

# Family Etiology of Youth Problems

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## A GLOBAL INCREASE OF ADOLESCENT SUBSTANCE ABUSE

After a decade of apparent declines in substance use in 12th graders, school surveys are indicating an increase in the ever-used rate in 8th graders of 16.7 percent for marijuana, 58.8 percent for alcohol (26 percent having been drunk), 46 percent for cigarettes, and 20 percent for inhalant use (Johnston et al. 1995). Drug abuse among young adolescents (primarily eighth graders) has increased for 4 years (1992 to 1996) since eighth graders were added to the high school seniors sampled for many years in the Monitoring the Future Study (Johnston et al. 1995). The reported increases over 4 years are substantial—a 37-percent increase for marijuana, a 59-percent increase for hallucinogens, and a 115-percent increase for cocaine.

This upswing in drug use is a distinct change from the decreases in drug use reported for about a decade in high school seniors. The prior decrease appears to have been caused by an actual decrease in the popularity of illicit drug use correlated with increased awareness of the negative consequences of drug use, but also may have been related to increasing the high school dropout rates of drug-using students not included in the survey. Now that eighth graders have been added to the Monitoring the Future Study, it is easier to attribute the increases to actual increases in drug use, rather than to artifacts of a changing population each year and high school seniors using fewer drugs.

Concurrent with increasing substance use rates is increasing juvenile crime. Between 1984 and 1993, delinquents arrested for violent crimes increased nearly 68 percent, and the trend is accelerating (Federal Bureau of Investigation 1994). Huizinga and associates (1994) report strong relationships among drug use, delinquency, and gun use.

This increase in substance use and delinquency in adolescents is occurring worldwide—not just in this country. After a year of global travel, Kumpfer (1996) has speculated that this increased drug use is

related to increased numbers of children being raised in poverty, resulting in parents working more hours and spending less time with their children. Parental neglect is related to poor school achievement, association with drug-using peers, and eventually tobacco, alcohol, and other drug use. Lack of legitimate jobs for poorly educated youth leads to increased interest in perceived “golden opportunities” to make money in illegitimate activities, such as drug trafficking. The poor or have-nots worldwide are learning how to make illicit drugs to sell to the children of the more affluent countries. For instance, substance abuse prevention specialists in South America report that drug use among youth is rising. Peasants learn how to turn cocaine into a base paste called basuco, lace cigarettes with basuco, and sell them outside schools. Methamphetamine recipes are available on the Internet. Because drugs can be made in any home or backyard, supply cannot be stopped. As long as desperate poor people need some way to make money to live, the only way to reduce drug addiction is to reduce demand and initiation.

Unfortunately, drug demand is increasing, as is drug addiction among youth. Therapists treating drug-dependent adolescents report that a number of these youth are children of the 1970s hippies. These therapists believe that family factors such as parental role modeling of drug use, positive parental attitudes about drug use, and parental tolerance of their children using drugs are related to the increased use among youth today.

The importance of family risk and protective factors and processes in the development of drug abuse and dependency is becoming increasingly recognized. Most empirically tested, multicausal etiological models of substance use have verified with actual data the critical importance of family factors in guiding developmental trajectories in youth toward or away from drug use and other problem behaviors (Ary et al., in press; Brook et al. 1990; Kumpfer 1996; Kumpfer and Turner 1990/1991; Newcomb 1992; Newcomb and Bentler 1987; Swaim et al. 1990). Years of research in developmental psychology and social learning theory demonstrate that family socialization processes are the primary predictors of children's behavior. The importance of family influence in drug use suggests that more research-based, family-focused interventions, in addition to the popular school and peer-focused interventions, are needed to reduce adolescent drug use.

## CONTENTS OF CHAPTER

This chapter discusses etiological research from different fields, because prevention and treatment must be informed by the knowledge of the causes of developmental psychopathology. To be successful, prevention interventions must impact the pattern of multisystemic influences in a way powerful enough to alter the trajectory of problem youth. In this chapter, the following topics are covered:

- The etiology of substance abuse and dependency and individual biopsychosocial risk factors, including the comorbidity of problem behaviors in youth
- Developmental trajectories in problem youth as discussed by developmental stages of prenatal, infancy, childhood, and adolescence
- Ecological models and the interrelations among risk domains and the relationship of maternal lifecourse and caregiver dysfunction to substance abuse and antisocial behavior
- Family risk or protective processes that make children vulnerable to or protected from developmental psychopathologies and substance abuse

## INDIVIDUAL RISK FACTORS

Increasing research suggests that conduct disorders and other behavioral and temperament traits that increase a youth's vulnerability to drug use develop as a fairly stable pattern as early as 5 years of age (Zucker et al. 1995). Characteristics of these young children that appear to developmentally vector them in the direction of a comorbid developmental psychopathology of drug abuse and other developmental problems (Alexander and Pugh 1996) include:

- Impulsivity, reduced ego control, and attention deficit disorder (Cicchetti et al. 1993; Farrington et al. 1990; Hinshaw et al. 1993)
- Difficult temperament (Patterson 1986; Rothbart et al., in press)

- Below-average verbal IQ (DeBaryshe et al. 1993; Tremblay et al. 1992) and academic underachievement (Hinshaw et al. 1993)
- Negative affect (Compas 1987) and difficulties with emotional regulation (Cole and Zahn-Waxler 1992)
- Social incompetence (Blechman et al. 1995)
- Aggression and coercion as means to rewards (Patterson et al. 1992; Quay 1993)

Children of substance abusers, who are likewise at risk for substance abuse, have a higher burden of these risks (Kumpfer and DeMarsh 1985). Research suggests that these individual risks can accrue because of genetically inherited vulnerabilities or through environmental physiological (in utero drug exposure, head trauma, poor nutrition) or psychological damage (deficient socialization and care) (Merikangas 1994; Tarter and Mezzich 1992). However, twin studies (Pickens and Svikis 1986) and adoption studies suggest a pure genetic basis for some part of substance abuse vulnerability.

Genetically inherited individual risk factors include neurological deficits in prefrontal cognitive functioning and verbal abilities, difficult temperament, hyperactivity, autonomic hypereactivity, depression, anxiety, low threshold for pain, thrill-seeking, and different reactions to alcohol and other drugs making the drugs more pleasurable and easily abused (see Kumpfer 1987 and Tarter and Mezzich 1992 for a review).

Gene-environment interactions, particularly between the child's psychological temperament and the family environment and parenting skills of the caretakers, determine whether an inherited vulnerability will be expressed. One example illustrating the importance of nurturing parenting involves depression spectrum disease (DSD), a type of major depression characterized by families in which male relatives are alcoholic and antisocial, but females are depressive. Although DSD is considered a controversial topic and has not been substantiated in some other research (Merikangas 1990), recent adoption research suggests that in such families, major depression in females was predicted by the alcoholic diathesis only when combined with disturbed adoptive parenting. These same researchers found only a main effect (disturbed adoptive parenting) in predicting increased adoptee drug abuse (Cadoret et al. 1995), but a gene-environment interactive effect in predicting aggression and conduct disorders in adoptees. Additionally, these researchers found that conduct disorder and aggressivity were important intervening

variables in the relationship between antisocial personality disorder and adoptee drug abuse and/or dependency.

## THE COMORBIDITY OF PROBLEM BEHAVIORS

The overlap of these drug abuse risk factors with those for delinquency and other problem behaviors are striking. In fact, adolescent substance abuse, delinquency, conduct disorders, and other problems in youth are not independent, isolated problems (Alexander and Pugh 1996). Different types of chronic problem behaviors such as substance abuse, antisocial behavior, high-risk sexual behavior, and academic failure are sufficiently intercorrelated to justify a single problem behavior construct (Ary et al., in press; Donovan et al. 1988; Metzler et al. 1995; Osgood et al. 1988).

These problem behaviors tend to cluster in children raised in dysfunctional families by parents who were likewise raised in dysfunctional or overstressed families. The multigenerational nature of psychopathology has been widely recognized by clinicians, teachers, police, mental health researchers, and anyone else who frequently deals with these unhappy families and youth. Kumpfer (1987), in a major review of research on risks in children of substance abusers, pointed out the overlap of these children in most special social, educational, and medical services.

Family epidemiological research suggests that many psychiatric disorders run in the same families. At first, antisocial personality, substance abuse, and Briquet's syndrome with psychosomatic tendencies were found to be comorbid family diseases (Robins and Radcliff 1979). Recent analyses of the Epidemiological Catchment Area data suggest that anxiety disorder, borderline personality, narcissism, and depression are also part of this comorbid syndrome. Since early onset is often a sign of higher genetic loading for an emotional or behavioral disorder, Kumpfer (1994) suggested that early-onset delinquency as manifest in chronic career delinquents can be considered a "family disease." Aggressive subtypes of conduct disorders are believed to have underlying biological predispositions (Quay 1993).

The stability of these "predelinquent" characteristics should not seem such a mystery when one considers that genetics, family environment, and the characteristics of their caretakers remain fairly stable. Children are socialized and learn their patterns of behavior, their values, and emotional responses within the context

of the family. If they live in a nontraditional, counterculture environment, they will develop nontraditional norms (Richters and Cicchetti 1993*a, b*).

Based on family epidemiological research, the Epidemiological Catchment Area Study, which has been conducted for years at Washington University in St. Louis (Robins 1966, 1973), it is clear that pervasive family genetic and environmental factors impact children. Jessor and Jessor (1977) described the problem-prone behavior syndrome in youth; Wender (1989) called the grouping of antisocial personality, substance abuse, and Briquet's syndrome found in the same families the Unholy Triad; and Zucker and Fitzgerald (1996) discussed a "nested matrix of risk" facing disopportunitied families created by family drug use, severe parental and child psychopathology, poverty, educational underachievement, and a problematic social support structure. These biopsychosocial risks should be addressed holistically—not piecemeal.

To inform the development of the most effective prevention interventions, researchers need solid research data on the developmental trajectories of youth likely to develop problem behaviors. However, this task is made more difficult because longitudinal developmental research studies indicate:

- *Different causal processes.* Developmental trajectories characterized by chronic, early-onset conduct disorders and other psychopathologies are likely to have a different causal structure characterized by multiple risk factors and fewer protective factors (Dunst 1995).
- *Individual trajectories.* Behaviors that appear heavily problematic at one time interval may, by way of normal developmental processes, dilute for some individuals but remain sustained for others (Bingham et al., under review; Jessor et al. 1991; Zucker et al. 1995).
- *Uneven timing.* The timing of the emergence of individual and family risks and resulting developmental patterns is not constant, but varies by subpopulations such as by gender, family history, ethnicity, and social and family environment (Bingham et al., under review; Blumstein and Cohen 1987; Loeber and Dishion 1983; Moffitt 1993*a, b*; Schulenberg et al., in press; Zucker et al., in press).

## DEVELOPMENTAL TRAJECTORIES IN PROBLEM YOUTH

Etiology research on the causes of problem behaviors in youth strongly support the popular belief that a small percent of children are at high risk for many different problems (Howell 1995; Huizinga et al. 1994; Kumpfer 1987; Thornberry 1987). These problems include chronic substance abuse, delinquency, school failure, and teenage pregnancy. Substance abuse and antisocial behavior are highly correlated and share common factors (Uihlein 1994).

Longitudinal studies indicate that early aggressive, anxious, and antisocial behavior precedes and predicts subsequent abuse in both males and females (Block et al. 1988; Kellam et al. 1983; Loeber 1988; McCord 1979; Miller 1990; Windle 1990). Similarly, alcohol and other drug abuse before the age of 15 years predicts greater severity of conduct disorders, which are a predictor of early-onset substance abuse (Robins and Przybeck 1985). Longitudinal studies of delinquency find that early delinquency behaviors (petty theft, vandalism, fires, and fighting) generally precede substance abuse by several years (Thornberry 1994); hence, these problem behaviors can be used as markers of youth likely to become substance abusers.

The risks for substance abuse represented by early behavioral disregulation and gross environmental inadequacies is related to Moffitt's (1993a) argument that antisocial behavior in adolescence masks two distinct types of individuals: those whose conduct problems, including substance abuse, are "adolescent-limited" and those whose are "life-course-persistent." She proposes that children who exhibit antisocial behavior only during adolescence are both normal and adjusted; their behavior is believed to be the result of a "contemporary maturity gap" that encourages teens to mimic antisocial behavior in others. On the other hand, evidence suggests that lifecourse-persistent antisocial behavior and substance abuse result from an interaction of children's neuropsychological deficits and dysfunctional, criminogenic home and neighborhood environments (Moffitt 1993a). Although there is considerable debate about the pathogenesis and prevention of persistent antisocial behavior and substance abuse, these factors are emerging centrally in the literature, as are maternal lifecourse factors such as welfare dependency, unemployment, and numerous, closely spaced pregnancies (Furstenberg et al. 1987; Offord et al. 1987).

Prenatal

A number of family-focused programs are beginning before the child is born in an attempt to reduce negative influences on the developing fetus, such as alcohol, other drug, and tobacco use; poor nutrition; trauma; and poor prenatal care, which has been related to lower birth weight and lower IQ in infants.

The effects of tobacco are particularly damaging to children's intelligence. Olds and Pettitt (1996) report a four to five point difference between the intellectual functioning of children born to women who smoked 10 or more cigarettes during pregnancy and children whose mothers did not smoke at all. Additionally, animal studies suggest that the adverse effects of smoking on subsequent intellectual functioning may be limited to the end of gestation, when nicotine receptors develop on the cerebral cortex. Taken together, these findings suggest that smoking reductions after midgestation, particularly if accompanied by improvement in prenatal diet, may be particularly effective in protecting the developing fetal brain by supplying the fetus with a greater abundance of nutrients and oxygen and reducing the cerebral cortex's exposure to nicotine (Olds et al. 1994).

There is a greater tendency for males to suffer from impairments in learning and language (Billingham 1982). These indications of greater male vulnerability to a range of neurological and intellectual deficits deserve attention, especially since they may be factors that help explain the greater incidence of antisocial behavior and substance abuse among males.

### Infancy

Typical developmental trajectories of early-onset, multiple-problem youth include being a temperamentally difficult infant who is irritable, excitable, difficult to sooth, overreactive to many stimuli, resistant to developing regular cycles, awake more than other infants, developmentally delayed, and not securely attached (Kumpfer 1987). This unfortunate beginning is strongly associated with family risk factors such as genetic factors; lack of prenatal care and good diet; maternal tobacco, alcohol, and other drug use (Streissguth et al. 1995); postnatal exposure to toxins (Schroeder and Hawk 1987); and physical head trauma, poor diet, and parental neglect and abuse (Rogosch et al. 1995; Widom 1989a). While some of these precursors are genetic, most can be ameliorated through supportive parenting. Frequently, the small percentage of adolescents who become chronic drug abusers and delinquents come from multiproblem families with mothers who are depressed, highly



stressed (Zahn-Waxler et al. 1990), and poorly educated and who lack the skills to effectively parent any child and certainly not a genetically or environmentally damaged child. Pregnancies spaced less than 2 years apart and a large number of children (Tygart 1991) are related to increased developmental psychopathologies. Unless provided with natural or professional social support, because of neighborhood disorganization and migration of middle-class families from inner cities, children from low-income families are being raised without community support, social supports, and positive role models.

### Childhood

During childhood, the individual risk factors for developmental psychopathology include academic failure, hyperactivity, sensation-seeking, peer rejection, and association with deviant peers because of rejection by more normal prosocial children as a consequence of their aggressive behaviors (Bierman and Wargo 1995). Possibly because of inept parenting and poor maternal and neighborhood monitoring, high-risk children rapidly escalate their coercive and early antisocial behaviors (i.e., lying, stealing, fighting, and noncompliance) (Ary et al., in press).

Patterson (1982) and Patterson and associates (1992) have long studied the parent-child processes that lead to increased coercion in children. Their research suggests that harsh and inconsistent parental discipline of early oppositional behavior shapes further aggression by a process of increasingly coercive interactions between the parents and the child. Additionally, the parents often become more inconsistent in their discipline and monitoring because they are trying to avoid these aversive discipline interactions. This avoidance can lead to a lack of parental monitoring of schoolwork and housework completion, activities with peers, and general behavior. Such research suggests that when a child makes his or her first request to do something, parents of coercive children say “No” about 80 percent of the time, whereas parents of normal children say “No” about 50 percent of the time. When the child asks a second time, in a more coercive manner, the parents of delinquent kids cave in and agree; whereas other parents say “No” almost 100 percent of the time. The parent-child transactional process described above and its relationship to deviant peers has been found applicable to adolescent drug abuse (Dishion and Ray 1991; Dishion et al. 1988), high-risk sexual behavior (Metzler et al. 1995), as well as problem behavior in general, including academic failure (Tildesley et al. 1995; Ary et al., in press; Metzler et al. 1994).

## Adolescence

In early adolescence, the behavior of these high-risk children includes alcohol, tobacco, and other drug use before the age of 15 years (Kumpfer 1987), which has been reported to predict greater severity of conduct disorder symptoms; that conduct disorder was a predictor of early onset of substance abuse (Robins and Przybeck 1985). Delinquency and arrest rates increase prior to substance use (Thornberry 1994); hence, if researchers could identify and intervene with conduct-disordered youth, the most severe types of substance abuse could possibly be impacted. Family-focused interventions have been found at all developmental stages to be more effective with at-risk youth than other types of interventions (Alexander and Pugh 1996). Early teens who display attention deficits, hyperactivity with aggression, and severe multiple problems are more likely to have alcohol abuse and criminal records by ages 18 to 23 (Lynskey and Fergusson 1995; Magnusson and Bergman 1988).

## ECOLOGICAL MODELS: INTERRELATIONS AMONG RISK DOMAINS

Bronfenbrenner's (1979, 1992) process-person-context model, derived from human ecology theory, was adapted as a framework for integrating the diverse influences on development for substance abuse and other problem behaviors discussed in this chapter. This model is compatible with biopsychosocial models (Kumpfer et al. 1990) because it includes interactions among multiple domains of influence, such as family, community/culture, school, individual, and peers. Such research frameworks also allow for the influence of family genetic and other physiological or biological influences on substance abuse as shown in the developmental framework of the Values, Attitudes, and Stress Coping (VASC) Model of Adolescent Substance Abuse proposed by Kumpfer and DeMarsh (1985).

Ecological models place more emphasis on the environmental context of families, such as poverty, neighborhood disorganization, and cultural impoverishment. Increases in dysfunctional caregiving (including neglect and inadequate socialization of self-control behavior) have been found when parents experience financial difficulties (Conger et al. 1992, 1993) and have larger families (Hirschi 1994). Similarly, poverty and unemployment rates and the child-to-adult ratio in a neighborhood are predictive of the child

maltreatment rate (Coulton et al. 1995). In such cases, children's risks for antisocial behavior and substance abuse are further increased (Felner et al. 1995; Hirschi 1994; Moffitt 1993*a, b*).

Although these findings make it clear that the co-occurrence of family risk factors multiplies the risk for behavior problems and substance abuse (Bry 1982) if not offset by family protective or resiliency factors, it is not clear how this happens. While the domains of influence on delinquency, conduct disorder, and adolescent substance abuse, and the variables grouped within these domains, are sometimes seen as additive, they are more appropriately thought of as bidirectional and transactional (Alexander et al. 1995; Kumpfer and Bluth, in press). Research discussed in the section below is beginning to clarify the family processes or transactional relationships that can lead to problem behaviors in youth or the protective family processes that can lead to increased resilience to drug use in environmentally at-risk youth. (For a more indepth review, see Kumpfer and Bluth, in press.)

Gary and Booker (1992) suggest that although behavioral science theories have been useful in working with families, family researchers should also consider emerging theoretical orientations such as symbolic interaction, family lifecycle (family development), feminism, womanism, and Afrocentricity as useful in creating theories to inform drug prevention programs within the context of family dynamics (Abramovitz 1987; Akbar 1984; Asante 1991; Collins 1990; Nes and Iadicola 1989; Reinharz 1993; Staples and Johnson 1993). By considering these new conceptual frameworks, researchers may begin to address some important culturally sensitive and gender-relevant variables that have been ignored by the established social science community. Among the understudied variables currently being examined by Gary (1986) and others (Ahmed et al. 1984; Brown et al. 1990) are (1) spirituality and religiosity, (2) racial and cultural identity, (3) racial discrimination as a stressor, (4) role of fine arts (music, dance, art, theatre) in human resilience, (5) gender identity, and (6) cultural hassles as stressors. The protective factors and risk factors should be added to resilience and vulnerability theories and tested in family prevention approaches.

#### RELATIONSHIP OF MATERNAL LIFECOURSE TO ANTISOCIAL BEHAVIOR AND SUBSTANCE ABUSE

Women's lifecourse development is strongly associated with developmental trajectories of their children and whether the children will develop antisocial behavior and abuse alcohol and other drugs (Olds and Pettitt 1996). In a longitudinal study of adolescent parents in Baltimore, for example, young women with recent welfare experience were more likely to report that their children had engaged in a variety of antisocial and delinquent behaviors, including substance use, than were their low-income, nonwelfare counterparts (Furstenberg et al. 1987). Being unmarried increased the likelihood that their children reported using alcohol, marijuana, cigarettes, and other drugs. Increased family size can lead to reduced parental influence, decreased parental supervision, less homework support and monitoring, fewer opportunities, and greater peer influence on both girls' and boys' development of antisocial behavior and substance use (Tygart 1991).

Low levels of maternal self-efficacy may compound the problems women encounter in effectively managing the challenges of daily living, resulting in additional difficulties in undertaking effective caregiving and monitoring of their children's behavior. Women with little sense of self-efficacy may also settle for intimate partners who compromise their efforts to provide stable family conditions for their children. Their partners may subvert their plans to obtain economic independence or to delay or avoid a subsequent pregnancy; they may expose the children to examples of and opportunities for delinquency and substance use; and they may help to create a climate in which academic success is less valued, thus undermining the development of their children's own sense of self-efficacy. These are important elements of what Moffitt has referred to as "criminogenic environments" (Moffitt 1993*b*).

#### RELATIONSHIP OF PARENTING OR CAREGIVER DYSFUNCTION TO ANTISOCIAL BEHAVIOR AND SUBSTANCE ABUSE

While almost all empirically tested models of substance abuse and other youth problems find that peer influence is the most proximal and final pathway to problem behaviors in adolescence, other social context variables such as school and family precede and predict the selection of antisocial and substance-using peers (Biglan et al. 1995; Kumpfer and Turner 1990/1991; Newcomb 1992; Swaim et al. 1990). Parent and intrafamily processes were consistently concluded to represent the best predictors of child behavior disorder (Farrington 1991; Loeber and Dishion 1983; Reid 1993) and the

most appropriate targets for change in a multisystemic context (Alexander and Pugh 1996; Liddle and Dakof 1993). According to Alexander and Pugh (1996), “Certainly, the focus has moved from identifying general dispositional risk factors to prioritizing the importance of family factors in etiology of antisocial behavior.”

Research using structural equation modeling (SEM) or latent cluster analysis help to clarify processes by which dysfunctional parenting or caregiving can result in youth associating with antisocial peers. The Social Ecology Model of Adolescent Substance Abuse (Kumpfer and Turner 1990/1991) tested on over 1,800 adolescents suggests that family conflict and poor parent/child relationships are associated with poor school climate. Both of these factors result in reduced school attachment and reduced self-esteem and self-efficacy. These variables mediate association with antisocial and substance-using peers. The developmental model of antisocial behavior advanced by Patterson and colleagues (Patterson and Bank 1989; Patterson et al. 1991, 1992), further clarified that poor family management practices (especially coercive interactions and poor monitoring) explained involvement with deviant peers.

Poor family management, lack of parenting skills, and dysfunctional caregiving have been strongly related to chronic substance abuse and delinquency. Dysfunctional caregiving generally refers to the inadequate parental provision of material and emotional care for children (Olds and Pettitt 1996). The abuse and neglect of children represents the extreme of such dysfunction. Abused and neglected children are at increased risk for early and persistent behavior problems and substance abuse (Downey and Coyne 1990; Eckenrode et al. 1993; Hussey et al. 1992; Kaufman and Cicchetti 1989; Kolko et al. 1990; National Research Council 1993; Raine et al. 1994; Widom 1989*a, b*; Yoshikawa 1994; Zahn-Waxler et al. 1990). Other aspects of dysfunctional caregiving associated with children’s substance abuse include various family management practices such as inconsistent parental discipline and inadequate parental monitoring (Dishion et al. 1995; Hawkins et al. 1992).

However, the mechanisms by which dysfunctional caregiving leads to substance abuse and other problem behavior are still unclear. Gottfredson and Hirschi (1990) argued that poor parenting practices failed to instill within the child the capacity for impulse regulation and empathy, increasing the risk for adolescent criminal behavior, including substance abuse. Moreover, inadequate supervision of children may increase children’s exposure to deviant peers (Dishion et al. 1995) and their opportunities for using alcohol and other drugs.

Empirically tested longitudinal models of causes of substance abuse using SEM suggested that family conflict and lack of positive family involvement at time 1 lead to reduced parental monitoring and supervision at time 2. This lack of supervision is related to involvement with deviant peers at time 2, which is related to time 3 problem behaviors such as antisocial behavior, high-risk sex, academic failure, and substance use (Ary et al., in press).

#### FAMILY CORRELATES OF SUBSTANCE ABUSE AND OTHER YOUTH PROBLEMS

Depending on the level of functioning, families can negatively impact a child's development. While there is no single cause of substance abuse, family variables are a consistently strong predictor of antisocial behaviors (McCord 1991; Tolan and Loeber 1993; Tolan et al. 1995). Parents and peers are the strongest risk factors for delinquency, according to the study of causes and correlates of delinquency (Thornberry et al. 1995). Several empirically tested models of delinquency and substance abuse found that parent-child relationships or processes such as support and supervision are the precursors of peer influences—the final pathway to delinquency (Ary et al., in press; Kumpfer and Turner 1990/1991). In other words, youth who like and respect their traditional parents are less likely to become involved with antisocial peers and delinquency.

Loeber and Stouthamer-Loeber (1986) conducted a meta-analysis of approximately 300 research studies. In longitudinal studies, socialization factors (e.g., lack of supervision, parental rejection of the child and child rejection of the parent, and lack of parent-child involvement) were found to be the strongest predictors of delinquency. Parental dysfunction, such as criminality and poor marital relations, were midlevel predictors, and parental health and absence were weak predictors. In concurrent comparative studies, the strongest correlate of problem behaviors in children and youth was the child's rejection of the parents and/or the parent's rejection of the child. The importance of effective parental discipline was higher in these studies than in the longitudinal studies. The effects of these risk factors appear to be the same for boys and girls.

From this and other reviews (Hawkins et al. 1994; Kumpfer and Alvarado 1995; Wright and Wright 1992; Zucker et al. 1995), as well as other primary sources, a list of family correlates of substance abuse can be assembled:

- Family history of the behavior problem, including parental or sibling role modeling of antisocial values and drug-taking behaviors and favorable attitudes about drug-taking behaviors (Hawkins and Catalano 1992) and parental criminality, psychopathology (Offord 1982; Robins 1981), and antisocial personality disorder and substance abuse (Faraone et al. 1991; Frick et al. 1992)
- Poor socialization practices, including failure to promote positive moral development (Damon 1988); neglect in teaching life, social, and academic skills to the child or providing opportunities to learn these competencies; and failure to transmit prosocial values and disapprove of youth's use of alcohol or other drugs (Dielman et al. 1989)
- Ineffective supervision of the child, including failure to monitor the child's activities (Ary et al., in press), neglect, latchkey conditions, sibling supervision (Steinmetz and Straus 1974), and too few adults to care for the number of children
- Ineffective discipline skills, including lax, inconsistent, or excessively harsh discipline (Jones and Houts 1990), parental behavioral undercontrol or psychological overcontrol of the child (Barber 1992; Garber and Robinson 1995), expectations that are unrealistic for the developmental level of the child creating a failure syndrome (Kumpfer and DeMarsh 1985; Reilly 1992), and excessive, unrealistic demands or harsh physical punishment (Cohen and Brook 1987)
- Poor parent/child relationships, including lack of parental bonding and early insecure attachment (Baumrind 1985; Lyons-Ruth et al. 1993); repeated loss of caretakers (Loeber 1990); negativity and rejection of the child by the parents (Brook et al. 1990; Cole and Zahn-Waxler 1992), including cold and unsupportive maternal behavior (Shedler and Block 1990); lack of involvement and time together (Kumpfer and DeMarsh 1985), resulting in rejection of the parents by the child; and maladaptive parent/child interactions
- Excessive family conflict and marital discord (Katz and Gottman 1993) with verbal, physical, or sexual abuse (Kumpfer and Bayes 1995)
- Family disorganization, chaos, and stress often because of poor family management skills, life skills, or poverty (Tolan et al. 1993)

- Poor parental mental health, including depression and irritability, which cause negative views of the child's behaviors, parental hostility to child, and harsh discipline (Conger and Reuter, in press)
- Family isolation, lack of supportive extended family networks (Dilworth-Anderson 1992), family social insularity (Dumas 1986), and lack of community support resources
- Differential family acculturation and role reversal or loss of parental control over adolescents by parents who are less acculturated than their children (Delgado 1990; Szapocznik et al. 1986)

#### RESILIENCY AND PROTECTIVE FAMILY FACTORS AND PROCESSES

Gary and Booker (1992) recommended that the prevention field be more focused on a family strengths perspective rather than the traditional risk and deficit perspective. This paradigm shift has been stressed for over 30 years by African-American and other scholars (Billingsley 1992, 1968; Gary et al. 1983; Hale-Benson 1986; Hurd et al. 1995; Roysse and Turner 1980). According to Wilson and Tolson (1988), "The most significant trend in Black family research is the shift from a deficit to a strengths view." Gary's research with African American families has clarified some of the protective processes in African-American families that build resilience in youth in high-risk environments and neighborhoods. The characteristics of strong families in his study were (1) a strong economic base, (2) achievement orientation, (3) role adaptability, (4) spirituality, (5) extended family bonds, (6) racial pride, (7) respect and love, (8) resourcefulness, (9) community involvement, and (10) family unity (Gary et al. 1983).

Risk factors are not the total story. It is important to understand that the probability of a child developing problems increases rapidly as the number of risk factors increases (Rutter 1987, 1990; Sameroff et al. 1987) only in comparison with the number of protective factors (Dunst and Trivette 1994; Rutter 1993). Children and youth generally are able to withstand the stress of one or two family problems in their lives; however, when they are continually bombarded with family problems, the probability of them becoming substance users increases (Bry et al. 1982; Newcomb and Bentler 1986; Newcomb et al. 1986).



The protective factor model of prevention provides a nondeficit, non-problem-centered framework and is heavily influenced by the strengths perspective of social work and mental health (Gary and Booker 1992). The purpose of the strengths perspective is to ensure that professionals pay attention to client strengths in implementing intervention programs. According to Saleebey (1992), the strengths perspective asks the professionals or persons designing the intervention programs to be “guided first and foremost by a profound awareness of and respect for clients' positive attributes and abilities, talents, and resources and aspirations.” (p. 6)

A complete discussion of the research on family protective processes is beyond the scope of this chapter (for a complete review, see Kumpfer 1994 and Kumpfer and Bluth, in press). Briefly, family protective factors include one caring adult (Werner 1986; Werner and Smith 1992), emotional support, appropriate developmental expectations, opportunities for meaningful family involvement, supporting dreams and goals, setting rules and norms, maintaining strong extended family support networks, and other protective processes. Newly created family interventions, such as the Iowa Strengthening Families Program (Molgaard and Kumpfer 1995), are increasingly based on enhancing family strengths and resilience.

**INTERACTION OF RISK AND PROTECTIVE FACTORS AND PROCESSES**

Research data from the Office of Juvenile Justice and Delinquency Prevention Program of Research on Causes and Correlates of Juvenile Delinquency from three longitudinal studies in Denver, Colorado, Rochester, New York, and Pittsburgh, Pennsylvania, suggest that risk factors are not simply additive, but interact to produce higher levels of risk burden (Thornberry 1994). Additionally, they are moderated by protective factors in the family or youth environment and internal resiliency factors or processes (Kumpfer 1995; Kumpfer, in press). If youth had only 1 of the 12 protective factors identified, the reductions in delinquency were negligible; however, if there were multiple protective factors (9 or more), the risk of delinquency was reduced to below 25 percent.

The Pittsburgh site identified three major developmental pathways to delinquency: (1) the authority conflict pathway, (2) the covert pathway, and (3) the overt pathway. In each case, the parents or caretakers involved with the youth support or hinder these developmental pathways or sustained trajectories. The authority pathway is characterized by defiance of parental authority; the covert pathway by lack of parental supervision and monitoring

leading to burglary, car theft, and fraud; and the overt pathway by the development of a coercive cycle of aggression and violence within the family (Patterson et al. 1989). Lack of supervision and monitoring appears to be particularly salient as a cause of violent offenses. Violent crimes peak just after the close of school at about 3:00 p.m. (Snyder and Sickmund 1995), suggesting lack of parental supervision and latchkey status. The Carnegie Council on Adolescent Development (1994) study found that about 40 percent of adolescents' nonsleeping time is spent alone, with peers without adult supervision, or with adults who might negatively influence their behavior.

#### SUMMARY OF ETIOLOGICAL RESEARCH IN DEVELOPMENTAL PSYCHOPATHOLOGY

Oetting, who is completing a major review of etiology for substance abuse, stated at a National Institute on Drug Abuse (NIDA) conference on rural substance abuse: "The biggest risk and protective factor is the family. It is the foundation" (Oetting 1996). It appears that three major aspects of family interactions are critical: (1) family attachment, bonding, and affective relationships; (2) guidance through supervision and support in making good friends; and (3) the transmission of norms and skills through discussions and role modeling. Additional research is needed to better understand the most critical family processes that protect youth and reduce risk.

Although prevalent mythology assures parents that they are not responsible for their adolescent's actions because peers are the primary influences, research suggests that family influences remain roughly comparable with peer influences for quite some time (Loeber 1990). In fact, in the areas of substance abuse, which typically develops several years later than delinquency, research by Coombs and associates (1991) suggested that the primary reason for a youth to use drugs is peer influence; however, the primary reason not to use drugs is parental disapproval. Hence, it is possible that research with prosocial youth would show that parental influence is still the primary influence during adolescence. This does not mean that these prosocial youth do not make their own decisions; if they had to choose between parental or peer wishes, they would more likely follow the recommendations of their parents.

Implications for Prevention

One major implication of this emerging developmental research for preventive interventions is that youth from multiproblem families and environments require different intervention strategies than those with later onset and lower risk burdens (Schulenberg et al., in press; Weber et al. 1989; Zucker and Fitzgerald 1996). Interventions for early-onset, multiproblem youth must take into account the multidetermined nature of developmental psychopathology (Borduin et al. 1995). Thus, investigators mounting new prevention or treatment intervention efforts need to carefully specify (and justify) ages or stages for specific intervention programming; consider the most salient domains of risk influence (family, school, peers, media, or individual); and consider the degree to which a problem at any stage is really a product of current influences or primarily a “downstream” manifestation of prior influences at an earlier time.

Sequentially identifying and attempting to modify each variable in isolation is not a very promising strategy. An additional issue is that some genetic, biological, and large community/social risk variables are not very amenable to change even in the most well-funded intervention. Thus, it is often difficult to remove (in ways comparable to surgery or radiation) such risk variables from the child or remove the child from the environment without incurring excessive cost or inflicting damaging effects. However, modifying mediators, such as parenting and family environment, which have a pervasive and sustained influence on many risk mediators, can reduce the likelihood that moderators we cannot impact directly (media, neighborhood disorganization) will continue to influence deviant behavior. This requires that researchers see beyond a static, multivariate model of change to a more dynamic, phasic, and developmental model of change, all informed by rigorous etiological and intervention research.

Zucker and Fitzgerald (1996) state that a “failure to appreciate these issues has led to the proliferation of intervention models that are either not relevant to that segment of the population for families at greatest risk, or that lead to significant, but clinically meaningless, effects.” (p. 3) These insufficient interventions have very small effect sizes rendered statistically significant by using power analyses to justify very large sample sizes. Despite statistical significance, they are clinically nonsignificant (Jacobson and Revenstorf 1989), or are epiphenomena in staying power, because they rapidly are diluted by an ecological context that washes away effects. Hence, doing too little is done too late.

Additionally, and more problematic, is the implication that the most desirable age for targeted interventions almost certainly varies across population subgroups and individuals. Hence, one approach would be to assess each individual and determine the appropriate interventions tailored for the specific risk and protective processes in the youth and family. This is a rather expensive and intrusive process. Another approach would be to conduct universal prevention approaches involving all youth. Unfortunately, these interventions rarely address the multitude of risks with sufficient dosage of multiproblem youth to make much of a dent in the risk burden. A hierarchical strategy of multiple gating that moves youth through the phases of prevention (Institute of Medicine 1994) from universal interventions to selective and eventually to indicated interventions has been recommended.

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