

THE STRENGTH OF YOUTH VOICE: UNDERSTANDING THE INFLUENCE OF YOUTH
STRENGTH-PERSPECTIVES ON DESIRED OUTCOMES FOR YOUTH ENROLLED IN
SYSTEM-OF-CARE SERVICES

BY

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THESIS

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ABSTRACT

Recent efforts to improve mental health services for young people have been accompanied by rhetoric around the importance of including youth and families in service planning and delivery, and attending to youth strengths in addition to pathology. However, within this treatment context, both in research and practice, many continue to prioritize adult perspectives of youth strengths and difficulties, and, several questions remain about how and why strengths matter for youth. The present study examines the relative influence of youth and caregiver strength assessments across 6 strength domains to predict 6 emotional and behavioral outcomes. Data were gathered from 49 youth and caregiver dyads that were interviewed upon enrollment in system-of-care services, and 6 months posterior. Hierarchical linear regression analyses provide support for the influence of youth strength assessments over and above caregiver strength assessments for predicting delinquency, school attendance, and activity involvement 6 months after enrollment in services. These results promote the value of youth strength perspectives as important predictors of desired outcomes over time, providing a platform for including youth voice in mental health service planning and delivery. Furthermore, exploratory analyses identified significant associations between particular strength domains and specific outcomes, highlighting the value of understanding strengths in a domain specific way.

*Dedicated in loving memory of my mother, Mary Sacre Trawick,
for her endless love and support.*

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CHAPTER 1

INTRODUCTION

Within the realm of youth services, there is growing recognition of the importance of assessing and utilizing individuals' strengths to inform service delivery (Rapp, Saleebey, & Sullivan, 2006; Weick, Rapp, Sullivan, & Kisthardt, 1989). However, youth's own perceptions of their strengths are seldom prioritized in research and practice. Researchers and practitioners across disciplines and human service sectors are increasingly attending to peoples' strengths in addition to problems and pathology. When strengths are considered, researchers and service providers rely predominantly on caregiver, teacher, and/or clinician assessments of youth's strengths and competencies (e.g. (Barksdale, Azur, & Daniels, 2010; Lyons, Uziel-Miller, Reyes, & Sokol, 2000; Oswald, Cohen, Best, Jenson, & Lyons, 2001). Although perspectives from multiple informants help provide a broad understanding of youth behavior and functioning across different contexts, there is some concern that drawing only on adult perspectives may not provide an accurate reflection of youth's strengths (Barksdale et al., 2010). Moreover, a person's own understanding of his or her strengths and shortcomings influences the development of their self-concept, which has implications for well-being, motivation, and other emotional and behavioral outcomes (Oyserman, Gant, & Ager, 1995; Oyserman & Destin, 2010).

Studies that have included youth self-assessments of strengths and difficulties have focused primarily on measuring cross informant agreement (Achenbach, McConaughy, & Howell, 1987; K. A. Friedman, Leone, & Friedman, 1999; Synhorst, Buckley, Reid, Epstein, & Ryser, 2005) and evaluating youth programs (Proctor et al., 2011) for nationally representative student samples. To date, little is known about the relative influence that youth and caregiver strength assessments have on outcomes for youth with serious mental health challenges. This study is the first to examine the unique contribution of youths' own assessments of their strengths as they relate to emotional and behavioral outcomes for a sample of youth with chronic and severe mental health challenges.

Paradigm Shift across Human Services

Bourgeoning support for attending to individual strengths, among problems and pathology, in human service delivery has influenced a paradigm shift in service orientation,

carving a new path for research and action (Cox, 2006; Rapp et al., 2006; Saleebey, 1996). In contrast to traditional problem centered approaches that focus on ameliorating symptoms and/or resolving problems, strengths-based approaches aim to identify and support the development of existing strengths, assets, and competencies of individuals toward personal growth and development (Cox, 2006; Epstein & Sharma, 1998).

Historically, many helping professions developed with a focus on human deficiency in an effort to identify problems to be solved through treatment and intervention (Weick et al., 1989). The emphasis on problem solving remains a central enterprise in human services today, wherein assessments and diagnoses of presenting problems typically lead to treatments or interventions that are presumed to address the identified issue. While this orientation to helping seems logical, many have articulated the limitations and adverse effects of a purely deficit-based model across human service sectors, largely in social work and mental health (Cowger, 1994; Weick et al., 1989).

Weick et al. (1989) point to the issue that emphasizing human deficits as the cause of people's problems encourages a victim-blaming mentality, ignoring the social and environmental factors at play. In addition, Cowger (1994) suggests that purely problem-focused models likely lead to self-fulfilling prophecies for the client and the clinician, contributing to clients' feelings of low self-worth that are reinforced by clinicians who remain unaware of their clients' potential for growth. This disempowering process can subsequently contribute to an unequal power relationship, wherein the clinician remains the authority on how to make sense of and "fix" clients' problems, potentially leading to unnecessarily prolonged treatment (Cowger, 1994). As a result of these limitations, researchers and practitioners advocate for the inclusion of explicit attention to strengths, beyond simply the absence of pathological symptoms (Graybeal, 2001).

In contrast to solely focusing on pathology, a strengths-based perspective values the positive qualities and competencies of individuals in an effort to promote an atmosphere of client empowerment and autonomy. Fostering client empowerment means supporting individuals in identifying and mobilizing their strengths and resources so that they may resolve their own difficulties, and develop feelings of self-efficacy and hope (Cowger, 1994). In this way, a strengths-based perspective helps mitigate the unequal power relationship between client and clinician, and helps people view themselves as more than just their pathological symptoms, "liberating people from stigmatizing diagnostic classifications" (Cowger, 1994). While there is

agreement about the values of a strengths-based perspective, strengths-based approaches to service have been criticized for being poorly defined. To help provide a framework, Rapp et al. (2006) offer six essential characteristics of strengths-based practice that reflect the underlying values of a strengths-based perspective. They insist that strengths-based approaches be goal oriented and hope-inducing, include a systematic assessment of strengths, appreciate environmental resources, mobilize client strengths and environmental resources toward goal attainment, and prioritize client choice and autonomy.

In keeping with these values, strengths-based approaches adhere to an ecological perspective of understanding individuals in context (Buckley & Epstein, 2004; Rhee, Furlong, Turner, & Harari, 2001; Weick et al., 1989). Rooted in theories of development, an ecological framework (Bronfenbrenner, 1977) appreciates the dynamic relationship between individuals in their environments, addressing one of the key limitations of a problem-based model. This contextual viewpoint supports the value that “all people possess a wide range of talents, abilities, capacities, skills, resources and aspirations” (Weick et al., 1989), and that low expression of strengths in a particular domain does not necessarily indicate a personal deficit, but rather a lack of opportunity to develop skills, or a lack of support in recognizing existing strengths (Epstein, 2004). Valuing strengths in a context specific way also highlights the importance of different domains of strengths. While a focus on strengths in general supports positive development and well-being, there is reason to believe that more specific strength areas are related to more specific outcomes, and that strength domains are not completely fungible. Given the primary aim of strengths-based practice to mobilize strengths toward goal attainment, it is likely that certain types of strengths may be more relevant than others for particular goals. How particular strength domains relate to emotional and behavioral outcomes remains an open question.

Much of the research on strengths-based approaches in human services has centered on evaluating assessment tools and interventions. Strengths-based assessments have received considerable attention as evidenced by the increased prevalence of standardized strengths assessments, such as the BERS2 (Epstein, 2004) and the Developmental Assets Profile (Search Institute, 2013). Strengths-based assessments have been shown to be useful in service planning and in better understanding clinical outcomes (Epstein & Sharma, 1998; Jimerson, Sharkey, Nyborg, & Furlong, 2004; Lyons, Kisiel, & West, 1997; Lyons et al., 2000). Additional research about the experience of strengths-based assessments has provided support for assessment as

intervention, when conducted with strong adherence to the values of a strengths perspective (Cox, 2006). Furthermore, program evaluation studies have provided empirical support for strengths-based youth programming, such as mentorship, employment, and positive behavioral supports (Cone & Glenwick, 2001; Epstein & Sharma, 1998; Zimmerman, Bingenheimer, & Notaro, 2002), as well as the relationship between youth strengths and global measures of functioning and impairment in the context of treatment (Cox, 2006; Lyons et al., 2000).

There is mounting theoretical and empirical endorsement for the fact that attention to strengths, in contrast to purely deficit focused assessment and treatment models, relates to positive outcomes for individuals. The progression from traditional problem focused approaches toward more comprehensive strengths-based approaches highlights the promise of the strengths-based paradigm shift in human service delivery. Such support provides a platform for further exploration of the relationship between strengths and specific emotional and behavioral outcomes within a treatment context.

Strengths-based Influence in Mental Health

While the cross-disciplinary paradigm shift toward the inclusion of strengths is a movement that has important benefits for people in general, it may be particularly important for youth and families who experience serious emotional and behavioral challenges. According to a national estimate in 2003, approximately 5 to 9 million youth in the United States experience “serious emotional disturbances” in a given year (Hogan, 2003). The term serious emotional disturbances has been used to characterize youth who have met diagnostic criteria for an emotional, behavioral, or mental disorder in the Diagnostic and Statistical Manual for Mental Disorders (DSM-IV), which impairs their functioning across settings (Gyamfi, Keens-Douglas, & Medin, 2007). In addition to the specific symptomatology they face, youth with emotional and behavioral disorders are also more likely than their peers to have academic challenges, drop out of school, receive school disciplinary action, and engage in delinquent behaviors (Blackorby & Wagner, 1996; Panacek & Dunlap, 2003; M. Quinn, Rutherford, Leone, Osher, & Poirier, 2005; Trout, Nordness, Pierce, & Epstein, 2003). These youth tend to experience multiple system involvement and have needs that have likely been unmet by traditional services focused narrowly on problems and deficits (R. M. Friedman, Kutash, & Duchnowski, 1996; B. A. Stroul & Friedman, 1986).

Attending only to problems and pathologies can perpetuate disempowering narratives and reinforce stigmatization of youth with mental health needs (Cowger, 1994). Moreover, youth and families whose racial or ethnic minority group and low socioeconomic status intersect with their experiences of mental health related challenges might be especially vulnerable to multiple system involvement and deficit-based treatment. The strengths-based paradigm shift, with an aim toward empowerment, helps establish a counter narrative for and about these marginalized groups, which may lead to increased respect and well-being (Barksdale et al., 2010; Cowger, 1994; Rappaport, 1987).

Attention to strengths within the mental health service domain can be seen quite predominantly in the national system-of-care initiative, originated by Stroul and Friedman (1986). The system-of-care effort aims to improve mental health service delivery in communities across the country in a way that counters traditional deficit-based and siloed human services. The approach, targeting youth and families with “serious emotional disturbances,” emphasizes the importance of a coordinated service delivery system that is collaborative, culturally competent, strengths-based, and youth and family driven (Duchnowski, Kutash, & Friedman, 2002; B. A. Stroul & Friedman, 1986). In addition to mounting evidence on the effectiveness of the system-of-care approach (Manteuffel, Stephens, & Santiago, 2002; K. P. Quinn & Epstein, 1998; Rosenblatt & Furlong, 1998; B. Stroul, McCormack, & Zaro, 1996), system-of-care efforts have helped fuel attention to and uptake of strengths-based mental health service delivery.

Although there is growing recognition that strengths-based approaches may be particularly important within the realm of mental health services, wherein deficit-based approaches have deep historical roots (Weick et al., 1989), few studies have explored the role of strengths for youth within the mental health treatment context. Studies examining strengths for youth with identified mental health needs have shown that youth who have higher levels of strengths tend to have less functional impairment (Barksdale et al., 2010), fewer mental health symptoms (Oswald et al., 2001), and a greater likelihood of discharge from residential treatment (Lyons et al., 2000). Still, questions remain about the relationship between youth strengths and outcomes that extend beyond the goals of mental health treatment, narrowly defined. The present study aims to investigate the relationship between youth strengths and desired emotional and behavioral outcomes for a sample of youth seeking treatment for identified mental health

needs. This study focuses on emotional and behavioral outcomes that reflect the interests of system-of-care efforts to improve outcomes for youth across contexts. As such, this study will observe the relationships between youth and caregiver assessments of youth strengths and delinquency, school attendance, school performance, school discipline, coping, and activity involvement.

Strength Assessments from Multiple Informants

As it relates to system-of-care values, strengths-based approaches emphasize the worth, capabilities, and assets of individuals, challenging the professional authority—looking to youth and families as experts on their lives (Weick et al., 1989). Research indicates that family engagement in strengths-based assessment and service-planning efforts not only reduces the focus on youth deficits, but also engenders feelings that their perspectives are valued and understood (Cowger, 1994; Malysiak, 1998; Rapp & Wintersteen, 1989; Whitbeck et al., 1993). While many value the use of multiple informants to provide a comprehensive, nuanced understanding of a child's functioning and impairment (K. A. Friedman et al., 1999), accommodating input from multiple stakeholders and making sense of potentially conflicting perspectives can be arduous in a collaborative approach to service delivery (van Dulmen & Egeland, 2011).

Research on cross informant agreement can help distinguish reported behavioral differences that are a function of the psychometric properties of an assessment tool from differing perspectives of raters (K. A. Friedman et al., 1999). Traditionally, research looking at cross informant agreement between youth and adult ratings of youth behavior has focused primarily on deficit-based assessments of youth problems and pathologies. Most notably, a meta-analysis of 296 samples from 119 studies, conducted by Achenbach et al. (1987), found relatively low, statistically significant correlations between youth self-reports and parent reports of youth problems, suggesting that youth and caregiver reports both contributed unique information. More recent research on cross informant agreement between youth and caregiver reports of behavioral and emotional strengths found significant moderate to high correlations (.50-.63) in a nationally representative sample of youth in the US (Synhorst et al., 2005), and low to moderate correlations (.25-.43) in a sample of Finnish students (Sointu, Savolainen, Lappalainen, & Epstein, 2012a). In the Finnish sample, students receiving special education

supports had higher youth-parent cross informant agreement than students without special education supports (Sointu, Savolainen, Lappalainen, & Epstein, 2012b). Taken together, the findings indicate that there is both shared variability and notable differences between youth and adult assessments of youth strengths and difficulties. It seems that both raters contribute unique information that should be given sincere consideration in research and practice (Synhorst et al., 2005).

As we have discussed, there is reason to believe that an individual's strengths are related to their emotional and behavioral functioning, and that strengths provide important information in service planning and delivery (Cowger, 1994; Lyons et al., 2000; Oswald et al., 2001). However, in a collaborative approach to service planning for youth with chronic and severe mental health challenges, whose strength assessments count? Extant research suggests that both youth and caregivers provide unique and related information about youth strengths and difficulties (Achenbach et al., 1987; Sointu et al., 2012a; Synhorst et al., 2005); yet, the relative utility of these unique contributions remains unclear. This study will be one of the first to observe the relative influence from youth and caregiver assessments of youth strengths as they relate to emotional and behavioral outcomes.

Youth Voice, Undervalued

In spite of rhetorical support for youth perspectives, and findings that suggests both youth and caregiver perspectives provide unique information, research around the importance of strength assessments continues to prioritize adult strength ratings; many studies only employ clinician or caregiver assessments of youth strengths (e.g. (Barksdale et al., 2010; Lyons et al., 2000; Oswald et al., 2001). Youths' own self-reports remain absent or overshadowed by adult reports of youth strengths and difficulties, in part because of beliefs that "[children] are often not good informants in reporting on their own behavior, and as such the diagnostician or researcher must rely generally on others for information on the child's functioning" (van Dulmen & Egeland, 2011). These views reflect the assumption that adults are a more reliable source of information about youth functioning (Sparks, Miller, Bohanske, & Claud, 2006). Often, these adult beliefs are manifested in youths' experiences of mental health services. A qualitative study of 25 systems-of-care communities revealed that youth experienced feelings of exclusion in their mental health service planning, and did not have a good understanding about if and how they

could be more involved (Gyamfi et al., 2007). In summary, Gyamfi et al. (2007) note, “involving youth in the service delivery process is an emerging phenomenon that still faces some resistance but is becoming increasingly accepted.”

The dearth of attention given to youth voice is partly a function of the power dynamic that exists between youth and adult caregivers and service providers. Checkoway, Pothukuchi, and Finn (1995) explain that young people as a group are socialized as subservient family or society members, and that this submissive role contributes to their marginalized status. Adults, compared to youth, carry more privilege and respect with regard to their perspectives (Checkoway, Pothukuchi, & Finn, 1995; Sparks et al., 2006). In general, people value the views of adults over youth, and presenting mental health challenges for youth exacerbate this disparity in the relationship between youth and mental health professionals due, in large part, to beliefs that youth with mental health challenges may experience “self-perception problems” or lack accurate insight about their strengths and challenges (Epstein, 2004).

The disparagement of youth input is problematic for several reasons. First, methodologically speaking, assessments of youth strengths that ignore youth self-report may be incomplete (Rothenberger & Woerner, 2004). Second, lack of sensitivity to the marginalization of youth may exacerbate existing power dynamics and maintain internalized feelings of inferiority and low self-worth (Checkoway et al., 1995; Gyamfi et al., 2007; Yap, Wright, & Jorm, 2011). Lack of engagement of marginalized youth, or worse, repeated neglect of their input, may be threatening to their social identities and leave youth with self-doubt and mistrust of adults (Halpern, 2006). Finally, by the same token, it is likely that the psychological processes that accompany strength assessments are related to positive changes in emotional and behavioral functioning, and prohibiting these processes may impede potential growth in such areas.

Consideration for youth self-evaluations is necessary in designing efforts to foster positive youth development and youth empowerment; without which these efforts may have potential iatrogenic effects on youths’ psychological well-being. Addressing these problems within the mental health treatment context, by prioritizing youth perspectives in service planning and delivery instead of ignoring them, may lead to treatments that foster positive outcomes for youth. It is useful to understand the relationship between youth perspectives of their strengths as they relate to desired emotional and behavioral outcomes. To date, within the realm of mental health services for youth, little has been studied about the impact of youth’s own perceptions of

their strengths on youth emotional and behavioral functioning. In this study, we examine youth strengths, as assessed by both youth and caregivers, with the expectation that youth self-assessments of their strengths will add value in predicting positive outcomes beyond caregiver assessments.

Study Aims

This study is the first study, to our knowledge, that explores the unique contributions of youth strength assessments in predicting emotional and behavioral outcomes beyond caregiver reports of youth strengths. Overall, we hypothesize that youth ratings of their own strengths are significantly additive predictors of positive outcomes such as delinquency, school attendance, performance and discipline, coping, and activity involvement than caregiver ratings. We selected outcomes that reflect the interests of system-of-care efforts to improve functioning for youth across contexts.

Moreover, because little is understood about which particular strength domains relate to desired outcomes, individual strength subscales, rather than an omnibus strength score, are used as predictors. Looking at strengths in a domain specific way may help shed light on how supporting certain strengths may foster youth achievement of desired outcomes. While there is reason to think that strengths are fungible and would relate to any and all desired outcomes for youth, in the interest of parsimony, and drawing on related literature, we propose that particular strength domains are relevant to certain emotional and behavioral outcomes. We offer exploratory hypotheses about which strength domains relate to specific outcomes. The supportive literature we reference deviates slightly from our study focus in that it does not depend on youth perceptions of their strengths across domains. We are confident that the literature is relevant because we trust that youth perceptions of their strengths are not completely divorced from reality, and that they function as a proximal indicator of the strengths youth possess. Detailed below are six hypotheses that convey the overall aim of the study, that youth perspective predict outcomes over and above caregiver perspectives, and attempt to link specific domains of strengths to specific outcomes

Hypothesis 1

There are numerous theories that attempt to explain delinquency among youth. As it

relates to our study, research supports the relationship between family involvement and career strengths as protective factors against engaging in delinquent behavior. Research exploring the relationship between family factors and delinquency (Criss & Shaw, 2005; Huey Jr, Henggeler, Brondino, & Pickrel, 2000; Loeber & Stouthamer-Loeber, 1986) suggests that strong family cohesion and functioning relate to lower rates of delinquency. In addition, literature supports the relationship between future oriented goals and delinquency. Specifically, strain theories posit that delinquency results from barriers to goal-seeking behavior (Agnew, 1985), and research on possible selves suggests that youth who have balanced future oriented beliefs about themselves also have lower rates of delinquency (Oyserman & Markus, 1990). It is likely that youth who have strong family involvement and future oriented career aspirations are less likely to engage in delinquent behaviors.

1. We hypothesize that higher youth ratings of their family involvement, and future oriented career strengths will contribute to less frequent delinquency, over and above caregiver ratings of youth's family involvement and career strengths.

Hypothesis 2

There are several factors that contribute to school attendance for youth with and without identified mental health needs. As it relates to youth strengths, it is likely that youth in general who aspire to achieve future career goals are motivated to attend school. Research with college students supports the relationship between developed career aspirations and school persistence (Hull-Blanks et al., 2005). In addition, existing literature suggests that classroom belongingness and school engagement are related to school attendance and academic resilience (Finn, 1989; Goodenow, 1993). It is plausible that in our sample of youth with identified mental health needs, the youth who have strong interpersonal strengths to control their emotions and behaviors in school, also experience less stigmatization and potentially more school engagement and classroom belongingness, leading to greater school attendance.

2. We hypothesize that higher youth ratings of their career and interpersonal strengths will contribute to greater school attendance over and above caregiver ratings of youth's career and interpersonal strengths.

Hypothesis 3

In terms of school performance, we predict that youth who study for tests, pay attention in class, and complete homework assignments will perform well in school. In addition, research suggests school performance may also be bolstered by feelings of self-competence and achievement (Caprara et al., 2008; Carroll et al., 2009). These attributes are captured by the domains of school functioning and intrapersonal strengths, respectfully.

3. We hypothesize that higher youth ratings of their school functioning and intrapersonal strengths will predict better school performance over and above caregiver ratings of youth's school functioning and intrapersonal strengths.

Hypothesis 4

We predict that youth with strong interpersonal strengths, who are better able to control their emotions and behaviors in social settings, will be less likely to receive disciplinary action through suspension or expulsion, punishments that conceivably follow from emotional or behavioral outbursts and disruption.

4. We hypothesize that higher youth ratings of their interpersonal strengths will decrease the probability of school discipline over and above caregiver ratings of youth's interpersonal strengths.

Hypothesis 5

Coping is the process of attempting to manage, tolerate, or ameliorate the demands of a stressful situation (Taylor & Stanton, 2007). Research suggests that psychological control, self-esteem, and optimism are helpful resources in coping processes (Taylor & Stanton, 2007). As it relates to strengths in this study, interpersonal strengths include a youth's ability to recognize and control emotions and behaviors, and intrapersonal strengths capture feelings of self-competence and achievement, as well as self-esteem and enthusiasm for life. Thus, we postulate that these strengths are related to coping skills for youth with serious mental health challenges.

5. We hypothesize that higher youth ratings of their intrapersonal and interpersonal strengths will predict better coping over and above caregiver ratings of youth's intrapersonal and interpersonal strengths.

Hypothesis 6

There is little empirical support for the strengths that directly contribute to prosocial activity involvement for youth with identified mental health needs. With regard to the strength domains in this study, we postulate that strong affective strengths and intrapersonal strengths are related to involvement in activities and organizations. Youth who are able to accept affection from others and express emotion (affective strengths), as well as those who experience feelings of self-competence and optimism (intrapersonal strengths) may be more involved in prosocial activities wherein self-esteem and communion with others is fundamental. Youth with lower self-esteem, who are less able to accept affection or express themselves, may experience more difficulty building relationships and engaging in social activities.

6. Higher youth ratings of their affective and intrapersonal strengths will predict increased involvement of activities over and above caregiver ratings of youth's affective and intrapersonal strengths.

CHAPTER 2

METHODOLOGY

Methodology

Data for this study were collected as part of a large, ongoing national effort to evaluate the development of systems-of-care and their impact on youth and families longitudinally. Trained community interviewers conduct structured interviews with assenting youth and consenting caregivers enrolled in a local system-of-care initiative through the National Evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program, funded by the Substance Abuse and Mental Health Services Administration. Youth and caregivers participated in structured interviews about their experiences with system-of-care services, in addition to other life domains (e.g. school, neighborhood, emotional and behavioral functioning and impairment, stress and coping) upon entry into services (baseline), and at 6-month intervals up to 24 months. The evaluation design followed an intent-to-treat model, thus, interviews were conducted with youth and families who may no longer have been receiving system-of-care services. Data for the present study include interview data from the baseline and six month interviews.

Participants

Inclusion criteria for system-of-care services and the National Evaluation Study required that eligible youth (between the ages of 10 and 18) have a diagnosable serious emotional disturbance (SED) and demonstrate risk of out-of-home placement. The present sample consists of 49 youth and caregiver dyads that met these criteria for system-of-care services and were interviewed at baseline upon enrollment in services, and 6 months later. Data are incomplete for some youth and caregivers.

The demographic characteristics of our sample reflect a central aim of the local system-of-care initiative to improve mental health services for African American youth and their families. African American male youth and their African American female caregivers characterized a majority of caregiver-youth dyads in our sample. Most of the caregivers (60%) were biological parents (93% of whom were mothers). Moreover, as it relates to the inclusion criteria, youth participants were identified as having a variety of presenting problems that met

diagnostic criteria upon enrollment in system-of-care services. Demographic data for youth and caregiver participants are represented in Tables 2.1 and 2.2.

Measures

Emotional and Behavioral Strengths

Youth and caregiver assessments of strengths were measured via the youth and parent rating scales of the Behavioral and Emotional Rating Scale Second Edition (BERS2). Both ratings scales comprise 57 items, rated on a Likert-type scale from 0 to 3, describing the extent to which the behaviors are not at all like me/the child (0) to very much like me/the child (3). The rating scales assess emotional and behavioral strengths across six domains (organized into 6 subscales). The *Interpersonal Strengths* subscale measures a youth's abilities to control emotions and/or behaviors in social contexts, including accepting responsibility for actions and respecting others. The *Family Involvement* subscale measures a youth's ties to and relationship with family and community, including relationship with parents and siblings and involvement in religious activities. The *Intrapersonal Strengths* subscale measures a youth's sense of competence and achievement, including self-confidence and enthusiasm about life. The *School Functioning* subscale measures a youth's competencies with school and classroom activities, such as paying attention in class and completing school tasks on time. The *Affective Strengths* subscale focuses on a youth's emotional relationship with others, specifically accepting affection and expressing emotions. The *Career Strengths* subscale assesses a youth's propensity toward future goals and career aspirations (Epstein, 2004; Epstein & Sharma, 1998).

Research supports the strong psychometric properties of the BERS and BERS2 (Epstein & Sharma, 1998; Epstein, Ryser, & Pearson, 2002; Epstein, Mooney, Ryser, & Pierce, 2004; Epstein, Hertzog, & Reid, 2001). Adequate construct validity of the six strength domains has been supported by confirmatory factor analyses, and criterion-prediction validity has been suggested by correlations with other established assessments (Child Behavior Checklist and Social Skills Rating System) in the expected direction (Epstein, 2004). As it relates to reliability, cross informant correlations between parent and student ratings in the norming sample on each of the subscales ranged from .50 to .63. Furthermore, internal consistency (Cronbach's alpha) for youth and caregiver-rated strength subscales ranged from .79 to .93, which is consistent with the present sample wherein internal consistencies ranged from a low of .72 (affective strengths) to a

high of .91 (interpersonal strengths) for youth and caregiver strength assessments (Epstein, 2004).

Delinquency

An omnibus delinquency score, including 22 youth-reported delinquent behaviors from the Delinquency Survey-Revised, was used to measure youth delinquency. The DS-R, developed for the National Evaluation, measures contact with law enforcement and the frequency with which youth have engaged in illegal or delinquent behaviors in the last 6 months, such as bullying or vandalism (*Phase VI data manual*). A subset of the items, rated on a frequency scale from 1 (no times) to 5 (more than 10 times) was used to generate the composite delinquency score. A log transformation adjusted the skewed distribution of this composite delinquency variable to weight variability at the low end of the scale more than the high end. Internal consistency (Chronbach's alpha) for this measure of delinquency was .82 at baseline, and .86 at 6 months.

School Attendance

School attendance was measured by a single item from the Education Questionnaire-Revision 2, developed by the National Evaluation Study to survey caregivers about their child's education status and experiences in school (*Phase VI data manual*). The item asked caregivers to rate the frequency of absences typical for their child in the past 6 months on a scale from 0 to 5. Specifically, 0 = Less than one day a week, 1 = About 1 day a month, 2 = About 1 day every 2 weeks, 3 = About 1 day a week, 4 = 2 days per week, and 5 = 3 or more days per week.

School Performance

A subset of four items from the school competence subscale of the Child Behavior Checklist was used as a measure of overall school performance. The CBCL is a caregiver report of youth emotional and behavioral problems and competencies. The CBCL has demonstrated high reliability and validity (Achenbach & Rescorla, 2001). The CBCL inquires about school performance in 4 school subject areas (Reading, English or Language Arts; History or Social Studies; Arithmetic or Math; Science) on a scale from 1 (failing) to 4 (above average). An overall school performance score was created using the mean responses of school performance

for these four subject domains. Internal consistency (Chronbach's alpha) for the school performance measure was .92 at baseline, and .87 at 6 months.

School Discipline

School discipline was measured by a single item on the EQ-R2 asking caregivers about disciplinary action taken toward their child in school (suspension, expulsion, suspension or expulsion, neither, or other) in the last 6 months. This item was recoded into a binary variable assessing whether or not any disciplinary action was taken in the last 6 months.

Coping/Self Advocacy

Coping/Self Advocacy was measured by four items from the Youth Information Questionnaire Revised, developed by the National Evaluation Study to gather youth self-reported information about different facets of their life (*Phase VI data manual*). A mean composite score was created using four items that asked youth about the frequency with which they manage their mental health challenges and emotions as well as how often they work with service providers to meet their mental health and emotional needs. Items were rated on a scale from 1 (never or almost never) to 5 (always or almost always). Internal consistency (Chronbach's alpha) for this measure of coping/self advocacy was .78 at baseline, and .83 at 6 months.

Activity Involvement

The Activity subscale of the CBCL was used to measure activity involvement. Caregivers responded to questions about their child's involvement in organizations, employment, and activities (Achenbach & Rescorla, 2001).

Chapter 2 Tables

Table 2.1

Descriptive participant data

	Youth	Caregiver
<u>Age</u>		
Range	10-18	27-76
Median	15	46
<u>Race</u>		
White	34%	8%
African American	66%	87%
<u>Gender</u>		
Male	75%	11%
Female	25%	87%

Table 2.2

Youth Presenting Problems and Caregiver Relationships to Youth

	Youth		Caregiver
<u>Presenting Problem (DSM Diagnostic Category)</u>		<u>Relationship to youth</u>	
Substance Use Disorders	4%	Biological parent	60%
Schizophrenia and Other Psychotic Disorders	0%	Adoptive/Stepparent	11%
Mood Disorders	44%	Foster parent	2%
Pervasive Developmental Disorders	4%	Aunt or Uncle	2%
Anxiety Disorders (not including PTSD or Acute Stress Disorder)	8%	Grandparent	23%
Adjustment Disorders	2%		
PTSD and Acute Stress Disorder	17%		
Impulse Control Disorders	2%		
Oppositional Defiant Disorder	17%		
Attention Deficit Hyperactivity Disorder	65%		
Personality Disorders	0%		
Mental Retardation	0%		
Learning, Motor Skills, and Communication Disorders	10%		
Conduct Disorder	6%		
Disruptive Behavior Disorder	4%		

Note: the total percent of presenting problems exceeds 100% because youth may experience more than one presenting problem. The total percent of caregiver relationship to youth does not add up to 100% because some caregivers (2%) did not fall within the above response categories.

CHAPTER 3

RESULTS

Strength Assessments

Descriptive statistics for youth and caregiver strength assessments on the Behavioral and Emotional Rating Scale (BERS2) are presented in Table 3.1. Compared to norming data provided by Epstein (2004), youth self-assessments for each strength domain in the present sample fell within the average range, and caregiver assessments of youth strengths for each strength domain, except for career strengths, fell within the below average range of strengths. Caregiver assessments of youth career strengths fell within the 37th-percentile, or the average range (See appendix A for BERS2 norming sample results as reported in the BERS2 Examiner's Manual) (Epstein, 2004).

Paired sample t-tests revealed that youth rate their strengths significantly higher than their caregivers for five of the six strength domains (interpersonal strengths $t = -3.128$ $p < .05$; family involvement $t = -4.147$ $p < .05$; intrapersonal strengths $t = -3.762$ $p < .05$; school functioning $t = -5.610$ $p < .05$; affective strengths $t = -4.755$ $p < .05$; career strengths $t = -1.18$ $p < .05$) (Table 3.2). To better understand the relationship between youth and caregiver ratings of youth strengths, Pearson product-moment correlation coefficients were computed both within and between raters for each strength domain. As expected, moderate positive relationships were found, except for the inter-correlation between youth and caregiver assessments of youth career strengths (see Table 3.3).

Emotional and Behavioral Outcomes

The primary purpose of this study was to test the hypothesis that youth self-assessments of their strengths predict positive emotional and behavioral outcomes over and above caregiver assessments of youth strengths. A series of hierarchical linear and logistic regression analyses were conducted to compare the predictive influence of youth and caregiver strength assessments on delinquency, school attendance, school performance, school discipline, coping skills, and involvement in prosocial activities at 6 months, controlling for baseline reports of these outcomes. Descriptive statistics for each desired outcome are presented in Table 3.4.

All regression models (linear and logistic) were built using a hierarchical input method to predict desired outcomes at 6 months. Independent variables were entered into the prediction models with baseline reports of the outcomes entered first as a control, followed by caregiver and youth strength assessments in succession. A subset of no more than two strength domains was analyzed for each outcome. Tables 3.5 through 3.9 provide information about the unique contributions of each independent variable (baseline outcomes, caregiver strength assessments, and youth strength assessments) for each step in the hierarchical linear regression modeling. Results are described for the full linear regression models (Model 3). Tables 3.10 and 3.11 summarize the results of the logistic regression modeling, built with the same hierarchical structure.

Almost all significant results for the linear regression analyses were in the expected direction, wherein higher strength scores were related to desired outcomes (i.e. lower rates of delinquency, fewer school absences, increased school performance, increased coping skills, and increased activity involvement). In addition, for all outcomes except coping, the autoregressive effect (i.e., effect of baseline outcome on outcome at 6 months) was significant in the full model (model 3) at the $p < .05$ significance level.

In the regression model for delinquency (using a log transformation of delinquency rates to adjust for skewness), youth strength assessments explained a greater proportion of the variance than caregiver assessments of youth strengths (change in R^2 for caregiver input = .02 vs. change in R^2 for youth input = .15). In addition, self-assessments of family involvement were significantly predictive of lower rates of delinquency at 6 months ($\beta = -0.39$, $p = .02$). However, not in support of our hypothesis, youth self-assessments of career strengths were significantly related to delinquency rates in the opposite direction; higher career strength scores were significantly related to higher rates of delinquency ($\beta = .31$, $p = .04$). Caregiver strength assessments were not significantly related to youth delinquency (see Table 3.5).

In the regression models predicting school-based outcomes, both youth and caregiver strength assessments were related to school attendance and school performance at 6 months. Youth strength assessments explained more variability than caregiver assessments of youth strengths for school attendance (change in R^2 for caregiver input = .04 vs. change in R^2 for youth input = .13), but not school performance. Specifically, youth assessments of their career strengths, and caregiver assessments of youth interpersonal strengths were related to school

attendance at a level approaching statistical significance given the directional hypothesis ($\beta = -0.26$, $p = 0.11$ and $\beta = -0.24$, $p = 0.12$ respectively; see Table 3.6). Moreover, both youth and caregiver assessments of school functioning were significantly predictive of school performance at 6 months ($\beta = 0.34$, $p = 0.05$ and $\beta = 0.6$, $p = 0.01$ respectively; see Table 3.7). The autoregressive result for the school performance model was not significant, suggesting that school performance at baseline was not significantly related to school performance at 6 months.

Furthermore, both youth and caregiver strength assessments explained significant variance for youth coping skills/self advocacy (change in R^2 for caregiver input = .16 vs. change in R^2 for youth input = .13), while youth-rated strength assessments explained a greater percentage of the variance for activity involvement than did caregiver assessments of youth strengths (change in R^2 for caregiver input = .04 vs. change in R^2 for youth input = .07). Additionally, only youth self-assessments of their strengths were significantly related to coping/self advocacy and activity involvement in the full model. Specifically, youth reports of their interpersonal strengths were significantly related to coping skills ($\beta = .39$, $p = .04$; see Table 3.8), and youth self-assessments of their intrapersonal strengths were significantly predictive of involvement in activities ($\beta = .28$, $p = .05$; see Table 3.9). The autoregressive result was not significant for coping at baseline being significantly related to coping at 6 months.

To test the relative influence of youth and caregiver strength assessments on school discipline, a hierarchical logistic regression analysis was used. Results for the logistic regression were assessed using a model comparison approach for each additional independent variable added in the model building process (see Tables 3.10 and 3.11).

The overall fit of each model was assessed by means of its goodness of fit indices (-2 log likelihood). Measures of classification accuracy were also used as a practical assessment to determine the relative success of each model in predicting school discipline. Furthermore, Wald statistics were used to test whether each individual predictor had a significant relationship with school discipline.

Models were compared in succession to understand the relative predictive influence of baseline school discipline and caregiver and youth assessments of interpersonal strengths on school discipline at 6 months. Goodness of fit statistics indicated that Model 3, the full model, had the best model fit. When practical usefulness was examined by the classification accuracy estimate across models, only baseline school discipline in Model 1 and youth assessments of

interpersonal strengths in the full Model 3 increased prediction accuracy over the null Model 0. Specifically, including youth assessments of interpersonal strengths resulted in the highest prediction accuracy (68.6%) for receiving school discipline at 6 months. In contrast, including caregiver assessments of youth interpersonal strengths in Model 2 resulted in a decrease in predictability of school discipline from the null Model 0. Wald statistics for each model indicated that there were no individual, statistically significant relationships between predictors and school discipline at 6 months. As such, these results will not be discussed further.

Chapter 3 Tables

Table 3.1

Summary of Mean Strength Ratings at Baseline (Caregiver and Youth)

	Caregiver Assessment			Youth Assessment		
	N	Mean (SD)	Range	N	Mean (SD)	Range
Interpersonal Strengths	47	6.62 (3.35)	16	42	8.86 (3.13)	18
Family Involvement	47	6.91 (3.17)	15	42	9.21 (2.82)	16
Intrapersonal Strengths	47	7.26 (3.49)	16	42	9.83 (2.76)	15
School Functioning	43	5.86 (2.99)	15	42	8.95 (2.94)	16
Affective Strengths	47	7.60 (2.95)	15	42	10.46 (2.77)	16
Career Strengths	42	9.90 (3.19)	15	42	10.50 (2.24)	13

Table 3.2

Summary of Paired Samples T Test

		Mean Difference (Caregiver-Youth) (SD)	t	df
Pair 1	Interpersonal strength	-2.024 (4.193)	-3.128	41
Pair 2	Family involvement	-2.238 (3.489)	-4.147	41
Pair 3	Intrapersonal strength	-2.381 (4.102)	-3.762	41
Pair 4	School functioning	-3.00 (3.296)	-5.610	37
Pair 5	Affective strength	-2.548 (3.473)	-4.755	41
Pair 6	Career strength	-0.730 (3.761)	-1.18	36

Table 3.3

Summary of Correlations between Caregiver and Youth Baseline Strength Ratings

	Interpersonal Strengths	Family Involvement	Intrapersonal Strengths	School Functioning	Affective Strengths	Career Strengths
Interpersonal Strengths	<u>0.165</u>	.776	.765	.557	.734	.538
Family Involvement	.343	<u>.363</u>	.825	.533	.797	.574
Intrapersonal Strengths	.594	.640	<u>.183</u>	.457	.774	.518
School Functioning	.419	.372	.441	<u>.371</u>	.538	.506
Affective Strengths	.323	.540	.553	.611	<u>0.259</u>	.441
Career Strengths	.545	.360	.593	.485	.526	<u>-.009</u>

Note: caregiver assessment inter-correlations are above the diagonal, youth assessment inter-correlations are below the diagonal, and caregiver-youth inter-correlations are along the diagonal and underlined

Table 3.4

Summary of outcome variables

	Delinquency (scale from 1-5)		School Attendance (scale from 0-5)		School Performance (scale from 1-4)		Coping/Self Advocacy (scale from 1-5)		Activity Involvement (ranged from 20-49)	
	Baseline	6 Months	Baseline	6 Months	Baseline	6 Months	Baseline	6 Months	Baseline	6 Months
N	35	38	35	40	40	45	31	35	43	45
Mean	1.32	1.22	2.74	2.48	2.48	2.62	3.46	3.60	35.95	35.36
(SD)	(0.37)	(0.30)	(1.93)	(1.87)	(0.99)	(0.87)	(0.76)	(0.85)	(7.41)	(7.41)

Table 3.4 (continued)

	School Discipline	
	Baseline	6 Months
N	41	46
Frequency	66%	44%

Table 3.5

Summary of Hierarchical Linear Regression Analysis Predicting Log Rates of Delinquency at 6 months (N =30)

Variable	Model 1				Model 2				Model 3			
	B	SE B	β	t	B	SE B	β	t	B	SE B	β	t
Baseline Delinquency (Log)	0.43	0.15	0.47	2.86	0.40	0.16	0.44	2.45	0.56	0.17	0.61	3.38
Caregiver Assessment												
Family Involvement				0.00	0.02	0.02	-0.06	-0.28	0.01	0.02	0.10	0.43
Career Strengths				-0.01	0.01	0.01	-0.08	-0.37	-0.01	0.01	-0.07	-0.37
Youth Assessment									-0.03	0.01	-0.39	-2.08
Career Strengths									0.04	0.02	0.31	1.86
R^2			.22				0.24				0.39	
Change in R^2							.02				.15	
F for change in R^2			8.204				0.28				3.14	

Table 3.6

Summary of Hierarchical Linear Regression Analysis Predicting School Attendance at 6 months (N =26)

Variable	Model 1				Model 2				Model			
	B	SE B	β	t	B	SE B	β	t	B	SE B	β	t
Baseline School Attendance	0.37	0.17	0.41	2.23	0.37	0.17	0.40	2.12	0.35	0.17	0.38	2.09
Caregiver Assessment	Interpersonal Strengths				-0.12	0.12	-0.22	-1.04	-0.14	0.12	-0.24	-1.17
	Career Strengths				0.03	0.13	0.06	0.27	0.06	0.12	0.11	0.54
Youth Assessment	Interpersonal Strengths								-0.09	0.12	-0.15	-0.70
	Career Strengths								-0.25	0.20	-0.26	-1.21
R^2	0.17				0.21				0.34			
Change in R^2					.04				.13			
F for change in R^2	4.97				0.58				2.14			

Table 3.7

Summary of Hierarchical Linear Regression Analysis Predicting School Performance at 6 months (N =31)

Variable	Model 1				Model 2				Model 3			
	B	SE B	β	t	B	SE B	β	t	B	SE B	β	t
Baseline School Performance	0.22	0.16	0.24	1.37	-0.14	0.18	-0.16	-0.80	-0.24	0.19	-0.27	-1.29
Caregiver Assessment	School Functioning				0.18	0.07	0.62	2.78	0.18	0.07	0.60	2.62
	Intrapersonal Strengths				0.02	0.05	0.07	0.40	0.00	0.05	0.02	0.09
Youth Assessment	School Functioning								0.11	0.06	0.34	1.74
	Intrapersonal Strengths								-0.03	0.06	-0.10	-0.55
R^2	0.06				0.33				0.40			
Change in R^2					.27				.07			
F for change in R^2	1.89				5.51				1.55			

Table 3.8

Summary of Hierarchical Linear Regression Analysis Predicting Coping Skills/Self Advocacy at 6 months (N =30)

Variable	Model 1				Model 2				Model 3			
	B	SE B	β	t	B	SE B	β	t	B	SE B	β	t
Baseline Coping	0.19	0.19	0.19	1.02	0.30	0.19	0.29	1.63	0.18	0.20	0.18	0.90
Caregiver Assessment	Intrapersonal Strengths				0.10	0.06	0.48	1.69	0.04	0.07	0.19	0.62
	Interpersonal Strengths				-0.02	0.07	-0.09	-0.32	0.00	0.07	0.01	0.03
Youth Assessment	Intrapersonal Strengths								0.01	0.06	0.05	0.21
	Interpersonal Strengths								0.09	0.05	0.39	1.79
R^2	0.03				0.19				0.32			
Change in R^2					.16				.13			
F for change in R^2	1.03				2.67				2.33			

Table 3.9

Summary of Hierarchical Linear Regression Analysis Predicting Activity Involvement at 6 months (N =37)

Variable	Model 1				Model 2				Model 3			
	B	SE B	β	t	B	SE B	β	t	B	SE B	β	t
Baseline Activity Involvement	0.61	0.14	0.59	4.40	0.53	0.15	0.51	3.52	0.44	0.16	0.43	2.73
Caregiver Assessment	Intrapersonal Strengths				0.50	0.44	0.25	1.13	0.52	0.46	0.26	1.12
	Affective Strengths				-0.11	0.53	-0.05	-0.21	-0.21	0.56	-0.09	-0.38
Youth Assessment	Intrapersonal Strengths								0.71	0.43	0.28	1.65
	Affective Strengths								-0.02	0.49	-0.01	-0.04
R^2	0.35				0.39				0.46			
Change in R^2					.04				.07			
F for change in R^2	19.34				1.14				1.89			

Table 3.10

Summary of Hierarchical Logistic Regression Analysis Predicting School Discipline at 6 months (N=35)

	B	S.E.	Wald	df	Sig.	Exp(B)
Model 0	Constant	-0.172	0.339	1	0.613	0.842
Model 1	Baseline School Discipline Constant	0.683 -0.588	0.709 0.558	1 1	0.335 0.292	1.98 0.556
Model 2	Baseline School Discipline Caregiver Assessment of Interpersonal Strengths Constant	0.741 0.039 -0.873	0.73 0.112 0.995	1 1 1	0.31 0.728 0.381	2.098 1.04 0.418
Model 3	Baseline School Discipline Caregiver Assessment of Interpersonal Strengths Youth Assessment of Interpersonal Strengths Constant	0.683 0.021 0.095 -1.565	0.736 0.114 0.11 1.287	1 1 1 1	0.354 0.857 0.389 0.224	1.979 1.021 1.099 0.209

Table 3.11

Model Comparison Statistics for Hierarchical Logistic Regression Analysis Predicting School Discipline at 6 months

	Model 0	Model 1	Model 2	Model 3
-2 Log Likelihood		47.314	47.192	46.43
Model Chi Square		0.949	1.071	1.833
Nagelkerke R Square		0.036	0.04	0.068
Classification Accuracy	54.3%	57.1%	51.4%	68.6%

CHAPTER 4

DISCUSSION

The primary purpose of this study was to investigate the hypothesis that youth self-evaluations of their strengths uniquely predict emotional and behavioral outcomes beyond caregiver assessments of youth strengths in a sample of young people with identified mental health needs seeking treatment. A second aim was to understand how particular strength domains relate to different outcomes within this treatment context. Results indicate that, in the face of significant differences between youth and caregiver strength assessments, youth perspectives contribute toward positive outcomes with regard to delinquency, school attendance, school performance, and activity involvement over and above caregiver strength assessments. Moreover, strength assessments within particular domains contributed differentially toward these outcomes. This study is a first step in establishing a relationship between strengths, as youth view them, and specific outcomes, extending theories about why and how strengths should matter for individuals. Our results provide the first evidence, to our knowledge, that youth strength perspectives, within the mental health treatment context, uniquely predict positive outcomes of emotional and behavioral functioning.

This study's explicit focus on youths' own assessments of their strengths as they relate to emotional and behavioral functioning is a response to the paucity of empirical support around how youth strengths matter, as well as the dearth of attention for youth perspectives within the mental health service sector. Continued scholarship in this area is a step toward a new program of research in psychology.

Strengths Assessments from Multiple Informants

Rhetorical endorsement of youth perspectives in mental health treatment planning has accompanied efforts like the system-of-care initiatives that value youth and family involvement. Many support the inclusion of multiple perspectives in mental health treatment planning (Cowger, 1994; Malysiak, 1998; Whitbeck et al., 1993); however, as we have discussed, making sense of input from multiple informants can present challenges, particularly when informant reports differ (van Dulmen & Egeland, 2011). In our sample of youth with identified mental health needs, youth and caregiver ratings differed significantly across strength domains;

caregivers uniformly rated fewer strengths for youth than youth rated for themselves. At the same time, correlations between youth and caregiver strength assessments were moderate and significant. Together, these results support previous research on youth and caregiver cross informant agreement (Achenbach et al., 1987; Sointu et al., 2012a; Synhorst et al., 2005), suggesting that youth and caregivers provide different, yet related information about youth strengths.

There are several theoretical reasons to explain the distinct, yet related strength ratings from youth and caregivers. First, compared to the relatively limited set of contexts in which caregivers can observe youth strengths, youth views of themselves likely incorporate an understanding of their strengths across a broader range of contexts. Second, youth and caregiver expectations may influence their strength ratings; higher expectations from caregivers may contribute to their lower strength ratings. Similarly, comparisons to other youth may influence strength ratings in the same way. Finally, previous research indicates that more depressed or stressed parents reported higher levels of behavior problems than did their children (Youngstrom, Loeber, & Stouthamer-Loeber, 2000), a phenomenon that may translate into lower strength ratings as well. These reasons, among others, may help explain why caregivers see fewer strengths in their youth than the youth see in themselves. In the event of differing reports, people tend to prioritize adult perspectives over youths' (Sparks et al., 2006); however, we agree with the views of Synhorst et al. (2005) that one informant's perspective is not more valuable than another's. It is from this perspective that we interpret the results of the hierarchical linear regressions, which revealed that both youth and caregiver strength ratings are useful in explaining unique variance in emotional and behavioral outcomes, supporting the value of both, divergent perspectives.

Strength Assessment Domains and Outcomes

The finding that youth strength assessments explained more variability in delinquency than did caregiver assessments of youth strengths highlights the importance of youth perspectives in understanding delinquent behavior. In further support, results revealed that youth ratings of their family involvement and career strengths were significantly related to delinquency, while caregiver ratings of these youth strengths were not. It is worth noting the unexpected direction of the relationship between youth ratings of career strengths and self-

reported delinquency rates. Unlike the expected negative relationship between youth ratings of family involvement and delinquency, youth ratings of career strengths were positively related to delinquency; higher ratings of career strengths were related to more delinquent behavior. One potential explanation for this finding, inspired by research on youth delinquency (Williams, 1989), is that youth engaged in frequent delinquent behaviors do so with an entrepreneurial drive and may view their delinquent behavior as enterprising, contributing toward a viable future goal. The relatively high rates of theft in our sample support this conjecture. The unexpected direction of this relationship might also be explained by a common third variable that drives high self-assessments of career strengths and higher rates of delinquency together. For instance, Oyserman and Markus (1990) have suggested that a balance between youth's expected possible selves and feared future possible selves is related to lower rates of delinquency. Perhaps youth in the current sample had high career goals with unmatched feared possible selves. Unfortunately, this cannot be observed in the present data. Additional research related to career goals and delinquency is needed.

Our results also revealed that the proportion of variance explained by youth strength assessments was larger than that explained by caregiver assessments of youth strengths for school attendance, but not for school performance. Both youth and caregiver assessments of school functioning were significantly predictive of school performance. Furthermore, while not statistically significant, there was a trend for youth assessments of career strengths and caregiver assessments of youth interpersonal strengths to relate to school attendance six months after enrollment in services. These trends are fitting with research that supports the relationship between career goals and school persistence among college students (Hull-Blanks et al., 2005), as well as the relationship between classroom engagement and school attendance (Finn, 1989). Because the career aspirations of youth ages 10-18 are likely less developed than those of college students, the relationship between career strengths and school persistence may be weaker in our sample. In addition, as it relates to interpersonal strengths, our conjecture that they contribute to classroom engagement by ameliorating stigma and facilitating classroom belongingness, subsequently leading to better school attendance, may not operate in the way we hypothesized. A larger sample size may reveal significant effects for school attendance, allowing us to better understand these relationships. Nonetheless, together these findings support the idea that even

when they differ significantly, both youth and caregiver assessments of youth strengths provide valuable information for school based outcomes.

In further support of youth voice, youth strength assessments explained a significant proportion of the variance for coping/self advocacy and a greater proportion of the variance for activity involvement than did caregiver ratings of youth strengths. Only youth strength assessments were significantly related to coping skills/self advocacy and activity involvement 6 months after enrollment in services. Youth reports of their interpersonal strengths were significantly predictive of coping skills/self advocacy, and youth assessments of their intrapersonal strengths were significantly related to involvement in activities. It is plausible that the processes involved in developing coping skills are similar to those involved in emotional and behavioral control (interpersonal strengths). Both skills may require some degree of emotional intelligence to identify emotions as well as generate plans to manage them. In a study of emotional intelligence, Velasco, Fernández, Rovira, and Campos (2006) found a positive relationship between emotional intelligence and positive emotion regulation as well as higher social involvement, outcomes that are closely related to both coping skills and interpersonal strengths. With regards to activity involvement, it is not surprising that intrapersonal strengths significantly predicted involvement in activities; intrapersonal strengths, relating to feelings of self-competence and achievement, are qualities that are typically valued in organizations, activities, and employment. Additionally, youth who believe in themselves and their abilities may be more likely to become involved in activities in which they believe they will excel.

Youth Voice, Valued

Taken together, these results provide support for the value of youth perspectives as they predict positive emotional and behavioral outcomes over and above caregiver perspectives about youth. The significant influence of youth self-assessments is especially compelling in the context of caregiver rated outcomes (i.e. school attendance, school performance, activity involvement, and school discipline), suggesting that the relationships between strength ratings and outcomes are not simply a function of rater consistency. In 3 out of 5 outcomes, the proportion of variance explained by youth strength assessments was larger than that explained by caregiver assessments of youth strengths. Although results provide empirical support that youth strength assessments explain more variability than caregiver assessments across a range of

emotional and behavioral outcomes, it is important not to discount the influence of caregiver perspectives. In many cases, caregiver ratings of youth strengths were also significantly related to outcomes. This study's exploration of the association between particular informant perspectives and desired outcomes provides insight into the unique influence of both youth and caregiver strength assessments on emotional and behavioral outcomes. Additional research is needed to better understand exactly how or why strengths are related to these and other outcomes of interest.

Strength Domains

In addition to the value of youth perspectives for understanding outcomes, the results of this study point to the value of examining relationships between particular strength domains and outcomes. While strength assessment tools, such as the BERS, have outlined different types of strengths, little is known about the domain structure of strengths and whether, and if so how, different strength domains relate to different outcomes. Understanding strengths in a domain specific way may help shed light on how supporting youth in particular strength areas can help them meet certain needs and achieve related goals.

In the interest of parsimony, and recognizing the limits of power in our study, we selected no more than two strength domains to include in analyses predicting each outcome. Our hypotheses were based on extant research and reasonable conjecture. Results revealed that family involvement and career strengths were both significantly related to delinquency (although not both in the expected direction), school functioning was related to school performance, interpersonal strengths were related to coping, and intrapersonal strengths were significantly related to activity involvement. While our findings provide evidence in support of these associations, there is little theoretical backing for these specific relationships within the literature on youth strengths in mental health treatment. The present study is the first to show that youth assessments of particular strength domains were specifically related to the emotional and behavioral outcomes selected, suggesting that there may be something meaningful about how specific strength domains relate to particular outcomes. The next step in better understanding these associations would be to compare the differential relationships of strength domains to outcomes in a more systematic way with a larger sample.

Based on our findings of the exploratory analyses regarding strength domains, we posit that our conceptualization of strengths reflects theories put forth in the self-efficacy literature. Researchers have discussed self-efficacy as being primarily domain-specific, referring to perceived competence in task-specific performance, as well as general, referring to a global confidence in abilities across domains (Luszczynska, Gutiérrez-Doña, & Schwarzer, 2005). General self-efficacy has been shown to be related to a range of broad psychological constructs such as well-being and achievement, while domain-specific self-efficacy relates more to specific behavioral competencies within the relevant domain (Luszczynska et al., 2005). In the same way, general indices of strengths tend to relate to more global outcomes of functioning and well-being (Cowger, 1994; Oswald et al., 2001), and in our exploratory study of strength domains, we found that specific strengths were related to specific emotional and behavioral outcomes for youth. While our results provide compelling evidence for the relationships between specific strength domains and certain outcomes, additional research unpacking the domain structure of strengths is needed. Future work should rely on the similarities we have noted between conceptualizations of strength perceptions and self-efficacy.

Strength Assessment Utility in Mental Health

To date, the literature across disciplines in human services overwhelmingly supports the practical utility of paying attention to strengths for the reasons previously outlined (Cowger, 1994; Rapp et al., 2006; Weick et al., 1989). Literature on youth mental health services is also replete with rhetorical support for including youth perspectives in treatment planning (Sparks et al., 2006). Until now, no studies have empirically examined the added value of youth perspectives about their strengths for understanding outcomes. Methodologically speaking, our results offer statistical support that youth perspectives of their strengths provide more information across a range of outcomes than do caregiver assessments of youth strengths. As it relates to practice, we now have evidence that youth perspectives have implications for certain emotional and behavioral outcomes, providing a platform for inviting youth voice into services.

Caution, however, should be exercised in relying on strengths assessments as sole indicators of emotional or behavioral needs. Previous research has suggested that the Behavioral and Emotional Rating Scale (BERS), while not developed to diagnose specific emotional or behavioral disorders (EBD), provides information about the presence or absence of personal

strengths, which differentiates children with EBD and those without (Epstein, 2004). In two studies, BERS strength scores were significantly different between youth with EBD and those without (Epstein et al., 2002; Reid, Epstein, Pastor, & Ryser, 2000). Yet, compared to the BERS norming data used in these studies, the strengths profile of youth assessments in our sample fell within the average range of strengths for the norming data, representing a low probability of EBD, and the caregiver-reported youth strengths profile in our sample fell mainly within the below average range for the norming data, representing a high probability of EBD (See appendix A for BERS2 norming sample results as reported in the BERS2 manual). Notably, as outlined by the criteria for enrollment in system-of-care services and this study, 100% of youth in our sample were identified with serious emotional and behavioral challenges. The juxtaposition of the strength profiles in our sample with those in the BERS norming sample highlights the differences between the two groups with regards to the implications of strength ratings. These results not only underscore the precaution that strength assessments alone are not sufficient indicators of emotional or behavioral disorders, they also suggest the need for additional research exploring the function of strengths for youth with identified mental health needs within a treatment context.

Limitations

One of the main limitations of this study was the relatively small sample size and low retention of participants from baseline to 6 months. Barriers to achieving a larger sample size in this study reflect some of the familiar challenges in conducting research with youth and families with identified mental health needs. In our study, recruitment and retention were both challenged by issues that highlight the severity and chronicity of the mental health needs and difficulties faced by youth and families in the sample, as well as other factors such as lost and missed communication between interviewers and families, discharge from system-of-care services, relocation, and more. A bigger sample size may likely reveal significant effects for relationships that were approaching significance in our study. In a similar vein, the results of our study represent associations found in a sample of youth who not only have identified mental health needs, but who have also actively sought treatment. Replicating these findings in broader youth samples will strengthen generalizability. Because we could not account for treatment effects, we cannot eliminate the possibility that treatment had any impact on our findings. Future

research should attend to the possibility that treatment may affect youth who have higher strength assessments differentially.

Future Directions

This study offers support for the relationship between youths' self-evaluations of different strength domains and positive emotional and behavioral outcomes beyond caregiver assessments of youth strengths, yet the nature and function of strengths for youth within the mental health treatment context remain unexplored. Future research should extend our analyses by comparing how strengths function for youth with identified mental health needs who have actively sought treatment and those who have not. Moreover, to gain a broader understanding of youth strengths, comparison studies should explore how strengths function for youth with and without identified mental health needs. As studies begin to incorporate and learn more about youth self-assessments of their strengths across groups and contexts, future research should also explore the services and supports that contribute to higher strength ratings and better outcomes for youth. Given the significant differences between youth and caregiver ratings of youth strengths in our sample, this study begs the question whether convergence between youth and caregiver strength ratings support better outcomes for youth. Furthermore, additional research in this area should also focus on better understanding different domains of strengths, and developing theories about how strengths operate within a domain structure. Perhaps a different partitioning of strength domains would contribute to outcomes and results that differ from the present study. As we generate ideas for future directions, it is apparent that countless open questions remain about the nature of youth strengths and how they function for youth across contexts. This study contributes a first step in a program of research around the importance of youth strengths, from their perspective.

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APPENDIX A: BERS2 NORMING SAMPLE DATA

Behavioral and Emotional Strengths	Subscale Scaled Scores	Probability Student has EBD	Strength Index	Percentage included in bell-shaped distribution
Very Superior	17-20	Extremely low	>130	2.34
Superior	15-16		121-130	6.87
Above Average	13-14	Very low	111-120	16.12
Average	8-12	Low	90-110	49.51
Below Average	6-7	High	80-89	16.12
Poor	4-5	Very high	70-79	6.87