ADOLESCENTS WITH CONDUCT PROBLEMS: ANALYZING THE IMPACT OF FAMILY STRUCTURE ON TREATMENT OUTCOMES

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ABSTRACT

ADOLESCENTS WITH CONDUCT PROBLEMS: ANALYZING THE IMPACT OF FAMILY STRUCTURE ON TREATMENT OUTCOMES

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This study examined the effects of family structure on treatment outcomes among a sample of proportionately minority, urban adolescents exhibiting behavior problems (Blacks, 56.2%; Latinos/Hispanics, 20.5%, Whites, 16.4%; and other, 6.8%). Eighty-one families received Functional Family Treatment, which features evidence- and family-based, customized intervention, and they were assigned to a two (single-mother households, $N = 50$ and married-mother households, $N = 30$), by two (pre-test/post-test) design. Adolescents completed measures on peer association, drug use, psychological distress, self-identified problem areas and family functioning. Mothers (all of whom were the biological mothers) reported their perception of family functioning. Results were analyzed using univariate repeated measures analysis of variance and *t*-tests. Findings indicated that the treatment was significantly effective in decreasing specific types of drug use and improving several domains of family functioning for adolescents from single-mother households. The treatment also significantly improved the single-mothers report on overall family functioning as well as in several critical domains. Implications for treatment interventions are discussed.

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CHAPTER ONE

INTRODUCTION

Statement of the Problem

Single-parent homes have become a large proportion of all households in American society, and it is estimated that over half of all children under 18 will experience parental separation or divorce, spending some time in a single-parent household. Almost 31% of this country's households are now maintained by single parents (Baer, 1999). Of that number, approximately 85% are women, and the rise in single-parent families has led to changes in family structure and the feminization of poverty. Mother-only households have been correlated with patterns of adolescent deviance and when coupled with strained economic resources, the patterns become pronounced (Dornbusch et al., 1985). Research has shown that fathers' prolonged absence, the unavailability of male role models and lack of gender-specific emotional support contribute to adolescent behavior problems. Regardless of the configuration of the household, family attributes and processes appear to moderate the development of adolescent behavior problems (Baer, 1999); family processes are impacted by family structure and socioeconomic status, and many single mothers encounter difficulty successfully navigating their adolescents through the vicissitudes of that developmental era (Baer, 1999; Dornbusch et al., 1985; Chilcoat, Breslau, & James, 1996; McLoyd, 1990).

Proponents of the deficit theory assert that single-mother families are deviant, dysfunctional and unstable and cannot maintain the ideal model of American life. Those arguing from this model conclude that children from single-mother households are susceptible to being on a trajectory for psychological dysfunction with regard to antisocial behavior, personality development and academic achievement. However, that may be an oversimplification as critics

of the deficit theory suggest that the model more often focuses on the structure of the family rather than the family process (Marotz-Baden, Adams, Buccho, Munro & Munro, 1979). There are significant studies that illustrate that adolescents from single-mother households can function adaptively both psychologically and socially, and they can achieve academic success (Hill, 1972; Lindblad-Goldberg & Dukes, 1981; Wilkinson & O'Connor, 1977; Willie, 1976).

Research has demonstrated that family characteristics and processes influence the risk of antisocial behaviors in adolescents. Specific predictors and reinforcers of antisocial behaviors in adolescents that have been noted to exist within the family unit include poor adolescent-parent communication, parental pathology, poor parental monitoring of the adolescent, poor parental involvement, violence and poor problem solving skills (Brody et al., 2003). Conversely, positive family functioning can engender protective influences. For example, age-appropriate parental monitoring, levels of warmth, behavior management, and psychological separation have been shown to serve as safeguards against behavior problems during adolescence (Baer, 1999; Hogue, Liddle, Becker & Johnson-Leckrone, 2002).

Conduct problems during adolescence forecast poor educational, occupational and emotional well being during young adulthood. If externalizing behaviors are not remedied during youth, criminal justice involvement is a likely outcome. The impact of successful prevention and intervention of adolescent deviance warrants an investigation. Furthermore, since single-parent households are a significant percentage of American households, the bulk of which are headed by single-mothers, an exploration would generate information about the impact of family structure and familial interaction on treatment outcomes with urban families. The purpose of the present study is to examine to what extent family functioning mediates the psychological and behavioral functioning of adolescents who present conduct problems.

The primary independent variable of interest to be examined is family structure. Specifically, the study will examine how the independent variable impacts clinical outcomes for adolescents who receive the Functional Family Therapy treatment (FFT).

Purpose of the Study

This study assesses the impact of family structure on treatment outcomes for adolescents who present conduct problems. The study examines family structure as the main moderating influence and family functioning as the main mediating effect on treatment outcomes. Data analyses illuminate other mediators and moderators that impact the pre-morbid functioning of the adolescents whose disruptive behaviors remain the same or increase after treatment and whose families report poor or positive overall family functioning.

A comprehensive treatment, FFT focuses on examining the ways in which the adolescent's family relational system engenders or sustains maladaptive behavior (Prinz & Jones, 2003). Systems, both within and outside of the family, are critical to FFT's multilayered, multisystemic treatment. The primary objective of FFT is developing and maintaining positive family functioning. The intervention incorporates macrocosmic social systems and services that can facilitate adaptive behavior. Hence, schools, mental health agencies and other local community agencies are deemed an integral part of the treatment and vital to positive outcomes (Alexander & Sexton, 2002).

The study aims to contribute to the literature on adolescents with conduct problems and the influence of family structure on treatment outcomes. The study also attempts to provide a greater understanding about the variables, specifically family functioning, that may predict or may be a factor in the development of conduct problems in adolescents from single-mother households. Research has shown that family structure is correlated with adolescent behavior, and

single mothers more likely to have adolescents with conduct problems than two-parent households (Frick et al., 1989; Dornbusch et al., 1985). However, evaluating from the perspective of the deficit model may oversimplify the complexity of the source of adolescent pathology. Furthermore, studying conduct problems in adolescents is important given that these behaviors are strongly correlated with juvenile delinquency and antisocial and criminal behavior in adulthood (Olweus, 1979).

The aim of the study is to examine whether there is a more significant decrease in the presentation of conduct problems in teens that reside in two-parent households compared to those from single-mother households after treatment as well as to assess the impact of family functioning on treatment outcomes. Family structure may be a significant proxy variable for important differences in parenting practices that may affect the risk and severity of externalizing behaviors.

Research Question and Hypotheses

Research Question

Do adolescents from two-parent households report a greater decrease in conduct problems than adolescents from single-mother households after intervention with Functional Family Therapy?

Hypothesis I

Adolescents from two-parent families will report a greater decrease in conduct problems than adolescents from single-mother families who have had comparable therapeutic intervention.

Hypothesis II

Adolescents from two-parent households and their mothers will report more positive overall family functioning than those from single-mother households and their mothers who have had comparable therapeutic intervention.

Definition of Terms

The following terms will be used to describe aspects of the study.

Conduct Problems

The term "conduct problems" is used to describe acting out, maladaptive behaviors such as fighting, violating curfew and other hostile behavior, and related syndromes such as Conduct Disorder and Oppositional Defiant Disorder. Researchers argue that "conduct problems" limited to the adolescent era are often manifestations of a teen's response to his/her changing responsibilities and role at home and in society. Their behavior is nonpathological, and within a normative range (Moffitt, 1993). However, "conduct problems" on the more severe end of the continuum (such as violence, stealing and truancy) that are not remediated during adolescence forecast a variety of problem behaviors in adulthood. "Conduct problems" will be used interchangeably with "externalizing behaviors" and "disruptive behaviors." "Conduct problems" will be measured by the Problem Oriented Screening Instrument for Teenagers (POSIT), Drug Use Screening Inventory (DUSI), the Peer Delinquency Scale and the Outcome Questionnaire (OQ-45.2), discussed later.

Family Functioning

"Family functioning" can be defined as the way that the family operates as a system along seven dimensions that include: *communication* (the process by which messages are given and understood as intended), *affective expression* (the content, intensity and timing of expressed feelings), *role performance* (assignment of specific tasks to each family member, amenability to

assigned activities, and actual enactment of the assigned activity), *task accomplishment* (the family's ability to organize and resolve developmental and crisis tasks), *involvement* (the degree to which family members are connected and involved in each other's lives), *control* (the process by which family members influence each other), and *values and norms* (the background against which all other family processes operate, including vital elements such as whether family rules are implicit or explicit, the freedom with which family members can determine and assert their own attitudes and behaviors, and whether family norms are consonant with the overarching societal context). The Family Assessment Measurement – III General Scale, discussed later, will measure "Family functioning."

Family Structure

This study compares single, mother-only families with families comprised of both biological mother and father (biological or stepfather), otherwise referred to as two-parent family or nuclear family. Single, mother-only households include only those where the biological mother is present and the biological father is absent and not replaced by a stepparent. Those who argue from the deficit model conclude that adolescents from single-parent households are more susceptible to psychopathology with regard to social behavior and personality development (Lindblad-Goldberg, 1989).

Functional Family Therapy (FFT)

"FFT" is an outcome-driven, evidence-based, systematic clinical intervention model for youth expressing externalizing and maladaptive behavior problems that range from minor offenses such as curfew violations and drug experimentation, to serious offenses such as drug abuse, theft and physical violence perpetrated against others. "FFT" is phasic and individualized for each family. Each of the three specific phases, *engagement and motivation*, *behavior change*,

and *generalization* has precise aims, assessment objectives and clinician attributes. The flexibly structured, integrative model is organized in a way that allows successful family intervention without therapist distraction in the family process.

CHAPTER TWO

REVIEW OF THE LITERATURE

The Problem

In 2001, the Office of Juvenile Justice and Delinquency Prevention reported that U.S. juvenile courts processed over 1.7 million cases in 1998, up 44% from 1989, and an estimated 1.3 to 1.5 million dollars for an average criminal career (e.g., incarceration costs, costs of an arrest to juvenile justice authorities and juvenile court, victim costs, and productivity loss due to incarceration) (Henggeler & Sheidow, 2003). Effective prevention and intervention can alter the developmental pathway and causal mechanisms that lead maladapted teens to a life entrenched in the criminal justice system. Adolescents from single-mother homes have consistently been cited as susceptible to maladaptive developmental pathway due to the mother's limited economic and emotional resources (Brody, et al., 1994; Brody & Flor, 1997; Lindblad-Goldberg, 1989). Functional Family Therapy posits that change in adolescent deviant behavior can occur by bringing about an understanding of both the positive and negative traits within teens' family relational systems. Without correcting family processes (e.g. communication, problem-solving abilities and affective expression), intervention outcomes will be poor and temporary (Sexton & Alexander, 2005).

Conduct Problems

Conduct and Oppositional Defiant Disorders

Conduct Disorder (CD) is a pervasive, serious and persistent psychiatric disorder in children and adolescents. Stealing, vandalism, truancy, defying authority, chronic aggression, substance use, fire-setting and other behaviors referred to as "antisocial," are required for the diagnosis of CD (three symptoms are required to occur within a 12-month period). The behaviors

deviate from age-appropriate and societal norms and infringe upon others' basic rights (APA, 2000; Sholevar, 1995). Oppositional Defiant Disorder (ODD) is viewed as a less severe variant of Conduct Disorder. Reference to CD is generally intended to convey a class of behaviors, which include an admixture of both ODD, and CD diagnoses which define the terms *antisocial behaviors*, *conduct problems*, *disruptive behaviors* and *externalizing behaviors*. Oppositional Defiant Disorder can be a precursor to Conduct Disorder, which in turn, if not remedied, can be a precursor to Antisocial Personality Disorder in adulthood (APD) (APA, 2000; Burke, Loeber and Lahey, 2003).

The prevalence of conduct disorders in the general population has been estimated from 1% to 6% to more than 10% (APA, 2000; Henggeler & Sheidow, 2003). There is no consensus on prevalence rates of CD/ODD. Statistics on antisocial behaviors in adolescents vary greatly depending upon the sample and the diagnostic criteria employed (Henggeler & Sheidow, 2003). Differences in prevalence can also be attributed to the type (e.g. adolescents, teachers, parents) and gender of informants (Essau, 2003). Though the estimates may appear excessive, they correspond with statistics which report that the number of youth in the custody of the juvenile justice system rose 30% from 1975 to 1985, and admittance to residential care increased 250% from 1965 to 1985.

Correlates to conduct problems include the increased importance of peer relationships in a teenager's life as parental supervision lessens. Other variables associated with the incidence of conduct problems in adolescents include: race, neighborhood type, family stressors, parent-adolescent interactions, socioeconomic status, parent marital status, marital satisfaction, family functioning and parental and grandparent pathology (especially APD) (Baer, 1999; Chamberlain & Rosicky, 1995; Loney & Lima, 2003; Patterson, DeBaryshe & Ramsey, 1989).

Clinical Course of Conduct Problems

Conduct problems may emerge for the first time during adolescence, or already existing childhood problems may become exacerbated or more severe during this developmental period. In the former, Anthony (1970) suggests that the adolescent's milieu is relatively benign and constitutional attributes are noticeably absent. The youth is generally able to deal with their problems and can internally manage their anxiety. Antisocial behavior limited to the adolescent developmental stage is often nonpathological, a normal response to the disparity in society between the adolescent's physical maturity and the lack of responsible adult roles made available to the adolescent (Moffitt, 1993). In the latter, the child's environment tends to be both pathogenic and pathological, and their constitution has not been resourcefully inoculated against external forces (e.g. demands in school and maladaptive family functioning), making them more vulnerable (the inability to deal proactively and appropriately with affective arousal). They are also unable to cope with anxiety internally; habit dysfunctions combine with neuroses and maladaptive behavior becomes chronic (Anthony, 1970).

Theories on the Development of Adolescent Conduct Problems

Research suggests that the developmental pathway for adolescent conduct problems is a result of both individual and external factors (Anthony, 1970; Essau, 2000; Essau, 2003; Moffitt, 1993). However, there is significant evidence that concludes that it is the external or social environment which most significantly impels or increases the risk for adolescent maladjustment.

Social learning theory postulates that humans' behavior is learned and shaped through day-to-day social interactions with others. These seemingly innocuous interactions either promote prosocial or antisocial behaviors. Family, peers and others are agents for teaching both prosocial and antisocial behaviors. Individual predispositions may increase the stability of pro-

and antisocial behaviors over time, but social learning theory asserts that *learned* behavior is the more significant determinant of the stability of the pro- and antisocial behaviors over time. It can be said that adolescents do not outgrow the propensity for conduct problems – they must be *taught* otherwise. Parents are the primary agents for teaching prosocial behaviors (Patterson, 1982).

Coercion theory or the coercive process states that individuals learn how to evoke responses from others in their natural environment in order to have their needs met. Both parents and their children can engage in coercion, training one another in aversive and aggressive behavior, through subtle reinforcement through daily interactions. Individuals use coercion from the time of infancy (Patterson, 2002). For example, an infant will cry to get their mother's attention to be fed, and their mother will respond to this cry by feeding the infant. If the infant does not get their mother's attention they will increase the intensity of the behavior in order to get their mother's attention to be fed, and perhaps the next time the infant is hungry she will cry with greater intensity to ensure that she attains the intended response (Patterson, 1982).

However, during infancy the use of coercion is benign in form. In the context of conduct problems in adolescents, a more intense and aversive degree of coercion is used and maintained within the parent-youth dyad and encourages antisocial behaviors both within and outside of the home. Again, it is the microsocial exchanges between individuals [e.g. the adolescent and his or her parent(s)], which create and reinforce a powerful dynamic that can lead to poor outcomes – conduct problems. Just as parents are the agents for teaching prosocial behavior they must also be the agents of punishment when their child presents antisocial and coercive behavior (Patterson, 1982).

There is a body of literature that specifically targets family composition as a factor in the development of adolescent conduct problems; more specifically, family compositions whereby the head of household is a single-mother (Chilcoat, Breslau, & James, 1996; Frick, Lahey, Loeber, Stouthamer-Loeber, Christ & Hanson, 1992; Lindhal, 1998). Those arguing from this perspective, the deficit model, deduce that the cause of adolescent maladaptive behavior is the inability of a single-headed household to be stable, healthy or integrated.

Belchman (1982) summarizes three theoretical underpinnings which explain the deficit model whereby the rearing of a child by one parent puts the child at risk from maladjustment. The perspectives are: first, the psychodynamic assumption that during childhood, the basic necessities for healthy development are only meet when there are two (male/female) parents in the home whereby socialization and gender-role identification can be learned; second, the perspective held by early social learning theorists, cultural anthropologists and sociologists that male children need to learn appropriate masculine behavior from fathers; and third, confluence theory whereby familial influences impact cognitive development, and a home where the father is absent cannot adequately provide a stimulating and healthy intellectual environment (compared to that of children from intact homes). Consequently, every adolescent from a single-mother headed household will automatically be at risk for maladjustment without consideration of protective factors.

There have been several reviews (Belchman, 1982; Herzog & Sudia, 1973; Marotz-Baden *et al*., 1979) that have found fault in the methodology of those studies that buttress the deficit model of family structure (i.e., divorced families, single mothers). Belchman (1982) suggested that confounding variables such as socio economic status account for many of the negative research findings. Furthermore, when research compared children in single-mother

headed to children from two-parent families of the same social class and economic status, results show that children from families lacking a father-figure do not suffer behaviorally, intellectually or academically. Moreover, there have been outcome studies that have focused on poor, single-mother headed families have and they shown that success in raising healthy, well-adjusted children (Hill, 1972; Lindblad-Goldberg & Dukes, 1981; Wilkinson & O'Connor, 1977). These studied demonstrate that dysfunction is not an inevitable outcome for children being raised in poverty-stricken single-parent homes.

While the deficit model often focuses on the family form as the origin of developmental pathology, Marotz-Baden *et al*. (1979), among others, suggest that it is not the family composition that impacts both negatively and positively to the social and emotional development of children; rather, it is *family process*, the way in which the family is organized, copes, communicates and adapts, which inordinately contributes to developmental pathways. They underscore the importance of research on the interceding processes that accompany individual families, through their personal styles and how those styles influence the socialization of the children within family units. Marotz-Baden and colleagues (1979) in their research review of the effects of family stucture on child development have identified several significant factors that are essential in comprehending the developmental outcomes irrespective of family composition: economic instability, quality of parental supervision and role-modeling. The conclusion that can be surmised from these lines of research is that families that are headed by single-parents are likely a solid family form, but lack a normative model from which to depict and explain adaptive single-parent family functioning.

Outcomes

Adverse outcomes of childhood CD include APD in adulthood. A meta-analysis of adult outcomes revealed that 1.7% of adults without a history of childhood CD were given the diagnosis of APD compared to 28.5% of individuals with a history of childhood CD (Lahey & Loeber, 1994). However, there are limitations in the literature regarding the progression of CD to adult APD. They include poor follow-up assessments, often only up to age 20 or 21, and may not capture the full picture of the sequelae during the many transitions of adulthood. Data regarding the cumulative stability of CD into adulthood are relatively high, but each year there are fluctuations, which indicate that there may be no one single measurement that is reliable.

Other poor outcomes of CD include social dysfunction in adulthood and engagement in criminal activity (and convictions). Other reported outcomes include dropping out of school, early pregnancy and child bearing, and with women, the violent victimization at the hands of a partner (Burke, Loeber & Lahey, 2003).

Family Structure

Marital status has been correlated with adolescent behavior, with single mothers more likely to have adolescents with conduct problems than two-parent households (Dornbusch et al., 1985; Frick et al., 1989). Research has documented a consistent correlation between parental marital status (divorced versus nondivorced) and conduct problems in boys (Guidubaldi, Perry, & Cleminshaw, 1984; Hetherington, Cox, & Cox, 1982; Santrock & Warshak, 1979). The extent of the differences is not large but has been shown to be relatively enduring (Guidubaldi & Perry, 1985; Hetherington et al., 1985). Together, this literature implicates divorce, or martial status, as an important factor in the etiology of the more serious and enduring cases of conduct problems (Forgatch, Patterson, & Skinner, 1985; Rutter, 1971).

Also related and of importance is the impact of the absence of a male parent in the household. The male parent provides a role model for gender role socialization processes. The absence of a father in the family or home has been associated with negative outcomes for adolescents (Hetherington & Clingempel, 1992; Mason et al., 1994), but there is research that posits that the quality of the father-child relationship is actually the more reliable predictor of negative outcomes than the physical presence of the father in the home (Gabel, 1992).

McLanahan and Sandefur (1994), note that the absence of a male parent in the household impacts the child's access community resources. Opportunities are decreased as a primarily as a function of income effects (as single-mother families are more likely to have reduced incomes). Limited financial resources may restrict single-mother households from residing in commuities with better facilities, schools, etc. and may impact community ties (i.e. children of separated or divorced paents are likely to move often and have those established ties broken or undermined), thus the child's social capital and, eventually, their developmental outcomes.

Interparental conflict in two-parent households has been shown to impact the degree and seriousness of conduct problems in teens. While studies have suggested that having two parents in the home is a protective factor against the development of conduct problems, Rutter (1971), Hetherington and Martin (1986) and Fortach et al. (1985) suggest that marital discord and interparental conflict lead to less effective parenting and inadequate and inconsistent discipline, both of which play critical roles in the origins of conduct problems.

Family Functioning

Family functioning refers to the quality of interactions within the family system. This includes family cohesion, family adaptability and communication (Olson, 1988; Olson, et al., Olson, Sprenkle, & Russell, 1979; Olson & Wilson, 1982). The family influences an adolescent's

interpersonal behaviors by providing social cues and modeling that the adolescent replicates in peer relationships (Bell, Cronwell, & Bell, 1988; Olewus, 1980; Patterson, 1982, 1986; Patterson & Banker, 1989). Family functioning has been consistently indicated as among the strongest predictors of conduct problems in adolescents (Loeber & Dision, 1983; Loeber & Stouthamer-Loeber, 1986; McCord, 1980, 1991; Patterson & Stouthamer-Loeber, 1984).

Much of the focus in the literature has been on parenting practices, specifically discipline and monitoring. Research has shown that inconsistent and ineffective discipline and poor parental monitoring are consistently related to the adolescent's engagement in deviant behavior for a range of populations (Capaldi & Patterson, 1996; Farrington, 1994; Gorman-Smith et al., 1996; McCord, 1980; Patterson et al., 1992). Evidence suggests, across race and socioeconomic status, that it is important for parents to know the adolescents' whereabouts and functioning when not in their company and administering consistent and judicious discipline (Gorman-Smith et al., 1999; Patterson, 1982; Patterson et al., 1992). Across studies, degree of warmth and cohesion, organizational skills, family value beliefs and family management skills have been associated with delinquent behaviors in youths (Farrington, 1994; Gorman-Smith et al., 1996; McCord, 1996; Tolan & Lorion, 1988).

Treatment

Functional Family Therapy

Functional Family Therapy is an evidence-based, multisystemic family intervention for youth at risk for involvement or involved in the juvenile justice system. The treatment was developed for adolescents who presented delinquent behavior and tested in a several studies by Alexander and his colleagues (Alexander & Parsons, 1982).

Alexander and Parsons' (1982) target populations were "soft" delinquents: adolescents who were first-time offenders largely from White middle-class Mormon families. Research showed notable decreases in recidivism, almost half the recidivism rates, with the FFT model when compared to delinquent youth randomly assigned to three other comparison groups (Alexander & Parons, 1973). Furthermore, a 30- to 42-month follow-up study of siblings of the referred delinquents in the FFT group showed half the recidivism rates of those siblings from the other three comparison groups (Klein, Alexander & Parson, 1977).

The primary focus of FFT is intervention with youth ages 11 to 18 and their families, with presenting behaviors ranging from CD to substance abuse to ODD. The treatment concentrates on understanding how the adolescent's relational system promotes or reinforces maladaptive behavior. Functional Family Therapy targets both adolescent and family functioning and encourages the unit to examine the function that the antisocial behavior(s) serves within the family. Therefore, the focus is taken away from the adolescent or "identified patient," and the entire family becomes the patient (FFT, 2003).

Functional Family Therapy stresses that the development and implementation of its interventions are culturally appropriate, context sensitive, and modified to the unique characteristics of each family member. The approach incorporates all the dimensions of the family's experience, validating, rather than punishing the effects of race and SES as stressors on individual lives. FFT was designed specifically for youth who are at risk for and engaged in the juvenile justice system (Prinz & Jones, 2003).

FFT moves through three phases of treatment: engagement and motivation, behavior change, and generalization. The goals of the first phase are to develop an alliance, reduce negative communication, and enhance engagement and optimism. During the behavior change

phase, the goals are to implement individualized change plans, reduce delinquent behavior, and build relational skills. The final phase focuses on generalizing the changes into a broader context, relapse prevention, and utilizing community support. All family members attend sessions together. Treatment typically consists of 8 to 12 meetings and can extend to 26 to 30 for more problematic cases. Functional Family Therapy is flexible, and it can be delivered in various settings: home, clinic and school. Functional Family Therapy is appealing because of the clear identification of its treatment techniques, which promote organized and coherent interventions with both the adolescent and the family (Prinz & Jones, 2003).

Functional Family Therapy has also been shown to significantly decrease the cost of treatment, showing a savings of up to $14,000 per adolescent (Juvenile Justice Bulletin, 2000).

Functional Family Therapy Outcomes

Published data show that FFT is highly successful and has positive outcomes when compared with standard juvenile probation services, residential treatment, and alternative therapeutic approaches. Both randomized trials and nonrandomized comparison group studies illustrate that FFT significantly reduces recidivism rates for a wide range of juvenile offense patterns (Alexander & Parsons, 1973; Gordon & Arbutnot, 1990).

Barton and colleagues applied FFT to “serious” offenders (youth with multiple offenses) who received treatment in their homes. The participants also received job training and placement and school placement. A comparison group had been placed residents at a group home for troubled youth and with a token-economy treatment modality. After 15-months, the FFT group ad a significantly lower recidivism rate (60%) than the comparison group (93%). Functional Family Therapy has also been applied to serious multiple offending youth recently released from state institutions (Gordon & Arbuthnot, 1990). The treatment group also received intensive

probation supervision and random drug screening. At the 21-month follow-up period, the treatment group showed a 30% recidivism rate while a statistical comparison group matched for prior offenses and age at first offenses would have had a probable rate of recidivism of 60% to 75%.

Research has also been conducted on FFT's impact in treating adolescent substance abuse. Waldron et al. (2001) conducted a clinical trial to investigate the efficacy of FFT with substance abusing youths and related problems with family functioning. The comparison groups were a Cognitive Behavior Therapy (CBT) group and a combined CBT and FFT group. The group was racially diverse, with a majority of male participants (80%). Results indicated that the FFT-only group demonstrated significant reductions in marijuana abuse from pretreatment to posttreatment. However, by the 3-month follow-up, decreases in marijuana were significant for the CBT-FFT group but no the FFT-only group. (The researchers hypothesized that the CBT-FFT group may have been a result of higher treatment doses.)

Freidman (1989) compared outcomes for adolescent drug users with those treated with FFT with a parent group method. The participating families of adolescent drug abuse clients (aged 14-21 yrs) who were admitted to 6 outpatient drug-free treatment programs were randomly assigned to either FFT treatment or a parent group method. In 93% of the FFT one or both parents participated (n = 85); but in only 67% of the families assigned to a parent group, one or both parents participated (n = 50). After a 6-month course of treatment and a 9-month follow-up period, a 15-month evaluation was completed. The youth and their mothers in both groups reported a significant reduction in substance abuse as well as improvement on various outcome criteria. There was, however, no significant difference between the 2 groups in degrees of improvement. Freidman's (1989) study demonstrates that FFT may be more accessible at the

out-start of treatment, which may be advantageous in terms of keeping attrition rates to a minimum as well as having a significant impact on the reduction of teen substance abuse (males in particular).

Functional Family Therapy has been documented to be effective in its 30-year course with culturally and racially diverse populations (FFT, 2003). In a study be Gordon and his colleagues (1988), the FFT model was applied to delinquent youth from culturally diverse and economically disadvantaged delinquent youth offenders (Appalachian and non-Mormon) wherein most of the youth has committed two offenses, both misdemeanors and felonies. The comparison group received probation. The FFT group were treated in their homes with novice, but well-trained graduate students. Court records an average of 28-months posttreatment revealed that recidivism rates for the comparison group (67%) were much greater than the FFT treatment group (11%). Gordon and his colleagues (1988) demonstrated the effectiveness of the treatment in decreasing recidivism rates, its value in treating ethnically diverse and economically challenged families as well as the efficacy of the model when even relatively inexperienced therapists are well-trained and adhere to the treatment methodology and principles.

There are also significant studies demonstrating the reduction in rates of aggressive behavior (e.g., fighting; Alexander, Holtzworth-Munroe, & Jameson, 1994). However, presently there are no studies that look at the impact of family structure and family functioning on FFT outcomes.

Summary and Purpose of the Study

The study aims to assess the impact of family structure on treatment outcomes for adolescents who present conduct problems. The study examines family structure as the main moderating influence and family functioning as the main mediating effect on treatment

outcomes. The assessment of family structure in conjunction with family functioning on treatment outcomes addresses how the pathogenic effects of stress are common or unique with this population.

Participants in the study represent a small sample of urban families whose teens have been diagnosed with either Oppositional Defiant Disorder or Conduct Disorder and are seeking treatment to help to control or eliminate the presenting behaviors. The intervention, which is focused on the entire family, not just the identified adolescent, generally consists of an 8 to 12 session intervention.

CHAPTER THREE

METHODS

Research Design

The study will be a quasi-experimental, pre-test-post-test design as there was no random assignment or manipulation of variables. The study investigates the impact of family structure on treatment outcomes for youth presenting with conduct problems. It also aims to assess to what degree family functioning both affects and is impacted by treatment.

Participants

Recruitment of Participants

The families in the study were selected from the archives of an investigation that examined the outcomes of FFT intervention. Participants were adolescents and their families who received Functional Family Therapy for the treatment of adolescent behavior problems. The participants were referred for treatment through the Reasonable Efforts in Assessment and Access Prevention (REAAP) program, a Philadelphia Department of Human Services juvenile justice prevention and intervention program referral source. Families reside in Philadelphia, Pennsylvania. The teenager(s) participating in the REAAP program did not have a prior arrest or adjudication record.

Inclusion Criteria

Participants had to be11-18 years of age, and must have indicated on the Personal History Questionnaire that their primary caregiver is the biological mother. Participants must have completed FFT treatment and the pre- and post-treatment measures.

Group 1. Adolescents who resided in households headed by their biological single-mothers were considered for this contingent.

Group 2. Adolescents who resided in two-parent households, whereby one parent is their biological mother, were considered for this contingent.

Exclusion Criteria

Participants who did not complete treatment or fill out the requisite post-data instruments were excluded from the study.

Participant Incentives

There were no incentives for participating in the treatment.

Power Analysis

A power analysis was completed to calculate the number of participants needed for the two groups (single-mother and two-parent). The dependent measures of substance use, family functioning, changes in psychological distress, and identified problem areas of functioning were used to assess differences between groups. A power analysis with an alpha set at .05 with medium effect size and a significant power in time and between groups greater than .9 resulted in an n of 80 participants (Cohen, 1992).

Procedures

Informed Consent

This research was approved by the Temple University Institutional Review Board (Committee B), protocol #6323. Each participating family member signed informed consent forms during the pre-treatment meeting, permitting use of their pre- and post-treatment data for research purposes. The participants were informed that their data would be deidentified and there would be no personal health risks as a consequence of partaking in the study.

Confidentiality

All information, including assessment results pertaining to the study, was kept confidential. Data were stored in a locked file cabinet. The investigator and supervisor abided by rules of confidentiality, not disclosing participant information to anyone outside of the study team. As is customary and appropriate in the treatment of outpatient clients, identifying information was kept with client records. However, any reports referring to study data were written such that participants' identities were protected (deidentifying names and other obvious information). The emphasis of the study was on symptom patterns and outcome, which by their nature cannot be easily associated with individual identities.

Treatment

The therapy followed the basic guiding integrative principles, goals, techniques, and procedures of Functional Family Therapy, over the course of 8 to 12 sessions for mild cases and up to 30 sessions for most acute cases, spread over a three- to four-month period. Session composition varied on a case-to-case and session-to-session basis, and therapists spent time working with the entire family and individual members to accomplish family-wide goals. FFT is multi-systemic and comprehensive intervention. Therefore, the treatment strategies were applied both within and outside the family domain, incorporating community systems such as schools and mental health agencies. Families received treatment both in their homes and at the FFT central office in the metropolitan Philadelphia area. The highest standards of ethical conduct were maintained.

Therapists

There were five full-time therapists with Bachelor degrees. All therapists completed a three-day (24 total hours) initial FFT training by national consultants from Family Functional Therapy - Practice Research Network (FFT-PRN), and three follow-up trainings (totaling 16

hours). FFT therapists also received weekly supervision via phone with FFT-PRN national consultants and one additional hour of case management with site supervisors.

Assessments Design

Measures were administered by the therapists. Before the first therapy session, a demographic and personal information form and multiple instruments were given to assess the targets of the intervention: conduct problems and family functioning. The instruments were administered again when the participants completed treatment.

Measures

Drug Use Screening Inventory (DUSI)

The DUSI is a self-report instrument used to assess the severity of substance use as well as to identify drug preference and possible drug abuse/dependence. The measurement domain of the DUSI is used to quantify drug use, and the participant indicates the number of times he/she has used various substances from “0 times” to “more than 20 times.”

Family Assessment Measure - III (FAM-III) General Scale

The FAM-III General Scale (Skinner et al., 1995) is a 50-item self-report measure of family functioning on 9 subscales. Specifically, the General Scale focuses on assessing the family as a system. Seven measures relate to key family dimensions (Task Accomplishment, Role Performance, Communication, Affective Expression, Involvement, Controls, Values and Norms) and two response style subscales (Social Desirability and Defensiveness). Items are rated on a 4-point Likert scale, from “Strongly Agree” to “Strongly Disagree,” with higher scores on a subscale indicating greater symptom severity. Directions request that answers be given to reflect one’s perspective on the family as a whole. The FAM-III General Scale has shown high internal consistency (coefficient alpha = .94) and test-retest reliability over one week (median test-retest

reliability for the FAM-III subscales were: r = .57, mothers; r = .56, fathers; and r = .66, children). The FAM-III has been found to discriminate clinical families from non-clinical families (Jacob, 1991). The FAM-III has scores correlated with measures of family idealization, cohesion and expressiveness from the Family Adaptation and Cohesion Evaluation Scales (Olson et al., 1983), the Family Environment Scale (Moos, 1974; Moos & Moos, 1981), and the Family Concept Q Sort (van der Veen, 1965). Correlations between the FAM-III and these measures were: idealization, r = .94; with cohesion, r = .82, and with expressiveness, r = .83, indicating strong construct validity (Bloom, 1985).

Functional Family Therapy/Family Court Demographics Form

The Functional Family Therapy/Family Court Demographics Form is an intake demographics form with name, address, age, gender, ethnicity, and other general demographic questions requesting information from the adolescent and the participating adult(s). Information such as names, addresses and dates of birth have been eliminated for the purpose of confidentiality and deidentified for the purpose of this study.

Outcome Questionnaire (OQ-45.2)

The OQ-45.2 (Lambert et al., 1996) is a 45-item, self-report instrument constructed to assess treatment efficacy by measuring changes is psychological distress over a short period of time. The three subscales, Symptom Distress, Interpersonal Relations and Social Roles, were developed based on the belief that the three domains are of critical importance in measuring an individual's status and psychotherapy outcome. The OQ requires that individuals rate their feelings on a 5-point Likert scale from "Never" to "Always." When compared with other similar measures, the Inventory of Interpersonal Problems and the Social-Adjustment Scale-Self-report, the OQ-45.2 was shown to have modest to high validity correlation coefficients across various

clinical samples (Counseling Center, Community Clinic and Inpatient Unit), with correlations being strongest with the total score. The OQ-45.2 has also been found to significantly discriminant between community and inpatient populations (Lambert & Finch, 1999).

Peer Delinquency Scale

Created by the Pittsburg Youth Study Interview (Moss, Lynch, Hardie, & Baron, 2002), the Peer Delinquency Scale assesses the degree of pro- and anti-social behaviors of peer associations as perceived by the identified adolescent. The behaviors range from school truancy to theft to drug use and sales. The rating scores for the 15-statement measure are designated as follows: 0 = None of them; 1 = Few of them; 2 = Half of them; 3 = Most of them; 4 = All of them; 6 = No friends; 8 = Don't know.

Problem Oriented Screening Instrument for Teenagers (POSIT)

The POSIT (Rahdert, 1991) is a 139-item instrument designed to identify problems in any one of ten functional areas: Substance Use/Abuse, Mental Health Status, Physical Health Status, Aggressive Behavior/Delinquency, Social Skills, Family Relations, Educational Status, Vocational Status, Peer Relations and Leisure and Recreation. The questions are categorized as general, age-related and red-flag items. The scores that are above the cut off for each functional area do not necessarily indicate the actual existence of a problem, but rather suggest that the area is in need of further evaluation. The POSIT is designed as the first-stage of an assessment system engineered to improve the evaluation and referral of substance-involved youth. The POSIT has shown high internal consistency with coefficients ranging from .44 (Physical Health Status) to .86 (Substance Use/Abuse). The POSIT has shown a moderate correlation with the Personal Experience Inventory (PEI) (Henly & Winters, 1988), with the POSIT Substance Use/Abuse scale and PEI Chemical Involvement scale most highly correlating; all coefficients were

significant, ranging from .51 to .69, indicating good convergent validity. Research has also shown that the POSIT is more likely to indicate true positive diagnostic cases (McLaney & Boca, 1996).

Purpose, Hypotheses and Data Analysis

This study evaluated the impact of family structure on treatment outcomes for youth presenting with conduct problems. It also aimed to assess to what degree family functioning both affects and is impacted by treatment. Research on family structure suggests that single, mother-only households have more difficulty rearing their children, especially during adolescence. Moreover, a central component underlying the quality of a parent's interactions with the adolescent, and the degree of the adolescent's conduct problems, is family functioning and processes.

The study sought to answer the following question: "Do adolescents from two-parent families report more of a reduction in conduct problems and their families an overall improvement in family functioning than single mother households after intervention?" This question is important to both researchers and practitioners who have an interest in the prevalence of adolescents who present conduct problems and reside in single-mother households. A quasi-experimental, pre-test/post-test design, with an n of 40 participants in each of the two groups, allowed an exploratory examination of the outcome of FFT with an urban population.

Research Question

Do adolescents from two-parent households report a greater decrease in conduct problems than adolescents from single-mother households after intervention with Functional Family Therapy?

Hypothesis I

Adolescents from two-parent families will report a greater decrease in conduct problems than adolescents from single-mother households who have had comparable therapeutic intervention.

Pre- and post-test data as measured by the Drug Use Screening Inventory, the Outcome Questionnaire 45.2, the Peer Delinquency Scale and the Problem Oriented Screening Instrument for Teenagers were compared based on family structure.

Hypothesis II

Adolescents from two-parent households and their mothers will report more positive overall family functioning than those from single-mother households and their mothers who have had comparable therapeutic intervention.

A comparison of the pre- and post-treatment Family Assessment Measure – III General Scale scores was conducted.

CHAPTER FOUR

RESULTS

Analysis Plan

Descriptive data are presented on demographic variables including age, gender, race, adolescent psychiatric diagnosis, maternal psychiatric diagnosis and substance abuse, maternal educational attainment, maternal status of employment and family use of public assistance. A univariate repeated measures analysis of variance was used to test if there was any difference between adolescents from single-mother and married-mother households in the reduction of behavior problems and improvement of family functioning after intervention. Outcome analyses were conducted using a 2 (Group: Single-mother, married-mother) by 2 (Time: pre-test, post-test) univariate repeated measures analysis of variance. Follow-up analyses (paired *t*-tests) were conducted where appropriate. Where there was more than one respondent, rather than combine reports in one single analysis, multiple reports were obtained. Therefore, in the family functioning domain, separate multivariate analyses were conducted for the adolescent-reported FAM scores and mother-reported FAM scores.

Descriptive Data

Assessments measures were administered once prior to intervention, and once following completion of the intervention. Duration of the intervention varied by case, as required by the severity of the presenting problems (adolescent behavior problems and family functioning). Of the 189 participants that completed the intake measures, 108 (57%) prematurely dropped out of treatment. The attrition rate is high, and may be a result of the lack of incentives offered by Functional Family Therapy (FFT) to the participants, other than the treatment itself as well as the volatility of families residing in a relatively impoverished urban area.

Adolescent Participants

Pre- and post-treatment measures were missing from one of the 81 participants who completed treatment, and seven cases were missing from age and gender demographic information and eight from ethnicity. The number of FFT sessions completed by the single-mother group was 12.44 (*SD* 4.21) and the married-mother group was 10.71 (*SD* 3.04). Table 4.1 presents a summary of the adolescents with respect to gender and ethnicity.

Table 4.1

Gender and Ethnicity of Adolescent Participants (n=80)

		Single-Mother		Married-Mother		
		N	%	*N*	%	Total *N*
Gender						
	Male	31	42	16	22	47
	Female	19	26	8	11	27
Ethnicity						
	Black	28	38	13	18	41
	White	7	10	5	18	12
	Latino/Hispanic	9	10	6	8	15
	Other	5	7	0	0	7

Note. Percentages shown are for the total sample.

The participating adolescents ranged from 10 to 17 years of age; the mean age for adolescents who resided in single-mother households was 14.22 (*n = 50, SD* = 1.88), and the mean for their counterparts who resided in married-mother households was 14.21 (*n* = 24, *SD* =

1.77). There were more male participants (63.6% of the sample), and in terms of ethnicity, Blacks had the greatest proportional representation (Blacks, 56.2%; Whites, 16.4%; Latinos/Hispanics, 20.5%; and other, 6.8%).

The most prominent psychiatric diagnoses for both groups were first Oppositional Defiant Disorder (76.3% of the adolescents from single-mother households and 72.2% of those from two-parent households), and second, but more clinically severe, Conduct Disorder (22.2% of those from married-mother households and 18.6% of the adolescents from single-mother households). Cannabis abuse was the greatest identified substance-related psychiatric diagnosis for both groups (25.4% of the adolescents from single-mother households and 22.2% of those from married-mother households), then alcohol abuse (16.7% of those from married-mother households and 15.3% of the adolescents from single-mother households and), and finally polysubstance abuse (11.9% of the adolescents from single-mother households and 11.1% of those from married-mother households).

Mother Cohorts

The mean age for the single-mothers was 42.69 (*SD* 9.24) and the married-mothers was 49.44 (*SD* 11.75). Both the single and married mothers reported a current psychiatric diagnosis (28.6% of single mothers and 4.3% of married mothers) and a history (10.2% of single mothers and 13.0% of married mothers) or current (10.2% of single mothers and 8.7% of married mothers) substance abuse-related psychiatric diagnosis. Almost half of both the mother cohorts reported to have graduated from high school or received their General Equivalency Degree (44.9% of the single mother and 45.8% of the married mothers). At the time of the intake, almost all of the mothers in both cohorts reported unemployment (91.8% of the single mothers and

83.3% of the married mothers). And, finally, with regard to usage of Public Assistance, 50% of the single mothers received benefits compared with 29.2% of the married mothers.

Research Findings

Conduct Problems

Drug Use

Analysis of Group Means. A univariate repeated measures of analysis of variance was utilized to examine the differences in the effects of treatment on self-reported drug use over a short period of time. Pretest, posttest and intervention effects are summarized in Table 4.2.

Table 4.2

Pretest and Posttest Sample Size, Means, Standard Deviations, F-values and p-values for the Drug Use Screening Inventory

			Pretest	***Posttest***	***Time***		***Groups***		***Interaction***	
		N	***M (SD)***	***M (SD)***	***F***	***p***	***F***	***p***	***F***	***p***
Problem With Alcohol	**S**	50	.04 (.198)	.04 (.198)	2.21	.142	.898	.347	2.21	.142
	M	23	.04 (.209)	.13 (.344)						
Problem With Cocaine/Crack	**S**	50	.04 (.198)	.04 (.198)	1.45	.232	1.10	.298	1.45	.232
	M	23	.04 (.209)	.13 (.344)						

Problem With Marijuana	**S**	50	.12 (.328)	.08 (.274)	1.07	.304	.019	.891	3.81	.055
	M	23	.04 (.209)	.17 (.388)						
Problem With Stimulants	**S**	50	.04 (.198)	.02 (.141)	3.80	.055	.747	.390	7.05	**.010**
	M	23	.00 (.000)	.13 (.344)						
Problem With LSD	**S**	50	.04 (.198)	.04 (.198)	4.13	**.046**	.343	.560	4.13	**.046**
	M	23	.00 (.000)	.13 (.344)						
Problem With Tranquilizers	**S**	50	.04 (.198)	02 (.141)	3.80	.055	.747	.390	7.05	**.010**
	M	23	.00 (.000)	.13 (.344)						
Problem With Pain Killers	**S**	50	.08 (.274)	.06 (.240)	.104	.748	1.61	.285	.759	.387
	M	23	.00 (.000)	.04 (.209)						
Problem With Opiates	**S**	50	.04 (.198)	.04 (.198)	4.13	**.046**	.343	.560	4.13	.046
	M	23	.00	.13						

			(.000)	(.344)						
Problem With PCP	**S**	50	.04	.02	3.80	.055	.747	.390	7.05	**.010**
			(.198)	(.141)						
	M	23	.00	.13						
			(.000)	(.344)						
Problem With	**S**	50	.04	.04	4.13	**.046**	.343	.560	4.13	**.046**
Gases/Fumes			(.198)	(.198)						
	M	23	.00	.13						
			(.000)	(.344)						
Problem With Other	**S**	50	.04	.04	2.21	.142	.007	.933	2.21	.142
			(.198)	(.198)						
	M	23	.00	.09						
			(.000)	(.288)						

Note. Due to missing data, participant numbers vary. S = Single-mother households and M = Married-Mother households.

There were no substantive differences in drug use between the two groups. However, the univariate repeated measures of analysis of variance results showed statistical significance when adolescents were asked to report the drug(s) with which they have a problem. More adolescents from single-mother households reported a problem with stimulants before treatment and less after treatment [M = .02, F(1,71) = 7.05, p = .01), while adolescents from married-mother households reported no problem with stimulants until after the treatment with means increasing after treatment [M = .13, F(1,71) = 7.05, p = .01).

There was a main effect for time for self-reported problems with LSD, indicating an increase in the average weighted means after treatment [F(1,71) = 4.13, p = .046]. There was

also a disordinal interaction effect for self-reported problems with LSD: adolescents from single-mother households had the same identified problem usage of the drug before and after treatment, and contrary to expectation, those from two-parent household reported an increase post-treatment [$F(1,72) = 4.13$, $p = .046$].

Adolescents from single-mother households reported a decrease in an identified problem with the use of tranquilizers after the treatment whereas those from married households increased from no reported problem with the drug pre-treatment [$F(1,71) = .18$, $p = .01$), indicating a disordinal effect, which is in opposition to the hypothesis.

With opiates, there was a main effect for both time and an interaction effect. The average means of both groups indicated an increase in reported problems with the drug. Contrary to predictions, those adolescents from single-mother households reported the same degree of problems with the drug pre- and post-treatment, while those from two-parent families reported an increase post-treatment [$F(1,71) = 4.13$, $p = .046$]. The same effects occurred with inhalants: there was a rise in both groups identification of a problem with the drug post-treatment and adolescents from married families reported an increase in usage problems post-treatment while the other group's scores remained the same post-treatment [$F(1,71) = 4.13$, $p = .046$].

Adolescents from the two-parent group showed a significant increase in their reported problems with PCP after treatment while those from the other single-mother group reported a decrease, indicating an interaction effect [$F(1,71) = 3.8$, $p = .01$]. It should be noted that the mean values range so close to zero that the results should be interpreted with caution. The unpredicted results of the univariate repeated measures of analysis of variance with this particular measure may be a function in a change in the interviewees' response style.

Psychological Distress

Analysis of Group Means. A univariate repeated measures analysis of variance was utilized to examine the differences on the effects of treatment on psychological distress over a short period of time. Pretest, posttest and intervention effects are summarized in Table 4.3.

Table 4.3

Pretest and Posttest Sample Size, Means, Standard Deviations, F-values and p-values for the Outcome Questionnaire 45.2

			Pretest	***Posttest***	***Time***		***Groups***		***Interaction***	
		N	***M (SD)***	***M (SD)***	***F***	***p***	***F***	***p***	***F***	***p***
Symptom Distress	**S**	50	24.30 (14.54)	22.48 (13.96)	.022	.884	.396	.547	1.35	.250
	M	23	20.30 (12.29)	22.65 (16.89)						
Interpersonal Relations	**S**	50	12.16 (5.31)	11.64 (5.91)	1.54	.219	1.46	.232	3.07	.084
	M	23	8.91 (6.60)	11.96 (8.43)						
Social Role	**S**	50	12.20 (5.03)	10.76 (5.27)	.517	.475	1.57	.215	.949	.333
	M	23	10.09 (4.13)	10.30 (6.74)						

Total Score	**S**	50	48.62 (22.05)	44.42 (22.45)	.075	.785	.739	.393	2.40	.126
	M	23	39.30 (20.65)	45.30 (30.23)						

Note. S = Single-mother households and M = Married-Mother households.

The univariate repeated measures of analysis of variance conducted for the OQ 45.2 indicates that there was no evidence of statistically significant differences among adolescents from single-mother and two-parent households (time, groups, or interactions) on the three subscales or total scores.

Peer Association

Analysis of Group Means. A univariate repeated measures analysis of variance was utilized to examine the differences on the effects of treatment on association with friends who engage in deviant behaviors over a short period of time. Pretest, posttest and intervention effects are summarized in Table 4.4.

Table 4.4

Pretest and Posttest Sample Size, Means, Standard Deviations, F-values and p-values for the Peer Delinquency Scale

		Pretest		***Posttest***	***Time***		***Groups***		***Interaction***	
		N	***M (SD)***	***M (SD)***	***F***	***p***	***F***	***p***	***F***	***p***
Truancy	**S**	42	1.21	1.07	2.64	.109	6.31	**.015**	.293	.590

			(1.20)	(1.14)						
	M	21	.67	.38						
			(.796)	(.669)						
Acting Out	**S**	48	1.60	1.29	2.35	1.30	4.97	**.029**	.138	.711
			(1.31)	(1.17)						
	M	21	.95	.76						
			(1.12)	(.995)						
Property Damage	**S**	42	.76	.79	.100	.753	5.62	**.021**	.016	.900
			(1.17)	(1.10)						
	M	18	.17	.22						
			(.383)	(.428)						
Assault	**S**	43	.98	.81	.894	.349	5.86	**.019**	.015	.902
			(1.31)	(1.05)						
	M	16	.31	.19						
			(.479)	(.403)						
Assault With a	**S**	41	.49	.51	.432	.514	5.06	**.028**	.196	.660
Weapon			(.840)	(.925)						
	M	16	.00	.13						
			(.000)	(.342)						
Marijuana Use	**S**	48	1.25	1.44	.032	.859	8.31	**.005**	.798	.375
			(1.35)	(1.41)						
	M	16	.50	.38						
			(.730)	(.619)						

Note. Due to missing data, participant numbers vary. S = Single-mother households and M = Married-Mother households.

There was a significant group effect in the following domains of the Peer Delinquency Scale: Truancy [$F(1,61) = 6.31$; $p = .015$], Acting Out [$F(1,67) = 4.97$; $p = .029$], Property Damage [$F(1,58) = 5.62$; $p = .021$], Assault [$F(1,57) = 5.86$; $p = .019$], Assault With a Weapon [$F(1,55) = 5.06$; $p = .028$] and Cannabis Use [$F(1,62) = 8.31$; $p = .005$]. The univariate repeated measures of analysis of variance results indicated that adolescents from single-mother households had more associations with peers that engaged in the aforementioned deviant behaviors than the adolescents from married-mother households regardless of time. The results support the hypothesis that adolescents from single-mother households tend to associate more with peers that engage in antisocial behaviors (which is part of the constellation of behaviors considered conduct problems in this study).

Self-Identified Problem Areas

Analysis of group means. A repeated measures analysis of variance was utilized to examine the differences on the effects of treatment on identified problems in global functioning in ten areas on the POSIT over a short period of time. There were no significant differences in any of the univariate repeated measures of analysis of variance test results with the exceptions of the Mental Health Status and Vocational Status. Pretest, posttest and intervention effects are summarized in Table 4.5.

Table 4.5

Pretest and Posttest Sample Size, Means, Standard Deviations, F-values and p-values for the Problem Oriented Screening Instrument for Teenagers

			Pretest	*Posttest*	*Time*		*Groups*		*Interaction*	
		N	*M (SD)*	*M (SD)*	*F*	*p*	*F*	*p*	*F*	*p*
Mental Health	**S**	50	8.00 (4.90)	6.72 (4.82)	.356	.553	1.18	.282	4.07	**.047**
	M	23	5.87 (3.83)	6.57 (4.15)						
Vocation	**S**	49	4.71 (2.48)	5.14 (2.50)	5.40	**.023**	2.21	.141	1.02	.316
	M	23	3.61 (2.33)	4.70 (2.27)						

Note. S = Single-mother households and M = Married-Mother households.

The was a significant time by group interaction with the scores of the Mental Health Status: after treatment, the adolescents from single-mother households' mean scores decreased and those from two-parent households' mean scores increased [$F(1,71) = 4.07$; $p = .047$]. These results indicate that treatment may have positively impacted the adolescents from single-mother households and illuminated maladaptive functioning in those from two-parent families (accounting for the increased response in this area). The Vocational Status scores increased for both groups over time [$M = 5.00$, $F(1, 70) = 5.4$; $p = .023$] but there were no significant differences in magnitude of change within and between groups. The treatment effects for the results may have highlighted the importance of future employment on the Vocational Status, thus increasing the score on the subscale.

Paired *t*-tests were computed to test for significant changes in scores on the POSIT pre- and post-test in each of the treatment groups. Results showing significant differences between the groups are displayed in Table 4.6.

Table 4.6

t-tests for differences in scores on Problem Oriented Screening Instrument for Teenagers Between Adolescents from Single- and Married-Mother Households

		Pretest		***Posttest***			
		N	***M (SD)***	***N***	***M (SD)***	***t***	***p***
Mental Health	**S**	50	8.00 (4.90)	50	6.72 (4.82)	2.60	**.012**
	M	23	5.87 (3.83)	23	6.57 (4.15)	-.717	.481
Vocational Status	**S**	49	4.71 (2.48)	49	5.14 (2.50)	-1.09	.283
	M	23	3.61 (2.33)	23	4.70 (2.67)	-2.45	**.023**
Social Skills	**S**	49	3.84 (1.95)	49	3.61 (1.94)	.723	.473
	M	23	2.96 (1.46)	23	3.78 (1.91)	-2.09	**.049**
Aggressive Behavior - Delinquency	**S**	50	6.10 (3.71)	50	5.14 (3.32)	2.17	**.035**
	M	23	4.74 (2.67)	23	4.65 (2.67)	.130	.898

Note. Due to missing data, participant numbers vary. S = Single-mother households and M = Married-Mother households.

Contrary to the hypotheses, scores from the single-mother group significantly decreased within the Mental Health and Aggressive Behavior – Delinquency domains. The results indicate that the treatment is effective as the adolescents from this cohort assess their emotional status and problematic behavior. Also contrary to predictions, scores from the dual-parent group significantly increased within the Vocational Status and Social Skills domains. The results indicate that this cohort experienced an amplification with regard to self-identified problems within the domains after treatment.

Family Functioning

Adolescents Perspective on Family Functioning

Analysis of Group Means. A univariate repeated measures of analysis of variance was utilized to examine the differences on the effects of treatment on perceived family functioning as assessed by the FAM over a short period of time. Pretest, posttest and intervention effects are summarized in Table 4.7.

Table 4.7

Pretest and Posttest Sample Size, Means, Standard Deviations, F-values and p-values for the Family Assessment Measure – III, General Scale (Adolescents)

			Pretest	***Posttest***	***Time***		***Groups***		***Interaction***	
		N	***M (SD)***	***M (SD)***	***F***	***p***	***F***	***p***	***F***	***p***
Task Accomplishment	**S**	50	56.24 (11.45)	52.80 (8.98)	.184	.669	.006	.936	6.23	**.015**
	M	23	51.91 (11.54)	56.78 (11.97)						

Note. S = Single-mother households and M = Married-Mother households.

There were no significant differences between the two groups with the exception of the Task Accomplishment subscale. Contrary to expectation, the adolescents from single-mother households scores decreased, while the adolescents from two-parent households scores increased [$F(1,71) = 6.23$, $p = .015$]. It should be noted that scores equal to or greater than 60 are considered to be clinically significant indicator of serious dysfunction. It would appear that both groups experience some difficultly with basic assigned tasks, responding appropriately to

changes in family cycles, the generation of potential solutions and the execution of change, but adolescents from two-parent households fair worse than their counterparts.

Maternal Perspective on Family Functioning

Analysis of Group Means. A univariate repeated measures of analysis of variance was utilized to examine the differences on the effects of treatment on perceived family functioning as assessed by the FAM over a short period of time. Pretest, posttest and intervention effects are summarized in Table 4.8.

Table 4.8

Pretest and Posttest Sample Size, Means, Standard Deviations, F-values and p-values for the Family Assessment Measure – III, General Scale (Mothers)

			Pretest	***Posttest***	***Time***		***Groups***		***Interaction***	
		N	***M (SD)***	***M (SD)***	***F***	***p***	***F***	***p***	***F***	***p***
Task Accomplishment	**S**	50	57.12 (12.10)	53.32 (10.20)	6.00	**.017**	.254	.616	.000	.987
	M	24	58.50 (17.33)	54.75 (13.95)						
Communication	**S**	50	58.08 (8.70)	55.40 (8.13)	8.15	**.006**	.001	.982	.075	.785
	M	24	58.42 (13.27)	55.17 (11.77)						

Involvement	**S**	50	57.32 (0.58)	53.60 (9.71)	.269	.605	.671	.415	5.97	**.017**
	M	24	56.17 (12.33)	58.58 (11.12)						
Social Desirability	**S**	50	44.00 (7.76)	48.60 (7.30)	11.81	**.001**	.135	.715	.257	.613
	M	24	43.92 (11.50)	47.33 (10.35)						
Total Score	**S**	50	57.98 (6.74)	55.17 (6.88)	4.02	**.049**	.305	.583	1.73	.192
	M	24	57.88 (10.95)	57.30 (10.01)						

Note. S = Single-mother households and M = Married-Mother households.

There were significant results on three clinical scales, the total score and the Social Desirability domain. There was a significant effect for time with mean scores for both groups on the Task Accomplishment subscale [$F(1,72) = 6.00$, $p = .017$]. This indicates, that, contrary to the hypothesis, both sets of mothers were able to improve their ability to be flexible and adapt to change, maintain task-oriented goals under stress and create and attempt to implement alternative solutions. However, it should be noted that scores equal to or greater than 60 are considered to be clinically significant indicator of serious dysfunction, and post-treatment scores border on the range of clinical dysfunction. There was a significant time effect for the groups on the Communication subscale; mean scores for both groups decreased after treatment [$F(1,72) = 8.15$, $p = .006$], which does not support the hypothesis. Again it should be noted that while treatment appears to have facilitated improvement in the mothers' ability to convey information

sufficiently, clearly and directly as well as being available and receptive to messages sent, post-treatment scores are in proximity to the clinical dysfunction range.

The effects of treatment on maternal score on the Involvement subscale contradicted predictions: single-mothers' mean scores decreased, but the scores for two-parent households increased [$F(1,72) = 5.97$, $p = .017$]. The single-mothers experienced an increase in empathy, nurturing and concern for meeting the emotional needs of others, while their counterparts experienced a decrease with the aforementioned attributes. As with the other two clinical subscales of the FAM, the mean scores on this subscale were at the upper boundaries of the non-clinical/normative range.

The mean total FAM scores for both groups significantly decreased over time, which contradicts the hypothesis. The scores declined from 57.95 to 55.86 [$F(1,72) = 4.02$, $p = .049$], indicating that the treatment had an overall positive effect on the mothers' assessment of and participation in family functioning. As with the three clinical subscales, the significant mean scores on were the upper boundaries of the non-clinical/normative range.

The Social Desirability domain, which illuminates the need of the respondent to be portrayed and perceived positively by others (and is not one of the clinical scales), gleaned a significant effect for time; with mean scores increasing [$F(1,72) = 11.82$, $p = .001$]. This is not surprising, given that participants want to sound better after treatment (especially with the social pressure to respond in ways they believe that clinicians and researchers want).

Paired *t*-tests were computed to test for significant changes in scores on the POSIT pre- and post-test in each of the treatment groups. Results showing significant differences between the groups are displayed in Table 4.9.

Table 4.9

t-tests for differences in scores on the Family Assessment Measure – III, General Scale Between Single- and Married-Mothers

		Pretest		***Posttest***			
		N	***M (SD)***	***N***	***M (SD)***	***t***	***p***
Task Accomplishment	**S**	50	57.12 (12.10)	50	53.32 (10.20)	2.39	**.021**
	M	24	58.50 (17.33)	24	54.75 (13.95)	1.26	.220
Communication	**S**	50	58.08 (8.70)	49	55.40 (8.13)	2.27	**.027**
	M	24	58.42 (13.27))	24	55.17 (11.77)	1.89	.071
Affective Expression	**S**	50	57.24 (8.46)	50	54.04 (8.49)	2.63	**.011**
	M	24	57.08 (12.61)	24	58.00 (11.22)	-.365	.719
Involvement	**S**	50	57.32 (10.58)	50	53.60 (9.70)	2.60	**.012**
	M	24	56.17 (12.33)	24	58.58 (11.12)	-1.18	.252
Social Desirability	**S**	50	44.00 (7.76)	50	48.60 (7.30)	-3.69	**.001**
	M	24	43.92 (11.50)	24	47.33 (10.35)	-1.60	.124
Total Score	**S**	50	57.98 (6.74)	50	55.17 (6.88)	3.12	**.003**
	M	24	57.88 (10.95)	24	57.30 (10.01)	.372	.713

Note. S = Single-mother households and M = Married-Mother households.

Contrary to predictions, for the single-mother group there was a significant decrease in scores on the Task Accomplishment, Communication, Affective Expression, Involvement subscales and Total Score, indicating that the treatment was effective in increasing the single-mothers' functioning within those variables of family process. There was also a significant increase on the Social Desirability (a non-clinical) subscale with the single-mother group,

indicating that engagement with the treatment team may have provoked the participants to enhance their self-portrayal.

Summary of Findings

Following is a summation of the study results. Table 4.10 details variables which supported the hypotheses; Table 4.11 details variables which contradict the hypotheses; and Table 4.12 details variables which were not relevant to the hypotheses.

Table 4.10

Variables Which Support the Hypotheses

Variable	**Description**
Conduct Problems: Peer Association (Peer Delinquency Scale)	There was a significant group effect for adolescents from singe-mother households, indicating that they had more associations with peers that engaged in deviant behaviors than their peers from married-mother households after treatment (specifically with regard to Truancy, Acting-Out, Property Damage, Assault, Assault With a Weapon and Cannabis Use).
Conduct Problems: Self-Identified Problem (POSIT)	After treatment, adolescents from single-mother households reported increased problems within the Mental Health and Vocational Status domain.

Table 4.11

Variables Which Contradict the Hypotheses

Variable	Description
Conduct Problems: Drug Use (DUSI)	Adolescents from single-mother households reported a significant decrease in their self-identified problem with stimulants, tranquilizers and PCP after treatment.
Family Functioning: Adolescent Perspective on Family Functioning (FAM)	Contrary to expectation, the scores of adolescents from single-mother households decreased with regard to Task Accomplishment after treatment, while the adolescents from the married-mother cohorts' scores increased.
Family Functioning: Maternal Perspective on Family Functioning (FAM)	Single-mothers showed significant improvement (significant time effect) on three clinical scales after treatment: Task Accomplishment, Communication, Involvement and Total FAM score. It should be noted that the married-mother cohort experienced a significant post-treatment increase in score on the Involvement clinical scale.

Table 4.12

Variables Which Were Not Relevant to the Hypotheses

Variable	Description
Conduct Problems: Psychological Distress (OQ 45.2)	There was no evidence of statistically significant differences among adolescents from both cohorts after treatment

CHAPTER FIVE

DISCUSSION

This study examined the effects of family structure on treatment outcomes among a sample of proportionately minority adolescents residing in an urban setting who exhibited behavior problems. The adolescents were assigned to a two by two (pre-test/post-test) design, comparing intervention outcomes between single-mother- and two-parent-headed households. Adolescents completed measures on peer association, drug use, psychological distress, self-identified problem areas and family functioning. Mothers (all of whom were the biological mothers) reported their perception of family functioning. Results were analyzed using univariate repeated measures analysis of variance and *t*-tests.

Summary of Research Findings

The study established the short-term outcomes of a family-based intervention for indicated-risk adolescents from both single- and married-mother households. In comparison, there is no strong evidence that indicates that adolescents from married-mother households show more immediate improvement after treatment than their counterparts from single-mother households. Additionally, single-mothers and their indicated-risk adolescent did not report poorer family functioning than the married-mothers and their indicated-risk adolescent.

The study purported two hypotheses with regard to adolescents who presented conduct problems (diagnosed with either Conduct Disorder or Oppositional Defiant Disorder): 1) After treatment with FFT, adolescents from married-mother households would have less behavior problems than their peers from single-mother households; and 2) After treatment with FFT, adolescents from married-mother households and mothers would show a greater improvement in family functioning than their peers from single-mother households.

With respect to the first hypothesis, the analyses offered little support. The current findings suggest that both cohorts fair about the same with regard to the immediate treatment effects. In fact, there was only one significant segment of conduct problems – peer association – wherein the adolescents from single-mother households reported significantly more interaction with peers who engaged in antisocial behaviors. There may be an inclination on the part of the adolescents from single-mother households to engender a pseudo or extended family outside of the home, regardless of the absence of prosocial behaviors in their peers or the strength of the family functioning within the home.

The abovementioned findings correspond with research (Hetherington & Lingempeel, 1992; Mason et al., 1994) which concludes that the absence of a father in the household has been associated with negative outcomes for adolescents than those from two-parent families. It should be noted that such differences may not simply be due to family structure, but they may reflect the processes within the family such as the quality of the mother-child relationship and degree of parental involvement. Furthermore, investigators examining the variables associated with single-mother households have suggested that factors such as availability of resources and coping capacities of the family (Gabel, 1992) and parental monitoring and discipline (Patterson & Stouhamer-Loeber, 1984; Steinberg, 1986) may account for peer association differences between adolescents being raised in single-parent and those in dual-parent families.

The second important finding of this study, which relates to the second hypothesis, is that adolescents and their single-mothers did not report poorer family functioning post-treatment than the married-mother cohort. On the contrary, both the adolescents and their single-mothers reported more significant improvement when compared to their counterparts. The outcomes in this domain were impressive, given the literature which purports that single-mothers and their

adolescents are automatically at a disadvantage and prone to poorer family functioning than intact families (Belchman, 1982). The analyses of the single-mothers' perspective of family functioning gleaned the most notable results as they demonstrated greater improvement than the other cohort on three clinical subscales, which indicated less overall family dysfunction (although, as abovementioned, the post-treatment scores continue to fall within the upper boundaries of the non-clinical/normative range). Furthermore, the results of the *t*-tests conclude that overall as group, the single-mothers were amenable to treatment and the treatment has a significant impact on the how they changed their maladaptive behavior and engaged in family processes. This is no small feat considering that the sample of mothers were economically disadvantaged, residing in high-crime communities and are exposed to overcrowding and lack sufficient knowledge and resources to adaptively negotiate basic macrosystems.

The results of hypothesis one and two raise the question of the validity of the deficit theory. This study supports the literature that asserts that it is the quality of family functioning rather than the type of family structure that is the better predictor of an adolescents initial and sustained engagement in antisocial behaviors. The results also show that adolescents from single-mother households are highly prone to associations with peers who engage in deviant behavior regardless of the improvement of family functioning. There appear to factors that are unaccounted for in this study which contribute to the continued relationship between adolescents from single-mother families and peers who engage in antisocial activates. One of the most important may be the role of lack of social capital (i.e. both personal and social resources) for adolescents in American inner cities.

The increasing isolation of the poor, as described by Robert Putnam's (2000) *Bowling Alone*, significantly affects the social connections that are critical to the mental health f urban

youth. He believed that social connections are a crucial form of community and personal capital affecting well-being. The absence of said connections may have a striking impact for those already suffering from the negative consequences of poverty and spatial marginalization. As applied to the adolescents in this study, the lack of social capital which bridges adolescents and their families, especially single-mother households, to increased personal access to information, skills sets and more enhanced power may have dramatic affects on both an individual and family-wide basis. With respect to adolescents with behavior problems from poor urban areas, capital (physical capital, that is the income and economic wealth that improves an individuals daily living; human capital, the personal experiences that engender overall well-being and productive, prosocial behavior; and social capital, the social networks and ties that help people maintain or increase their social standing) is compromised. Family- and community-based interventions help to supplement and rectify the otherwise impaired capital. An increase in social capital may also facilitate families engagement in more legitimate economies (it is noteworthy that although almost all of the mothers in the sample were unemployed, few noted receiving local or federal financial subsidies or benefits, so it can be assumed that many engaged in an underground economy in order to live day to day).

Although it was not the aim of this study, it adds to the relatively thin knowledge base on prevention and treatment with a predominately minority urban population. As it happens, Blacks and Latinos may be more amenable to multisystemic interventions that underscore family processes (Boyd-Franklin, 1995). The current study demonstrates that low-income, urban minority families can be recruited and will participate in and benefit from intensive, individually tailored, outcome-driven, ecological treatment efforts. Although FFT was initially developed for delinquents of a lesser degree, first-time status offenders largely from White, middle-class

Mormon families (Gordon et al., 1995), but the study has shown that, when applied to youths from urban poor, urban populations, it can be just as effective. In fact, this study's results demonstrate the significant impact that the a systematic application of an in-home behavioral-systems family intervention can transcend racial and socioeconomic boundaries, and it effectively remediated the single-mothers perception of and engagement in maladaptive family processes.

Limitations

Attrition

The results of the study were not generalizable to the general population due to the small sample size. The initial sample was 189 participants, but 57% prematurely terminated treatment. It is not surprising that the rate of attrition was so high given that the population was socioeconomically disadvantaged and there were no incentives were offered other than receiving FFT treatment. It should also be noted that none of the families were mandated for treatment which can make completing treatment seemingly less crucial, perhaps especially when the FFT therapists begin to consistently reflect back to family members the necessity of correcting maladaptively entrenched behaviors. The study also did not account for therapist ethnic-matching or the strength of the therapeutic alliance, both of which may have been variables that impacted the rate of treatment dropouts.

Also due to the high attrition rates, which resulted in the small sample size, there was an inability to match cases based on socioeconomic status, number of treatment sessions (which obviously can impact if maximum dosage of treatment is received by some but not all cases) ethnicity, etc. An increased sample size would allow the employment of more sophisticated analytic tools and increase the power size to test the hypothesized outcome effects, and assigning

cases to groups based on pretest scores may have facilitated more subtle post-treatment differences between the cohorts. Despite the study strengths, enthusiasm for the results is tempered by the fact that treatment effects were only examined at termination. The lithmus test of treatment effects is the long-term impact on participants. While the database provided post-treatment follow-up assessments at regular intervals, the scant number of respondents made it impossible to truly gauge the long-term outcomes.

Existing Database

There were a number of possible confounding variables that could not be controlled due to the way in which the archival database was constructed (e.g. length of time that the single-mother has been single could not be determined because it was not a question on the intake assessment). In addition, although the database provided the number of sessions that each family received, it did not document the length of time in which the therapy sessions were conducted. This obviously has a significant impact on the dosage of treatment. Many researchers may argue that dosage can de defined by the number of sessions, the intensity of the dosage is just as, if not more important, especially which at at-risk population in which the adolescent and their families have historically engaged in antisocial behaviors and perceive themselves are macrosystemically marginalized.

In addition to the abovementioned, the database also failed to glean a concrete sense of each family's socioeconomic standing as measured by actual income earned. If the database reported finances of each family, the investigation would have been able to ascertain the true degree of poverty experienced by the sample, and this would have underscored and given evidence of the true economic disadvantage experienced by these families and illuminated any disparities between the two cohorts.

Directions for Future Research

Reconstructing Current Perceptions of Family Structure

The results of this study have two primary implications for future research and clinical practice. First, contrary to the deficit theory, adolescents being raised by a single-mother do not necessarily have poorer treatment outcome effects than their peers being raised in nuclear-family households. Single-mother families are no more homogenous than dual-parent families. The limitations of the study, due to issues with the existing database and high attrition rates, hindered the study's ability to limn a detailed portrait of the sample. However, it can be assumed that while there are within- and between-group differences, to explicate the processes within each family structure, samples many times larger than the present one must be used, so higher order interactions can be examined.

Also, future research may no longer need to focus on the comparative effects of family structure, but examine how variables such as family processes, socioeconomic status and capital interact to facilitate or hamper adolescents' behavior (anti- or prosocial).

Investigating the Impact of Social Capital on Treatment Outcomes

Clearly, where one resides is important as location impacts exposure to stressors such as violence. Nevertheless, not everyone who resides in impoverished or stress-inducding regions exhibits similar symptoms of distress, Families, friends, churches, schools, and community-based organizations all play an important role in buffering or lowering an individual's levels of stress, even in the face of high-crime, poverty and general community disenfranchisement and disorganization. An investigation which extrapolates the degree to which adolescents with behavior problems from single-mother households engagement with capital may prove to assist in eradicating the oversimplification that single-mother families are innately disadvantaged.

Rather than comparing groups (single- versus dual-parent), a within-group examination of the variables that contribute to individual and family functioning may prove to be judicious.

Longitudinal Research

Longitudinal studies have the advantage of capturing change within individuals over a prolonged period of time, and are thus better suited for developmental studies. Conduct problems during youth may be a developmental expression of independence and the assertion of one's identity. Although this particular sample of adolescents were more susceptible to behavior problems due to neighborhood effects and socioeconomic status, a longitudinal study would help to parse out the more serious cases of antisocial conduct that are not developmentally-based. A longitudinal study would also show researchers the degree to which mother-child interactions impact the adolescents' behavior over time (as the adolescent becomes less dependent on their parent for basic and higher needs). Longitudinal research may also glean any protective factors within single-mother families, offering a more positive perspective of this family constellation.

Implications for Clinical Practice

Recognizing the Importance of Family-based Treatment With Poor Urban Populations

Functional Family Therapy's treatment modality takes the focus off the individual, identified patient (the adolescent) and places emphasis on the family constellation and the maladaptive interactions that promote antisocial behavior. Although many clinicians who practice family therapy do not provide evidence-based treatment, the basic principles of FFT offers a paradigm by which they can effectively utilize with both mild and extreme cases of family dysfunction.

Functional Family Therapy promotes the engagement of the family into larger social systems. Often times clinicians divorce extrapolate the treated families from greater

socioecological systems, but FFT demonstrates that encouraging greater social connections is crucial to the amelioration of family dysfunction and the maintenance of prosocial behavior and well-being.

Conclusion

The study demonstrates that more research comparing adolescents with behavior problems from single- and married-mother households may be fruitful in terms of showing that the differences between the groups cannot simply be a function of family structure. Future research on this topic and with this particular dyad can both demystify and dispel notions, informing public policy, and assisting educators and clinicians.

Second, as mentioned above, the study, whose participants were predominately poor, urban youths and their families, demonstrates that this marginalized group is accessible and agreeable to treatment. In particular, treatment that addresses the entire family system as opposed to the adolescent as the identified patient. A better understanding of these family processes could provide a better framework from which clinicians can assess and treat their clients and engender a paradigm shift for the way that society perceives the single-mother and her family.

REFERENCES

Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 profile*. VT: University of Vermont, Department of Psychiatry.

Alexander, J.F., Pugh, C., Parsons, B.V., and Sexton, T.L. (2000). Functional family therapy. In D.S. Elliot (Ed.), *Blueprints for Violence Prevention*. Colorado: University of Colorado.

Alexander, J.F. & Sexton, T.L. (2002). Functional family therapy: A model for treating high-risk, acting-out youth. In F.W. Kaslow (Ed.), *Comprehensive handbook of psychotherapy, Volume 4, Integrative/Eclectic* (pp. 111-132). New York: John Wiley & Sons.

Alvarez, H.K., & Ollendick, T.H. (2003). Individual and psychosocial factors. In C. Essau (Ed.), *Conduct and oppositional defiant disorders: Epidemiology, risk factors, and treatment* (pp. 33-59). New Jersey: Lawrence Erlbaum Associates.

American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders, 4th Edition, Text Revision (DSM-IV-TR). Washington, DC: American Psychiatric Association.

Anthony, E.J. (1970). The behavior disorders in children. In P. Mussen (Ed.), *Carmichael's Manual of Child Psychology*, Volume II, Third edition (pp. 667-732). New York: John Wiley & Sons.

Aneshensel, C. S., & Sucoff, C. A. (1996). The neighborhood context of adolescent mental health. *Journal of Health and Social Behavior, 37*, 293-210.

Aos, S., Barnoski, R., & Lieb, R. (1998). *Watching the Bottom Line: Cost-Effective Interventions for Reducing Crime in Washington.* Washington: Washington State Institute for Public Policy.

Atkin, Q., Whollery, M.L., Peterson, G., Burlingame, G.M., Wells, .G., & Nebeker, R. S. (1997). *Reliability and validity of the Youth Outcome Questionnaire*. Paper presented at annual meeting of the Western Psychological convention, Seattle, WA.

Baer, J. (1999). The effects of family structure and SES on family processes in early adolescence. *Journal of Adolescence*, *22*, 341-354.

Bardone, A. M., Moffitt, T., Caspi, A., & Dickson, N. (1996). Adult mental health and social outcomes of adolescent girls with depression and conduct disorder. *Development and psychopathology, 8*, 811-829.

Becker, D., Liddle, H. A. (2001). Family therapy with unmarried African American mothers and their adolescents. *Family Process*, *40*, 413-427.

Biederman, J., Mick, E., Faraone, S.V., & Burback, M. (2001). Patterns of remission and symptom decline in conduct disorder: A four-year propective study of an ADHD sample. *Journal of the American Academy of Child and Adolescent Psychiatry*, *40*, 209-298.

Blechman, E. (1982). Are children with one parent at psychological risk? A methodological review. *Journal of Marriage and Family Therapy*, *8*, 179-195.

Bloom, B.L. (1985). A factor analysis of self-report measures of family functioning. *Family Process*, *24*, 225-239.

Brody, G. H., Murry, V. M., Ge, X., Kim, S. Y., Simons, R. L., Gibbons, F. X., et al. (2003). Neighborhood disadvantages moderates associations of parenting and older sibling problem attitudes and behavior with conduct disorders in African American children. *Journal of Consulting and Clinical Psychology, 71*, 211-222.

Burlingame, G.M., Well, M.G., & Lambert,M.J. (1996). *Youth Outcome Questionnaire*. Maryland: American Professional Credentialing Services.

Burke, J.D., Loeber, R., & Lahey, B.B. (2003) Course and outcomes. In C. Essau (Ed.), *Conduct and oppositional defiant disorders: Epidemiology, risk factors, and treatment* (pp. 61-96). New Jersey: Lawrence Erlbaum Associates.

Chamberlain, P., & Rosicky, J.G. (1995). The effectiveness of family therapy in the treatment of adolescents with conduct disorders and delinquency. *Journal of Marital and Family Therapy*, *21*, 441-459.

Chilcoat, H.D., Breslau, N., & Anthony, J.C. (1996). Potential barriers to parent monitoring: Social disadvantage, marital status, and maternal psychiatric disorder. *Journal of the American Academy of Child & Adolescent Psychiatry, 35*, 1673-1682.

Cohen, P., Cohen, J., & Brook, J. (1993). An epidemiological study of disorder in late childhood and adolescence: II. Persistence of disorders. *Journal of Child Psychology and Psychiatry, 34*, 869-877.

Conners, C. K. (1989). *Manual for Conners Rating Scales*. North Tonawanda, NY: Multi-Health Systems.

Cuffe, S. P., Waller, J. L., Cuccarao, M. L., Pumariega, A. J., & Garrison, C. Z. (1995). Race and gender differences in the treatment of psychiatric disorders in young adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*, 1536-1543.

Davis, B., Sheeba, L., & Hops, H. (2002). Coercive family processes and adolescent depression. In J.B. Reid, G.R. Patterson, & J. Snyder (Eds.), *Antisocial behavior in children and adolescents: A developmental analysis and model for intervention* (pp. 173-192). Washington, D.C.: American Psychological Association.

Dornbusch, S.M., Carlsmith, J.M., Bushwall, S.J., Ritter, P.L., Leiderman, H., Hastorf, A.H., et al. (1985). Single parents, extended households, and the control of adolescents. *Child development*, 56, 326-341.

Essau, C. (2003). Epidemiology and comorbidity. In C. Essau (Ed.), *Conduct and oppositional defiant disorders: Epidemiology, risk factors, and treatment* (pp. 33-59). New Jersey: Lawrence Erlbaum Associates.

Fabrega, H.., Ulrich, R., & Mezzich, J. E. (1993). Do Caucasian and Black adolescents differ at psychiatric intake? *Journal of the American Academy of Child and Adolescent Psychiatry, 32*, 407-413.

Frick, P.J., Lahey, B.B., Hartgarden, S., & Hynd, G.W. (1989). Conduct problems in boys: Relations to maternal personality, martial satisfaction, and socioeconomic status. *Journal of Clinical Child Psychology, 18*, 114-120.

Frick, P.J., Lahey, B.B., Loeber, R., Stouthamer-Loeber, M., Christ, M. G., & Hanson, K. (1992).Familial risk factors to oppositional defiant disorder and conduct disorder: Parental psychopathology and maternal parenting. *Journal of Consulting and Clinical Psychology, 60,* 49-55.

Frick, P.J., O'Brien, B.S., Wootton, J.M., & McBurnett, K. (1994). Psychopathy and conduct problems in children. *Journal of Abnormal Psychology, 103,* 700-707.

Functional Family Therapy (2003). FFT: Functional Family Therapy. Retrieved May 30, 2004, from http://www.fftinc.com/index.php

Gabel, S. (1992). Behavioral problems in sons of incarcerated or otherwise absent fathers: The issue of separation. *Family Processes, 31,* 303-314.

Gerra, G. (1997). Neurotransmitter-neuroendocrine responses to aggression: Personality influences. In A. Raine, P. Brennan, D. Farrington, & S.A. Mednick (Eds.) *Biosocial basis of violence* (pp. 333-335). New York: Plenum.

Gordon, D.A., Graves, K., & Arbuthnot, J. (1995). The effect of functional family therapy for delinquents on adult criminal behavior. *Criminal Justice and Behavior, 22,* 60-73.

Gorman-Smith, D. (2003). The social ecology of community and neighborhood and risk for antisocial behavior. In C. Essau (Ed.), *Conduct and oppositional defiant disorders: Epidemiology, risk factors, and treatment* (pp. 117-136). New Jersey: Lawrence Erlbaum Associates.

Henggeler, S.W. & Sheidow, A.J. (2003). Conduct disorder and delinquency. *Journal of Marital and Family Therapy*, 29, 505-522.

Hetherington, E.M., & Clingempeel, W.G. (1992). Coping with marital transitions: A family systems perspective. *Monographs of the Society for Research in Child Development, 57* (2-3, Serial No.227).

Hogue, A., Liddle, H.A., Becker, D., Johnson-Leckrone, J. (2002). Family-based prevention counseling for high-risk young adolescents: Immediate outcomes. *Journal of Community Psychology, 30,* 1-22.

Jensen, P.S., & Cantwell, D.P. (1997). Comorbidity in ADHD: Implications for research, practice, and the DSM-IV. *Journal of the American Academy of Child and Adolescent Psychiatry, 36,* 1065-1079.

Juvenile Justice Bulletin (2000). Functional Family Therapy. Retrieved May 30, 2004, from http://www.ncjrs.org/html/ojjdp/jjbul2000.

Kazdin, A.E., Stolar, M.J., & Marcinao, P.L. (1995) Risk factors for dropping out of treatment among White and Black families. *Journal of Family Psychology, 9,* 402-417.

Keenan, K., Loeber, R., & Green, S. (1999). Conduct disorder in girls: A review of the literature. *Child Clinical and Family Psychology Review, 2,* 3-19.

Lahey, B.B., & Loeber, R. (1994). Framework for a developmental model of oppositional defiant disorder and conduct disorder. In D.K. Routh (Ed.), *Disruptive behavior disorders in childhood* (pp.139-180). New York: Plenum.

Lambert, M.J., & Burlingame, G.M. (1996). *The retest artifact and its implications for establishing dose-effect estimates of patient change following psychotherapy*. Paper presented at the annual meeting of the Society for Psychotherapy Research. Amelia Island, FL.

Lambert, M. J., Burlingame, G. M., Umphress, V. J., Hansen, N. B., Vermeersch, D., Clouse, G., & Yanchar, S. (1996). The reliability and validity of a new outcome questionnaire. *Clinical Psychology and Psychotherapy*, *3*, 249-258.

Lambert, M.J. & Finch, A.E. (1999). The Outcome Questionnaire. In M. Maruish (Ed.), *The Use of Psychological Testing for Treatment Planning and Outcome Assessment* (pp.831-869). New Jersey: Lawrence Erlbaum Associates.

Lindahl, K.M. (1998). Family process variables and children's disruptive behavior problems. *Journal of Family Psychology*, *12*, 420-436.

Lindblad-Goldberg, M. (1989). Successful minority single-parent families. In L. Combrinck-Graham (Ed.), *Children in Family Contexts: Perspectives on Treatment* (pp. 116-133). New York: Guilford Press.

Loeber, R., & Hay, D. (1997). Key issues in the development of aggression and violence from childhood to early adulthood. *Annual Review of Psychology*, *48*, 371-410.

Loeber, R., & Wikstrom, P. H. (1993). Individual pathways to crime in different types of neighborhoods. In D. P. Farrington, R. J. Sampson, & P. O. H. Wikstrom (Eds.), *Integrating individual and ecological aspects of crime* (pp. 169-204). Stockholm: National Council for Crime Prevention.

Loney, B.R, & Lima, E.N. (2003). Classification and assessment. In C. Essau (Ed.), *Conduct and oppositional defiant disorders: Epidemiology, risk factors, and treatment* (pp. 3-31). New Jersey: Lawrence Erlbaum Associates.

Marotz-Baden, R., et al. (1979). Family form or process. Reconsidering the deficit family model approach. *The Family Coordinator*, *30*, 5-14.

Mason, C.A., Cauce, A.M., Gonzalez, N., & Hiraga, Y. (1994). Adolescent problem behavior: The effect of peers and the moderating role of father absence and the mother-child relationship. *American Journal of Community Psychology, 22,* 723-743.

Massey, D. S., & Denton, N. A. (1993). *American apartheid: Segregation and the making of the underclass*. Cambridge, M. A.: Harvard University Press.

McBurnett, K., Lahey, B.B., Rathouz, P.J., & Loeber, R. (2000). Low salivary cortisol and persistent aggression in boys referred for disruptive behavior. *Archives for General Psychiatry*, *57*, 38-43.

McLaney, M.A., and Boca, F.D. (1994). A validation study of the Problem-Oriented Screening Instrument for Teenagers (POSIT). *Journal of Mental Health, 3,* 363-377.

McLoyd, V.C. (1990). The impact of economic hardship on Black families and children: Psychological distress, parenting, and socioemotional development. *Child Development*, *61*, 311-346.

Miller-Johnson, S., Lochman, J.E., Coie, J.D., Terry, R., & Hyman, C. (1998). Comorbidity of conduct disorder and depressive problems in the sixth grade: Substance use outcomes across adolescence. *Journal of Abnormal Child Psychology*, *26*, 221-232.

Moeller, T. G. (2001). *Youth aggression and violence: A psychological approach*. New Jersey: Lawrence Erlbaum Associates.

Moffitt, T. E. (1993). Adolescence-limited and life-course-persistent antisocial behavior: a developmental taxonomy. *Psychological Review, 100,* 674-101.

Olson, S.L., Bates, J.E., Sandy, J.M., & Lanthier, R. (2000). Early developmental precursors of antisocial behavior in middle childhood and adolescence. *Journal of Abnormal Child Psychology, 28*, 119-133.

Olweus, D. (1979). Stability of aggressive reaction patterns in males: A review. *Psychological Bulletin, 80*, 852-875.

Patterson, G.R. (2002). The early development of coercive family process. In J.B. Reid, G.R. Patterson, & J. Snyder (Eds.), *Antisocial behavior in children and adolescents: A developmental analysis and model for intervention* (pp. 25-44). Washington, D.C.: American Psychological Association.

Patterson, G.R., DeBaryshe, B.D., & Ramsey, E. (1989). A developmental perspective on antisocial behavior. *American Psychologist, 44*, 329-335.

Patterson, G.R., & Stouthamer-Loeber, M. (1984). The correlation of family management practices and delinquency. *Child Development, 55*, 1299-1307.

Putnam, R. (2000). *Bowling alone: The collapse and revival of the American community*. New York: Simon & Schuster.

Pihl, R.O., Vant, J, & Assad, J. (2003). Neuropsychological and neuroendocrine factors. In C. Essau (Ed.), *Conduct and oppositional defiant disorders: Epidemiology, risk factors, and treatment* (pp. 163-189). New Jersey: Lawrence Erlbaum Associates.

Plybon, L.E. & Kliewer, W. (2001). Neighborhood types and antisocial behavior in urban school-age children: Tests of direct, mediated, and moderating effects. *Journal of Child and Family Studies, 10*, 419-437.

Prinz, R.J. & Jones, T.L. (2003). Family-based interventions. In C. Essau (Ed.), *Conduct and oppositional defiant disorders: Epidemiology, risk factors, and treatment* (pp. 279-298). New Jersey: Lawrence Erlbaum Associates.

Rahdert, E.R. (1991). The adolescent assessment/referral system manual. (DHHS Publication No. ADM91-1735), Rockville, MD, National Institute of Drug Abuse.

Robbins, M.S., Turner, C.W., Alexander, J.F., & Perez, G. A. (2003). Alliance and dropout for adolescents with behavior problems: Individual and systemic effects. *Journal of Family Psychology, 17*, 62-76.

Sexton, T.L., & Alexander, J.F. (2005). Functional Family Therapy. *Office of Juvenile Justice Programs and Delinquency Prevention.* U.S. Department of Justice.

Seydlitz, R., & Jenkins, P. (1998). The influence of families, friends, schools, and community on delinquent behavior. In T. P. Gullotta, G. R. Adams, & R. Montemayor (Eds.), *Delinquent violent youth: Theory and interventions* (pp. 53-97). London: Sage Publications.

Sholevar, G. P., & Sholevar, E. H. (1995). Overview. In G. P. Sholevar (Ed.), *Conduct disorder in children and adolescents* (pp. 3-26). Washington, DC: American Psychiatric Press.

Skinner, H.A., Steinhauer, P.D., and Santa-Barbara, J. (1995). *Family Assessment Measure - III Manual*. Toronto, Canada: Multi Health Systems.

Skinner, H.A., Steinhauer, P., & Sitarenios, G. (2000). Family assessment measure (FAM) and process model of family functioning. *Journal of Family Therapy, 22*, 190-210.

Steinberg, L. (1986). Single parents, step-parents, and the susceptibility to of adolescents to antisocial peer pressure. *Child Development, 58,* 269-439.

Van Kammen, W.B., & Loeber, R. (1994). Are fluctuations in delinquent activities related to the onset and offset in juvenile illegal drug use and drug dealing? *Journal of Drug Issues, 24*, 9-24.