ranging from 0 ("never") to 4 ("always"). Two subscales of the measure, Involvement and Positive Parenting form the APQ Positive Parenting Scale while Inconsistent Discipline, Poor Monitoring/Supervision and Use of Corporal Punishment form the APQ Negative Parenting Scale. The APQ has demonstrated solid psychometric properties in studies evaluating the association between parenting practices and child behavior outcomes (Clerkin, Marks, Policaro, & Halperin, 2007). In the present study the  $\alpha = .95$  for the Positive Parenting Scale and  $\alpha = .85$  for the Negative Parenting Scale.

Intimate partner violence. The revised version of the Conflict Tactics Scales (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996; Straus, 1979) was used in this study to understand the relationship between parenting and IPV. To collect data on conflict tactics of

both partners, it is recommended that both partners answer each of 39 items measuring the extent of psychological aggression, physical assault, sexual coercion, and injury as well as use of negotiation to address conflicts (Straus, Hamby, Boney-McCoy, & Sugarman, 1996; Straus, 1979). In this study, only data regarding parent IPV experiences were obtained. Both the original CTS and its revised version, the CTS2, are the most widely used measures of intimate partner violence (Straus, Gelles, & Steinmetz, 2006). To account for effects of multiple kinds of violence against the parent, this study will use Psychological Aggression, Physical Assaults, and Sexual Coercion scales. Answering the CTS2 questions, parents reported on tactics used by their partner during last year on a 7-point Likert scale ranging from 0 ("never") to 6 ("more than 20 times"). The reported internal consistency for the Psychological Aggression scale was .79, for the Physical assault,  $\alpha = .86$ , for Sexual Coercion,  $\alpha = .87$  (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). In the present study, alpha coefficients for the Psychological Aggression was .87, for Physical Assault,  $\alpha = .91$ , for Sexual Coercion,  $\alpha = .82$ . The CTS2 Total Violence alpha was .95.

Family cohesion and flexibility. Two key concepts relating to family functioning—family cohesion and family flexibility—were measured using the Family Adaptation and Cohesion Scales-IV (FACES; Olson & Gorall, 2003). The family cohesion subscale measures the agreement of family members with such statements as "Our family seldom does things together," "Family members are involved in each others lives", while family flexibility is measured by such questions as "We have clear rules and roles in our family" and "When problems arise, we compromise" on a 5-point Likert scale (1 = "strongly disagree," 5 = "strongly agree"). Circumplex ratio scores were created for the cohesion and flexibility

subscales to capture both balanced and unbalanced family functioning. Alpha reliability coefficient reported in the FACES-IV validation study was .89 for Balanced Cohesion scale and .84 for Balanced Flexibility scale (Olson, 2011). In this study, the alpha for internal consistency of items in the Balanced Cohesion scale is .89 and .81 in the Balanced Flexibility scale. The reliability alpha of the total balanced cohesion and balanced flexibility scale is .92.

Frequency of alcohol use. The Alcohol Use Section of the Drinking and Drug History and Current Use Patterns questionnaire (Zucker, Fitzgerald, & Noll, 1990) was used in this study to assess the frequency of alcohol consumption among parents in this sample. Parents answered questions about the frequency with which they consumed beer, wine (or a punch containing wine) and liquor on 11-point scale (0 = "never," 1 = "less than once a year," 10 = "3 or more times a day"). The drinking frequency score was then converted to approximate the number of drinking occasions during the year. That is, the answer "once a month" was recoded as 12, to indicate that a person drank one time a month x 12 months. By the same token, the answer "two times a day" was recoded as 1,460. Thus, the drinking frequency count for every alcoholic beverage ranged from 0 to 4,380. Subsequently, a variable of Global Annual Alcohol Use Frequency was generated, which is a sum of reported frequencies of use of individual alcoholic drinks.

### **Overview of the Analyses**

Structural equation modeling (SEM) is the principal analytic technique used in this study (Acock, 2013). SEM analyses combine measurement models with path analyses and allow use of multiple indicators for latent variables. This approach permits isolation of random measurement error from latent variables, which increases explanatory power. The maximum

likelihood estimation was used to fit the model where an observed information matrix was utilized to compute the variance-covariance matrix of the estimators and standard errors. The model was fit with Stata 13 software package (StataCorp, 2013). The guidelines suggested by Raykov, Tomer, and Nesselroade (1991) were followed in reporting SEM results in this study. In particular, the goodness of fit was assessed using the Comparative fit index (CFI), Tucker-Lewis index (TLI), and the root mean squared error of approximation (RMSEA). The recommended cutoff value for CFI and TLI is 0.95 while for RMSEA, the cutoff of 0.05 represents a good fit and less than 0.08 – a reasonably close fit (Acock, 2013). There were about 6% of missing data and multiple imputation technique was used to impute the missing values (Molenberghs & Kenward, 2007).

#### Results

Figure 1.1 shows the use of parenting practices in Ukrainian families. These results suggest that parents in Ukraine frequently praised and rewarded positive behaviors of their children. The mean score on positive parenting was 2.90 (SD = .86, Range = 0-4). Additionally, parents often had friendly talks with their children, helped them with school and extracurricular activities (M = 2.41, SD = .83 for Involvement scale). As shown on Figure 1.1, the scores for negative parenting scales, including inconsistent parenting, poor monitoring and corporal punishment were lower. Comparison of the Global Positive Parenting scale (M = 2.65, SD = .81) with the Global Negative Parenting scale (M = 1.39, SD = .59) revealed that overall, Ukrainian parents reported significantly higher scores on positive than on negative parenting, t(319) = 18.33, p < .001.

### **Measurement Model**

The first latent variable, frequency of parental alcohol use, was indicated by frequency with which beer, liquor and wine were used during last 12 months. Parent experiences of IPV were indicated by three subscales that were created from the measure of IPV described earlier. Flexibility and cohesion scales served as the two indicators for the family functioning latent variable. Positive parenting latent variable was indicated by APQ positive parenting and parent involvement scales. Finally, corporal punishment, inconsistent parenting and poor monitoring scales served as indicators of the APQ negative parenting latent variable. Table 1.1 includes intercorrelations among latent variables. The measurement model also included a covariance between all latent variables in the model. Because measurement model demonstrated a good fit to the data:  $\chi^2$  (55, N = 320) = 94.16, p < 0.001, CFI = 0.982, TLI = 0.974, RMSEA = 0.047, it was subsequently used to test the following structural model.

Structural Model: Linking Sociodemographic Variables, Alcohol Use, IPV, Family Functioning with Positive and Negative Parenting

In the first step, the relationship between predictor and outcome variables was analyzed. Table 1.1 illustrates significant correlations of parent alcohol use, IPV experiences, family functioning, parent education and income with positive and negative parenting practices. Parent age was not significantly related to outcome variables and, therefore, was not used for further analyses (Baron & Kenny, 1986). Parent education and income that represent observed sociodemographic covariates were included in the subsequent path analyses. Figure 1.2 shows results of these analyses. The straight lines represent paths with the values along the lines showing the estimated strength of influences. These values are standardized path coefficients

(betas). This model provided a good fit for the data,  $\chi^2$  (76, N = 320) = 116.15, p < 0.01, CFI = 0.98, TLI = 0.98, RMSEA = 0.04.

Results suggest that lower parental involvement with alcohol, balanced family functioning, and fewer experiences of partner violence had a direct significant effects on more frequent use of positive parenting practices and less frequent use of negative parenting (Table 1.2). Balanced family functioning had a strongest effect on positive parenting,  $\beta$  = .43, z = 6.49, p < .001 and on negative parenting,  $\beta$  = -.41, z = -5.55, p < .001. Table 1.2 also shows that parents with lower education were more likely to use negative parenting practices,  $\beta$  = -.16, z = -2.72, p < .01. The direct relationships between parent education and use of positive practices was not significant. Likewise, family income had no direct effect either on positive or negative practices.

Results in Table 1.2 also indicate that lower alcohol use, fewer incidences of IPV, better parent education and higher family income were significantly and indirectly related with higher positive parenting score and with lower negative parenting score. Parent education had the strongest indirect effect on positive parenting,  $\beta = .21$ , z = 4.08, p < .001 and alcohol use had the strongest indirect effect on negative parenting,  $\beta = .26$ , z = 5.67, p < .001. Alcohol use also had the strongest total standardized indirect effect on positive parenting,  $\beta = .59$ , z = -6.84, p < .001. Parents' experiences of domestic violence had the strongest total standardized indirect effect on negative parenting,  $\beta = .50$ , z = 6.48, p < .001. The model explained 61% of variance in the positive parenting, 67% in the negative parenting (Table 1.3).

## **Mediation analyses**

A series of analyses was performed to test indirect relationships in the model. Results of these analyses are presented in Table 1.4. These mediation analyses suggest multiple significant indirect chains of influence on parenting. Consistent with the hypothesized direction (Hypothesis 3a), there was a trend-level effect of parent education mediated by alcohol use on positive parenting and non-significant effect on negative parenting. Likewise, there was no significant indirect effect of parent education on parenting mediated by family functioning (Hypothesis 3b). There was a trend-level indirect effect of parent education mediated by IPV on positive parenting and statistically significant indirect effect on negative parenting (Hypothesis 3c). Contrary to expectation, there was no significant indirect effect of income on positive parenting; however, there was a trend-level of significance in effect on negative parenting (Hypothesis 3d). Consistent with Hypothesis 3e, income had a significant standardized indirect effect mediated by family functioning on positive and negative parenting. The Hypothesis 3f that there would be a significant indirect effect of family income on parenting mediated by parent drinking was not supported by the data. Finally, Table 1.4 illustrates that all hypotheses regarding indirect effects of alcohol use and IPV on parenting were supported by the mediation analyses.

#### **Discussion**

The results of this study suggest that majority of Ukrainian parents use positive parenting practices with their children. At first sight, this finding appears to contradict the previous research with Ukrainian parents who reported a belief about a general lack of knowledge of parenting skills (Denysiuk, 2004). However, if the historical context is taken into

account, these results reveal another picture. Consistent with Bronfenbrenner (1981), child development is influenced by the family environment as well as broader societal templates for organization of schools and families, neighborhoods and communities. When Russian communists began to challenge the foundations of society, many families who disapproved of these policies, resettled in Canada and the United States. In fact, "the entire Bronfenbrenner family relocated to the "Land of Opportunity," to a true homeland for displaced professionals and political dissidents" from a Soviet Ukrainian city of Odesa (Panken, 2005, p. 9). Still, most families stayed in the Soviet Union and socialized under influence of communist ideology until its collapse in 1991. Results of this study suggest that while Russian communist ideologists tried to shift responsibility for child socialization from parents to the state (Rouhier-Willoughby, 2008), the majority of Ukrainian parents effectively resisted it and kept providing their children with positive and highly involved parenting. The majority of Ukrainian parents appear to practice positive parenting with their children without being aware of it. Indeed, the frail selfimage that parents revealed in the earlier research of Denysiuk (2004) might represent a habitual strategy of surrendering to external authority, be it a communist ideologist or a researcher. Without previous exposure to parenting programs, Ukrainian parents have no frame of reference for the skills they already practice. Without knowing what is right and wrong, many parents with multi-generational experiences of injustice and oppression may choose to present themselves as weak and incompetent, believing that somewhere out there, there are real experts on parenting.

Results of the measurement analyses suggest that the positive parenting construct was equally loaded by positive disciplining and engaged parenting. However, negative parenting

construct was primarily driven by spanking and poor child monitoring with inconsistent parenting having a weaker loading on the construct. Without proper training in parenting, parents might not know what constitutes successful childrening and their choice of interaction with children may depend on other factors, such as personality and life circumstances. This can shed the light on other results of the analyses tested in the model (see Figure 1.2).

For example, these results provide only partial support for hypothesized relationships between parent sociodemographic variables and parenting practices. Prior research linked parent education with the ability to provide higher quality of childcare and better parenting (Belsky, 1984; Chumak & Tkachenko, 2008). Results of this study suggest that parental lower education has a direct relationship with negative parenting. In this study, parents with lower education had lower income and, therefore, could experience greater financial strain compared to better educated and wealthier parents. Without knowledge about the harmful effects of spanking on child development and being under pressure, some parents can fail to refrain from becoming angry and hitting the child. Lower education can also force parents to accept lower paying and irregular jobs and they might need to spend more hours away from their children and have less opportunities to monitor their children's behavior and whereabouts. In this model, parent education also had a significant indirect effect on negative parenting mediated by IPV. This result suggests that parents with lower education are at increased risk for domestic violence and such abusive relationships may contribute to increase of negative parenting. This result is consistent with prior research in the United States (Levendosky & Graham-Bermann, 2001) and was expected.

Contrary to hypothesis, higher parent education was not associated with increased positive parenting. Regardless of academic background, parents equally well rewarded good behavior of their children and stayed engaged in school and out-of-class activities. It is possible that many parents find it natural to praise their children. High parent involvement, however, can be explained by traditionally strong relationship between Ukrainian schools and families. Social work as a profession did not exist in the Soviet Ukraine and Ukrainian teachers were required to perform many functions typical for social workers in the U.S. or Western Europe. These include, for example, making regular house calls, home visits, assessment of family functioning, reaching out to parents of children who show signs of academic failure of discipline problems, referring families to various governmental bodies and interacting with low enforcement agencies in crises situations. This system is still in place in Ukraine may partly explain the high scores on parent involvement.

In this study, parent income and age were not significantly related with neither positive, nor negative parenting. In Ukraine, majority of families live in poverty, therefore, it is possible that with the sample size used in this study, statistical analyses could not detect effects of income on parenting behavior. However, income had a significant indirect association with negative parenting mediated by family functioning. These results suggest that parents with lower income experience difficulties with emotional closeness, rules and role structure in their homes and these difficulties appear to contribute to poor child monitoring, more frequent use of spanking and inconsistent parenting. In this study, the family income was measured by a question that asked about total monetary amount received by the family in the last month. This method may not be sensitive to seasonal variations of income typical for rural Ukrainian

families involved in agricultural and animal production. Also, this question does not take into account income from informal sources, such as exchanges of commodities, and informal payments that some participants may not be willing to admit. In the future studies, it might be better to assess income using indirect information about family wealth. For example, instead of asking parents how much money they earn, parents could be asked questions about their families' buying and recreation capability.

The finding that age had a weak relationship with other study variables can be partially explained by the fact that this study was only limited to parents of children aged 9-16 years and as in the case with income, there was not enough statistical variation in the age variable, which can explain these insignificant results. Indeed, majority of parents in this study were 32-40 years of age, which means that they already moved beyond the challenges of young adulthood age and have not encountered health, social and economic challenges related to transition to old age. For more representative results, future studies might need to estimate parenting of children across all age groups.

The results of this study fully supported the hypothesis that alcohol has a strong negative impact on parenting. In addition to the direct relationship with decreased use of positive parenting and increased use of negative parenting, higher frequency of alcohol use influenced parenting through indirect paths. In particular, the analyses indicate that increased alcohol use was associated with more conflicts in the homes and more unbalanced family functioning, which in turn resulted in lower use of positive parenting and higher use of negative parenting practices. Indeed, parental alcoholism can disturb the healthy balance in the family, weaken emotional connection between family members or lead to codependent and overly reactive

behaviors. Also, alcohol can lead to chaotic organization of the home environment and disturbance of roles. For example, it is not uncommon for alcoholic families that children assume adult roles, become breadwinners, and help raise younger siblings. Furthermore, parent alcohol abuse can undermine parents' ability to set and maintain routines and schedules. Intoxicated parents may have impaired ability to interact with their children, understand and adequately respond to children' emotions and communication cues, engage in children's life, help them with school and extracurricular activities, and provide adequate supervision and monitoring. These effects can be a result of parents' impaired memory and attention, emotional disregulation and the fact that parents' time and resources have been directed away from their children and toward activities related to securing, consuming and recovering from alcohol use. These results were expected based on previous research in developed countries (Anderson et al., 2013).

Furthermore, IPV had significant direct and indirect association with parenting in this study. Parents who experienced more violence reported lower scores on positive parenting and higher scores on negative parenting. Also, higher intensity of IPV was related with less balanced family cohesion and flexibility. Unbalanced family functioning mediated the impact of IPV on parenting and also was directly related with lower positive parenting and higher negative parenting.

When interpreting these results, it is important to be mindful of the fact that Ukrainian families are different from families living in other countries, they have a different history and live in a different sociocultural environment. For example, it is illegal to use alcohol before age 21 in the U.S. In Ukraine, however, alcohol use is legal, normative and widely spread among

majority of 15-16 year old children (Balakireva et al., 2011). Early onset of alcohol use is associated with later social problems including violent behaviors (Hicks & Zucker, 2014).

Results of this study indicate a strong relationship between alcohol use and IPV. The chosen direction from alcohol use to the IPV was an attempt to satisfy a requirement of temporal precedence for SEM models (Baron & Kenny, 1986). It seems reasonable to hypothesize that Ukrainians start using alcohol before they develop relations with intimate partners. Also, the measure of domestic violence used in this study only asks about IPV experiences during last years. It is possible that such experiences were the first experiences of abuse. Alcohol use, however, is a developmental problem with chronic and progressive features (Hicks & Zucker, 2014) with up to 52% risk for the disorder present already at birth (McLellan et al., 2000). Active involvement and experimentation with alcohol usually begins during adolescence (Balakireva et al., 2011). It often happens together with and under pressure from peers (Curran, Stice, & Chassin, 1997). Adolescents who drink more alcohol usually have more symptoms of conduct disorder as both problems are steered by a common underlying mechanism of neurobehavioral disinhibition (Tarter et al., 2003). It is, therefore, possible that participants who reported heavier alcohol use in this study had been socialized in peer environments where both extensive alcohol use and interpersonal violence were common. These socialization mechanisms may have contributed to the choice of intimate partners and increased the risks for co-occurring violence and substance abuse. However, the other scenario is also possible in which primary IPV victimization increased the risk for subsequent alcohol use (Devries et al., 2014). This explanation is consistent with prior research with young Ukrainian adults who used alcohol as one of the main tools for coping with psychological problems

(Burlaka, Churakova, Aavik, Staller, & Delva, 2014). The detrimental influence of IPV on parenting was expected based on prior research with abused mothers in the U.S. (Levendosky & Graham-Bermann, 2001).

### Conclusions, limitations and recommendations

Overall, this study makes an important contribution to the very limited literature on relationship between alcohol use, violence, family system characteristics and parenting in Ukraine. It is crucial that practitioners and policymakers are aware of these patterns that increase the risk for inadequate parenting. Although not causal, these risk markers can be very useful for development of effective and culturally sensitive interventions with parents in Ukraine and in other countries with similar social and historical backgrounds. It is important to make these interventions affordable for Ukrainian parents who mostly live in poverty. Through these interventions, Ukrainian parents should be encouraged to avoid corporal punishment, to supervise and actively participate in the lives of their children and reward their good behaviors. Moreover, practitioners who work with parents should acknowledge the potential adverse impact of frequent alcohol use, unbalanced family systems and IPV on the parenting.

In spite of the fact that this study provides rare and rich insight into relationship between family factors and parenting in Ukraine, its cross-sectional design requires caution when interpreting the results. Furthermore, these findings are based on parents' recall of parenting practices and co-occurring family factors. The data suggests that parents predominantly utilize positive parenting practices with their children. This finding expands prior research in Ukraine that reported parents' beliefs about lacking parenting competencies. In the face of this new data, these beliefs may not reflect the actual parenting competencies in Ukraine. Additional research

with parents is warranted to clarify the nature of such perceived parenting incompetence.

Furthermore, because there is a possibility that participants of this study partly reported desired rather than true parenting behaviors, future studies may benefit from qualitative designs that will allow a more fine-grained understanding of specific parenting practices as well as studies in which parenting behaviors are observed in real time. Furthermore, longitudinal and experimental designs of the future studies would help clarify causal relationships between parenting and parent-level and family-level variables.

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Table 1.1

Correlations, Means, Standard Deviations, and Cronbach Alpha Coefficients of the Major Study Variables Displayed in Figure 1.2

Variable	1	2	3	4	5	6	7	8	M	S.D.
1. Positive parenting	(.95)								2.65	.81
2. Negative parenting	52	(.85)							1.39	.59
3. Alcohol use	53	.37	(.85)						172.73	261.85
4. Violence incidents	45	.54	.38	(.95)					7.6	10.02
5. Family functioning	.57	56	35	48	(.92)				.35	.11
6. Family income	.19	25	21	26	.30	-			313.43	196.85
7. Parent age	.06	06	1	02	.04	1	-		37.79	6.52
8. Parent education	.26	40	29	39	.32	.43	.05	-	13.26	2.10

*Note*. N = 320. Correlation coefficients above .06 are statistically significant at p < .001. Numbers on the diagonal are Cronbach alpha coefficients indicating internal consistency reliability estimates of multi-item measures.

Table 1.2

Standardized Coefficients of Direct, Indirect and Total Effects of Study Predictors on Positive and Negative Parenting

	Po	sitive pare	enting	Negative parenting			
Variable	$\beta_{direct}$	$\beta_{indirect}$	$\beta_{total}$	$\beta_{\text{direct}}$	$\beta_{indirect}$	$\beta_{total}$	
Family functioning	.43***	-	.43***	41***	-	41***	
Alcohol use	39***	20***	59***	.15*	.26***	.42***	
IPV	12*	17***	29***	.34***	.16***	.50***	
Parent education	.06	.21***	.27***	16**	25***	40***	
Family income	02	.13**	.11 <sup>†</sup>	.01	14**	13*	

*Note.*  $\beta_{\text{direct}}$  = standardized coefficients for direct effects;  $\beta_{\text{indirect}}$  = standardized coefficients for indirect effects;  $\beta_{\text{total}}$  = standardized coefficients for total effects.

<sup>†</sup> p < 01, \* p < 05, \*\* p < 01, \*\*\* p < .001

Table 1.3  $\textit{Multiple } R^2 \textit{ Values for Study's Endogenous Variables}$ 

Variable	$R^2$
Positive parenting	.61
Negative parenting	.67
Alcohol use	.03
IPV	.29
Family functioning	.40

Table 1.4

Indirect Effects of Education, Income, Alcohol Use and IPV on Parenting

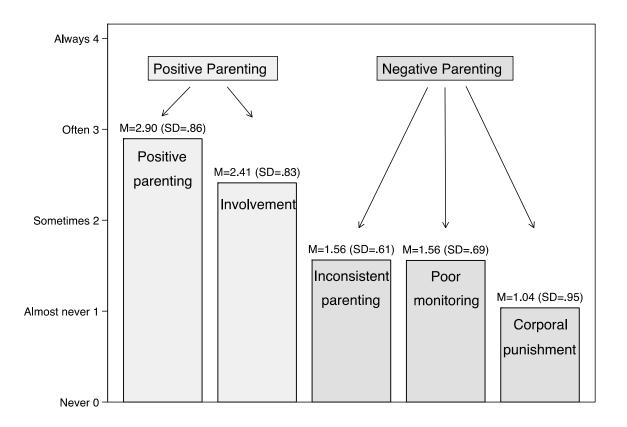
Mediation chains	β	Z
education — alcohol use — positive parenting	.06	1.94†
education — alcohol use — negative parenting	02	-1.48
education — family functioning — positive parenting	.03	1.35
education — family functioning — negative parenting	03	-1.34
education — IPV — positive parenting	.04	$1.84^{\dagger}$
education — IPV — negative parenting	10	-3.60***
income — IPV — positive parenting	.01	1.40
income — IPV — negative parenting	04	-1.85 <sup>†</sup>
income — family functioning — positive parenting	.06	2.50*
income — family functioning — negative parenting	06	-2.44*
income — alcohol use — positive parenting	.02	.73
income — alcohol use — negative parenting	01	70
alcohol use — IPV — positive parenting	04	-1.98*
alcohol use — IPV — negative parenting	.11	3.77***
alcohol use — family functioning — positive parenting	10	-3.53***
alcohol use — family functioning — negative parenting	.10	3.18***
IPV — family functioning — positive parenting	17	-4.47***
IPV — family functioning — negative parenting	.16	4.40***

*Note.*  $\beta$  = standardized coefficient; z = coefficient/standard error.

<sup>†</sup> *p* < 01, \* *p* < 05, \*\* *p* < 01, \*\*\* *p* < .001

Figure 1.1

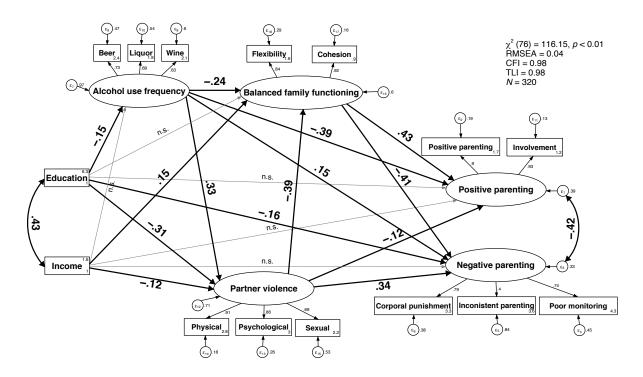
Means and Standard Deviations of APQ Parenting Scales



*Note*. M = Mean, SD = Standard Deviation. Lighter-colored bars represent APQ Global Positive Parenting Scale. Darker bars represent APQ Global Negative Parenting Scale.

Figure 1.2

Effects of Parental Alcohol Use, Family Functioning, IPV and Sociodemographic Characteristics on Positive and Negative Parenting.



*Note*. Large ellipses represent latent constructs. Bolded lines represent statistically significant standardized path coefficients at .05 or above. Curved lines represent correlations among errors. Small circles represent residual variances.

## Chapter III

Externalizing Behaviors of Ukrainian Children: The Role of Parenting

Child externalizing problems (e.g., hitting other children, stealing from others, cheating, refusing to comply with rules and requests of parents and teachers) are among the primary reasons for mental health treatment referrals in children (Kazdin, 2003). Although the association of child externalizing behaviors (Beauchaine & Hinshaw, 2008) with parenting have been extensively studied in high-income countries (Deater-Deckard & Dodge, 1997; Gershoff, 2010; Hoeve et al., 2009), there is a very limited body of research examining these behaviors and their relationship with parenting practices in developing countries such as Ukraine. Thus, this study sought to understand the unique and relative influence of positive parenting, involvement, inconsistent parenting, monitoring and corporal punishment on child externalizing behaviors.

A second critical issue concerns the relationship between parenting behaviors and child externalizing behaviors in the model that takes into account important sociodemographic characteristics, such as parent and child age, child gender, parent education, employment, income and marital status. For example, researchers have reported that chronically poor children were likely to reduce externalizing behaviors when their parents gained employment and the family income increased (Dearing, McCartney, & Taylor, 2006). In another prospective

longitudinal study with White U.S. families (Family Transitions Project), Conger, Neppl, Kim, and Scaramella (2003) investigated the intergenerational transmission of aggressive parenting and aggressive child behaviors. Researchers reported that single-parent status, lower education, income, and participants' age did not explain the intergenerational continuity of aggressive parenting or aggressive child behaviors. However, in the following study with participants recruited from the same project, a strong influence of socioeconomic disadvantage was observed (Scaramella, Neppl, Ontai, & Conger, 2008). Specifically, poverty in the first generation was related with early parenthood in the second generation of participants in that study. Next, younger parent age in the second generation predicted higher use of harsh parenting techniques with their children (third generation). In particular, trained observers observed parents' performance during a puzzle task and a clean up task during which younger parents were significantly more likely to be hostile and angry, resort to the use of age-inappropriate techniques and physically attack their children. Finally, children of parents who were younger and used harsh parenting behaviors were significantly more likely to exhibit externalizing behavior problems. In another study with White and African American participants, children also were more likely to develop externalizing behaviors if they had lower socioeconomic status, were of male gender, and were raised by single mothers (Deater-Deckard, Dodge, Bates, & Pettit, 1996). However, in this study, corporal punishment led to child externalizing behaviors only for White children while "African American children receiving harsh physical punishment had lower aggression and externalizing scores" (Deater-Deckard et al., 1996, p. 1069). Researchers concluded that culture might, in fact, lead to a differential impact of certain parenting practices on children's adjustment. Therefore, the present study will examine the

concurrent influences of parent and child sociodemographic characteristics and parenting on externalizing behaviors of Ukrainian children from 9 to 16 years of age. This age period is marked by dramatic social, cognitive and physical developmental changes as well as increases in child externalizing behaviors (Beauchaine & Hinshaw, 2008). Thus, it is important to investigate the relationship between child externalizing behaviors and parenting in Ukraine, a geographical setting, in which, to our knowledge, such research has not been conducted yet.

## Child externalizing problems and parenting

In the United States, approximately five percent of youth engage in severe externalizing behaviors, including violence, life-course-persistent offending, and conduct disorder, property damage, and disproportionate substance abuse (Vaughn, Salas-Wright, DeLisi, & Maynard, 2014). Although the rate of severe externalizing behaviors appears to be nugatory, these behaviors result in disproportionally large societal costs (Craig, Schumann, Petrunka, Khan, & Peters, 2011). Developmentally, conduct disorders typically surface during adolescence, although the early signs of developmental progression to externalizing behaviors can be seen already in preschool age (Loeber, 1990). In fact, for most children, the "onset" of physical aggression can be noticed by the end of the second year of life (Tremblay et al., 1999).

According to prior research, some children are "early starters" while other children show the "late starter" pattern (Moffitt, 1993; Patterson, Capaldi, & Bank, 1991). Those who begin early, typically demonstrate symptoms of oppositional defiance disorder (ODD; American Psychiatric Association, 2013) in the preschool years and develop conduct disorder (CD; APA, 2013) by middle childhood (Lahey, Loeber, Quay, Frick, & Grimm, 1992). During adolescence, these children progress to more aggressive behaviors and acts of severe delinquency while also

showing some non-aggressive rule-breaking behaviors, such as lying and stealing. Lahey et al. (1992) note that "late starters," on the other hand, demonstrate normal behaviors in preschool and early school ages and develop symptoms of CD during adolescence. Usually, "late starters" will have a less severe form of CD and more favorable life outcomes than children with a long history of externalizing behaviors that began during their preschool years. In contrast, children whose oppositional disorders emerged in the early preschool years are very likely to experience a more serious trajectory of externalizing behavior problems (Loeber & Farrington, 2001; White, Moffitt, Earls, Robins, & Silva, 1990).

Childhood externalizing problems are a significant precursor for later-life involvement in delinquent and aggressive behaviors (Tremblay, Mâsse, Pagani, & Vitaro, 1996). They often lead to interpersonal problems, poor physical health, academic failures, school dropout, juvenile delinquency, adult crime, marital problems and alcoholism (Loeber & Farrington, 2001). The developmental stability of externalizing behaviors was reported at the level of correlations between .5 and .7 (Rose, Rose, & Feldman, 1989; Tremblay et al., 1996). The intensity with which antisocial behaviors occur in children is positively related with negative outcomes in adulthood. Robins, Tipp, and Przybeck (1991) reported that 18% of youngsters who had three and more behavior problems during adolescence later received antisocial diagnoses. However, 46% of those adolescents who demonstrated six and more externalizing behavior problems received antisocial personality disorder diagnoses as adults.

The risk of development of externalizing problems is strongly related to parenting.

Parenting provides the environmental framework for children's psychosocial growth

(Bronfenbrenner, 1981). Such parenting practices as consistency, positive parenting,

involvement with the child, monitoring and supervision, physical punishment and non-corporal punishment discipline aim to advance children's readiness to meet social and emotional challenges (Frick, 1991; Frick, Christian, & Wootton, 1999). However, not all of these practices promote child development equally well. In fact, such practices as poor monitoring and corporal punishment can hurt the child and contribute to the development of externalizing behaviors, especially when the child feels emotionally rejected (Gershoff, 2013; Loeber & Stouthamer-Loeber, 1986; Ma, Han, Grogan-Kaylor, Delva, & Castillo, 2012). Patterson (1982) postulated that child aggressive behaviors develop in interactions with parents through a coercive reinforcement process. During conflict bouts, the child reacts to parental aversive behavior (e.g., criticism) by substantially escalating his or her negative behaviors. This coercive reaction tends to terminate the conflict bout and the child learns that he or she can use such negative reinforcement to influence parent behavior. Parent then uses an even more aversive approach that leads to even more aversive child responses (Patterson, Reid, & Dishion, 1992). Eventually, these aversive interactions may lead to parental loss of control and use of corporal punishment as a way to insure child's compliance. The use of corporal punishment may be quite infrequent. In one U.S. study, the data collected from 141 public school students and their parents indicated that 85% of adolescents had been slapped or spanked (Bender et al., 2007). In that sample, offspring who experienced corporal punishment had more depressive symptoms and greater number of externalizing problems. In a meta-analyses of 88 studies, Gershoff (2002) concluded that parental use of corporal punishment was associated with immediate compliance of children. Sadly, this study also showed that the physical discipline also led to children's aggression, lower internalized morals and psychopathology. Children exposed to violent behavior models tend to

imitate such models (Bandura, Ross, & Ross, 1961; Miller, Grabell, Thomas, Bermann, & Graham-Bermann, 2012).

Other deficits in fundamental parenting competencies that were found to predict child externalizing problems include inconsistency, poor monitoring, lack of involvement (Stanger, Dumenci, Kamon, & Burstein, 2004), abusive behaviors, neglect, and permissiveness (Jaffee & Maikovich-Fong, 2011; Knutson, DeGarmo, Koeppl, & Reid, 2005; Wall & Barth, 2005), lack of praise, warmth, support, and nurturing (Harper, Brown, Arias, & Brody, 2006; Lansford, 2010; Pettit, Bates, & Dodge, 1997). Likewise, previous research associated child externalizing psychopathology with parental antisocial personality disorder (Loeber & Farrington, 2001).

With respect to the role of positive parenting, prior longitudinal research with mostly European Americans revealed that parental warmth with 5-10 year old children predicted children's effortful control 24 months later and subsequently predicted decreased externalizing psychopathology when these children reached adolescent age (Eisenberg et al., 2005). The strong inverse relationship between positive parenting and child externalizing behavior was supported in a more recent longitudinal study with predominantly White U.S. children (Boeldt et al., 2012). Parents' praise and warmth help children develop social competence, stay focused, listen to others, collaborate and stay calm (Webster-Stratton & Hammond, 1998). Additionally, researchers found positive associations between using praise, child monitoring and limit setting and lower child externalizing behaviors among underserved Latino immigrant children (Holtrop, McNeil Smith, & Scott, 2014). Webster-Stratton (2012) argued that positive parenting is of fundamental importance for a developing child because it increases the child's security and competence.

Ukraine has ratified the United Nation's Convention on the Rights of the Child (United Nations Children's Fund, 2005) that discourages use of corporal punishment for children. Still, the incorporation of children's rights principles into research and practice lags behind (Denizhna & Sova, 2010; Kalmikova, 2010). Denysiuk and colleagues (2003) reported that 76% of Ukrainian parents lack knowledge about proper ways of raising their children. Previous research in developed countries suggests that children score higher on externalizing problems relationship if their parents use fewer positive and more negative parenting techniques. However, to the author's knowledge, no comprehensive study has investigated the use of parenting practices with Ukrainian families. Moreover, because sociocultural preconditions, history and present conditions in Ukraine are dramatically different from developed countries, it is crucial to investigate parenting practices in that region and analyze their relationship with child externalizing behaviors. Knowledge about these associations will primarily inform policymakers and practitioners in Ukraine. If there is a link between parenting approaches and child externalizing problems this knowledge can be used to inspire new interventions with parents and children in this sociocultural context.

This study aimed to explore the relationship between child externalizing problems and parenting practices in Ukraine. First, it was hypothesized that the child externalizing behavior will be associated with lower scores on positive parenting and involvement, and higher scores on corporal punishment, poor monitoring and inconsistent parenting. Second, it was hypothesized that the child's male gender and younger age, younger parent age, lower education, unemployment and single parenting status would provide additional explanation to variance in child externalizing behaviors.

### Method

## **Participants**

This study used a community-based sample of Ukrainian parents and children. The participants were chosen from 11 rural and urban communities to represent southern, eastern and central regions of the country. The author of this paper designed the study in partnership with the Ukrainian Methodological Psycho-medico-pedagogical Center of the Department of Education. The center approved the study according to Ukrainian law and standards for ethical research and then independently coordinated research interviews with participants, obtained informed consents and assents, and collected data from participants without personal identifiers. The dataset, without personal identifiers of the participants, was then transferred to the author who obtained a determination of non-regulated status of the study from the University of Michigan Institutional Review Board.

The measures for this study were selected by the author based on previous experience with these measures in U.S. research studies where these measures had shown good psychometric properties. In the next step, the measures were translated into Ukrainian language using recommendations of Brislin (1970). Specifically, one bilingual translator completed the translation from English into Ukrainian and another bilingual translator back translated the measures from Ukrainian into English. A group of independent raters including a schoolteacher, a representative of the department of education, two social workers and a psychologist read the translation, identified errors and suggested alternative formulations that would tap more accurately into the meaning of items as well as match the language difficulty to the level of schoolchildren. Also, the measures were administered to a small group of children and their

feedback was incorporated into translations. Translators then performed the next round of translations. This process continued until there was an agreement between translators and the raters.

To recruit participants, Ukrainian school psychologists spread flyers and extended personal invitations to parents of children 9 to 16 years of age. A total of 320 parent-child dyads were interviewed in school premises and in participants' homes. Careful attention was paid to issues of privacy and the safety of participants. The final sample had an even distribution of children across ages and gender. That is, there were 40 children (50% boys) in each year of age. Parent participants included 294 biological mothers, 18 biological fathers, six grandmothers and two adoptive mothers. Parents were on average 37.79 years of age (SD = 6.52), 70% were employed and the majority self-identified as Ukrainian (92%). About half of the parents (49%) completed vocational training, others had a university degree (26%), finished a few years of college (6%) or 11 grades or less of school (19%). Most of parents were married or lived with a partner (60%) while the rest were widowed, divorced, single or married and living separately. The average family income was \$406 (SD = \$255) ranging from \$12-\$150 (15%), \$151-\$300 (19%), \$301-\$450 (28%), \$450-\$600 (20%), to \$600-\$2,200 (18%).

#### Measures

**Demographic characteristics**. As part of this study, parents answered questions about their age (measured in years), employment and marital statuses, level of education (measured in total number of years spent at educational establishments), ethnicity and family income (measured in US \$ per month). Parents also answered questions about the age (measured in years) and gender of their children.

Child Externalizing Behavior. The Child Behavior Checklist for Ages 6-18 ( CBCL/6-18; Achenbach & Rescorla, 2001), a widely used, well-standardized psychometric instrument with high validity and reliability, was utilized in this study. Parents answered 113 questions about the adjustment of their children using a three-point Likert scale from 0 ("not true"), to 1 ("somewhat or sometimes true"), to 2 ("very true or often true"). The outcome variable used in this study was the Externalizing Problems scale (Cronbach's alpha = .89) that was a sum of 10 items measuring attention problems (e.g., "Can't concentrate, can't pay attention for long"), 17 items measuring rule-breaking behavior (e.g., "Breaks rules at home, school, or elsewhere") and 18 items measuring aggressive behavior (e.g., "Cruelty, bullying, or meanness to others").

Parenting practices. The Alabama Parenting Questionnaire (APQ; Frick, Christian, & Wootton, 1999; Frick, 1991) is a widely used measure of parenting skills in the families with children who have behavior problems (Dadds, Maujean, & Fraser, 2003; Hawes & Dadds, 2006). The APQ consists of 42 items assessing positive and negative parenting practices grouped within the following areas: positive involvement with children (e.g., "you drive your child to special activities"); use of positive discipline techniques (e.g., "you praise your child when she does something well"); poor monitoring and supervision (e.g., "your child goes out without a set time to be home"); inconsistent disciplining (e.g., "the punishment you give your child depends on your mood"); use of corporal punishment (e.g., "you hit your child with the belt"); and other discipline practices (e.g., "you give your child extra chores as a punishment"). Parents rated the frequency with which the parenting practices typically occurred in their home on a 5-point scale ranging from 0 ("never") to 4 ("always"). The APQ has demonstrated solid psychometric properties in studies evaluating the association between parenting practices and

child behavior outcomes (Clerkin, Marks, Policaro, & Halperin, 2007; Essau, Sasagawa, & Frick, 2006). The Cronbach  $\alpha$  for Involvement subscale was .91, reliability alpha for Positive Parenting subscale was .92, the alpha for Corporal punishment was .86, for Poor Monitoring subscale,  $\alpha = .79$  and the alpha for Inconsistent Disciplining subscale was .67. The Cronbach alpha for Positive Parenting scale was .95 and reliability alpha for Negative Parenting scale was .84.

## **Overview of the Analyses**

A multiple imputation procedure using predictive mean matching (Molenberghs & Kenward, 2007; Rubin, 1986) was utilized to impute missing cases (0.6%) with Stata (StataCorp, 2013). The fact that there was no statistical difference in sociodemographic characteristics between two groups suggests that the data were missing at random. After estimation of descriptive statistics and correlation analyses, a robust multiple regression was used to predict the outcome variable, a broad-band Externalizing behavior of children. Parenting practices were treated as predictor variables and parent and child sociodemographic variables were included in the model as statistical control variables. Preliminary inspection of the family income variable revealed several outliers. These data points were not data entry errors and came from the same population as the rest of the data points. For this reason, the author decided to keep them in the analyses and use the robust method of regression, which accounts for influential outliers and data points that have high leverage (Fox, 1997; Li, 1985; Verardi & Croux, 2008). Another reason why robust regression was a preferred choice for these analyses is the fact that this method does not make assumptions about normality of the distribution of the

dependent variable. This feature is particularly useful for this sample in which most children had lower scores on Externalizing behaviors, skewness = 1.04, p < 0.001.

Preliminary examination of predictor variables revealed a strong correlation between positive parenting and involvement scales r(318) = .70. However, the estimated variance inflation factor (VIF) indicated that independent variables were not affected by multicollinearity. The VIF scores above 5 raise concern for collinearity (O'Brien, 2007). In this study, none of the predictor variables had a score close to this criterion. The highest VIF scores were found for parent involvement (VIF = 2.21) and for positive parenting (VIF= 2.49).

Because parenting practices and sociodemographic variables differ on measurement scales, standardized coefficients were computed to estimate relative effect sizes of predictors (Acock, 2012). Predictor variables were entered in the model in three steps. First, the regression analyses were made with positive parenting variables only. In the next step, regression analyses included positive and negative parenting variables. Finally, in the third model, in addition to parenting practices, child and parent sociodemographic characteristics were entered in the model as control variables.

### Results

## **Descriptive statistics**

Table 2.1 provides statistics for the analytic sample (N = 320). The scales in this study showed moderate to strong internal consistency reliability. The Inconsistent Parenting scale showed the lowest reliability, Cronbach's alpha = .67. Among Externalizing problems, the highest reported scores were for child Aggression (M = 8.64, SD = 6.97), followed by Attention Problems (M = 6.12, SD = 4.36) and Rule-breaking behaviors (M = 5.91, SD = 6.64). Parents'

scores on positive parenting practices (Positive Parenting and Involvement) were higher than on negative practices (corporal punishment, poor monitoring and inconsistent discipline; Table 2.1). Regarding the use of corporal punishment, thirty-one percent of parents reported never spanking their children, 44% reported never slapping a child with a hand and 57% never used a belt, switch, or other object when children did something wrong. Overall, the majority of parents (75%) reported use of corporal punishment with their children.

Table 2.2 shows correlations among study variables. These results indicated that all but two predictor variables had a significant relationship with the outcome variable. The two variables that were not significantly associated with the child externalizing problems were child age and parent age, and they were excluded from subsequent regression analyses.

Table 2.3 illustrates results of the robust regression. Higher involvement with the child  $(\beta = -.16, p < .05)$  and higher positive parenting score  $(\beta = -.37, p < .001)$  were significantly associated with lower externalizing problems in model one. Model one was significant overall F(2, 317) = 36.74, p < .001, and explained 24% of the variance in the child externalizing behavior. Results from model 2 show that positive parenting, poor monitoring and corporal punishment uniquely accounted for variance in child externalizing behaviors. Parents who reported less frequent use of positive parenting techniques indicated that their children had more conduct and attention problems  $(\beta = -.18, p < .05)$ . Poor child monitoring was related to higher child externalizing behavior,  $(\beta = .24, p < .001)$ . Caregivers who indicated more frequent use of corporal punishment with their children reported more symptoms of child externalizing behavior problems  $(\beta = .25, p < .001)$ . In this model, such parenting techniques as involvement and inconsistent parenting were not significantly related to child externalizing problems.

Overall, model 2 explained approximately one-third of the variance in child externalizing behavior,  $R^2 = 0.36$ , F(5, 314) = 27.13, p < .001.

In addition to parenting practices, Model 3 included parent and child sociodemographic characteristics (Table 2.3) and was highly significant,  $R^2 = 0.41$ , F(10, 309) = 17.54, p < .001. In this model, increased child externalizing behavior was associated with lower parents' use of positive parenting techniques ( $\beta = -.16$ , p < .05), poor child monitoring and supervision ( $\beta = .20$ , p < .001), more frequent use of physical discipline ( $\beta = .25$ , p < .001; Figure 2.1), male gender of the child ( $\beta = .12$ , p < .01), parent unemployment ( $\beta = -.11$ , p < .05), and single parenting ( $\beta = -.11$ , p < .05). Table 2.3 provides additional details of these results, including unstandardized coefficients and standard error.

### **Discussion**

This study yielded important descriptive information regarding the use of parenting practices related to risk of development of child externalizing behavior problems in Ukraine. Prior psychometric research with APQ parenting scales in Australia reported lower reliabilities of poor monitoring and corporal punishment scales (Dadds et al., 2003). In this study with Ukrainian families, these scales had good reliability. However, the inconsistent parenting scale showed somewhat lower reliability (alpha = .67), which was also observed in study using the APQ with German youth (alpha = .54-.62; Essau et al., 2006).

Results suggest that Ukrainian parents used positive parenting techniques more often than negative parenting practices. Still, three-fourth of parents in this sample reported lifetime use of corporal punishment with their children. This number is slightly smaller than the prevalence of corporal punishment previously reported for U.S. adolescents (Bender et al.,

2007). It is possible that in Ukraine, corporal punishment of children is a less culturally accepted parenting practice. Ukraine's ratification of the Convention on the Rights of the Child in 1991 (United Nations, 2015) may have helped streamline the national legislation and people's beliefs about corporal punishment of children. Specifically, Ukrainian law classifies physical assaults to people of any age as crimes (Verkhovna Rada, 2015).

This study also examined the strength of association between child externalizing behaviors and parenting. As predicted, higher scores on child externalizing behavior were associated with higher scores on corporal punishment and poor monitoring. These results are consistent with prior research in the United States and other countries (Gershoff, 2002, 2013, 2013; Ma et al., 2012). The findings also strongly align with a broad international consensus that the use physical discipline is, in effect, a form of masked violence against children. "Corporal punishment and other cruel or degrading forms of punishment are forms of violence" that "...directly conflicts with the equal and inalienable rights of children to respect for their human dignity and physical integrity" (UN Committee on the Rights of the Child, 2007, p. 6). The UN Committee on the Rights of the Child proposes that "any level of legalized violence against children" needs to be addressed (p. 6). Although the mean score on corporal punishment was lower than the score on other parenting practices, the standardized beta coefficient for corporal punishment was larger than the betas for other parenting scales. The findings suggest that physical discipline is like a fly in the ointment and that it would require a lot of love to heal the emotional scars caused by physical attacks. Indeed, chronic and prolonged exposure to trauma can be perceived by children as a betrayal by the very persons who are supposed to guide, support and protect them, and, therefore, corporal punishment can lead to extreme

reactions of rage, helplessness, and disruption of self-regulation (Ford & Courtois, 2013). Thus, social workers and psychologists working with prevention and treatment programs for child aggression, delinquency and attention need to help Ukrainian parents who still use corporal punishment, acquire positive parenting techniques and abandon physical discipline. Finally, these findings stress that physical disciplining is not helpful and may be harmful to children also in the Ukrainian context, as it appears to contribute to the intergenerational transmission of aggressive and disruptive behaviors.

Furthermore, lower child externalizing behavior was significantly associated with higher scores on positive parenting. Consistent with previous research (Boeldt et al., 2012; Eisenberg et al., 2005; Holtrop et al., 2014), Ukrainian children had fewer attention problems, lower aggression, and fewer acts of rule-breaking behaviors when their parents hugged and praise them and rewarded their good behavior. The lack of a significant relationship between the child Externalizing problem scale and inconsistent parenting was contradictory to hypothesis one. Consistent parenting reflects the idea that parents need to help children understand what rules and behaviors are expected from them and, if the child then breaks these rules, parents follow with the consequences (Carolyn Webster-Stratton, 2012). In the United States, the contribution of inconsistent parenting to child aggression was intensively studied during last 50 years (Patterson, Dishion, & Bank, 1984), and generations of U.S. caregivers were systematically trained in parenting through psychoeducation programs and community-based interventions. Ukrainian parents, however, have had little to no opportunities to learn about proper ways to parent their children and the majority of parents lack such knowledge (Denysiuk et al., 2003). Perhaps, Ukrainian parents might not be even aware of the importance of two steps that

constitute consistent parenting: communicating desired behaviors to the child and applying tangeable consequences if the child fails to behave as desired. Instead, caregivers in Ukraine may provide reactive parenting and apply punishment after undesired behavior has already happened. However, it is also quite possible that Ukrainian parents believe that there is no harm in threatening a child while actually carrying out a threat might be perceived as cruel. Given the importance of consistency in parenting for child externalizing behaviors (Patterson et al., 1984), further research exploring the meaning of this construct for Ukrainian parents is clearly warranted.

Likewise, the hypothesized association between child externalizing behaviors and low involvement with the child was not supported by these data. Although there was a significant correlation between these two variables, in the regression model that also included other parenting practices, parent involvement was not a significant predictor. One explanation of this finding can be that two items of the APQ measure were designed for the Western, more developed societies and were less valid for the Ukrainian context. One of these items asks about frequency with which parents drive their children to school. Ukraine is one of the poorest countries in Europe (World Bank, 2015) and very few parents in Ukraine have private cars. Another question asks about parents helping their children with special activities, such as sports, scouts and church youth groups. While these opportunities are widely available in Western Europe and the United States, it is not known whether Ukrainian communities have similar activities. Future qualitative research is warranted to explore equivalency of the construct of parent involvement in developed countries and in emerging democracies, such as Ukraine.

Next, consistent with hypothesis two, the child's male gender and single parenting status were significantly related with higher scores on child externalizing behavior problems. These results are consistent with prior research in the United States and were expected (Deater-Deckard et al., 1996). As in the study of Dearing et al. (2006), unemployment among Ukrainian parents was significantly related to increased child externalizing psychopathology. However, results did not provide support for the hypothesized positive relationship between child externalizing behaviors and the age of the child and of the parent. This finding may be explained by the limited age range of the participants in this study. Although this study primarily focused on the relationship between parenting and child externalizing behaviors, future studies with primary focus on relationship between child externalizing behaviors and child and parent age should include participants of broader age span. Also, the relationship of lower parent education and family income with child externalizing problems was not significant in the regression model with all other variables.

Although this study used reliable measures with a large sample of Ukrainian parents, the results of this research might be influenced by the following limitations. First, this study used a cross-sectional design, which limits the ability to make causal inferences. However, when it comes to parent-child interactions, prior research found them to be bidirectional (Patterson et al., 1984). That is, inept parenting is related with child aggression and child aggression, in turn, is associated with inept parenting. Still, future studies should use longitudinal and experimental designs to understand temporal aspects of the relationship between sociodemographic factors, parenting and child externalizing behaviors in Ukraine. Second, this study is limited to parents of children between 9 and 16 years of age. Therefore, it does not discriminate between children

who have externalizing problems from preschool age and children who developed these problems during adolescent age. This knowledge is critical because childhood-onset externalizing behavior are often caused by neurocognitive deficits and adverse social and family dynamics and persists into adulthood age while adolescence-limited externalizing behaviors are often caused by negative peer influences and fade away in early adulthood (Moffitt, 1993). Given this important distinction and potentially different implications for prevention programming, future Ukrainian studies should collect information on externalizing problems across childhood and adolescence ages.

In sum, this study makes an important contribution to the emerging evidence on the relationship between parenting practices and social and demographic characteristics and child externalizing behavior problems in Ukraine. Results from the final model suggest that prevention and treatment programs for children with aggression, delinquency and attention problems need to include specific modules focusing on reduction of corporal punishment of children, enhancing parents' ability to monitor their children and on use of positive parenting techniques. Furthermore, based on these findings, Ukrainian policy makers should disseminate information to parents and schools about the detrimental effects of corporal punishment and poor monitoring, particularly for male youths. Also, the government should support programs and policies helping Ukrainian parents gain employment. Finally, the government should assist parents who do not have daily spousal support when caring for their child. The finding that single parenting is associated with child externalizing behavior is particularly worrisome in light of the continued military conflict with Russia-supported terrorist groups in Eastern Ukraine that

has already claimed many thousands of lives. If this conflict continues, many more families will lose their members leading to further increase of single-parent homes in Ukraine.

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Table 2.1

Study Variables (N=320)

Variable	M	SD	Actual range	Potential range	Coefficient alpha
Externalizing problems	20.67	16.53	0-73	0-90	.89
Aggression	8.64	6.97	0-30	0-36	.91
Delinquency	5.91	6.64	0-28	0-34	.92
Attention problems	6.12	4.36	0-19	0-20	.84
Involvement	2.09	.98	0-4	0-4	.91
Positive parenting	2.90	.86	0-4	0-4	.92
Corporal punishment	1.04	.95	0-4	0-4	.86
Poor monitoring	1.56	.67	0-3.30	0-4.00	.79
Inconsistent disciplining	1.65	.63	0-3.83	0-4.00	.67

*Note.* M = mean; SD = standard deviation

Table 2.2

Pearson Correlations (N = 320)

	EX	IN	PP	PM	ID	CP	CA	CG	PA	ED	EM	MS	FI
EX	-												
IN	41	-											
PP	48	.70	-										
PM	.49	52	47	-									
ID	.18	12	08	.34	-								
CP	.52	44	61	.56	.26	-							
CA	.06	33	20	.33	.05	.08	-						
CG	.18	09	10	.12	.05	.01	.00	-					
PA	04	02	.04	.0002	.09	16	.32	.09	-				
ED	33	.31	.23	37	23	29	08	11	.05	-			
EM	26	.23	.20	14	08	17	01	05	06	.31	-		
MS	21	.15	.13	14	07	08	02	05	01	.13	.09	-	
FI	25	.24	.16	27	08	19	15	05	11	.43	.35	.24	-

*Note*. All correlations .12 and larger are statistically significant at p < .05 level or greater. EX = child externalizing; IN = inconsistent parenting; PP = positive parenting; PM = poor monitoring; ID = inconsistent disciplining; CP = corporal punishment; CA = child age; CG = child gender (male); PA = parent age; ED = parent education; EM = parent employment (employed); MS = marital status (married); FI = family income.

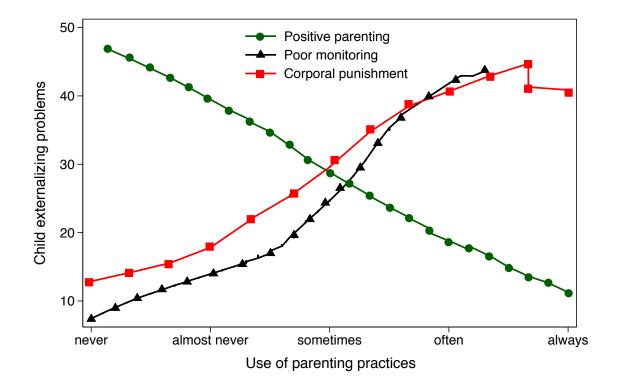
Table 2.3  $Relationship\ between\ Parenting\ Practices\ and\ Child\ Externalizing\ Behaviors\ (N=320)$ 

	Mod	del 1	Mo	del 2	Model 3		
Predictor	B (SE)	β	B (SE)	β	B (SE)	β	
Involvement	-2.65* (1.06)	16	91 (.99)	05	28 (1.01)	01	
Positive parenting	-7.13*** (1.42)	37	-3.53* (1.46)	18	-3.08* (1.46)	16	
Poor monitoring			5.87*** (1.37)	.24	4.84*** (1.35)	.20	
Inconsistent discipline			.11 (1.38)	.01	44	02	
Corporal punishment			4.45*** (1.10)	.25	4.60*** (1.09)	.25	
Male child gender					3.95*** (1.46)	.12	
Parent education					56 (.37)	07	
Parent employment					-4.13* (1.88)	11	
Marital status					-3.64* (1.49)	11	
Family income					001 (.003)	02	
R-squared	.2	24	.36		.41		
F	36.7	4***	27.13***		17.54***		

Note. SE = standard error. \* p < 0.05, \*\* p < 0.01. \*\*\* p < 0.001.

Figure 2.1

Locally Weighted Regression of Child Externalizing Problems on APQ Parenting Practices



## Chapter IV

Youth Alcohol Problems: Relationship with Child Externalizing Behaviors, Gender and Age, Parental IPV, Parenting Practices, and Parent and Peer Alcohol Use

Alcohol abuse is a developmental and recursive disorder that often begins in childhood and adolescence (Zucker, Boyd, & Howard, 1994). Although the associations of child alcohol problems with child conduct problems and hyperactivity, parental and peer alcohol use and family conflicts have been thoroughly studied in the United States and other high-income countries (Zucker, Donovan, Masten, Mattson, & Moss, 2008), very few studies testing these association in countries with developing economies exist in the published in the peer-reviewed journals. Thus, the present study aims to estimate the relationship between child alcohol-related problems and parent and peer alcohol involvement, parent experiences of violence, parenting practices, children's externalizing behaviors, gender and age in a sample of 320 Ukrainian parent-child dyads.

### Factors that contribute to alcohol use problems among youths

High-level alcohol consumption is known to cause health problems such as cancers and heart disease (Di Castelnuovo et al., 2006). Also, increased alcohol use is associated with a range of social and psychological problems, including, for example, co-occurring psychopathology (Merikangas et al., 1998, 2010), delinquency (Monahan, Rhew, Hawkins, & Brown, 2014), problems with academic and occupational attainment and difficulties in

relationships with other people (Sher & Gotham, 1999). In prior studies, the average correlation between alcohol use and alcohol problems have been found to range between .14 and .56, with the average Pearson r = .37 (Sadava, 1985). Therefore, Sadava stressed the importance of finding factors predicting alcohol problems in addition to intensity of alcohol use. Windle's (2000) examination of factors related to higher risk of alcohol problems over and above the level of alcohol use revealed that adolescents had more alcohol problems when they had increased interaction with alcohol-using peers or siblings. That longitudinal study with 570 White high-schoolers from western New York showed that sibling and peer substance use were stronger predictors of adolescent alcohol involvement than other significant predictors of drinking such as parent alcohol use, stressful life events and drinking with coping motives. Barnow, Schuckit, Lucht, John and Freyberger (2002) also demonstrated that the association with substance-using peers was predictive of more alcohol problems in a study with 115 families from Pomerania, Germany. Interestingly, the included family history of alcoholism variable did not have a significant relationship with the offspring's alcohol problems. However, adolescent aggression and delinquency were strongly related with substance use in the peer group and subsequent alcohol problems.

Parental alcohol use is a key predictor of child problem behaviors and involvement with alcohol (Hawkins, Catalano, & Miller, 1992; Russell, Windle, & Searles, 1990).

Developmentally, children tend to demonstrate conduct problems before developing alcohol-related problems (Hicks & Zucker, 2014). In one study, Zucker, Fitzgerald and Bingham (1998) used a cross-sectional sample to demonstrate significant positive associations between parent alcohol use disorder (AUD) and the number of behavior problems among children ages 3

through 8. In another study with longitudinal design, children who had externalizing problems at age 9, as well as children who were exposed to maternal drinking, were significantly more likely to develop heavy drinking problems as adults (Englund, Egeland, Oliva, & Collins, 2008). Hurt, Brody, Murry, Berkel and Chen (2013) used qualitative methods to explore factors associated with increased adolescent alcohol use. These researchers found that youths who used alcohol were not properly monitored by caregivers, had less predictable routines at home and were raised by substance abusing parents. Furthermore, in one Australian longitudinal study with 2,551 mothers, maternal alcohol use during the child's adolescence predicted alcohol-related problems for the child during early adulthood (Alati et al., 2005). Finally, researchers reported strong cross-sectional relationships between parental substance use and adolescents' alcohol use in the Southwest of the United States (A. R. Anderson & Henry, 1994) and in Western New York (Windle, 1994).

Kelley et al. (2010) noted that consistent with social learning theory (Bandura, 1986), when children live with parents who experience intimate partner violence (IPV) and use alcohol, not only might they replicate the violent behaviors but also learn to use alcohol as a maladaptive coping strategy for IPV. Kelley and colleagues argued that multiple studies have examined either the effects of parent alcohol use or the impact of IPV on child development alone and that new studies should test the cumulative impact of alcohol use and IPV on the development of child mental health problems. Furthermore, these new studies should expand the knowledge on the strength of these associations in interactive models that also take into account such factors as parenting, child age and gender, and peer influences.

The ecological systems theoretical framework suggests that children grow in environments that influence their growth and individual development (Bronfenbrenner, 1981). Thus, parenting style is another factor that can affect the child's involvement with alcohol (Windle et al., 2008). Windle and colleagues suggested that such parenting characteristics as emotional warmth, caring and support tend to delay the onset of drinking and lower the levels of adolescent alcohol use. Multiple studies also confirm that parental monitoring of children's academic life and involvement with peers and more quality time spent together with the children can lead to greater communication satisfaction and less frequent alcohol use. For example, Anderson and Henry (1994) found that poor communication with the child, lower support and control through reasoning, withdrawal of love and higher coercion predicted higher involvement of the youth with alcohol and drugs. Barnow and colleagues (2002) demonstrated that adolescents with alcohol problems received less emotional warmth and were more frequently rejected by their parents. Additionally, alcohol-abusing adolescents were more often diagnosed with conduct disorder and antisocial personality disorder than their non-alcoholabusing peers. In another study, parental AUD influenced youths substance use and association with deviant peers through such mechanisms as negative affect and poor monitoring (Chassin, Pillow, Curran, Molina, & Barrera Jr, 1993).

Parenting is a crucial family task (Anderson, Sabatelli, & Kosutic, 2013) and one Ukrainian study reported that lower parental control was related to risky alcohol use among 15-16-year-old students (Iakunchykova & Andreeva, 2012). Likewise, lower parental control increased the odds of child alcohol use in a U.S. longitudinal study with 4,894 White adolescents and youths of Mexican heritage (Kopak, Chen, Haas, & Gillmore, 2012). Hence,

children who do not receive necessary support and guidance from their parents, may become more susceptible to negative influences of alcohol abusing environments through association with deviant peers (Hawkins et al., 1992). In cross-sectional study of German youth, heavydrinking youths were more likely to have alcohol-abusing peers in their close networks if they experienced parental rejection and lack of emotional warmth (Barnow et al., 2002). A longitudinal study with 363 Caucasian and Hispanic adolescents in the United States revealed bidirectional influences of adolescent alcohol use on peer alcohol use and peer alcohol use on the adolescent alcohol use (Curran, Stice, & Chassin, 1997). In a systematic review of 22 longitudinal studies conducted between 1997 and 2011, Leung, Toumbourou and Hemphill (2014) examined the relationship between adolescent and peer alcohol use. Of these studies, 16 were implemented in the United States, four in the Netherlands, one in New Zealand, and one in Germany. No results were reported from countries with developing economies and no data was available from any country in Eastern Europe. In most studies, peer influence was estimated using reports on the number of friends engaged in alcohol use, or the perceived extent of peer alcohol involvement. Researchers used such outcome variables as quantity and frequency of adolescent alcohol use, binge drinking, and alcohol related problems. Evidence from 21 of the included studies confirmed the prospective temporal relationship between adolescent association with alcohol-using peers and subsequent increase in alcohol consumption. Other researchers found that involvement with deviant peers leads to increased substance use as well as a number of other persistent co-occurring behavior problems, which, once established, are not likely to desist (Monahan et al., 2014).

Imitation and role modeling of parental and peer alcohol-using behaviors can be thought of as such that belong to a normal socialization process (e.g., Brook, Brook, Gordon, & Whiteman, 1990; Jessor & Jessor, 1977; Kandel, 1980) and several factors related to child development can help put these environmental influences into perspective. First, children acquire the ability to arrange objects or events along certain dimension by age 4 or 5 (Zastrow & Kirst-Ashman, 2013). For example, this cognitive ability, which Piage called seriation, allows children to sort toys by their height, length, color or texture. Also, for the first time in their life children of this age begin to compare their personal attributes with attributes of other individuals in the family, in the playground and at school. As a result, children begin to realize that their qualities are different from the qualities of other children. Children with low self-esteem can be caught by a false sense of self-assurance when they begin trying alcohol drinks with more popular youths and adults. It is quite possible that Ukrainian children develop positive alcohol expectancies early in life because alcohol use is very common in Ukraine (World Health Organization, 2014).

During the next developmental period, formal operations, that lasts between 11 and 16 years of age (Zastrow & Kirst-Ashman, 2013), adolescents acquire the ability to see multiple perspectives, and consider hypothetical relationships under changing conditions. Such dramatic changes in reward-seeking, planning, problem-solving and decision-making occur due to the rapid development of the caudate, nucleus accumbens (NA), globus pallidus (GP), and putamen, while changes in mood and emotion regulation relate to the growth of the amygdala and hippocampus (Davidson et al., 2002; Goddings et al., 2014; Gottfried, 2011). For example, Maria, age 10, is aware that alcohol killed uncle Petro and thinks that drinking is dangerous.

However, at the age 14, Maria may have quite an opposite idea about alcohol use. She might find it difficult to decide whether alcohol use is really harmful. Even though uncle Petro died of it, many other people, including parents and, more importantly, peers do not appear to have any health issues as a result of alcohol use. Moreover, by this age, Maria may have already had personal pleasurable experiences with alcohol. Erik Erikson (1950, 1968) postulated that during the preadolescent stage of Industry versus Inferiority (6 to 12 years of age), school-aged children mainly focus on schooling, while during the adolescent stage, Identify versus Role Confusion, youths begin examining various other roles searching for their unique identities. It is during this period that Ukrainian adolescents begin to experiment with consuming alcohol (Balakireva et al., 2011). Still, the onset of alcohol use in adolescent age is highly problematic because it significantly increases the risks of developing AUD in adult age (Danielsson, Wennberg, Hibell, & Romelsjö, 2012; Englund et al., 2008). Thus, there is a tremendous difference between, children of preadolescent and adolescent age with regards to tasks, roles, abilities and adjustment; and, therefore, it is important that research includes children across preadolescent and adolescent ages.

Childhood externalizing behavior is another known predictor of alcohol abuse. Indeed, both animal and human studies link impulsivity with alcohol use (Dick et al., 2010). The biogenetic-dispositional model posits that temperament characteristics of the child, such as higher activity level may increase the risk for the child to associate with deviant peers and become involved in substance use (e.g., Blackson, Tarter, Martin, & Moss, 1994). Other studies also suggest that externalizing problems may serve as precursors of later-life AUD. For example, in a longitudinal study, Englund et al. (2008) observed that higher externalizing

behavior problems at age nine increased the odds of developing alcohol use disorders in early adulthood among males. For women, the use of alcohol in adolescence mediated the association between externalizing behavior at 9 years of age and AUD at 26 years.

Researchers from the Minnesota Center for Twin and Family Research identified an agerelated patterns of individual involvement with alcohol (Iacono, McGue, & Krueger, 2006).

Longitudinal findings from this study suggest that children who were perceived as disruptive at
age 11 developed substance use problems at age 14. Furthermore, children with externalizing
problems in adolescence tended to develop AUD in early adulthood. Although these data
indicated that externalizing problems have a strong effect on child alcohol involvement, another
important finding from this study pointed to the strong association between older child age and
development of substance use problems (Hicks & Zucker, 2014).

In addition to the child's age, the child's gender has also been found to be a significant predictor of increased alcohol use. For example, prior cross-sectional research revealed that among Ukrainian children aged 16 years, boys had significantly higher levels of alcohol use than girls (Danielsson et al., 2012). Still, it is not known whether male gender is a significant predictor of alcohol use among Ukrainian children of younger ages.

# The present study

The time from late childhood through adolescence represents a period of rapid physical and neurocognitive development that creates unique opportunities for growth. Prior research in high-income countries suggests that for some children who grow under the influence of prosocial parents and peers, adolescence can be the time to enjoy remarkable moments of academic and personal success and the time of discovery of numerous new dimensions of

human existence. However, for those children who experience adversity in their homes and socialize with deviant friends, adolescence can be a beginning of the downward spiraling with progressive increases in problem behaviors related to alcohol use. Although these findings appear to be strong in higher income societies, it is important to examine if these findings can be replicated in other sociocultural contexts where children experience additional burdens such as poverty and the chaotic organization of society. Ukraine is one of those countries where children might feel less hopeful about their future due to the war with Russia-supported militants, the country's struggling economy and lack of funding for prevention programs. Understanding youth problem drinking in Ukraine is important not only to better document the asymmetry of the prevalence of these problems in one of the world's top drinking sociocultural contexts but also for its practical importance of informing alcohol prevention policy and programming. There is a need to examine early alcohol problems in samples that include both parents and children that can give information about co-occurring processes during time periods when most of the children begin experimenting with alcohol. Presently, there is a void in the peer-reviewed literature regarding risk and protective factors for child alcohol problems in samples of Ukrainian children under the age of 15 years.

The present study is an attempt to fill this gap by using multiple psychometrically sound measures in a sample of children aged 9 to 16 with equal numbers of females and males in each year of age. Given the literature on the role environmental factors play in the development of problem drinking among youths, it was hypothesized that higher scores on youths' alcohol problems will be significantly associated with lower scores on the Positive Parenting scale and higher scores on the Negative Parenting scale as well as higher parental alcohol use and greater

exposure to alcohol-using peers. With regards to child-level risk factors, it was hypothesized that higher externalizing behavior, male gender and older age of the youths will be significantly and positively associated with more problems related to alcohol consumption.

#### Method

# **Participants**

The data in this study were collected from children and parents living in 11 rural and urban communities of Ukraine. The study was approved by the Ukrainian Methodological Psycho-medico-pedagogical Center of the Department of Education. School psychologists obtained informed consents and assents, interviewed participants and transferred the dataset without participants' personal identifiers to the author for analyses. A status of the study's non-regulation was then issued by the University of Michigan Institutional Review Board.

Children between 9 and 16 years of age and their parents (a total of 320 parent-child dyads) were interviewed on safe school premises and at participants' homes. The majority of parents were biological mothers (N = 294) who identified themselves as Ukrainian (92%). Other ethnicities were Roman, Armenian, Polish and Russian. On average, parents were 37.79 years of age (SD = 6.52). The average family income was \$406 (SD = 255) and 70% were employed. The sample included one-fifth of parents who completed 11 grades or less of secondary school, half of participants with a vocational school diploma, 6% who had a few years of college and 26% who had university degrees.

#### **Measures**

**Demographic characteristics**. Participating parents answered questions about their age, caregiver status (e.g., biological mother, biological father etc), education, employment, household income and ethnicity. Children identified their age and gender.

Child alcohol-related problems. The Alcohol Use Section of the Drinking and Drug History and Current Use Patterns children's questionnaire (Zucker, Ellis, Bingham, & Fitzgerald, 1996) was used in this study to assess adverse consequences related with children's alcohol use. Children answered 27 questions designed to estimate whether they had ever experienced problems associated with alcohol use in such areas as relationships (e.g., had problems with girlfriend/boyfriend, lost friends, problems with parents), social adjustment (e.g., missed school, troubles with the police), and intrapersonal/health issues (e.g., had blackouts, gone on a binge of constant drinking, felt guilty about my drinking). The answers ranged from 0 ("never happened") to 10 ("happened more than 500 times"). There was a high internal consistency (α = .90) in this sample.

**Violence to parent.** Parents answered eight questions on psychological aggression and 12 questions pertaining to physical assault from the revised version of the Conflict Tactics Scales (CTS2; Straus, Hamby, Boney-McCoy, & Sugarman, 1996; Straus, 1979). The physical assault items (e.g., "My partner twisted my arm") and psychological aggression items (e.g., "My partner insulted or swore at me") measured the incidence of violence during last 12 months using a 7-point Likert scale ranging from "never" to "more than 20 times." The Cronbach alpha for the Psychological Aggression scale was .79 and for the Physical Assault scale,  $\alpha = .86$ . The CTS2 Violence alpha was .94.

Parent alcohol use. The parents' alcohol use was estimated with Alcohol Use Section of the Drinking and Drug History and Current Use Patterns questionnaire (Zucker, Fitzgerald, & Noll, 1990). Parents reported frequency of consumption of liquor, beer, and wine (or a punch containing wine) using a 11-point scale ranging from 0 ("never") to 10 ("3 or more times a day"). To compute the total drinking frequency score, the use for individual beverages was converted the number of drinking occasions during past 12 months. If a parent answered "once a month", this answer was recoded to 12. Similarly, if a parent indicated "3 or more times a day", this answer was recoded as 4 times per day, or a total of 1,460 times per year. Thus, the potential range for the Global Annual Alcohol Use Frequency scale that added up answers for three types of beverages was between 0 and 4,380.

Parenting practices. Parenting behavior was measured with the Alabama Parenting Questionnaire (APQ; Frick, Christian, & Wootton, 1999; Frick, 1991). Parents reported the frequency with which they utilized positive parenting (e.g., "you praise your child when she does something well"), were positively involved with children (e.g., "you drive your child to special activities"), used poor monitoring and supervision (e.g., "your child goes out without a set time to be home"); exercised inconsistent disciplining (e.g., "the punishment you give your child depends on your mood") and used corporal punishment (e.g., "you hit your child with the belt"). The APQ measures parenting with 42 items using a 5-point scale ranging from 0 ("never") to 4 ("always"). The APQ Positive Parenting Scale consists of the Involvement and Positive Parenting scales while the APQ Negative Parenting Scale consists of the Poor Monitoring/supervision, Corporal Punishment and Inconsistent Discipline scales. The APQ demonstrated good psychometric properties in research on relationship between parenting and

child behavior outcomes (Clerkin, Marks, Policaro, & Halperin, 2007; Essau, Sasagawa, & Frick, 2006). In the present study the  $\alpha$  = .95 for the Positive Parenting Scale and  $\alpha$  = .84 for the Negative Parenting Scale.

Peer alcohol use. One item from the Alcohol Use Section of the Drinking and Drug History and Current Use Patterns children's questionnaire (Zucker et al., 1996) was used in this study. Specifically, children answered a question, "About how many of the kids you hang around with drink alcohol at least sometimes?" The answers were coded as 0 ("none"), 1 ("1-2"), 2 ("several"), 3 ("less than a half"), 4 ("more than a half"), and 5 ("all of them").

Child externalizing behaviors. The Externalizing Behavior Scale of the Child Behavior Checklist (CBCL; Achenbach, 1991) was used in the present study. CBCL consists of 113 items measuring children's adjustment using a three-point Likert scale, ranging from 0 ("not true"), to 1 ("somewhat or sometimes true"), to 2 ("very true or often true"). The Externalizing Scale is comprised of the Aggressive Behavior scale (M = 8.64, SD = 6.97, Chronbach's alpha = .91), Attention Problems scale (M = 6.12, SD = 4.36, Chronbach's alpha = .84), and Delinquent Behavior scale (M = 5.91, SD = 6.64, Chronbach's alpha = .92). In previous studies, the internal consistency alpha for the Externalizing scale was .93 (Achenbach, 1991). In the present study, the Chronbach's alpha for Externalizing scale was .89.

#### **Overview of the Analyses**

Preliminary inspection of the outcome variable revealed that most children did not have alcohol problems and the outcome variable was not normally distributed, skewness = 4.87, p < 0.001. Thus, robust regression technique, which is less sensitive to violations of normality of the distribution of dependent variable (Acock, 2012; Li, 1985), was utilized in this study to estimate

the associations of the children's alcohol problems from parenting practices, IPV to parent, child externalizing problems, parent and peer alcohol use, child gender and age. The Stata statistical software version 13 (StataCorp, 2013) was used for data management and analyses. There was a small amount of missing cases (6%) and a multiple imputation procedure with predictive mean matching (Molenberghs & Kenward, 2007; Rubin, 1986) was utilized to impute missing cases with Stata (StataCorp, 2013). There was no statistical difference in sociodemographic characteristics between participants with missing data and those with complete data, suggesting that the pattern of missingness was random. Regression analyses were performed in five steps. First, demographic variables measuring child gender and age were included in the model. Next, violence to parent and parental alcohol use were included in the model as such that reflect dimensions of family climate in which a child lived. Next, parenting practices were added as predictor variables to account for specific parenting techniques used with the child. In the next step, a variable measuring the child's externalizing behavior was added to the model. The final model tested whether psychosocial exposure of a child to alcohol-using peers would add to the explanatory power of parent and child factors associated with child alcohol problems. The standardized coefficients were estimated to assess the strength of relationship between the outcome variable and predictor variables that used different measurement scales (Acock, 2012).

#### **Results**

### **Descriptive statistics and correlations**

The average number of alcohol problems reported by youth in this sample was 3.88 (SD = 9.79). There were fewer alcohol problems among female (M = 2.59, SD = 6.75) than male youth (M = 5.16, SD = 11.97), t(318) = -2.36, p < .05. Figure 3.1 illustrates gender and age

distribution of alcohol problems among participating youth. The most prevalent problems reported by youth were issues in the relationship with the other family members (M = .50, SD = .50) 1.32) and friends (M = .48, SD = 1.20), problems with school teachers and administrators over alcohol use (M = .33, SD = .90). Youth also reported missing classes (M = .30, SD = .94), worrying that they were drinking too much (M = .18, SD = .85). Other adolescents reported losing friends (M = .19, SD = .76), feeling guilt for drinking (M = .27, SD = .91) while continuing alcohol use even though they gave a promise to stop (M = .24, SD = .87). Table 3.1 indicates good reliability of the scales used in this study as well as means, standard deviations and the ranges of child alcohol and externalizing problems, positive and negative parenting, parent IPV and the number of drinking peers. On average, youths reported relatively low levels of alcohol problems and parents reported low levels of externalizing behaviors in their offspring. The parents reported higher use of positive parenting than negative parenting. The level of psychological and physical violence was high in this sample with an average of 173 incidents (SD = 261.85) during last 12 months. Table 3.2 shows correlations suggesting that child alcohol problems were significantly related with more child externalizing symptoms, lower score on positive and higher score on negative parenting. Higher score on alcohol problems was associated with more violence to parent, higher parent alcohol involvement, more alcohol using peers, male gender and older age.

Association between child externalizing problems, parenting, parent IPV, parent and peer alcohol use, child gender and age, and child alcohol related problems

The robust regression results for child alcohol problems are presented in Table 3.3. In Model 1, child's male gender ( $\beta = .13$ , p < .05) and older age ( $\beta = .38$ , p < .001) had significant

relationships with child alcohol problems. Results from Model 2 suggested that parent alcohol use was associated with child alcohol problems ( $\beta$  = .16, p < .05) and parent IPV had no significant relationship with child alcohol problems. Both male gender and older age of the child were also related with child's problem involvement with alcohol in Model 2. With parenting predictors added to Model 3, both lower positive ( $\beta = -.19$ , p < .05) and higher negative ( $\beta = .17$ , p < .01) parenting approaches were significantly related to child alcohol problems. Child age and gender remained significant while parent IPV and alcohol use were not significantly related to child alcohol problems. A different picture emerged after child externalizing behavior was included in the Model 4. In this model, both negative and positive parenting practices showed a trend toward significance while child age and externalizing behaviors were still statistically significant. Parent alcohol use and IPV were not related to child alcohol problems in Model 4. In Model 5, the introduction of the peer drinking variable decreased the predictive power of parenting from a trend to non-significance. In this final model, older child age, more symptoms of child externalizing behavior and higher peer alcohol use were significantly associated with more child alcohol problems. The results of the final model explained 32% of the variance in child alcohol problems, F(8, 311) = 10.76, p < .001.

# Discussion

This study tested a comprehensive, multi-variable model that contributed to the knowledge on developmental and contextual factors associated with problem alcohol use among Ukrainian youths (Hicks & Zucker, 2014; Kelley et al., 2010). Specifically, this study examined the relationship between caregiver and peer alcohol use, parent IPV, child externalizing behavior problems, youths' gender and age, and child problem alcohol use.

Consistent with prior research in high income countries (Beauchaine & Hinshaw, 2008; Monahan et al., 2014; Sher & Gotham, 1999), results of this study indicated that Ukrainian youths experienced alcohol-related problems in such areas as academic attainment, relationships with others and delinquency. Bivariate comparison of the prevalence of alcohol problems in male and female groups of youth supported the hypothesis that child gender would be significantly associated with increased alcohol use (Danielsson et al., 2012). Male youths in this study were more likely than female youths to have such problems. Furthermore, the child gender variable was one of four significant predictor variables in the model, which also accounted for parent drinking and IPV, and parenting practices. However, male gender demonstrated a smaller effect size than child externalizing behaviors and peer drinking and in the models that accounted for these latter variables, male gender was no longer significant. This finding suggests that for Ukrainian youths, externalizing psychopathology may represent a higher risk for development of early symptoms of AUD than male gender. Likewise, child exposure to alcohol-permeated environments carries potentially higher risks for development of alcohol problems than male gender.

As hypothesized, older children in this study had more alcohol problems. This result resonates with the developmental thinking about alcohol use disorder. Specifically, with age, youths acquire greater neurocognitive abilities that spawn curiosity and interest to explore additional dimensions of life (Zastrow & Kirst-Ashman, 2013), which may include experimenting with behaviors endorsed by role models in the youths' social environments, such as parents and peers (Brook et al., 1990; Jessor & Jessor, 1977; Kandel, 1996). Similar to adolescents in countries with developed economies, Ukrainian youths explore options available

in their environments as they grow older and actively search for existential components that will help them mold their unique identities (Erikson, 1950, 1968). Because adolescent alcohol use substantially increases the risk of AUD in early adulthood (Danielsson et al., 2012; Englund et al., 2008; Hicks & Zucker, 2014), social workers and psychologists working with drug prevention in Ukraine have to emphasize the importance of keeping children away from alcohol through adolescent years.

The next hypothesis dealt with the association between parent experiences of IPV and child alcohol problems. In spite of significant correlation between these variables, parent IPV was not significantly related with offspring's alcohol use in the regression models. One explanation of this result is that parental experiences of IPV may have more distal effects on child alcohol use. For example, domestic violence can reinforce negative parenting behaviors and child aggression (Bandura, 1986; Chassin et al., 1993; Kelley et al., 2010) even though its shared variance with child alcohol problems is small.

A finding that parental alcohol use showed significance in explaining youths alcohol problems only in Model 2 was intriguing. The hypothesis that parental alcohol use will be related with offspring's alcohol problems (Hawkins et al., 1992; Russell et al., 1990) was supported by these data. However, when parenting practices, child externalizing behaviors and peer drinking variables were added, parental alcohol use became insignificant. Future studies should examine whether parent or child psychopathology, or parent IPV moderate the effect of parental alcohol involvement on child alcohol problems. For example, in the earlier described German study (Barnow et al., 2002), no direct significant relationship between family history of alcoholism and offspring alcohol problems was observed. However, the family history of

alcoholism predicted increased parent psychopathology, which then predicted child aggression and delinquency, involvement with substance using peers and alcohol problems. Finally, in addition to meditational analyses, future longitudinal research in Ukraine could help clarify whether adolescent exposure to parental drinking has a delayed impact and influences development of the AUD later in life, in early adulthood (Alati et al., 2005).

With regards to the relationship between parenting behaviors and child alcohol problems, these data supported the hypothesis that positive parenting is associated with fewer youths' alcohol problems while negative parenting is linked with more alcohol problems. This finding is consistent with prior research that parental support, care and supervision can protect the child from substance abuse (Kopak et al., 2012; Windle et al., 2008) and was expected. Still, the effect size of parenting behaviors was decreased in models that also accounted for child externalizing psychopathology and peer drinking. Although these findings speak to the well established knowledge on the substantial increase in psychopathology and involvement with deviant peers during late childhood and early adolescence (Beauchaine & Hinshaw, 2008), it is critical for future studies to examine how much of the variance in child externalizing problems and association with deviant peers can be attributed to specific parenting practices (Kandel, 1996).

The next hypothesis was supported in that youths externalizing behaviors were associated with higher number of alcohol problems (Figure 3.2). This finding was in line with prior evidence that supported the positive relationship between externalizing psychopathology and development of youthful alcohol problems (e.g., Blackson et al., 1994; Dick et al., 2010; Englund et al., 2008). Likewise, as hypothesized, youths who were exposed to greater number

of alcohol using peers were significantly more likely to develop alcohol problems. This finding is fully consistent with prior research regarding peer influences on the development of AUD among youths in countries with developed economies (Barnow et al., 2002; Curran et al., 1997; Leung et al., 2014). The analyses of beta weights from the final model suggested that when family, peer and youth's predictors are accounted for in the same model, peer alcohol use has the largest effect size followed by child age and child externalizing behaviors with all other predictors bearing no significant relationship with child alcohol problems. Thus, the findings support the conclusion that Ukrainian youths' alcohol problems are primarily driven by factors intrinsic to the child and peer environments.

One important piece of information that this study adds to previous research in Western countries (e.g., Zucker, 2008) is that in sociocultural contexts with high prevalence of alcohol use such as Ukraine, the gender differences may become less salient, particularly in models that control for deviant peer influence, child psychopathology and dysfunctional familial patterns.

In summary, the present study uses the interactive models with multiple predictors to expand the knowledge on relative strength of parent-, peer- and child-level correlates of child alcohol problems in a community sample of Ukrainian parent-child dyads. Several limitations should be kept in mind when interpreting these findings. First, the cross-sectional design of this research limited the ability to draw conclusions regarding cause-effect relationships between study variables. Prospective studies with mixed-method approach should examine the temporal precedence of variables explored in this study and test probable causes and effects. Next, this research describes only participants from 11 communities in three out of 27 Ukrainian oblasts. These three oblasts are located in the Southern, Central and Eastern Ukraine while perspectives

of Ukrainian families living in the Northern and Western Ukraine are not included in this dissertation. It is possible that the intrafamilial processes described in this dissertation were shaped under stronger influence of Russia and are different from those in non-participating regions due to the greater cultural and historical connection of Northwestern Ukraine with Western Europe. Furthermore, because data were collected during summer months, it was possible to reach out only to families that stayed home and did not travel abroad or participated in other recreational activities. Future studies should consider alternative timing of data collection involving parents and children. Additionally, future research should be designed to compare perspectives of families who want with those who do not want to participate in studies that investigate alcohol use, child psychopathology and domestic violence, and explore the role of stigma in such decisions. Also, combining quantitative and qualitative components would give voices to participants and improve understanding of the context, processes and meaning of alcohol use among Ukrainian youths (Creswell, 2013). Last, this study explored alcohol problems among children of relatively young age many of whom had not developed AUD, therefore, these findings are only limited to initiation of alcohol abuse and early alcohol-related problems.

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Table 3.1

Major Study Variables (N = 320)

Variable	Mean	Standard Deviation	Min-Max	Chronbach's Alpha	
Total alcohol problems	3.88	9.79	0-105	.90	
Child externalizing problems	20.67	16.53	0-73	.89	
Positive parenting	2.49	.84	0-4	.95	
Negative parenting	1.57	.58	0-3	.84	
Violence to parent	32.94	39.26	0-186	.94	
Parent alcohol use	172.73	261.85	0-2125	-	
Number of drinking peers	1.90	1.62	0-5	-	

Table 3.2  $Pearson\ Correlations\ (N=320)$ 

	1	2	3	4	5	6	7	8	9
1. Alcohol problems	-								
2. CBCL externalizing	.35***	-							
3. Positive parenting	39***	48***	-						
4. Negative parenting	.34***	.53***	54***	-					
5. Violence to parent	.21***	.41***	46***	.47***	-				
6. Parent alcohol use	.21***	.31***	50***	.35***	.35***	-			
7. Drinking peers	.44***	.28***	36***	.29***	.22***	.23***	-		
8. Male gender	.13*	.18***	10	.07	.04	.08	.03	-	
9. Child age	.38***	.06	29***	.19***	.15	.02	.48***	.00	-

*Note.* \* *p* < .05, \*\*\* *p* < .001

Table 3.3

Robust Regression Coefficients in the Model Predicting to Children's Alcohol-Related Problems

Predictor	Model 1		Model 2		Model	Model 3		Model 4		Model 5	
	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β	B (SE)	β	
Child gender	2.56* (1.01)	.13	2.23* (.98)	.11	1.89* (.92)	.10	1.37 (.93)	.07	1.49 (.92)	.08	
Child age	1.60*** (.27)	.38	1.52*** (.29)	.36	1.24*** (.24)	.29	1.33*** (.24)	.31	.90*** (.19)	.21	
Violence to parent			.02 (.02)	.10	.00 (.02)	02	01 (.02)	05	01 (.02)	04	
Parent drinking			.01* (.003)	.16	.00 (.002)	.05	.002 (.002)	.04	.00 (.002)	.02	
Positive parenting					-2.18* (.91)	19	-1.59 <sup>†</sup> (.89)	14	-1.38 (.86)	12	
Negative parenting					2.83** (.95)	.17	1.64 <sup>†</sup> (.95)	.10	1.49 (.93)	.09	
Child externalizing							.12*** (.03)	.21	.10** (.03)	.17	
Drinking peers									1.37*** (.38)	.23	
R-squared	.16		.20		.26		.28	.28		.32	
F	17.12**	**	14.36*	***	10.22***		11.45***		10.76*	**	

Note. N = 320. † p < .1, \* p < .05, \*\* p < .01, \*\*\* p < .001

Figure 3.1 Average Number of Alcohol Problems in Youths by Gender and Age (N = 320)

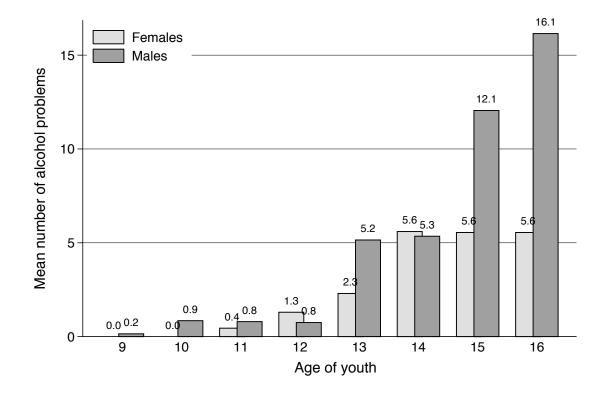
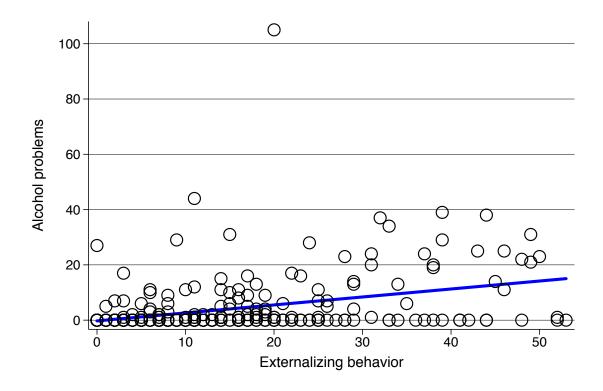


Figure 3.2

Total Child Alcohol Problems by Mean Child Externalizing Problems



### Chapter V

#### Conclusion

The main research question in this study was to discover factors related to development of alcohol problems in Ukrainian youths. The Family Systems Theory (FST) was used as a starting point for development of a method to understand how this process takes place. This theory includes several components related to the examination of the development of alcohol problems, including emotional bonding among family members, as well as ways to enact control and discipline, roles and rules. The Bronfenbrenner's ecological model that deals with human behavior in the social environments extends the FST framework and permits examination of the impact of larger social settings on human behavior. Defining the context for children's lives, the two paradigms complement each other while suggesting different pathways to development of youth alcohol problems. For example, a brief look at child and adolescent alcohol use may reveal a picture where peer alcohol involvement is the most important risk factor for adolescent problem alcohol use. Still, the degree to which adolescents are susceptible to peer influences is determined developmentally from family influence prior on:

Any psychological snapshot taken during adolescence, when peers are undeniably an important force in children's lives, rightly should be viewed as the end of a long

process of socialization that began early in childhood and most likely has origins in the family. (Collins, Maccoby, Steinberg, Hetherington, & Bornstein, 2000, p. 227).

Given this foundation, it is critical to use a life span perspective in studies focusing on the etiology and the course of alcohol use disorders (AUDs). Research can be instrumental for the identification of key areas in human systems and individual functioning involved in initiation and maintenance of addictive behaviors. If such research can help isolate culturally relevant risk factors, then the quality of life can be enhanced for individuals at risk for experiencing problems in health and personal relationships, and failing to fulfill major obligations at work and in the family due to alcohol use. Thus, to reduce the negative effects of early involvement with alcohol, theoretically grounded, culturally valid and affordable intervention programs should focus on some or all of the factors identified in this dissertation, including low education and poverty, parent alcohol use and intimate partner violence (IPV), family flexibility and cohesion, parenting practices, child externalizing behavior problems and negative peer influences.

Apart from revealing disturbing evidence on early signs of alcoholism in one of the top drinking nations in the world, this work sheds the light on some of the key processes associated with it. In particular, results from this dissertation emphasize the intersection of child demographic factors and psychopathology with both intergenerational (parent-child) and intragenerational (peer-child) linkages related to development of child problem involvement with alcohol. This research adds vital information to addiction science, as most studies rely on data collected in countries with developed economies to make universal conclusions on the course of the development of alcohol use disorder. By relying solely on a

Western understanding of mental disorders, such studies are likely to forgo important differences across ethnic groups and lead to biased, unsubstantiated and potentially harmful clinical and policy recommendations. This dissertation focused on a unique sociocultural sample of 320 Ukrainian parent-child dyads. Another unique feature of this dissertation is that the data were collected using internationally validated and reliable psychometric instruments and ethically responsible procedures. Participants were recruited at 11 communities in Eastern, Southern and Central Ukraine. A series of complex statistical analyses were performed with these data such as data preparation, descriptive statistical analyses and graphs, bivariate correlations, regressions and structural equation modeling.

The first study evaluated factors related with positive and negative parenting skills. Results from this first dissertation study indicated that most Ukrainian parents used engaged and positive discipline with their children. Although the prevalence and intensity of negative parenting practices were lower, some parents reported the use of such deleterious parenting approaches as spanking, poor monitoring and inconsistent parenting. These data also supported several hypotheses on risk and protective factors associated with the choice of parenting behaviors. Some of these factors had a direct relationship with parenting. For example, the risk for using negative parenting was higher for parents who reported more domestic violence, lower education, higher alcohol use and unbalanced family functioning. As for positive parenting, it was directly related with lower parent IPV, lower alcohol use and more balanced family functioning. Additionally, this study identified a number of indirect associations with parenting. For example, higher parent education was linked with lower parent IPV, which led to lower use of negative parenting. Higher family income was also a

protective factor as it was related with lower IPV and more balanced family functioning, which subsequently increased the use of positive parenting and decreased the use of negative parenting. This study also identified indirect paths involving parental alcohol use. Parents who reported lower alcohol use were less likely to experience IPV, perceived their families as more balanced and subsequently were more likely to use positive parenting and less likely to use negative parenting. Finally, experiences of abuse were found to be negatively related with balanced family cohesion and flexibility and subsequently associated with less frequent use of positive parenting and more frequent use of negative parenting.

The aim of the second study was to assess the relationship between parenting practices and child externalizing behavior problems, including aggression, delinquency and attention problems. Results of this study indicated that children had lower externalizing psychopathology if their parents reported higher use of positive parenting, stronger child monitoring and lower use of physical discipline. Additionally, this study revealed that child externalizing behavior was positively related with child male gender, parent unemployment and single parenting.

The third and final dissertation chapter assessed child alcohol problems and their relationship with child externalizing behaviors, gender and age, parental IPV, parenting practices, and parent and peer alcohol use. Results of this study suggested that the most prevalent child alcohol problems related to academic attainment, relationships with others and rule-breaking behavior. There were less alcohol problems among female youths than among male youths. Other results indicated that older child age, more symptoms of

externalizing behavior and higher peer alcohol use were significantly associated with more youth alcohol problems.

#### Limitations

Although the above described research relied on solid psychometric instruments and viewpoints of more than one informant, several limitations that can limit generalizability of these results merit attention. One limitation is the cross-sectional nature of the data used for these analyses. Although studies of the relationship between phenomena with a single data collection are common and remain to be important preliminary exploration tools, cross-sectional data do not permit answering 'chicken-and-egg' type of questions. Therefore, before future Ukrainian experimental and longitudinal data answer questions about the temporal precedence of phenomena described in this dissertation, any inferences about causality can only be made as informed guesses that rely on theories and results from other experimental and longitudinal studies. Another potential bias in these findings comes from the fact that mothers reported on most of parent-level measures. Perhaps, these findings could be stronger if fathers and mothers were equally represented in the sample. Thus, any parent-level perspectives expressed in this research should be primarily understood as mothers' perspectives.

Another important limitation of these data may come from timing of data collection. These data were collected during summer months of 2013. Therefore, these results might be understood as such that describe families with children who were available during these summer holidays. It is quite possible that families who participated in this research had fewer financial means and, therefore, stayed home unlike more wealthy families who may have

spent summer months traveling and living at resorts. Next, these data were collected right ahead of the Russian occupation of parts of Ukrainian territory. It is possible that the postwar emotional processes in the Ukrainian families are somewhat different and also include post-traumatic reactions and a sense of hopelessness and irrevocable loss. Millions of Ukrainians lost their homes and possessions escaping the theater of war with Russian aggressors and tens of thousands lost their lives.

### **Implications for Clinical Practice and Social Policy**

These results indicate that some Ukrainian children develop alcohol related problems very early in their life. Therefore, it is critical to implement primary prevention programs that will target children who have not tried alcohol yet (Burlaka, 2008). Among activities that should receive the attention of community-based prevention workers are continuous monitoring of substance use trends, implementation of evidence-based programs and education of healthcare workers, local politicians, youth organizations, social workers and teachers in current research on risk and protective factors. The primary prevention work should aim at fostering a dynamic dialogue about the role of family and social environments in the early development of alcohol disorder among researchers, representatives of governmental and non-governmental organizations and mass media that work with substance abuse prevention in Ukraine.

Prior mixed methods research revealed that young Ukrainian adults often cope with mental health problems by getting help from friends and family and by using alcohol (Burlaka, Churakova, Aavik, Staller, & Delva, 2014) because traditional mental health services use questionable treatments and are affected by stigma (Burlaka, Churakova, Aavik,

& Goldstein, 2014). Results of this research with children and adolescents add an important developmental piece to the above-described evidence and reiterate the notion that perhaps child alcohol abuse could be reduced if children with externalizing psychopathology were provided with adequate mental health services. Because this dissertation research revealed that even children aged 9 had alcohol problems, screening for alcohol using and other high-risk behaviors should be performed with children as young as age 8. For example, children could be screened at primary health care centers during annual health check-ups. If risky behaviors are identified, then children and their families could be referred to treatment services.

Results of this research suggests that in addition to primary prevention, breaking the intergenerational cycle of alcoholism in Ukraine will require secondary prevention interventions targeting family systems, parental alcohol use and domestic violence in families who have substance using children with conduct problems. Although clinicians may need to work with multiple systems including school personnel and groups of adolescents, it is important to pay particular attention to families. Such interventions that employ family system theory and focus on the structural and emotional aspects of family life are strongly warranted. Furthermore, this research suggests that prevention programs should include parenting training modules. These parenting programs should preferably start before adolescence, that is, before the time when children begin experiencing strong influences from peers. Parents need to learn that some children with attention problems may require medications and that all children with externalizing behaviors will benefit from careful monitoring and supervision. Clinicians can help parents develop predictable routines and

identify desired rules and behaviors. In the next step, parents can learn ways to reinforce these behaviors and routines. Additionally, parents should learn strategies that can help their children collaborate with peers, develop social and emotional skills, and develop empathy and academic skills. Other critical tasks for both parents and children include learning to plan future actions and strategies to calm down in stressful situations. In addition to calming down, distraction, ignoring and time-out techniques can help prevent externalizing behaviors. A finding that parent IPV negatively influences family cohesion and flexibility and parenting behaviors underlines the importance of programs that target victims of IPV and help them improve their parenting skills. One of such programs, the Moms' Empowerment Program (MEP; Graham-Bermann, 2012) has been recently developed and successfully tested in the United States (Howell et al., 2015). It would be important to implement and evaluate effectiveness of this short, structured and affordable intervention in Ukraine.

These results also suggest ways in which policy makers can help reduce alcohol problems among youths. First, it is deeply concerning that young children appear to have access to alcoholic drinks. Relevant changes to national legislation should enforce more strict rules for sales of alcohol to minors. It is critical that local authorities and law enforcement agencies play a more active role in alcohol prevention. Finally, every step should be taken by policy makers to give hope to youths and their families, reduce unemployment, enhance stability in the society and address economic and academic disadvantages that may contribute to alcohol abuse.

#### **Future Research Directions**

Although this dissertation covers a vast scope of phenomena related to early signs of child alcoholism in Ukraine, it brings about several opportunities for future research. First, a larger, systematic and a representative sample of children needs to be examined to understand the timing of the rise of alcohol use and abuse among Ukrainian children. The present study examined alcohol using behaviors among 320 children with about half of these children being of late childhood age and half – early adolescent age. This sample allows making conclusions about co-occurring risk and protective factors; however, its size may not be sufficient for robust inferences regarding population prevalence of early alcohol use and abuse. As mentioned earlier, a large screening of children aged 8 to 17 should be performed at primary healthcare centers and the preparations for this work are currently underway.

Next, additional research is needed to assess the nature and the impact of parent drinking on child alcohol use by exploring differences in child alcohol use across different age groups of children. Furthermore, prospective studies need to compare the impact of father alcohol use as opposed to mother alcohol involvement. Future studies can also explore in better details the linkages between parental alcohol use and child alcohol use and specifically test such hypothetical paths as child exposure to parental alcohol use, child helping parents around with alcohol during parties, parent offering a drink to her child. These and other paths by which children are socialized into alcohol use can illuminate future interventions with Ukrainian families.

Also, additional research is needed to examine the relationship between child anxiety and depression and alcohol involvement. Such analyses were not included in this dissertation

for lack of space. However, there is a significant amount of research suggesting that internalizing psychopathology plays an important role in alcohol use and abuse and future studies should explore this relationship in the Ukrainian sociocultural environment. Moving forward, future research should focus on implementation science. Every effort should be made to seek evidence-based programs and evaluate their effectiveness in Ukraine. Additionally, with emerging locally-produced knowledge on AUDs, it is important to begin designing and testing low-cost interventions that are tailor-made for Ukrainian families and children. Future studies should use mixed method, experimental and longitudinal designs to replicate the findings from this research and explore the above-mentioned research directions. Qualitative research could provide particularly important tools for understanding cultural meaning, etiology and treatment options for AUDs in Ukraine. Also, in addition to self-reports, observational techniques should be used whenever possible, particularly for the assessment of parenting behaviors. Furthermore, genetic and brain imaging research should be encouraged for possible early identification of youths at risk for development of alcohol disorder. Finally, although these results can be used in the context of other post-communist societies neighboring with Ukraine, additional research is warranted to confirm their validity in such countries because many important economic, social and political changes have happened since the disintegration of the Soviet Union that made Ukrainian conditions very different from conditions in the neighbor countries.

### Summary

Taken together, these results reveal a complex pattern of psychosocial relationships associated with the development of child alcohol problems. The in-depth analyses across

three studies with the same sample expand knowledge about specific ways in which children's alcohol using behaviors are influenced by various levels of family and ecological systems. The first level of analyses revealed specific mechanisms that hinder positive parenting behaviors while reinforcing the negative parenting techniques. These mechanisms include parent alcohol use, domestic violence, disturbed emotional bonding among family members and unbalanced family organization and leadership. The next level of analyses revealed that specific parenting techniques were associated with fewer children externalizing behaviors. Parents who monitored, supervised their children, promoted children's positive behaviors and eschewed corporal punishment reported lower child impulsivity, aggression and delinquency. The third and final level of analyses showed that children who were more aggressive, had more attention problems and were more likely to violate societal norms and rules had more alcohol-drinking peers in their environments, and were more likely to develop early symptoms of alcohol use disorder. Thus, when seen together, these three studies make an important contribution to the field of global psychosocial research on children and families by beginning to establish an empirical foundation for tailor-made alcohol prevention programs and policies in Ukraine.

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# Appendices

# Appendix 1: Child Behavior Checklist for Ages 6-18 (CBCL/6-18)

The possible answers are "not true" (0), "somewhat or sometimes true" (1), "very true or often true" (2)

- 1. Acts too young for his/her age
- 2. Drinks alcohol without parents' approval (describe):
- 3. Argues a lot
- 4. Fails to finish things he/she starts
- 5. There is very little he/she enjoys
- 6. Bowel movements outside toilet
- 7. Bragging, boasting
- 8. Can't concentrate, can't pay attention for long
- 9. Can't get his/her mind off certain thoughts or obsessions (describe):
- 10. Can't sit still, restless, or hyperactive
- 11. Clings to adults or too dependent
- 12. Complains of loneliness
- 13. Confused or seems to be in a fog
- 14. Cries a lot
- 15. Cruel to animals
- 16. Cruelty, bullying, or meanness to others
- 17. Daydreams or gets lost in his/her thoughts
- 18. Deliberately harms self or attempts suicide
- 19. Demands a lot of attention
- 20. Destroys his/her own things
- 21. Destroys things belonging to family or other children
- 22. Disobedient at home
- 23. Disobedient at school
- 24. Doesn't eat well
- 25. Doesn't get along with other children
- 26. Doesn't seem to feel guilty after misbehaving
- 27. Easily jealous
- 28. Breaks rules at home, school, or elsewhere
- 29. Fears certain animals, situations, or places, other than school (describe):
- 30. Fears going to school
- 31. Fears he/she might think or do something bad
- 32. Feels he/she has to be perfect
- 33. Feels or complains that no one loves him/her

### Appendix 1: Child Behavior Checklist for Ages 6-18 (CBCL/6-18; continued)

- 34. Feels others are out to get him/her
- 35. Feels worthless or inferior
- 36. Gets hurt a lot, accident-prone
- 37. Gets in many fights
- 38. Gets teased a lot
- 39. Hangs around with children who get in trouble
- 40. Hears sound or voices that aren't there (describe):
- 41. Impulsive or acts without thinking
- 42. Would rather be alone than with others
- 43. Lying or cheating
- 44. Bites fingernails
- 45. Nervous, high-strung, or tense
- 46. Nervous movements or twitching (describe):
- 47. Nightmares
- 48. Not liked by other children
- 49. Constipated, doesn't move bowels
- 50. Too fearful or anxious
- 51. Feels dizzy or lightheaded
- 52. Feels too guilty
- 53. Overeating
- 54. Overtired without good reason
- 55. Overweight
- 56. Physical problems without known medical cause:
  - 1. Aches or pains (not stomach or headaches)
  - 2. Headaches
  - 3. Nausea, feels sick
  - 4. Problems with eyes (not if corrected by glasses) (describe):
  - 5. Rashes or other skin problems
  - 6. Stomachaches
  - 7. Vomiting, throwing up
  - 8. Other (describe):
- 57. Physically attacks people
- 58. Picks nose, skin, or other parts of body (describe):
- 59. Plays with own sex parts in public
- 60. Plays with own sex parts too much
- 61. Poor school work

### Appendix 1: Child Behavior Checklist for Ages 6-18 (CBCL/6-18; continued)

- 62. Poorly coordinated or clumsy
- 63. Prefers being with older kids
- 64. Prefers being with younger kids
- 65. Refuses to talk
- 66. Repeats certain acts over and over, compulsions (describe):
- 67. Runs away from home
- 68. Screams a lot
- 69. Secretive, keeps things to self
- 70. Sees things that aren't there (describe)
- 71. Self-conscious or easily embarrassed
- 72. Sets fires
- 73. Sexual problems (describe):
- 74. Showing off or clowning
- 75. Too shy or timid
- 76. Sleeps less than most kids
- 77. Sleeps more than most kids during day and/or night (describe):
- 78. Inattentive or easily distracted
- 79. Speech problem (describe):
- 80. Stares blankly
- 81. Steals at home
- 82. Steals outside the home
- 83. Stores up too many things he/she doesn't need (describe):
- 84. Strange behavior (describe):
- 85. Strange ideas (describe):
- 86. Stubborn, sullen, or irritable
- 87. Sudden changes in mood or feelings
- 88. Sulks a lot
- 89. Suspicious
- 90. Swearing or obscene language
- 91. Talks about killing self
- 92. Talks or walks in sleep (describe):
- 93. Talks too much
- 94. Teases a lot
- 95. Temper tantrums or hot temper
- 96. Thinks about sex too much
- 97. Threatens people

# Appendix 1: Child Behavior Checklist for Ages 6-18 (CBCL/6-18; continued)

- 98. Thumb-sucking
- 99. Smokes, chews, or sniffs tobacco
- 100. Trouble sleeping (describe)
- 101. Truancy, skips school
- 102. Underactive, slow moving, or lacks energy
- 103. Unhappy, sad, or depressed
- 104. Unusually loud
- 105. Uses drugs for nonmedical purposes (don't include alcohol or tobacco) (describe):
- 106. Vandalism
- 107. Wets self during the day
- 108. Wets the bed
- 109. Whining
- 110. Wishes to be of opposite sex
- 111. Withdrawn, doesn't get involved with others
- 112. Worries
- 113. Please write in any problems your child has that were not listed above:

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# Appendix 2: Revised Conflict Tactics Scales (CTS2)

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### Appendix 3: Alabama Parenting Questionnaire (APQ)

The following are a number of statements about your family. Please tell me how often these events typically occur in your home. The possible answers are "never" (1), "almost never" (2), "sometimes" (3), "often" (4), "always" (5).

- 1. You have a friendly talk with your child.
- 2. You let your child know when he/she is doing a good job with something.
- 3. You threaten to punish your child and then do not actually punish him/her.
- 4. You volunteer to help with special activities that your child is involved in (such as sports, boy/girl scouts, church groups).
- 5. You reward or give something extra to your child for obeying you or behaving well.
- 6. Your child fails to leave a note or to let you know where he/she is going.
- 7. You play games or do other fun things with your child.
- 8. Your child talks you out of being punished after he/she has done something wrong.
- 9. You ask your child about his/her day in school.
- 10. Your child stays out in the evening past the time he/she is supposed to be home.
- 11. You help your child with his/her homework.
- 12. You feel that getting your child to obey you is more trouble than it's worth.
- 13. You compliment your child when he/does something well.
- 14. You ask your child what his/her plans are for the coming day.
- 15. You drive your child to a special activity.
- 16. You praise your child if he/she behaves well.
- 17. Your child is out with friends you don't know.
- 18. You hug or kiss your child when he/she has done something well
- 19. Your child goes out without a set time to be home.
- 20. You talk to your child about his/her friends.
- 21. Your child is out after dark without an adult with him/her.
- 22. You let your child out of a punishment early (like lift restrictions earlier than you originally said).
- 23. You child helps plan family activities.
- 24. You get so busy that you forget where your child is and what he/she is doing.
- 25. Your child is not punished when he/she has done something wrong.
- 26. You attend PTA meetings, parent/teacher conferences, or other meetings at your child's school.
- 27. You tell your child that you like it when he/she helps out around the house.
- 28. You don't check that your child comes home at the time he/she was supposed to.
- 29. You don't tell your child where you are going.
- 30. Your child comes home from school more than an hour past the time you expect him/her.
- 31. The punishment you give your child depends on your mood.
- 32. You child is at home without adult supervision.

# Appendix 3: Alabama Parenting Questionnaire (APQ; continued)

- 33. You spank your child with your hand when he/she has done something wrong.
- 34. You ignore your child when he/she is misbehaving.
- 35. You slap your child when he/she has done something wrong.
- 36. You take away privileges or money from your child as a punishment.
- 37. You send your child to his/her room as a punishment.
- 38. You hit your child with a belt, switch, or other object when he/she has done something wrong.
- 39. You yell or scream at your child when he/she has done something wrong.
- 40. You calmly explain to your child why his/her behavior was wrong when he/she misbehaves.
- 41. You use time out (make him/her sit or stand in a corner) as a punishment.
- 42. You give your child extra chores as a punishment.

### Appendix 4: Drinking and other Drug Use

Items assessing frequency of parent alcohol use:

The possible answers are "less than once a year or never" (0), "less than once a year" (1), "less than once a month, but at least once a year" (2), "about once a month" (3); "2 or 3 times a month" (4); "once or twice a week" (5); "3 or 4 times a week" (6); "nearly every day" (7); "once a day" (8); "2 times a day" (9); "3 or more times a day" (10)

- 1. When drinking wine, how often do you usually have wine or a punch containing wine?
- 2. When drinking beer, how often do you usually have beer?
- 3. When drinking whiskey or liquor, how often do you usually have whiskey or liquor (such as martinis, manhattans, highballs, or straight drinks including scotch, bourbon, gin, vodka, rum, etc.)?

Item assessing child exposure to drinking peers:

The possible answers are "none" (0), "1-2" (1), "several" (2), "less than a half' (3), "more than a half' (4), "all of them" (5)

1. About how many of the kids you hang around with drink alcohol at least sometimes?

Items assessing alcohol-related problems:

Now some questions about outcomes people sometimes have because of drinking. Have you had any of the following happen because of your drinking?

How many times? The possible answers are 1, 2, 3-5, 6-10, 11-20, 21-50, 51-100, 101-250, 251+

- 1. Got into trouble with my teachers or principal because of my drinking.
- 2. Got into difficulties of any kind with my friends.
- 3. Driven a car when I'd had a good bit to drink.
- 4. Been criticized by some- one I was dating because of my drinking.
- 5. Gotten in trouble with the police because of my drinking.
- 6. Gotten in trouble with my parents because of my drinking.
- 7. Missed school (or time on job) because of my drinking.
- 8. Thought I was drinking too much.
- 9. Gone on a binge of constant drinking.
- 10. Lost friends because of my drinking.
- 11. Felt guilty about my drinking.
- 12. Took a drink or two first thing in the morning.
- 13. Restricted my drinking to certain times of day or week in order to control it or cut down (like after 5PM, or only on weekends, or only with other people).
- 14. Once started drinking, kept on going till drunk.
- 15. Had a car accident when I was drinking and driving.
- 16. Kept on drinking after I promised myself not to.
- 17. Had the shakes "the morning after".

# Appendix 4: Drinking and other Drug Use (continued)

- 18. Heard or saw or felt things that weren't there (hallucinations), several days after stopping drinking.
- 19. Had blackouts (couldn't remember later what you'd done while drinking).
- 20. Been given a ticket for drunk driving (DWI or DUIL).
- 21. Been given a ticket for public intoxication, drunk and disorderly or other non-driving alcohol arrest.
- 22. Found that I had a strong need for a drink at some time each day.
- 23. Needed to drink a lot more in order to get an effect, or found that I no longer could get high on the amount I used to drink.
- 24. Found that I was able to drink a lot more than I used to before I would get drunk.
- 25. Had days where I drank much more that I expected to when I began.
- 26. Found that I often continued drinking for more days in a row than I had planned to.
- 27. Found that I tended to gulp my drinks rather than just drink them.

### Appendix 5: Family Adaptability and Cohesion Evaluation Scale (FACES) IV

#### Directions to family members:

All family members over the age 12 can complete FACES IV. Family members should complete the instrument independently, not consulting or discussing their responses until they have been completed. Fill in the corresponding number in the space on the provided answer sheet.

The possible answers are "strongly disagree" (1), "generally disagree" (2), "undecided" (3), "generally agree" (4), "strongly agree" (5).

- 1. Family members are involved in each others lives.
- 2. Our family tries new ways of dealing with problems.
- 3. We get along better with people outside our family than inside.
- 4. We spend too much time together.
- 5. There are strict consequences for breaking the rules in our family.
- 6. We never seem to get organized in our family.
- 7. Family members feel very close to each other.
- 8. Parents equally share leadership in our family.
- 9. Family members seem to avoid contact with each other when at home.
- 10. Family members feel pressured to spend most free time together.
- 11. There are clear consequences when a family member does something wrong.
- 12. It is hard to know who the leader is in our family.
- 13. Family members are supportive of each other during difficult times.
- 14. Discipline is fair in our family.
- 15. Family members know very little about the friends of other family members.
- 16. Family members are too dependent on each other.
- 17. Our family has a rule for almost every possible situation.
- 18. Things do not get done in our family.
- 19. Family members consult other family members on important decisions.
- 20. My family is able to adjust to change when necessary.
- 21. Family members are on their own when there is a problem to be solved.
- 22. Family members have little need for friends outside the family.
- 23. Our family is highly organized.
- 24. It is unclear who is responsible for things (chores, activities) in our family.
- 25. Family members like to spend some of their free time with each other.
- 26. We shift household responsibilities from person to person.
- 27. Our family seldom does things together.
- 28. We feel too connected to each other.
- 29. Our family becomes frustrated when there is a change in our plans or routines.
- 30. There is no leadership in our family.

# Appendix 5: Family Adaptability and Cohesion Evaluation Scale (FACES) IV (continued)

- 31. Although family members have individual interests, they still participant in family activities.
- 32. We have clear rules and roles in our family.
- 33. Family members seldom depend on each other.
- 34. We resent family members doing things outside the family.
- 35. It is important to follow the rules in our family.
- 36. Our family has a hard time keeping track of who does various household tasks.
- 37. Our family has a good balance of separateness and closeness.
- 38. When problems arise, we compromise.
- 39. Family members mainly operate independently.
- 40. Family members feel guilty if they want to spend time away from the family.
- 41. Once a decision is made, it is very difficult to modify that decision.
- 42. Our family feels hectic and disorganized.