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The Impact of Family Stressors on the Social Development of Adolescents Admitted to a Residential Treatment Facility

Cynthia Harr
Baylor University, Cynthia_Harr@baylor.edu

Tancy Horn-Johnson
Waco Center for Youth, tancy.johnson@dshs.state.tx.us

Nathaniel Williams
University of Tennessee, nwilli39@utk.edu

Lacey DeJager
Methodist Children's Home, ldejager@mchwaco.org

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Residential treatment is often considered to be a last resort placement for high risk children and adolescent populations who present multiple difficulties in their homes, schools, and communities (Frensch & Cameron, 2002). Repeated treatment and placement difficulties and problems have made understanding the characteristics of this vulnerable population an ongoing concern and focus of research from the 1970s to the present. Children and adolescents placed in residential settings face a broad range of family and mental health risks such as maltreatment, neglect, disturbed family interactions, and underprivileged environments that have contributed to poor social competency (Berrick, Courtney, & Barth, 1993; Handwerk et.al., 2006; Zimmerman & Kaminsky, 1998; Maluccio, 1974; Millward, Kennedy, Towlson, & Minnis, 2006; Wurtele, Wilson, & Prentice-Dunn, 1983). One of the most recent comprehensive studies, the Odyssey Project (N =1,321) (Child Welfare League of America [CWLA], 2005), revealed that children and adolescents in residential care often have multiple ongoing mental health, family-related, and behavioral problems that not only precede placement but also continue during and after residential care. Regarding family functioning and parenting, the study found high levels of sexual (38%) and physical abuse (57%), domestic violence (34%), maternal drug (50%) and alcohol dependency (38%), maternal mental illness (30%), and psychiatric hospitalizations (27%) (CWLA, 2005).

In the past, the family dynamic has been just one of several identified treatment issues for youth in residential care. At times, clinicians have shown ambivalence about the involvement of parents in the treatment and development of care plans of children/adolescents with mental and behavioral disorders. Historically, residential care has generally provided parental surrogacy. This was largely due to the perception that parents were the cause of the child's mental health and social development problems. As a result, it was often determined that family members should have limited contact and little involvement in the development of a care plan. However, the American Association of Children's Residential Centers, the longest-standing national association that focuses on the needs of children in residential care and their families, recognizes the necessity of actively involving the family in the intervention process and currently emphasizes the development of programs that focus on family-driven care for youth that builds on family strengths (American Association of Children's Residential Centers, 2009).

Review of the Literature

Acquiring and practicing appropriate social skills are primary developmental tasks during the adolescent years. As adolescents begin to explore and shape their individual identities and form meaningful relationships, they do so in the context of their family system and environment. Changes such as entering puberty, encountering demanding academic and social responsibilities, and facing psychological challenges related to self-image and self-confidence often occur simultaneously. Familial changes such as divorce or remarriage, new siblings, and communication difficulties can magnify the challenges that adolescents face during these years. There are indications that adolescents' positive social and moral development might be hindered when multiple changes and challenges occur during this period of transition. In order to better understand adolescent mental health and social development; individual, familial, and social context processes should be an integrated focus of study (Carlo, Fabes, Laible, & Kupanoff, 1999; Steinberg & Morris, 2001).

Social Development Theory

The study of adolescent development has focused on describing, explaining, and predicting behavior during this phase of the life cycle. Often the emphasis has been on avoiding problems rather than developing competencies within the family that will prepare the adolescent for adulthood. While there have been attempts to develop a comprehensive theory of normative adolescent development, no specific theoretical perspective has met with widespread acceptance, and theories that were once popular, such as those of Freud, Erickson, and Piaget, have declined in their influence. Often the study of adolescence has focused on a collection of several "mini-theories" that are designed to explain small portions of the larger puzzle. While there is extensive information on adolescent problem behavior based on solid research, there is a need for additional research on normative psychosocial, cognitive, and biological development during adolescence that builds on recent findings and takes advantage of innovative studies of the impact of biological, familial, and environmental factors on behavior (Steinberg & Morris, 2001).

In recent years, understanding about the underlying characteristics of adolescents' life contexts and coping strategies and about stress and coping processes has increased as a result of the emergence of a family systems orientation combined with a focus on the social context of development. Life stressors and social resources, especially as related to

the family of the adolescent, are recognized as two important contextual and socialization factors that are associated with adolescent health and well-being. These factors not only influence adolescents' coping responses and impact adolescent mental health; they also shape the process of development and maturation among adolescents. Ongoing research needs to examine how adolescents and environments alter each other, the transactions that underlie this interactive process, and under which conditions successful crisis resolution leads to new coping skills in the adolescent and provides an opportunity for continued maturation. Using a conceptual model based on a stress and coping framework, researchers can acquire an in-depth understanding of how stress and coping processes occur in various life domains and of how they influence health, socialization, and well-being among adolescents and their families (Guerra, Huesmann, & Zelli, 1993; Moos, 2002). Such knowledge can assist in developing more effective intervention strategies that focus on building individual and family strengths.

The Role of Family in Social Development
While there has been an increased interest in studying adolescent development in the family context, the role of the family on early adolescents' positive social and moral development requires further exploration. Adolescent development is impacted by a combination of genetic, familial, and non-familial influences, and the socialization process is complex and multifactorial. Family management practices such as rules and supervision along with peer norms represent the dominant external constraints for adolescents and may increase positive social opportunities and decrease antisocial opportunities. Several recent studies of adolescents and their parents found that authoritative parenting is associated with a wide range of psychological and social advantages in adolescence. Conversely, adolescents from warm, supportive families were found to be more socially competent. Prosocial behaviors are shown to be fostered by supportive parenting, combined with discipline techniques (Carlo et al., 1999; Choi, Harachi, Gillmore, & Catalano, 2005; Steinberg, & Morris, 2001). To improve the treatment success of high-risk adolescents in residential treatment, it is critical that professional staff assist parents in building family strengths by improving their parenting skills and support them in their ongoing attempts to provide this type of healthy guidance for their children after discharge.

The substantial impact of family communication patterns, support, conflict, and stressors in the development of mental health issues in the lives of adolescents is well documented. While ongoing and severe family

conflict and the absence of family cohesion and warmth can negatively impact psychosocial functioning in adolescents, a reduction in family conflict may reduce the risk for depression. Family violence increases the risk of conduct problems and depression (Gavazzi, Bostic, Lim, & Yarcheck, 2008; Reeb, Conger, & Wu, 2010). The findings from Henderson, Dakof, Schwartz, and Liddle (2006) are consistent with integrative models of adolescent risk factors and suggest that family functioning and self-concept work in conjunction with one another to predict the severity of adolescent externalizing problems. Results indicated that family functioning partially mediated the relationship between self-concept and externalizing problems. This suggests that poor self-concept is related to adolescent perceptions of maladaptive family functioning, which in turn is related to more severe externalizing behaviors. The study supports interventions for clinically referred adolescents that target both individual adolescents and their families in order to improve the healthy functioning of the family system.

Few studies have been conducted that focus on the impact of families/parents on socialization and emotion regulation in clinically diagnosed parents and/or adolescents (Morris, Silk, Steinberg, Myers, & Robinson, 2007). An essential aspect of social development is learning to manage emotions in a socially appropriate manner even when responding to stressful or emotional situations. Although adolescents become increasingly focused on social interaction with their peers, parents continue to play an active and important role in the socialization of adolescents' emotions, and the family's emotional climate impacts their well-being. Parents model and mentor their children in the expression and management of emotions, whether positively or negatively. Adolescents whose parents express more negative emotions tend to have more internalizing and externalizing symptoms than those whose parents express fewer negative emotions. Youth who receive support from their parents about their negative emotional experiences are better able to discuss negative feelings and talk about strategies for managing them. They are less likely to experience the anxiety and depression that leads to internalizing problems (Stocker, Richmond, Rhoades, & Kiang, 2007).

Morris et al. (2007) suggested that families, specifically parents, influence emotion regulation (ER) in their children through: 1) observational learning, modeling and social referencing; 2) parenting practices specifically related to emotion and emotion management affect; and 3) the emotional climate of the family via parenting style, the attachment relationship, family expressiveness, and the marital relationship. Interactive family processes and dynamics create an

emotional climate that affects the development of healthy ER. Marital relationships can positively or negatively impact a child's emotional security with marital conflict contributing to adjustment difficulties in adolescents.

A broad range of family risk factors have been linked to increased adolescent drug abuse and antisocial behavior. The lack of family support and a negative relationship with parents is linked to the co-occurrence of depression and substance use in adolescence. Stressful life events are positively associated to drug use, delinquency, and negative affect. Adolescents with a lower level of perceived family support and more stressful life events exhibit more emotional behavioral problems. However, perceived social support from family is negatively associated with adolescent drug use, delinquency, and negative affect and is positively associated with academic orientation. A dual focus on parental and family support as well as a reduction of stressful events would be beneficial when addressing adolescent behavioral and emotional problems (Herrenkohl, Kosterman, Hawkins, & Mason, 2009; Windle & Mason, 2004).

Focus of the Research

While there is extensive research in the area of family influence on adolescent development and socialization, there is a need for more focused studies that explore the role of family in the social development of high-risk adolescents who require residential care. This study investigates the impact of family characteristics and stressors (i.e., family risk factors that negatively impact the adolescent) on the social development of adolescents at the time of their intake evaluation at the Waco Center for Youth (WCY), a long-term mental health residential treatment program. WCY is the only long-term residential care agency serving emotionally and behaviorally challenged adolescents and their families in the state of Texas that functions under the authority of the Texas Department of State Health Services. Youths from over 200 counties between the ages of 13 to 17.9 are provided services that include: education, psychiatric treatment, medical services, clinical services, nursing services, psychological and habilitation services, after-care, staff supervision, protection of rights, chaplaincy services, and residential housing (Texas Department of State Health Services, 2010). It was predicted that adolescents in this environment who experience a higher level of family stress would exhibit a higher number of negative behaviors associated with poor social development. Specifically, intake data were evaluated to address the following questions:

1. What are the prevalence and types of problem behaviors exhibited by the adolescents upon entry to the residential facility?

2. What impact do family stressors have on the adolescents' level of social development at the time of admission?

Method

This study is a non-experimental, quantitative design using secondary archival data analysis. The research proposal was reviewed by the Baylor University IRB and found exempt.

Sample

Social assessment forms ($N = 457$) found in case records of clients admitted to the Waco Center for Youth from the dates of January 1, 2006, to December 30, 2008, were used in the study. There was no involvement of human subjects in the study. In order to be admitted to WCY, the adolescent must have at least one Axis I diagnosis. They must not be currently suicidal or homicidal, and they may not be admitted if they are on official probation. They are currently residents in the state of Texas and range in age from 13 to 17.9 at the time of admission.

The majority of the clients at WCY have been referred from school programs, individual counselors, outpatient treatment programs, or psychiatric hospitals. Families with children and adolescents needing services to address emotional and behavioral problems often seek initial services through their Local Mental Health Authority (LMHA). Adolescents may have problems at home and/or parents may receive reports from their child's school identifying behavioral and/or emotional concerns that may lead to a referral to the LMHA. Families may also seek services due to their child having legal involvement with the county juvenile justice center. The goal in service delivery is to provide the least restrictive environment, so outpatient therapies are generally initiated first. However, if an adolescent and family continue to have compounding problems, the LMHA may refer the family to the county's Community Resource Coordination Group (CRCG), which identifies clients in need of higher level-of-care services. This group reviews clients who are not responding to outpatient treatments/therapies and who may be in need of more restrictive environments. Participants in the CRCG include members of the community: the LMHA, juvenile probation officers, Independent School District (ISD) personnel, therapists, the client/family, and others in the community who have knowledge of a specific client/family. This group

then may decide to refer the client to WCY for residential treatment. After a client is referred from their county's CRCG, the WCY staff provides ongoing client treatment progress reports to the LMHA. When the client is ready for discharge, the WCY professionals arrange for a joint meeting with the CRCG to provide an update about the client's treatment response, current diagnoses, and prescribed psychotropic medications. Follow-up treatment recommendations are made that often include individual and family therapy along with medication management.

Data Collection
The data for this study at Waco Center for Youth were obtained from client medical charts covering the period of January 1, 2006, to December 31, 2008. Upon entry to the program, all youth are systematically evaluated using a standardized assessment process that results in completion of a social assessment form. This comprehensive social assessment form is used by all state mental health agencies in Texas and documents the history, family structure, and development of the client.

Primary sources of information are records submitted to the WCY admissions department, including the referral form typically completed by the Legally Authorized Representative (LAR)/parent. This form indicates current behavioral and emotional issues precipitating the present admission, documents dates and agency locations of prior outpatient and inpatient treatments/therapies, provides educational and academic information, and lists past and present legal involvement. Additional documents required before admission include a psychological evaluation done within the last year and IQ testing (e.g., WISC-R, WIAT). Copies of social assessments, psychiatric evaluations, and psychological testing from prior treatment facilities, including Texas State Hospitals, are also obtained and integrated into the current WCY admission documentation in order to create a chronological treatment history of the client. During an intake interview with the client and family, the primary therapist and case manager clarify any discrepancies, complete "gaps" in the client's history, and add information that will aid in formulating an accurate client/family history.

All the data obtained from admission forms, other documents submitted, and intake interviews are integrated and recorded onto the social assessment form. The case manager then inputs those data into an electronic medical record through the Clinician Work Station (CSW). At that time, the client is arbitrarily assigned a Medical Patient Index (MPI) number. To extract the data for this study, an inquiry was established that electronically extracted specific data elements from client records using

the non-identifiable MPI numbers and put them on an Active Directory Site and Service (ADSS) shared live table. The Crystal Reporting software program, a function of the CWS, was used to extrapolate individual and multiple elements based on the parameters of the study. Human subjects were not involved in the data collection, and no identifying information was included in the reporting of the research results.

For the purposes of this study, the archival data from the social assessment were used to determine the history, family structure, and social development of the client. There are a variety of boxes that are checked on the social assessment form when applicable to an individual client and/or their family. For the purposes of this study, family stressors are defined as family risk factors that negatively impact the adolescent. Family stress is specifically defined as the occurrence in the family of the following data elements in the assessment form: divorce, family violence, substance/alcohol use by parent, absence of sensitivity/understanding to each other, difficulty expressing feelings, family dynamic, formal/reserved, cynical/ hopeless/ pessimistic, enmeshed, frequently hostile with times of pleasure, overtly hostile, unable to express feelings, and history of chemical abuse in parent. A family stress score (i.e., level of family stress) was determined by the sum of the number of items checked on the social assessment. The more items that are checked, the higher the level of family stress.

Positive social development was defined as an absence of occurrence in the life of the adolescent of the following data elements in the assessment form: academic/school problems, cruelty to animals, fought with peers, weapons used in fights, few relationships with peers, gang member/association, juvenile legal involvement, substance use, withdrawn, fire-setting, problems with authority figures, and violence/trauma, self-abuse, suicide attempts, and aggression. A social development score (i.e., level of social development) was determined by the sum of the number of items checked on the social assessment. The fewer items that are checked, the higher the level of positive social development.

Results

The sample consisted of 258 (57%) males and 199 (43%) females with a mean age of 15.27 (SD = 1.30) years (see Table 1). Most participants were white/Caucasian (81%, n = 370) or African-American (16%, n = 72); 3% identified their race as "other." The distribution of family stressors was normal with a mean of 3.38 (SD = 1.64, min = 0, max = 7) out of a possible 12. The social development scores were also normally

distributed with a mean of 5.12 (SD = 1.64, min = 1, max = 11). Youth did not differ on the number of family stressors by gender or race; however, older youth tended to have fewer family stressors than younger youth (r = -.15, p = .002). Males exhibited greater social impairment (M = 5.35, SD = 1.80) than females (M = 4.84, SD = 1.50), (t(446) = 3.19, p = .002). There were no differences in social development scores by age or race.

Table 1

Demographics of the sample

Age	Male		Female		Total	
	N	%	N	%	N	%
13	36	14.0	11	5.6	47	10.3
14	57	22.1	37	18.7	94	20.6
15	59	22.9	43	21.7	102	22.3
16	65	25.2	61	30.8	126	27.6
17	37	14.3	41	20.7	78	17.1
18	4	1.6	5	2.5	9	2.0
Total	258	100.0	198	100.0	456	100.0

As a precursor to our main analyses, we first examined the prevalence of problem behaviors exhibited by the youth upon entry to the residential facility (see Table 2). Nearly all youth exhibited problems with authority and poor academic performance. Legal problems, substance abuse, self-harm behaviors, and a history of suicide attempts were also common. The prevalence of fire-setting and cruelty to animals in this population far exceeded prevalence estimates of these behaviors in the general population. It is clear that the youth entering the facility were experiencing severe impairment in their social development across several domains.

Table 2

Rates (%) of problem behavior among youth entering residential treatment

Problem behavior	%
Aggression	89.3
Problems with authority	88.8
Academic problems	87.5
Fight with peers	51.6
Juvenile/ legal problems	51.0
Self-harm	50.8
Substance abuse	39.2
Suicide attempt	31.3
Cruelty to animals	13.8
Fire-setting	13.6

Note: N = 457

For our main analysis, we used hierarchical ordinary least squares regression to estimate the impact of family stressors on youth's social development after controlling for gender, age, and race (see Table 3). Given the lack of racial diversity in the sample, we dichotomized the race variable for this analysis. Covariates were entered in block one of the regression, and the independent variable, family stressors, was entered in block two. Results indicated that youth with more family stressors exhibited significantly greater impairment in their social development (β = .19, p = .000) accounting for 4% of the variance. The only other significant predictor in the model was gender. Males appeared to have more impairment in social development as shown by significantly higher social development scores than females (β = .15, p = .002). The overall model was a good fit for the data ($F(4) = 7.02$, p = .000) and accounted for 6% of the variance in outcome. These findings support our primary hypothesis and indicate youth entering residential treatment with more family stressors exhibited greater impairment in their social development.

Table 3

Hierarchical regression examining the impact of family stressors on youths' social development

Predictors	B (SE)	β	p
Model 1[a]			
Intercept	5.01 (.97)		
Gender	.52 (.16)	.15	.001
Age	-.01 (.06)	-.01	.844
Race	.09 (.20)	.02	.664
Model 2[b]			
Intercept	3.81 (1.00)		
Gender	.50 (.16)	.15	.002
Age	.02 (.06)	.02	.703
Race	.14 (.20)	.03	.502
Family Stressors	.20 (.05)	.19	.000

Note: N = 445

[a] $R = .16$, $R^2 = .02$, $F(3, 444) = 3.68$, $p = .012$. [b] $R = .25$, $\Delta R^2 = .04$, $F(1, 440) = 16.66$, $p = .000$.

In order to obtain a clearly defined picture of the impact of family stressors on specific problem behaviors, we ran a series of hierarchical logistic regression models examining the relationships between the family stressor score and each problem behavior as a dichotomous (yes/no) outcome controlling for gender, age, and race. Table 4 presents findings from these models. Results revealed that family stress exhibited a significant impact on substance abuse but failed to reach statistical significance on the other outcomes. Given the greater impairment of males, it was not surprising that males were more like to exhibit legal problems, fire-setting, cruelty to animals, and aggression toward others; females were more likely to harm themselves or attempt suicide. Older youth were more likely to have substance abuse problems or a history of

suicide attempts, whereas younger youth were more likely to have been cruel to animals or to have fought with peers. Ethnic minority youth were more likely to have legal problems, whereas whites were more likely to have a history of self-harm. Overall, gender was the most consistent predictor of outcome among the disaggregated problem behavior variables.

Table 4

Impact of family stressors and demographic variables on problem behaviors

| | Odds ratios | | | |
Problem (DV)	Male gender	Age	Ethnic minority	# of family stressors
Substance abuse	.94	1.42**	1.34	1.32**
Juvenile/ legal involvement	1.56*	1.09	2.06**	1.12
Problems with authority	1.34	.83	1.61	1.14
Academic problems	1.45	.97	1.16	1.01
Aggression	3.12**	.82	1.52	1.09
Fight with peers	1.09	.82**	.79	.98
Cruelty to animals	2.16*	.78*	.53	.88
Fire-setting	3.53**	.88	1.21	1.15
Self-harm	.24**	1.02	.56*	.99
Suicide attempt	.40**	1.29**	.91	.93

Note: N = 445. Odds ratios derived from hierarchical logistic regression models. Demographic variables were entered in block 1 followed by # of family stressors in block 2.

*p < .05

**p < .01

Discussion

In evaluating the broad characteristics of children and adolescents entering a state mental health residential setting, the findings replicate previous studies that indicate that this is an extremely vulnerable population who present with significant mental health, behavioral, and familial risks (Trout et al., 2008). As shown in the results, the youth entering the facility were experiencing severe impairment in their social development across several domains. With the realization that these clients are placed in a long-term mental health residential setting due to ongoing issues unresolved in outpatient treatment, it is not surprising that the sample used in this study presents with significant behavioral challenges.

However, in addition to the above confirmation, the results from this study strongly suggest that family stressors are a critical factor in the healthy social development of adolescents in a residential treatment setting. The statistical analyses showed that increasing numbers of family stressors were associated with greater difficulties in social development. This research found that the combination of multiple stressors within the family over an extended period of time has a significant negative impact on the social development of these adolescents. It is possible that adolescents living in family situations that are lacking in stability and social support are forced to use emotional and physical resources that normally would be directed toward adolescent developmental life stage tasks to cope with stressful life situations. They may be constantly dealing with issues such as crisis management and personal loss. Many of them are forced them to expend energy on basic survival in order to handle the onslaught of the many daily challenges they encounter. These adolescents may also be in a position of attempting to learn and apply emotion regulation without having the benefit of positive parental modeling and mentoring in the home. The gender differences found in the study reflect a tendency for males to exhibit externalizing symptoms while females may exhibit more internalizing symptoms. This finding along with the relationship of substance abuse to social development should continue to be explored further in future research.

Findings from this study underscore the heterogeneity of problems confronted by youths, especially those in long-term residential care, and highlight the need for a continuum of services provided that includes both client-based and family-based approaches. Adolescents undergo multiple physical and psychological changes in the span of a few years. Supportive community mental health services should be made available early on when difficulties with family functioning or social development are

first recognized (Aviles, Anderson, & Davila, 2006). Rather than simply treating symptoms as separate foci, integrative treatments that focus on dealing with multiple risk factors should be developed to provide holistic intervention that focuses on recognizing and building on family strengths.

Implications for Practice, Policy, and Research
The results suggest that effective therapeutic interventions with adolescents should include both parent-focused support programs and child-focused cognitive behavioral programs that coordinate parent and child treatment planning. Parents may need to develop additional social and problem-solving skills themselves and learn effective parenting practices in order to create a supportive family environment with fewer family stressors. Due to this concern, WCY has implemented an approach that combines cognitive behavioral therapy with multisystemic family therapy. Therapists use a three-pronged approach: 1) providing education on diagnoses to both the client and family; 2) teaching problem solving skills to the client and family; and 3) aiding the client and family to construct positive problem-solving strategies to potential negative situations based on past experiences.

In recent years, there has been a change in the approach to working with the families of children and adolescents in mental health residential care involving the use of family decision making, parent-professional partnerships, and wraparound care. Residential centers that have begun to use practice approaches that include parents and families in the care of the youth have generally seen improved outcomes for both the child and their family. The emphasis on family-driven care implies that families will have a primary role in decision making concerning the treatment of their children. There are many reasons for residential facilities to focus on family-driven care. Children generally love and value their parents and desire to heal any disconnection from their families. The treatment issues often have genetic/biological components and environmental aspects that require the participation of parents to address. Family members often provide important information and feedback. Engaging the family sets the stage for shared responsibility and opportunity for healing of past hurts and losses. It is important to understand the child/adolescent in the context of the family and community environment. When the family has its strengths recognized and valued, family members tend to more readily assume their responsibility and role in the healing process. A partnership that involves both parents and professionals tend to result in shorter lengths of stay and more positive outcomes of care (American Association of Children's Residential Centers, 2009).

Family-driven care includes the involvement of parents in treatment planning meetings and allows them to have an active voice in the decision-making process. Wraparound teams that work with families while their child is in the residential program and then follow them back into the home and community provide consistency that assists in maintaining treatment goals and progress made while in the residential setting. The key to family involvement and commitment is the recognition and validation of the strengths of both the child and the parents. Involving parents in advocacy, program development, and policy-making encourages collaboration and partnerships that can lead to positive changes in resources and services (American Association of Children's Residential Centers, 2009). In recent years, WCY has recognized these philosophical changes and intervention strategies. Family involvement is encouraged through family therapy and parent/guardian involvement in case planning and intervention strategy.

Since family stressors were prominent in contributing to the social impairments of these adolescents, when they leave residential care it is especially crucial that ongoing aftercare services focusing on these family issues are provided for both the child and the parents. With vulnerable families who require a complex intervention plan, the most effective approach may be multidisciplinary. A case manager who coordinates the services of team specialists on behalf of the family can ensure that complex problems are assessed and addressed holistically within an integrated, comprehensive plan (Carrilio, 2001). At WCY, discharge plans for each client and family include aftercare services that build and strengthen coping skills learned during residential treatment. The agency works with the Community Resource Coordination Group to link the client and the family back into the community with the appropriate aftercare services. These may include ongoing therapy focused on relapse prevention, family therapy, and medication management as well as appropriate educational placement.

At times, the intervention plan may necessitate involving extended family who will provide ongoing support for the adolescent. If a situation arises that requires removal from the home, kinship placements should be considered. Adolescents in kinship placements tend to exhibit fewer adjustment problems and have more stability and permanence than those in foster care (Raghunandan & Leschied, 2010). However, the reality is that by the time a child is placed in residential care, extended family resources may have been exhausted. When residential aftercare is required, the use of house parents rather than child care workers is preferable in order to create a family-like atmosphere; such an

atmosphere provides closer relationships as well as the opportunity for modeling of social skills by the staff (Jones, 2009). During this transition level of supervision and support, adolescents are more likely to solidify gains made in more structured, intensive care residential settings prior to returning to their community.

The recognition that there are multiple risk factors that impact the social development of adolescents calls for greater collaboration and coordination between schools, the juvenile justice system, child service agencies, and mental health providers. There must be improved communication and a unified approach in order to provide the necessary services and resources throughout these various systems to address prevention, early detection and intervention, and ongoing treatment support of chronic problems. Ideally, human service agencies and community services should be alternative support systems for adolescents during these critical developmental years. Research has shown that community involvement for at-risk adolescents often has protective effects on adolescent mental health (Amodeo & Collins, 2007; Hull, Kilbourne, Reece, & Husaini, 2008; O'Brien, Langhinrichsen-Rohling, & Shelley-Tremblay, 2007). In order to carry out the services needed for a holistic, family strengths approach to intervention, there must be major policy changes in governing systems on the agency, community, state, and federal levels to ensure the provision of necessary resources and the funding of preventative and intervention programs.

Limitations

The primary limitation of the study is that the data were obtained from one mental health residential setting in Texas. Replication of the study at other state and private residential settings would support the validity of the findings. The intake procedure may also be considered a potential limitation to the study due to the reliance on previous records, self-report, and parental or guardian report in the completion of the assessment form. Although most admissions interviews include interviewing the client and the family separately, there are times when only a joint session is conducted. This may influence the information the client and family members are willing to share. Perceived and actual behavior may also be viewed and reported differently by various clients and their families. In addition, the completion of certain subjective items on the form may be open to case manager interpretation of the information provided by the client and family during the interview.

The lack of racial diversity in the sample is also notable since the study was conducted at a state agency that would be expected to have a

client base more reflective of the general population. For example, in 2009, Texas public schools, the white (40.7%) and Hispanic (40.9%) 12th-grade student population was almost equal, whereas the WCY sample had a large majority (81%) of white adolescents (Texas Education Agency, 2009). This may be due to reluctance on the part of Hispanic families to place their children in long-term care. It may possibly be a reflection of the referral process to WCY by other private and state agencies that often determine the disposition of an adolescent's case. This is an area that requires further investigation.

Conclusion

This study supports the theory that there are reciprocal linkages between parental and youth behavior and that parental support or lack thereof has a significant impact on adolescents during this developmental stage prone to life crises and transitions. There is a continued need for a clearer understanding of how the mutual linkages between parental and youth behavior affect the personal resources and coping skills that facilitate better youth adjustment (Moos, 2002). As research continues to provide better understanding of the influences of family systems on the multiple problem behaviors of adolescents, effective evidence-based prevention and treatment strategies can be developed that have greater potential to bring about positive, long-term change. Future research should also address program evaluation of adolescent outpatient treatment, residential care, and family support programs in order to better understand how these different types of programs can be best utilized with varying populations.

In conclusion, during this stage of life when there are increasing opportunities for socialization, adolescents should be developing their ability to deal with more complex stressors using more advanced coping and emotional regulation skills. Family stressors such as increased conflict between parents and teens may negatively impact the positive influence parents potentially have during this formative period when many critical life choices are made. This study builds upon the literature that emphasizes the necessity for holistic treatment interventions for adolescents that address issues within the family environment as well as individual concerns. While it must be acknowledged that in some cases family involvement may be limited due to agency policies or family willingness, practitioners should strive to positively impact the family system at all treatment levels. Much more attention should be given to assessing family strengths, using interventions that focus on increasing family strengths, and developing family-based systems of care that include wraparound interventions both before and after residential treatment.

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