YOUTH VOICE AND PERCEIVED CONTROL IN TREATMENT FOR YOUTH IN A SYSTEM OF CARE

by

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ABSTRACT

SASHA HUGGINS. Youth voice and perceived control in treatment for youth in a system of care. (Under the direction of DR. RYAN KILMER)

Empowering clients in the mental health system is a principle for providing care that has developed in response to the once standard approach in which individuals had little to no voice and choice in their treatment plans and were served in very restrictive settings. The system of care (SOC) philosophy provides an approach to mental health service provision for youth that aligns with an empowerment philosophy. In addition to aiming for services and supports to be individualized, strengths based, and culturally appropriate, SOCs are to institute policies wherein youth have voice and choice in their treatment planning through active involvement and in the least restrictive setting possible. The extant literature suggests that adherence to the SOC principles has positive outcomes for youth and their families. This study sought to identify how youth reported voice and choice in treatment related to youth emotional and behavioral outcomes, satisfaction with services, and social support. Responses of 73 youth (and their caregivers) on the Behavioral and Emotional Rating Scale, Second Edition (BERS), Child Behavior Checklist (CBCL), Youth Services Survey (YSS), social support items, and voice and choice items were analyzed using baseline (Time 1) and follow-up data from 6 months to 1 year afterwards (Time 2 or Time 3). Contrary to hypotheses, results from a series of hierarchical regression analyses indicated that there were not any significant relationships between youth reported voice and choice in treatment and behavioral and emotional outcomes, satisfaction with services, and social support. Study implications, limitations, and future directions are discussed.

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CHAPTER 1: INTRODUCTION

During his presidential address to the Society for Community Research and Action: Division of Community Psychology at the 88th Annual Meeting of the American Psychological Association, Julian Rappaport (1981) stated the following:

> When I say "have become one-sided" I am implying that there is more than one side to the ways in which our social institutions can operate to do their job. Partly because institutions have a tendency to become one-sided, many social problems are ironically and inadvertently created by the so-called helping systems—the institutions and organizations developed by well-meaning scientists and professionals—and often "solutions" create more problems than they solve. (p. 8)

In the same address, Rappaport (1981) explained how previous approaches to community mental health, such as deinstitutionalization, consumer rights and needs, and even prevention programs, while well-meaning, turned out to be extreme and "one-sided"; he consequently advocated a new approach to community mental health: empowerment. In brief, Rappaport conceptualizes empowerment as a process and interchange through which individuals develop a concrete and psychological sense of control over their lives. Furthermore, Rappaport believes that empowerment needs to be present in the context of the organizations within which individuals work, the broader community, and even at the political level (Rappaport, 1981, 1984, 1987).

The present work examined empowerment in a sample drawn from a population that has often been marginalized—it explored youth empowerment and youth voice in the context of a system of care (SOC) in an attempt to understand the nature of the relationship between youth reports of control over their treatment and their adjustment. It

is important to clarify how youth voice and youth perceived control over treatment relates to outcomes because (a) the SOC philosophy stresses client leadership in treatment, and (b) the extant literature on the concept of empowerment lacks studies on youth empowerment in the context of the mental health system. Prior research shows empowerment to be beneficial to client outcomes among adults (Linhorst, Hamilton, Young, & Eckert, 2002; Nikkel, Smith, & Edwards, 1992; Strack, Deal, & Schulenberg, 2007).

The current study contributes to the literature and understanding of youth empowerment, as well as our understanding of how youth perceived control over treatment relates to outcomes in the context of a SOC. More specifically, the present work examined the association between perceived youth empowerment (operationalized specifically as perceived youth voice and choice) and youth outcomes, as reported at the beginning of their entry into the system of care (SOC) and after one year of involvement. The sections that follow briefly describe SOCs, summarize relevant literature on empowerment, frame how empowerment relates to SOCs, and detail the research questions that guided the present study.

What is a System of Care?

The SOC philosophy was developed in response to the lack of specialty mental health services offered to children with significant mental and emotional disturbances (Huang et al., 2005; Stroul & Friedman, 1986). According to Huang and colleagues (2005), multiple reports completed in the time leading up to the landmark monograph published by Stroul and Friedman (1986) highlighted that only a portion of children in need of services were receiving them, and not only were children not receiving the

mental health services they needed, the services they did receive were in overly-restrictive settings, there were few intermediate-care and community-based options available, and the coordination between service providers was sub-par (see, e.g., Joint Commission on the Mental Health of Children, 1969; Knitzer, 1982; President's Commission on Mental Health, 1978; U.S. Congress, Office of Technology Assessment, 1986).

In 1984 the National Institute of Mental Health (NIMH) developed the Child and Adolescent Service System Program (CASSP) to help states and local communities establish SOCs in order to better serve the needs of children with mental and emotional disturbances (Huang et al., 2005; Stroul & Friedman, 1986). SOCs were developed and originally defined as "a comprehensive spectrum of mental health and other necessary services which are organized into a coordinated network to meet the multiple and changing needs of severely emotionally disturbed children and adolescents" (Stroul & Friedman, 1986, p. 11). In SOCs, services are meant to be based in the community, child-centered and youth-guided, family-focused, and culturally appropriate (Center for Mental Health Services [CMHS], 2010; Huang et al., 2005; Miller, Blau, Christopher, & Jordan, 2012; Stroul & Friedman, 1986, 1996). The SOC philosophy stresses the "wraparound" process in which there is the availability and use of an array of services and resources delivered in the least restrictive setting possible, in a coordinated, linked manner, and with services and supports individualized to the cultural environments, goals, needs, and strengths of the child and family (Huang et al., 2005; Miller et al., 2012; Stroul & Friedman, 1986, 1996; VanDenBerg, Bruns, & Burchard, 2008).

According to the SOC philosophy and the wraparound practice model, clients have strengths that can be utilized in the treatment process and children and their families and caregivers should have a voice and choice in treatment; that is, clients should be fully involved and active participants in all aspects of service planning and delivery (Huang et al., 2005; Stroul & Friedman, 1986, 1996). Service providers should work to incorporate these elements of the SOC philosophy in treatment planning and delivery while ensuring that they protect the children's rights and promote advocacy efforts for the children (Stroul & Friedman, 1986).

Both theory and research suggest that when services are well-coordinated and carried out according to the SOC philosophy, there will be positive results (CMHS, 2010; Gyamfi, Keens-Douglas, & Medin, 2007; Huang et al., 2005). According to one study, when youth and caregivers reported that services aligned well with the SOC philosophy, they endorsed fewer child behavior problems and caregivers reported greater satisfaction with services one year post-services relative to those who rated their services as less reflective of SOC (Graves, 2005).

As conceptualized, SOCs are intended to utilize community resources and encourage active involvement from those served with the intent of drawing on the strengths, expertise, and knowledge of clients (Friesen & Huff, 1996). These guiding notions are consistent with the goals of empowering programs and, more broadly, system processes, which are intended to facilitate and support client involvement, autonomy, and decision-making power in their lives and communities (Cornell Empowerment Group, 1989). Thus, youth empowerment in SOCs is a logical step and should be a readily-applied construct in the process of planning and implementing services. In the SOC

context, empowerment is intended to reflect active participation and decision-making from the client, aided by service providers and based on client strengths (Romanelli et al., 2009).

More specifically, in explaining empowerment, Rappaport (1981) stated that the concept requires providers to view mental health consumers as they should be, human beings with rights and needs, not as "simply children in need or as only citizens with rights" (p. 15). He also urged that even people who seem most needy and least able to function need to have more control over their lives, and experts need to be adaptable and take on the role of non-experts (Rappaport, 1981). To that end, youth and families in SOCs are not to be viewed as incapable of decision-making and excluded from treatment planning; the planning of services and supports is to be youth guided and family driven. Furthermore, given the view that Rappaport stated concerning mental health empowerment, along with the participatory nature of treatment in SOCs, one could argue that it ought to be common for children and youth to have high perceived voice in, and control over, their lives and treatment.

How Do We Understand Empowerment?

While researchers have been defining and refining theories of adult empowerment in the mental health field for some time (Linhorst et al., 2002; Rappaport, 1981, 1984, 1987; Strack et al., 2007; Swift & Levin, 1987; Zimmerman & Warschausky, 1998), the concept of youth empowerment is still taking shape, and no uniform definition has been adopted (Altman et al., 2004; Cargo, Grams, Ottonson, Ward, & Green, 2003; Kaplan, Skolnik, & Turnbull, 2009). Furthermore, the notion of youth empowerment has grown out of work in a variety of areas, including empowerment-based research, positive youth

development, and community-based prevention programs (Holden, Messeri, Evans, Crankshaw, & Ben-Davies, 2004; Moody, Childs, & Sepples, 2003).

This study further contributes to understanding youth empowerment in the context of youth roles and voice in a SOC. However, it is salient to underscore that this effort grows out of the National Longitudinal Study of SOCs (i.e., the National Evaluation), using data from one site, and the measures being used here are not strictly framed as assessing empowerment *per se*. Rather, the measures are intended to assess perceived voice and choice, with (at least in principle) belief in the import of voice and choice being shared by service providers in SOCs and those who work in other contexts with varying populations. Consequently, before attempting to define youth empowerment, it is important to explore the broader construct of empowerment and its nuances, particularly as the concept of youth empowerment is still developing and its use is being incorporated in SOCs. Furthermore, it is also important to be cognizant that although many specific and varying definitions of empowerment share common components (i.e. the purpose is to give more control over treatment to the client and the community), in general there is not a single key, widely accepted definition of the construct.

The empowerment concept can be viewed as a reaction to the traditional approach of mental health care, with the client as simply a recipient of services. Traditionally, in decision-making and resource allocation, those in power can determine what and how decisions are made, shape the issues that are placed on the public agenda, and even influence what those with less power want (Cornell Empowerment Group, 1989). In this view, mental health empowerment is about redistributing control and access to resources to those who are targeted by the policies and decisions of those in power. Making

decisions for the mental health consumer and presenting prepackaged treatment plans, all without engaging the client in the process, is an operational style that is rejected by proponents of empowerment (Cornell Empowerment Group, 1989; Rappaport, 1981, 1987). Many definitions of empowerment frame it as the way by which individuals and communities gain control and mastery over their lives and mental health services planning and delivery (Dickerson, 1998; Holden et al., 2004; Rappaport, 1981, 1984, 1987; Swift & Levin, 1987; Wallerstein, 1993; Zimmerman & Rappaport, 1988; Zimmerman & Warschausky, 1998). For example, two features that Chamberlin (1997) described as part of the empowerment construct include access to resources and information related to the consumer's treatment, and consumers having decision-making power concerning their treatment. It is imperative that during the process of empowerment, individual strengths and competencies are utilized and highlighted (Dickerson, 1998; Perkins & Zimmerman, 1995; Rappaport 1981, 1984; Schulz, Israel, Zimmerman, & Checkoway, 1995; Swift & Levin, 1987), rather than blaming the individual and focusing on deficits (Cornell Empowerment Group, 1989; Perkins & Zimmerman, 1995). Furthermore, the empowerment construct involves mutual respect, educating and equipping consumers, while providers work as partners, not as power-yielding experts (Cornell Empowerment Group, 1989; Holden et al., 2004; Perkins & Zimmerman, 1995; Rappaport, 1981, 1984, 1987; Zimmerman & Warchausky, 1998).

These characteristics of empowerment align with the SOC philosophy in the focus on clients' strengths and decision-making capabilities (Huang et al., 2005; Stroul & Friedman, 1986, 1996). Researchers also seem to have reached a consensus in that empowerment is described as varying by context. More specifically, it can and should

manifest differently across individuals, cultures, and environments, a factor that contributes directly to the lack of a single definition or norm for understanding empowerment (Holden et al., 2004; Perkins & Zimmerman, 1995; Rappaport, 1984; Zimmerman & Warschausky, 1998). Just as those who have studied empowerment recognize the importance of context, SOC theorists and practitioners have also acknowledged the need for culturally-appropriate services as well as services and supports based in the community and in the least restrictive settings possible (Huang et al., 2005; Stroul & Friedman, 1986, 1996). Thus, when SOC providers operate effectively according to the SOC philosophy, encouraging clients to utilize their unique strengths in the treatment process, within the context of their lives, the result should be that clients report high levels of empowerment and outcomes associated with empowerment.

In the literature on youth and adult empowerment, empowerment is discussed as an ongoing, psychological, and policy-directed process as well as a construct that can be assessed as an outcome variable (Cargo et al., 2003; Cornell Empowerment Group, 1989; Gutiérrez, DeLois, & GlenMaye, 1995; Kaplan et al., 2009; Perkins & Zimmerman, 1995; Swift & Levin, 1987; Wallerstein, 1993; Zimmerman & Warschausky, 1998). Thus, a given initiative can be empowering and result in individuals who feel empowered (Perkins & Zimmerman, 1995; Swift & Levin, 1987; Zimmerman & Warschausky, 1998).

For example, Dickerson (1998) provided a multi-faceted definition of empowerment that includes three main components: a sense of personal competence, self-determination, and social engagement. Dickerson (1998, p. 259) described the first

of these attributes as including exhibiting positive self-esteem, accepting one's psychiatric disability, and adopting the perspective of having an internal locus of control. According to Dickerson (1998, p. 259), the second attribute, i.e., self-determination, includes making decisions about one's life, involvement in choices concerning treatment, and being part of the planning and organization of services. Finally, Dickerson (1998, p. 259) elaborated that the third attribute of empowerment involves empathizing with and supporting other consumers, feeling "righteous anger" about stigma and other injustices, and taking part in advocacy activities. Others have explained that the lack of empowerment is exhibited by powerlessness, alienation, learned helplessness, and loss of a sense of control over one's life (Rappaport, 1984; Wallerstein, 1993). Of particular relevance to the present effort, such findings and ideas led Wallerstein (1993) to advocate for client-directed decision-making in treatment and active participation in the program and community.

As illustrated in this brief review of diverse studies and findings, numerous variables and indicators have been used to reflect empowerment. Furthermore, many of the elements included in definitions of empowerment are also incorporated into the SOC philosophy, particularly those related to client strengths, voice, and choice. Thus, explicating the more narrow focus of youth empowerment is the next step to understanding youth voice and youth empowerment in the context of SOCs.

Defining Youth Empowerment. Given the similarities between characteristics of empowerment and the SOC philosophy, the application of youth empowerment and youth voice and choice in the context of a SOC should be a logical development. Moody et al. (2003) defined youth empowerment as "the gradually increasing freedoms and

responsibilities that young people should acquire as they mature" (p. 264). While gradually increasing freedom is a part of youth empowerment, as well as appropriate development and maturation (Moody et al., 2003), youth empowerment is further operationalized here as involving client voice and choice, a process that provides opportunities for youth to (a) experience leadership, advocacy, and peer education; practice planning, decision-making, and critical thinking skills; and (b) express their creativity, in the context of positive interactions (Messias, Fore, McLoughlin, & Parra-Medina, 2005) as part of their treatment process in a SOC as part of their treatment process; this frame of youth empowerment—and its relationship to treatment and outcomes—is explored here as the focus of this effort.

To elaborate on that definition, youth empowerment is a dynamic, transactional process—characterized by the feedback and interaction between youth and adults—achieved by utilizing a more egalitarian programming approach (Cargo et al., 2003). Furthermore, youth manage their participation and input in the environment of a positive social climate and with facilitative adult support (Cargo et al., 2003). Moreover, youth should be viewed as resources, provided the means to assume useful roles, and have the opportunity to make decisions about their own lives (Holden et al., 2004; Roth & Brooks-Gunn, 2003; Scales, 1999). Participation is essential to youth empowerment, wherein youth earn the trust of parents and adults while claiming authority for themselves (Rissel et al., 1996). All of these characteristics are needed as part of the youth empowerment process in the context of a SOC.

Youth Empowerment and Service Systems. Researchers have studied youth empowerment in a variety of contexts, such as positive youth development programs and

prevention programs for at risk youth (Cargo et al., 2003; Holden et al., 2004; Messias et al., 2005; Moody et al., 2003; Rissel et al., 1996). Moreover, in mental health service provision, and particularly SOCs, there is a growing movement to focus on youth empowerment and youth voice for youth receiving mental health services.

To that end, mental health and SOC providers are seeking to be more active in educating youth about their mental health and the service system. Service providers have also been encouraged to give youth more power to actively participate in and influence their treatment communities (Gyamfi et al., 2007; Kaplan et al., 2009; Romanelli et al., 2009). As part of the empowerment process, youth should be engaged and have the opportunity to participate actively in proceedings related to their mental health care in order to help enhance their functioning and mental health and increase self-competency (Romanelli et al., 2009). Furthermore, as part of the youth empowerment process in the context of mental health services, need assessments, planning, and implementation should each be strengths-based (Romanelli et al., 2009). That is, an explicit effort is made to identify youth strengths and resources; these are to be considered as the youth, family, and child and family planning team work to understand what services and resources youth may need, organize and coordinate a plan of action for attaining those services and resources, and are then carry out the plan of care and its programming, supports, and services.

As one example, the establishment of youth groups for children involved in a SOC is cited as a method through which youth may feel empowered to become more involved and concentrate on the development of their individual strengths (Gyamfi et al., 2007). Youth groups are a medium through which youth can communicate the

experiences they have had as a result of having a mental health diagnosis, and they encourage a sense of belonging (Gyamfi et al., 2007).

Overall, focusing on youth empowerment in SOCs is a growing approach. However, as part of understanding youth empowerment in the context of a SOC, it is also important to be aware of the possible benefits and outcomes associated with empowerment and youth empowerment in particular.

Empowerment and Outcomes

Outcomes associated with empowerment include increased self-confidence, social support, quality of life, and self-esteem, along with skills development, actual or perceived control, feelings of attachment and belonging, and the belief that one is making a contribution (Nikkel et al., 1992; Perkins & Zimmerman, 1995; Strack et al., 2007). As one case in point, in one study based in mental health facilities, it was considered empowering for adult individuals with severe mental illness (SMI) to have more control in their treatment decisions; of course, a person's level of involvement in the decision and planning process can be limited by his or her mental state (Linhorst et al., 2002).

Youth Empowerment and Outcomes. In studying youth empowerment, researchers have accordingly studied empowerment's association with numerous conceptually-related constructs. Kaplan et al. (2009) suggested that increased resilience and improved coping skills are possible outcomes of youth empowerment. As one case in point, at-risk youth involved in the Youth Empowerment and Support program reported higher levels of civic involvement, self-esteem, mentor support, positive peer-bonding, social skills attainment, and school attachment (Moody et al., 2003). Moreover, Moody et al. (2003) stated that youth involvement in an empowerment program may have an

effect on "feeling cared for and supported" (p. 264), such that youth who feel empowered are more likely to report perceived social support, a facet of empowerment specifically related to the study at hand. To date, studies have evaluated outcomes of youth empowerment for youth involved in community programs (Kaplan et al., 2009; Moody et al., 2003), as well as other programs and groups that are specifically situated in SOCs; a considerably smaller body of work has examined the potential effects of youth empowerment-related constructs in the context of SOCs more broadly (e.g., CMHS, 2010).

As one example, using data from focus groups of youth and youth coordinators involved in youth groups in their local SOC, Gyamfi and colleagues (2007) described some benefits of youth choice and voice. For instance, in their work (Gyamfi et al., 2007), youth reported that being part of a youth group helped them to develop supportive, positive relationships with adults, assume new responsibilities and learn new skills, develop more coping strategies, foster positive feelings about themselves, and give back to their community. Youth who participated in youth groups in a SOC shared that they valued the social support they received from their peers and other adults and, subsequently, even reported contributing to the formation of other youth groups and advisory committees. Moreover, family members of youth involved in youth groups described the youth as resilient, capable, more autonomous, and having self-worth (Gyamfi et al., 2007). Apart from youth groups in SOCs, and of particular salience to the present project, youth who participated in their own treatment planning sessions reported greater improvement in behavioral and emotional strengths between intake and six

months after beginning to receive services than did youth who did not participate in their treatment planning sessions (CMHS, 2010).

These specific benefits were noted for youth who were actively involved in their SOC and were studied as possible outcomes of youth voice and youth empowerment. However, in general, youth empowerment and youth control in treatment and in SOCs has been lacking. Youth in SOCs have reported feeling "under-used and under-empowered" due to the limited information and input they were given and allowed to give regarding their SOC and service plan (Gyamfi et al., 2007, p. 390). Low youth participation in decision-making via board and committee membership has been reported, as well as low participation in service-planning and providing feedback, with some youth reporting not knowing they could get involved (Gyamfi et al., 2007). The youth who were involved in service planning communicated they were allowed varying degrees of choice, with some given more choices than others (Gyamfi et al., 2007). While some experts might say that youth need to earn the trust of the adults in order to gain more power, the nature of empowerment requires that they are given a chance, which is not contingent upon their pre-existing deficits or capabilities. Unfortunately, service providers do not consistently create an empowering environment for youth in SOCs, such as when meetings are held at times when youth are in school or transportation is not provided (Gyamfi et al., 2007). Youth in SOCs also report that the adults could do more to educate them and help them get involved (Gyamfi et al., 2007).

In the move to focus on the import of the consumer's voice, along with collecting information on perceived social support, considering and measuring consumer satisfaction has great priority (Garland, Haine, & Lewczyk Boxmeyer, 2007; Turchik,

Karpenko, Ogles, Demireva, & Probst, 2010). This is particularly salient within SOCs, given the structure of their treatment planning process and the notion that satisfaction is considered to be partially indicative of the effectiveness of SOCs (CMHS, 2010).

To that end the Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F) are used as part of the national evaluation of SOCs; they include questions on youth satisfaction and participation in decisions concerning their care (Brunk et al., 2000; CMHS, 2010). Ratings of satisfaction are widely used, as they are easily obtained from parents and youth and easily interpreted (Garland et al., 2007). Ultimately, complaints about services could reflect lack of consumer empowerment and consumer voice, and lack of adherence to the process of care for a particular consumer, weaknesses which in turn might negatively affect the reported outcomes and satisfaction of youth and their caregivers (Graves, 2005). Thus, though it might be argued that consumer satisfaction with services does not necessarily reflect the quality of the services rendered, research has indicated that the relationship between service satisfaction and outcomes is complex.

One study explored the relationship between reported parent satisfaction and their opinion of the therapists' knowledge and interactions with them and their child, treatment outcomes, and other factors within their child and adolescent mental health services unit (CAMHS; Bjørngaard, Wessel Andersson, Osborg Ose, & Hanssen-Bauer, 2008). Bjørngaard et al. (2008) found that 96-98% of variance in parent satisfaction could be attributed to factors within the CAMHS units. Mixed or inconclusive results about the importance of service satisfaction have been reported in other studies, documenting few significant factors, accounting for little of the variance in reported satisfaction, and

identifying differing results when using parent or youth reports of satisfaction (Garland et al., 2007; Turchik et al., 2010). However, even in these latter efforts (i.e., Garland et al., 2007; Turchik et al., 2010), symptom reduction and improvement in functioning were among the variables significantly and positively related to parent- and youth-reported satisfaction with services for youth receiving mental health services in the community. Given the focus on consumer satisfaction in SOCs and the inconclusive results regarding the relationship between satisfaction with services and other variables, it is important to continue to study the concept and include less-explored options, such as perceived empowerment, which, in the current study, is voice and control in treatment.

The Context of the Present Study: The Local SOC. Accordingly, the purpose of the present study was to investigate the relationship between perceived youth voice in and control over treatment and youth outcomes, satisfaction with services, and reports of social support in MeckCARES, a local SOC initiative. The MeckCARES SOC was a partnership among local agencies that serve youth and their families in Mecklenburg County, NC. The goal of this partnership was to revamp child mental health service delivery by establishing a collaborative, coordinated SOC that employed the wraparound practice model and built on consumer strengths to improve outcomes for youth and their families. The MeckCARES site took part in the National Evaluation, which sought to track participant reports of improvement and their experiences with service providers. Information from the National Evaluation is used to measure the effectiveness of MeckCARES and other SOCs around the country (CMHS, 2010).

Specifically, using data from participants who took part in the National Evaluation via their enrollment in MeckCARES, this study aimed to address the following main questions and hypotheses:

To what degree is youth-reported control over treatment at intake related to:

1. Youth problem behaviors and emotional strengths and resources, as reported by parents and youth at the Time 3 (T3), one-year follow-up?

   Hypothesis 1. Youth who report higher perceived control scores at the Time 1 (T1) baseline interview will evidence fewer problem behaviors and more strengths (by parent- and self-report) at T3.

2. Youth and caregiver reports of satisfaction with services at the T3 follow-up?

   Hypothesis 2. Youth who report higher perceived control scores at T1 will evidence higher satisfaction scores (by caregivers and self- report) at T3.

3. Youth- reported general social support at T1 and T3?

   Hypothesis 3. Youth who report higher perceived control scores at T1 will report higher social support scores at T3.

CHAPTER 2: METHOD

Participants

Participants with National Evaluation data from T1 and T3 were used for the current study. T3 was chosen as the follow-up date because it allowed for analyses of participant responses after a full year of involvement in the SOC. There were 73 qualifying participants with data from T1 and T3. Of the participants who did not qualify for the current project, 144 had data from T1 but not T3, 126 had data from T1 and T2 but not T3, and 28 had data from T3 but not T1; overall, 239 MeckCARES enrollees participated in at least one of the first three waves of the National Evaluation but did not qualify for this study.

Chi-square tests of independence and *t*-tests were run to assess for differences on selected variables between MeckCARES enrollees who are participants and non-participants in the present study. A chi-square test of independence indicated that a higher proportion of the study's youth participants were Black or African American (88.9%) relative to those who did not qualify (i.e., they were excluded because of missing key study data from T1 and/or T3) for the project (77%), χ^2 (1, N = 302) = 4.84, $p < .05$, *phi* = .13. A chi-square test also indicated the nature of the caregiver's relationship to the child was related significantly to study category, χ^2 (6, N = 278) = 16.64, $p < .05$, *phi* = .25, such that caregivers who qualified for this study were much less likely to describe themselves as foster parents to the youth (2.9%) than caregivers who did not qualify for

the current project (12.4%), and more likely to describe themselves as grandparents (18.8%) than caregivers who did not qualify (5.3%). In addition, a *t*-test indicated that the mean caregiver's age differed significantly between the study categories, t (298) = 2.34, $p < .05$; on average, caregiver participants (*M* age = 44.43 years; *SD* = 10.44) were 3.18 years older than caregivers who did not qualify (*M* age = 41.25 years; *SD* = 9.93). Study participants and those who did not qualify for the present study did not evidence significant differences on the study's key outcome variables of mental health functioning (cf. below; i.e., BERS Strength Quotient, CBCL Problem Total).

Of the 73 qualifying participants, 64 identified as African American, six identified as Caucasian, and one identified as Hispanic. All the participants (*N* = 73) were referred by a mental health agency, clinic, or provider. Oppositional defiant disorder was the most common primary diagnosis among participants (26%), followed by attention-deficit/hyperactivity disorders (16.4%) and mood disorders (12.3%). The problems most frequently reported as the reason(s) why youth were referred to services were conduct/delinquency-related problems (*n* = 43) and hyperactivity and attention-related problems (*n* = 30).

At T1, four (5.5%) respondents were agency staff acting as caregivers, with all others in a more standard caregiver role (*n* = 69, 94.5%), including biological parents (*n* = 47; 68.1%), extended family members (grandparents, aunts, uncles; *n* = 15; 21.7%), adoptive/stepparents (*n* = 5; 7.2%), and foster parents (*n* = 2; 2.9%). Of the reported gender data, caregivers were 91.8% female (*n* = 67) and 8.2% male (*n* = 6), and ranged from 28 to 74 years of age (*M* = 44.43, *SD* = 10.44). Caregivers largely reported themselves as Black or African-American (*n* = 58, 82.9%) or White/Caucasian (*n* = 8,

11%). Of the caregivers, 25 (35.2%) reported having a high school diploma/GED or higher and 21 caregivers (29.6%) reported attending some college, but not having a degree, 39 (56.5%) endorsed having been employed in the past 6 months, and 52 (75.3%) reported a yearly income of less than $25,000.

Measures

Enrollment and Demographic Information Form (EDIF). Completed by provider agency staff, this form contains 16 items that capture demographic information, as well as assessment and diagnostic information about the child at baseline (i.e., at the beginning of their involvement with the SOC).

Youth Information Questionnaire (YIQ). This 23-item measure was completed by youth at intake (YIQ-I) and at follow-up (YIQ-F). Items address youth work history, emotional and behavioral symptoms leading up to services, suicidality, neighborhood safety, and medications. The YIQ also contains items that address the key study constructs of (a) youth voice and choice in treatment as well as (b) social support (see Appendix A for a listing of the items used for these constructs). Respondents used a true/false scale (1 = *true*, 2 = *false*) to respond to the 5 items concerning voice and choice in treatment, with items reverse coded such that higher sums indicated greater perceived voice and choice in treatment (0 = *false*, 1 = *true*). Youth responded to 6 items about social support using a six-point scale (1 = *never*, 2 = *rarely, almost never*, 3 = *less than half the* time, 4 = *more than half the* time, 5 = *usually, almost always*, and 6 = *always*), with items summed such that higher values indicated greater perceived social support. The Data Manual for the National Evaluation (CMHS, 2007) does not include reliability and validity information for the constructs assessed by the YIQ.

Caregiver Information Questionnaire (CIQ). Caregivers or staff serving as caregivers completed slightly different versions of this questionnaire, with 49 and 44 items, respectively. Respondents provided demographic information such as their race, gender, income, education level, employment status, relationship to the child, potential risk factors in the family/household (child's exposure to domestic violence, symptoms of depression by a resident of the home, mental illness of a resident, criminal conviction for a resident of the home, substance abuse by a resident), the child's history of maltreatment (physical abuse or sexual abuse, if applicable), and the child's history of service and/or medication utilization.

Behavioral and Emotional Rating Scale, Second Edition (BERS-2). This 57-item measure (Epstein, 2004) assesses youth behavioral and emotional strengths across six areas: *Family Involvement*, the child's participation in, and relationship with, the family; *Interpersonal Strength*, the child's ability to control emotions or behaviors in social settings; *Affective Strength*, the youth's ability to express feelings towards, and accept affection from, others; *School Functioning*, reflecting the child's competence in classroom and other school tasks; *Intrapersonal Strength*, the youth's opinion of his or her competence and accomplishments; and *Future/Careers Strength*, the youth's goals for his or her future. The first five areas constitute the measure's core subscales; the sum of these subscales is used to calculate a global *Strength Index* (M = 100, SD = 15).

There are two versions of the BERS-2, the caregiver-completed BERS-2C and the youth-completed BERS-2Y, both of which measure the same areas. Caregivers and youth rated statements using a four-point scale (0 = *not at all like your child/not at all like you*, 1 = *not much like your child/not much like you*, 2 = *like your child/like you*, and

3 = *very much like your child*/*very much like you*). The BERS-2 is a valid measure of behavioral and emotional strength and has good reliability (CMHS, 2010; Epstein, 2004; Epstein, Mooney, Ryser, & Pierce, 2004; Mooney, Epstein, Ryser, & Pierce, 2005). The Cronbach's alpha for the BERS-2C Strength Index is .97, with alphas for the six subscales ranging from .80 to .93. The alpha for the BERS-2Y Strength Index is .95, with alphas for the six subscales ranging from .79 to .88 (CMHS, 2010). Youth and caregiver reports on the BERS were both used to study reported strengths at follow-up.

Child Behavior Checklist (CBCL, 6-18). On the widely-used CBCL (Achenbach, 1991), caregivers responded to 113 items about possible child behavioral and emotional problems, as well as competencies, using a scale from 0 to 2, with 0 = *not true (as far as you know)*, 1 = *somewhat or sometimes true*, and 2 = *very true or often true*. The statements on the CBCL 6-18 measure eight constructs or syndromes, two broad groupings of syndromes, and a *Total Problems* score. The eight syndrome scales include *Withdrawn*, *Somatic Complaints*, *Anxious/Depressed*, *Social Problems*, *Thought Problems*, *Attention Problems*, *Delinquent Behavior*, and *Aggressive Behavior*. The two broad groupings include (a) *Internalizing Problems*, a combination of *Withdrawn*, *Somatic Complaints*, and *Anxious/Depressed*, and (b) *Externalizing Problems*, a combination of the *Delinquent Behavior* and *Aggressive Behavior* scales. The sum of responses from each scale is converted to a T-score (M = 50, SD = 10), with T-scores above 70 indicating clinically significant impairment in that area. The CBCL 6-18 has demonstrated good consistency, with alpha correlations at or above .90, and good construct validity as demonstrated via its relationships with content scales from the Connor Parent Rating Scale-Revised and the Behavior Assessment System for Children,

with Pearson *r* coefficients ranging from .34 to .89 (CMHS, 2010). In conjunction with the BERS Strength Index, the Total Problems score from this measure was used to study reported youth problems and strengths at follow-up.

Youth Services Survey (YSS) and Youth Services Survey for Families (YSS-F). Caregivers and youth completed the 21-item YSS-F and YSS, respectively. The two measures are similar in content, allowing for respondents to provide their opinions of the service experience they have had with SOCs over the past six months. The YSS-F and the YSS assess five service domains: accessibility of services, participation in treatment, cultural sensitivity of service providers, outcomes, and satisfaction with services. The present study used the satisfaction with services domain, studying the relationship it has with reported youth voice in treatment. Respondents provided answers to each item using a five-point rating scale, where 1 = *strongly disagree*, 2 = *disagree*, 3 = *undecided*, 4 = *agree*, and 5 = *strongly agree*. The YSS and YSS-F have good reliability, with reported Cronbach's alphas of .94 for the satisfaction with services domain in each measure (CMHS, 2010). In a study of parent satisfaction with services for youth enrolled in Medicaid and receiving services through Kentucky's 14 community mental health centers, the YSS-F was found to be a reliable measure of satisfaction (Riley, Stromberg, & Clark, 2005). The YSS and YSS-F were used to measure reported satisfaction with services at follow-up.

Procedure

As of May 2, 2012, 708 participants had enrolled in MeckCARES. Of the 708 families that had enrolled in MeckCARES, 332 participated in the National Evaluation. Families that enrolled in MeckCARES could participate in the National Evaluation if

they had a child, ages 10–21 years, who had one or more severe emotional and/or behavioral disturbance (SED/SEBD), and were receiving or about to begin receiving services through the SOC in Mecklenburg County. The SED classification was operationalized as reflecting the presence of at least one DSM-IV diagnosis, multi-system involvement (i.e., involvement in and receiving services from multiple public systems, such as mental health, social services, juvenile justice, etc.), at risk of out of home placement, and significant impairment. When families enrolled in MeckCARES, they were presented with information describing the evaluation. If they consented to contact, an interviewer contacted them and informed them about the National Evaluation of SOCs and the evaluative efforts locally. If a family decided to participate in the National Evaluation, the participating caregiver and youth then completed the baseline interview (Time 1) within 30 days of their enrollment in MeckCARES. After at least one person in the family completed the baseline interview, if the caregiver and/or the youth missed a subsequent time frame (Time 2-Time 7), he or she was still urged to continue in the National Evaluation, as long as he or she met the qualifying criteria.

National Evaluation team members interviewed one caregiver from each family at each time frame, usually the same caregiver for each session, although the specific caregiver who was interviewed occasionally differed across timeframes because of changing family circumstances. Caregivers included biological, adoptive, or foster parents, grandparents who were guardians, and staff members who were caregivers when youth lived in facilities or group homes. For the purpose of the National Evaluation, an adult was considered the primary caregiver if the youth had lived with him or her for the majority of the six months before the interview. Only one child from each family was

interviewed, even if the family had multiple children who were eligible to participate (CMHS, 2006).

Interviews were conducted every six months for up to three years, with a six-week window before and after each projected follow-up date in order to provide sufficient time to schedule and complete the interview. As incentive for participating in the study, caregivers received a $30 gift card after each interview, and youth received a $20 gift card after each interview.

Drawing from these National Evaluation data from this site, inclusion criteria for the present work were: (a) The youth and caregiver provided data at Time 1 (T1), and (b) the youth and caregiver provided data at Time 3 (T3). Furthermore, although National Evaluation participants were contacted every six months, according to the national effort's standardized protocol, they were not required to complete the same measures every timeframe. The youth voice and choice items, numbers 10–14 of the YIQ-I, are only given at T1, and the YSS and YSS-F are only administered at follow-up. The sample size consisted of 73 youth (n = 43 males; n = 30 females), who at T1 were between 10 and 18 years of age (M = 14.22, SD = 1.386).

CHAPTER 3: RESULTS

To prepare for the study's substantive analysis, the five items used to measure perceived youth voice and choice in treatment were first recoded and summed, such that higher scores indicate higher perceived voice and choice in treatment. The items used to measure social support were also first summed for each participant, with higher sums indicating greater social support. Table 1 displays descriptive findings for the study's central variables.

On average, youth tended to report behavioral and emotional strengths and resources that resulted in Strength Index scores close to the standardized mean of 100 on this norm-based measure (T1 *M* =96.11 and T3 *M* = 98.89), whereas caregivers reported youth strengths that resulted in Strength Index scores moderately below average (T1 *M* = 78.19 and T3 *M* = 82.11; Epstein, 2004). However, the differences were not statistically significant (*M* diff = -1.14, $p = .583$). In addition, caregivers tended to report levels of problems that resulted in high CBCL Total Problem Scores for the system-involved youths (T1 *M* = 69.75 and T3 *M* = 64.70) that, at T1, were just below the standardized 70-point threshold for clinical impairment (Achenbach, 1991), with the score significantly decreasing at follow-up, *M* diff =5.05, $p < .001$ (indicating caregivers' perceptions of improvement in youth functioning). On average, youth reported slightly lower satisfaction scores (T2 *M* = 3.88 and T3 *M* = 3.98) on the YSS measure than caregivers (T2 *M* = 4.07 and T3 *M* = 4.03), though the differences were not statistically

significant (*M* diff =.26, *p* = .108). Given that a '*3'* on the scale reflects being undecided and a '*4'* reflects moderately high satisfaction and agreement with positive statements concerning the treatment received from service providers, these scores suggest that youth and caregivers were satisfied with the treatment received from service providers. While the difference was not statistically significant, youth report of social support also increased slightly over time, with moderately high levels (the highest possible score was a 36) going from an average of 25.85 at T1 to an average of 27.14 at T3 (*M* diff =-1.29, *p* = .073). Finally, youth tended to report low voice and choice scores (*M* = 1.49), given that the maximum was 5.

Preliminary analyses were conducted to investigate the potential roles of the study's key variables of interest, as well as other exploratory variables, in contributing to understanding voice and choice in treatment. Exploratory variables included in the preliminary analysis were the race (Black or White), age, and gender of the youth participants, exposure to risk factors (as reported by caregivers) such as experience of physical or sexual abuse, and exposure to domestic violence, mental illness, criminals, or substance use. All exploratory variables, except for age and gender (0 = *boy*, 1 = *girl*), were responded to using a yes/no scale. The potential risk factors were also reverse coded and summed on a scale of 0-7, creating a Risk Factor Total variable, so that a higher score represented greater exposure to risk factors. These exploratory variables were included in order to investigate other factors that could possibly be related to empowerment, but were beyond the focus of the present study. The mean for each of the risk factors fell under .62, with the Risk Factor Total reported by caregivers averaging 2.36 (*SD* = 1.73) out of a maximum of 7.

Next, pearson and point-biserial correlations were run to determine the nature of the relationship between reported perceived youth voice and control in treatment, and the study's key variables of focus, and the exploratory variables. Several notable correlations were observed (Table 2.1 and Table 2.2). Of the correlations, T1 Strength Index scores on the BERS-2Y questionnaire were significantly and positively related to voice and choice in treatment (r = .26, p = .026); that is, youth who reported higher Strength Index scores also reported greater voice and choice in treatment scores. In addition, there was a trend such that total reported baseline support was close to being significantly related to voice and choice in treatment (r = .23, p = .051).

Of the exploratory variables, the caregiver's report of whether or not the youth had ever been physically abused was significantly and negatively related to voice and choice in treatment (r = -.25, p = .034). In addition, the negative association between caregiver report of whether or not the youth had ever been sexually abused and youth voice and choice in treatment (r = -.23, p = .051) approached significance. In light of these findings, a follow-up regression analysis was run to assess the relationship between youth having a history of maltreatment (i.e., either physical or sexual abuse, with 1 = *yes* and 0 = *no*) and youth reports of voice and choice in treatment. The follow-up analysis indicated that caregiver report of whether or not youth had a history of physical or sexual abuse was nearly a significant predictor of youth voice and choice scores $F(2, 67) = 3.07$, p = .053, *SEE* = 1.45. While this finding did not achieve the .05 level for significance, there was a clear tendency for youth with a history of maltreatment to report lower voice and choice in treatment. This model accounted for 6% of the variability in youth voice and choice scores. Including the two history of abuse variables in subsequent

hierarchical regression analyses involving separate models for each of the study's focus variables did not change the pattern of results obtained via models that did not include the abuse variables. In the interest of parsimony, the results that follow (and the models represented in tables) reflect analyses conducted without the abuse variables. In the other preliminary analyses, there were not significant mean differences in voice and choice scores based on the child's gender, and none of the other exploratory variables evidenced significant associations with voice and choice in treatment (Tables 2.1 and 2.2).

To address each research question and determine the degree to which reported perceived youth voice and choice in treatment at T1 predicted changes in key variables at the T3 follow-up, hierarchical regression analyses were run. Wherever youth and caregiver reports are utilized, analyses were run for youth and caregivers separately. Each of the T3 variables was entered as a dependent variable, and the corresponding T1 (or T2) variable was entered in step 1 as the first predictor variable, with the youth voice and choice score entered in step 2 as the second predictor variable.

Regression analyses were used to address research question 1, assessing the degree to which youth voice and choice scores predicted youth outcomes. A first set of hierarchical regression analyses indicated that caregiver-reported T1 BERS Strength Index scores along with youth voice and choice scores (Table 3) significantly predicted T3 caregiver-reported Strength Index scores, $F(2, 68) = 14.51$, $p < .001$, $SEE = 15.75$, with this model accounting for 28% of the variability in caregiver-reported BERS Strength Index scores at T3. The contribution of T1 caregiver-reported BERS Strength Index scores ($b = .68$, $sr = .55$) was statistically significant, $t(68) = 5.34$, $p < .001$, indicating that higher T1 caregiver-reported Strength Index scores were associated with

higher T3 caregiver-reported Strength Index scores. However, of particular relevance to the present study's focus, youth voice and choice scores did not contribute significantly to the variance in T3 caregiver-reported BERS Strength Index scores over and above the T1 BERS scores (b = .16, sr = .01), $t(68)$ = .13, p = .897.

T1 BERS Strength Index scores as reported by youth, along with youth voice and choice scores (Table 3), significantly predicted T3 youth-reported Strength Index scores, $F(2, 68)$ = 17.37, p < .001, *SEE* = 13.82, with this model accounting for 32% of the variability in youth-reported BERS Strength Index scores at T3. The specific contribution of T1 youth-reported BERS Strength Index scores (b = .64, sr = .58) was statistically significant, $t(68)$ = 5.84, p < .001; higher T1 youth-reported Strength Index scores were associated with higher T3 youth-reported Strength Index scores. However, the focus of this work, youth voice and choice scores, did not specifically contribute significantly to the prediction of T3 youth-reported BERS Strength Index scores, over and above the T1 BERS scores (b = -.86, sr = -.07), $t(68)$ = .75, p = .457.

T1 CBCL Total Problem scores as reported by caregivers, along with youth voice and choice scores (Table 3), significantly predicted T3 caregiver reported Total Problem scores, $F(2, 68)$ = 11.49, p < .001, *SEE* = 9.2. This model accounted for 23% of the variability in caregiver-reported CBCL Total Problem scores at T3. The contribution of T1 caregiver-reported Total Problem Scores (b = .63, sr = .50) was statistically significant, $t(68)$ = 4.79, p < .001), with higher T1 caregiver-reported Total Problem scores associated with higher T3 caregiver-reported Total Problem scores. However, consistent with the findings using the BERS, youth voice and choice scores did not

contribute significantly to the variance in T3 caregiver-reported Total Problem scores (*b* = -.11, *sr* = -.02), *t*(68) = .14, *p* = n.s.

A next set of analyses examined the study's second main research question, i.e., assessing the degree to which youth voice and choice scores predicted youth and/or caregiver reports of satisfaction with services at the T3 follow-up. In the hierarchical multiple regression, T2 caregiver satisfaction scores (see Table 4) along with youth voice and choice scores significantly predicted T3 caregiver satisfaction scores, *F*(2, 62) = 10.46, *p* < .001, *SEE* = .74. This model accounted for 23% of the variability in caregiver satisfaction scores at T3. The contribution of T2 caregiver satisfaction scores (*b* = .46, *sr* = .50) was statistically significant (*t*(62) = 4.57, *p* < .001), with higher T2 caregiver satisfaction scores associated with higher T3 caregiver satisfaction scores. However, youth voice and choice scores did not contribute significantly to the variance in T3 caregiver satisfaction scores, over and above the T2 caregiver satisfaction scores (*b* = -.03, *sr* = -.06; *t*(62) = .54, *p* = .595).

T2 youth satisfaction scores (Table 4) along with youth voice and choice scores significantly predicted T3 youth satisfaction scores, *F*(2, 55) = 7.31, *p* < .001, *SEE* = .76. This model accounted for 18% of the variability in youth satisfaction scores at T3. The contribution of T2 youth satisfaction scores (*b* = .40, *sr* = .43) was statistically significant, *t*(55) = 3.56, *p* = .001, with higher T2 youth satisfaction scores associated with higher T3 youth satisfaction scores. However, youth voice and choice scores did not contribute significantly to the variance in T3 youth satisfaction scores, after accounting for the T2 youth satisfaction scores (*b* = .04, *sr* = .08), *t*(55) = .67, *p* = .507.

For the third hypothesis, a final set of hierarchical regression analyses assessed the degree to which youth voice and choice scores predicted youth reports of social support at the T3 follow-up. T1 youth-reported social support scores along with youth voice and choice scores (Table 5) significantly predicted T3 youth-reported social support scores, $F(2, 68) = 5.14$, $p = .008$, $SEE = 5.04$, with this model accounting for 11% of the variability in social support scores at T3. The contribution of T1 social support scores ($b = .35$, $sr = .36$) was statistically significant, $t(68) = 3.15$, $p = .002$, such that higher T1 social support scores were associated with higher T3 social support scores. However, the central factor in these analyses, youth voice and choice scores, did not contribute significantly to the variance in T3 social support scores ($b = -.06$, $sr = -.02$), $t(68) = .13$, $p = .894$.

CHAPTER 4: DISCUSSION

This study explored youth empowerment and youth voice in the context of a system of care (SOC) in an attempt to better understand the nature of the relationship between youth reports of involvement and control over their treatment, and their subsequent adjustment. More specifically, a series of hierarchical regressions indicated that the parameters and items set forth in this study to measure youth voice and choice in treatment were not significantly related to youth-reported or caregiver-reported outcomes, satisfaction, and support, above and beyond the outcome variables of interest (BERS, CBCL, satisfaction, support) collected at a prior time point (baseline for BERS, CBCL, and support, T2 for youth and caregiver satisfaction). Preliminary correlations also indicated a weak relationship or lack of association among youth voice and choice in treatment and the exploratory variables of gender, age, and family risk factors. Preliminary analyses indicated a relationship between two exploratory variables and youth voice and choice in treatment: caregiver reported physical abuse and sexual abuse in the youth's history. However, those individual variables did not contribute meaningfully to models examining the contribution of voice and choice in treatment to this study's variables of focus. The lack of association among youth voice and choice in treatment, the study's focal outcome variables, and the exploratory variables raises multiple questions.

In the extant literature, the SOC philosophy has been carefully and extensively outlined, with the framework's components and principles elaborated upon in detail. The present study focused on certain elements of the SOC philosophy that have garnered relatively less research attention, namely that youth and their families should be actively involved and have a voice and choice in their treatment decision-making, planning, and implementation (Huang et al., 2005; Stroul & Friedman, 1986, 1996). In support of the effectiveness of implementing the SOC philosophy with fidelity, research has shown links between the SOC philosophy and positive results in the lives of youth and their families (CMHS, 2010; Gyamfi et al., 2007; Huang et al., 2005). However, whereas previous research has shown a positive relationship between practices that align with the SOC philosophy, and youth outcomes, social support, and satisfaction with services (CMHS, 2010; Graves, 2005; Gyamfi et al., 2007), the results of the present study do not match those findings. One possible implication of these findings is that they reflect a lack of adherence to the SOC philosophy of care for participants in this sample. This possibility is supported by the fact that youth generally reported low levels of voice and choice. While such an implication is contrary to expectations, it provides a starting point from which further exploration can begin, as well as impetus for further analysis and evaluation of SOC operations, and subsequent strengthening and redevelopment of SOC networks.

Caregivers reported high CBCL Total Problem scores, and lower Strength Index scores for youth than the youth reported for themselves. Furthermore, while youth reported moderate levels of satisfaction with services and perceived social support, they reported low voice and choice in treatment. The generally low voice and choice scores

likely limited the potential for detecting clear relationships between empowering team planning practices and youth adjustment. These findings may suggest that, in the face of youths' difficulties with day-to-day functioning, adults do not trust youth with or provide them with opportunities to make choices concerning their treatment. Such a decision is contrary to the concept that if youth are given more responsibility for their treatment they will have better outcomes. Conversely, the modest positive relationships found between voice and choice in treatment and T1 youth-reported BERS Strength Index scores in the preliminary correlation analysis may reflect youth being given greater voice and choice in their treatment when they have higher levels of functioning.

It is also possible that the lack of significance detected in the relationships between the voice and choice items and the youth outcome indicators may be attributable, at least in part, to the characteristics of the voice and choice items. For example, the voice and choice items were reported using a true/false scale of only five items, thus providing a limited number of responses with a restricted range of meaning, as well as limited variability in scores. Furthermore, these items were only included in the National Evaluation's protocol at T1, so youth would have had limited opportunity to experience 'voice and choice'. This may have contributed to the low voice and choice scores found here. However, T1 would have been a critical time to put into motion practices informed by the SOC philosophy and the wraparound practice model. Thus, given the principles and practices associated with SOC guidelines, it is notable that youth did not report greater voice and choice in treatment at T1. The items for voice and choice also solely focused solely on the youths' role in getting mental health for themselves, without assessing the presence of other accepted characteristics of youth empowerment (Cargo et

al., 2003; Holden et al., 2004; Messias et al., 2005; Moody et al., 2003). Overall, they may not have been sensitive enough to detect and capture youth empowerment in this context.

Lack of diversity in the sample also limits the population to which these findings can be generalized, and the moderate sample size (due to the study parameters) limited both the types of analyses that could be run and the statistical power for detecting effects. Thus, small effects could have gone unnoticed. A larger sample size would likely aid in exploring the relationships of interest described here.

Given the limitations discussed above, several considerations should be kept in mind for future explorations of youth voice and choice in treatment. For example, any replications of the present study should utilize data from a larger sample, as this would aid in detecting small effects. Also, in the future, greater consideration for and analysis of the context of the study and the participants' lives (i.e., cultural factors, exposure to risk factors, age, developmental stage, and gender) could result in a more thorough and nuanced understanding of the results. For example, the term "culture" is often associated with race and ethnicity, but culture is much broader than race and ethnicity (Miller et al., 2012). There are cultural factors specific to variables such as age, sexual orientation, and location. These factors could affect the way services are received and interpreted, and thus influence an individual's perception of their voice and choice in a given situation.

In the present study, modest negative relationships were indicated between voice and choice in treatment and youth history of physical abuse and sexual abuse. A follow up regression analysis of the relationship between voice and choice in treatment and physical and sexual abuse variables also indicated a tendency for youth with a history of

abuse to report lower voice and choice in treatment. However, the abuse variables did not contribute meaningfully to model investigating the study's core research questions. The relationships involving the abuse variables may have been weak due to a lack of sensitivity of the measures used in this particular study, or as a result of caregivers being unwilling to reveal and endorse such events in the lives of the youth. Had the youth reported such information, the number of incidents may be found to be greater. Thus, assessing exposure to risk factors such as physical or sexual abuse, drug use, mental illness, and criminal activity may still hold relevance in studies of perceived control. Although they did not contribute meaningfully to relationships involving youth voice and choice here, age and developmental stage should also be taken into account in studies of youth empowerment, as they dictate the norms of responsibility, an individual's overall ability to assume responsibility of his or her life and treatment, and the level of input and leadership an individual can successfully manage during the treatment process. In that same vein, even though the role of gender was not significant in the present study, gender should be analyzed when investigating the voice and choice process, as gender norms could influence what boys and girls consider empowering. Taking these factors into consideration, a review and analysis of the extant literature and research could result in a measure of youth voice and choice in treatment that could yield results that are more reflective of the relationship between youth voice and choice in treatment and other outcomes.

Despite its inconclusive results, the present study contributes to the growing extant literature on youth voice and choice and empowerment in the context of mental health service systems. Furthermore, the present study adds to the body of knowledge in

the area of youth voice and choice in treatment by providing an example of one way to investigate this topic. The topic still remains relevant, and given the need and desire for youth who are receiving mental health services to receive the most effective care possible, understanding the role of empowerment in the process is essential. In closing, in future studies of youth voice and choice in treatment as it relates to outcomes for youth in a SOC, empowerment and other factors of the SOC process merit investigation in order to better understand how youth voice and choice in treatment interacts with those processes in order to more efficiently and successfully serve youth who are at risk and in need.

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Table 1: Descriptives: key variables

	M	*SD*	Range
T1 BERS Strength Index Scores (Caregiver Reported)	78.19	14.82	45-120
T1 BERS Strength Index Scores (Youth Reported)	96.11	15.64	63-128
T3 BERS Strength Index Scores (Caregiver Reported)	82.11	18.56	52-133
T3 BERS Strength Index Scores (Youth Reported)	98.89	16.79	60-131
T1 CBCL Total Problem Scores (Caregiver Reported)	69.75	8.32	43-88
T2 CBCL Total Problem Scores (Caregiver Reported)	64.70	10.39	24-86
T2 Caregiver Satisfaction Scores	4.07	.91	1.50-5
T2 Youth Satisfaction Scores	3.88	.90	1.67-5
T3 Caregiver Satisfaction Scores	4.03	.82	1.67-5
T3 Youth Satisfaction Scores	3.98	.89	1.33-5
T1 Youth Social Support Scores	25.85	5.63	11-36
T2 Youth Social Support Scores	27.14	5.46	14-36
Youth Voice and Choice Scores	1.49	1.49	0-5

Note. BERS = Behavioral Emotional Rating Scale-2; CBCL = Child Behavior Check List. Range reflects the minimum and maximum obtained scores.

Table 2.1: Pearson's correlations among voice and choice in treatment and baseline youth outcomes and risk factor exposure

	Youth Voice and Choice Scores (N = 71)	BERS Strength Index Scores (Caregiver Reported) (N = 73)	BERS Strength Index Scores (Youth Reported) (N = 73)	CBCL Total Problem Scores (Caregiver Reported) (N = 73)	Caregiver Satisfaction Scores (N = 67)	Youth Satisfaction Scores (N = 59)	Youth Social Support Scores (N = 73)
Youth Voice and Choice Scores		r = -.041 p = .732	r = .264* p = .026	r = .023 p = .850	r = .069 p = .587	r = .199 p = .135	r = .233 p = .051
BERS Strength Index Scores (Caregiver Reported)			r = .338** p = .003	r = -.586** p = .000	r = .231 p = .061	r = .190 p = .149	r = .128 p = .279
BERS Strength Index Scores (Youth Reported)				r = -.243* p = .038	r = .194 p = .115	r = .386** p = .003	r = .437** p = .000
CBCL Total Problem Scores (Caregiver Reported)					r = -.076 p = .543	r = -.124 p = .349	r = .050 p = .672
Caregiver Satisfaction Scores						r = .180 p = .177	r = .152 p = .221
Youth Satisfaction Scores							r = .359** p = .005

Note. $^{*}p < .05$; $^{**}p < .01$.

Table 2.1: (continued)

	Youth Voice and Choice Scores (N = 71)	BERS Strength Index Scores (Caregiver Reported) (N = 73)	BERS Strength Index Scores (Youth Reported) (N = 73)	CBCL Total Problem Scores (Caregiver Reported) (N = 73)	Caregiver Satisfaction Scores (N = 67)	Youth Satisfaction Scores (N = 59)	Youth Social Support Scores (N = 73)
Physical Abuse[+]	r = -.252[*] p = .034	r = -.111 p = .351	r = -.271[*] p = .021	r = .274[*] p = .019	r = -.256[*] p = .037	r = -.117 p = .376	r = -.090 p = .449
Sexual Abuse[+]	r = -.234 p = .051	r = .008 p = .950	r = -.054 p = .651	r = .130 p = .277	r = -.161 p = .196	r = -.075 p = .577	r = .012 p = .920
Domestic Violence[+]	r = -.041 p = .736	r = -.186 p = .123	r = -.071 p = .558	r = .192 p = .112	r = -.097 p = .445	r = .195 p = .150	r = .178 p = .141
Exposure to Depression Symptoms[+]	r = .055 p = .664	r = -.155 p = .208	r = -.166 p = .176	r = .118 p = .339	r = -.170 p = .183	r = .008 p = .952	r = .160 p = .191
Exposure to Mental Illness[+]	r = -.181 p = .142	r = -.030 p = .805	r = -.222 p = .066	r = .097 p = .426	r = -.136 p = .284	r = -.077 p = .571	r = -.016 p = .898
Convicted Criminal in Home[+]	r = .005 p = .965	r = -.164 p = .174	r = .017 p = .891	r = .070 p = .567	r = -.185 p = .140	r = .070 p = .599	r = .194 p = .108
Exposure to Drug Abuse[+]	r = .036 p = .768	r = .104 p = .390	r = -.013 p = .917	r = -.078 p = .521	r = -.029 p = .822	r = .217 p = .108	r = .000 p = .998
Risk Factor Total	r = -.128 p = .287	r = -.122 p = .304	r = -.116 p = .328	r = .207 p = .079	r = -.251[*] p = .040	r = .072 p = .589	r = .153 p = .197
Age	r = .132 p = .271	r = -.042 p = .722	r = .041 p = .731	r = -.050 p = .673	r = .050 p = .688	r = .033 p = .805	r = .217 p = .065
Gender[+]	r = -.122 p = .312	r = -.244[*] p = .038	r = -.312[**] p = .007	r = .237[*] p = .043	r = -.217 p = .078	r = -.247 p = .059	r = -.206 p = .080
Black[+]	r = .084 p = .489	r = -.003 p = .980	r = .194 p = .102	r = .014 p = .906	r = .091 p = .466	r = .001 p = .991	r = .001 p = .994
White[+]	r = .006 p = .961	r = .028 p = .815	r = -.169 p = .157	r = -.091 p = .448	r = -.087 p = .486	r = -.117 p = .381	r = -.101 p = .397

Note. [+] Point-biserial correlations. For gender, 0 = *boy* and 1 = *girl*. For all others, 0 = *no* and 1 = *yes*. [*]$p < .05$; [**]$p < .01$.

Table 2.2: Pearson's correlations among voice and choice in treatment and follow-up (time 3) youth outcomes and risk factor exposure

	Youth Voice and Choice Scores (N = 71)	BERS Strength Index Scores (Caregiver Reported) (N = 73)	BERS Strength Index Scores (Youth Reported) (N = 73)	CBCL Total Problem Scores (Caregiver Reported) (N = 73)	Caregiver Satisfaction Scores (N = 73)	Youth Satisfaction Scores (N = 73)	Youth Social Support Scores (N = 73)
Youth Voice and Choice Scores		r = -.009 p = .938	r = .081 p = .500	r = -.003 p = .977	r = -.027 p = .824	r = .195 p = .104	r = .070 p = .564
BERS Strength Index Scores (Caregiver Reported)			r = .432** p = .000	r = -.692** p = .000	r = .331** p = .004	r = .201 p = .089	r = .140 p = .237
BERS Strength Index Scores (Youth Reported)				r = -.374** p = .001	r = .117 p = .326	r = .323** p = .005	r = .463** p = .000
CBCL Total Problem Scores (Caregiver Reported)					r = -.388** p = .001	r = -.224 p = .057	r = -.189 p = .109
Caregiver Satisfaction Scores						r = .120 p = .314	r = .063 p = .599
Youth Satisfaction Scores							r = .268* p = .022

Note. $^{*}p < .05$; $^{**}p < .01$.

Table 2.2: (continued)

	Youth Voice and Choice Scores (N = 71)	BERS Strength Index Scores (Caregiver Reported) (N = 73)	BERS Strength Index Scores (Youth Reported) (N = 73)	CBCL Total Problem Scores (Caregiver Reported) (N = 73)	Caregiver Satisfaction Scores (N = 73)	Youth Satisfaction Scores (N = 73)	Youth Social Support Scores (N = 73)
Physical Abuse[+]	r = -.252[*] p = .022	r = -.096 p = .419	r = -.224 p = .056	r = .263[*] p = .024	r = -.237[*] p = .043	r = -.280[*] p = .016	r = -.236[*] p = .044
Sexual Abuse[+]	r = -.234 p = .051	r = -.016 p = .895	r = -.143 p = .232	r = .168 p = .158	r = -.078 p = .513	r = -.188 p = .113	r = -.236[*] p = .044
Domestic Violence[+]	r = -.041 p = .736	r = -.066 p = .585	r = -.117 p = .335	r = .002 p = .987	r = -.231 p = .054	r = .047 p = .698	r = .033 p = .787
Exposure to Depression Symptoms[+]	r = .055 p = .664	r = -.160 p = .191	r = -.046 p = .708	r = .134 p = .275	r = -.227 p = .063	r = .079 p = .524	r = .065 p = .599
Exposure to Mental Illness[+]	r = -.181 p = .142	r = .077 p = .529	r = .023 p = .849	r = -.020 p = .869	r = -.195 p = .109	r = .210 p = .084	r = .057 p = .639
Convicted Criminal in Home[+]	r = .005 p = .965	r = -.054 p = .657	r = .012 p = .921	r = -.056 p = .643	r = -.037 p = .761	r = .072 p = .554	r = .175 p = .148
Exposure to Drug Abuse[+]	r = .036 p = .768	r = .015 p = .901	r = .012 p = .922	r = .003 p = .978	r = -.167 p = .166	r = .048 p = .694	r = .100 p = .411
Risk Factor Total	r = -.128 p = .287	r = -.067 p = .573	r = -.080 p = .503	r = .119 p = .316	r = -.335[**] p = .004	r = .053 p = .653	r = .063 p = .599
Age	r = .132 p = .271	r = -.005 p = .965	r = -.035 p = .767	r = -.047 p = .696	r = .086 p = .471	r = -.121 p = .307	r = -.015 p = .899
Gender[+]	r = -.122 p = .312	r = -.151 p = .201	r = -.350[**] p = .002	r = .219 p = .063	r = -.139 p = .242	r = -.265[*] p = .024	r = -.026 p = .826
Black[+]	r = .084 p = .489	r = .010 p = .935	r = .111 p = .353	r = -.130 p = .276	r = -.009 p = .939	r = -.067 p = .578	r = -.016 p = .891
White[+]	r = .006 p = .961	r = .032 p = .788	r = .072 p = .549	r = .059 p = .624	r = .044 p = .714	r = .092 p = .441	r = .005 p = .969

Note. [+] Point-biserial correlations. For gender, 0 = *boy* and 1 = *girl*. For all others, 0 = *no* and 1 = *yes*. [*]$p < .05$; [**]$p < .01$.

Table 3: Multiple regression analyses for voice and choice in treatment: changes in youth functioning in relation to voice and choice in treatment

	Δ in T3 BERS			
	Step1		Step2	
	B	β	B	B
T1 BERS Strength Index Scores (Caregiver Reported)	0.680	0.547*	0.681	0.547*
Youth Voice and Choice Scores	--	--	0.164	0.013

Note. Step 1 Adjusted R^2 = .289, p < .01; Step 2 Adjusted R^2 = .279, p = .897.
* p < .01.

	Δ in T3 BERS			
	Step1		Step2	
	B	β	B	B
T1 BERS Strength Index Scores (Youth Reported)	0.615	0.577*	0.636	0.597*
Youth Voice and Choice Scores	--	--	-0.860	-0.077

Note. Step 1 *Adjusted* R^2 = .323, p < .01; Step 2 *Adjusted* R^2 = .319, p = .457.
* p < .01.

	Δ in T3 CBCL			
	Step1		Step2	
	B	β	B	B
T1 CBCL Problem Scores	0.632	0.502*	0.633	.503*
Youth Voice and Choice Scores	--	--	-0.105	-0.015

Note. Step 1 *Adjusted* R^2 = .241, p < .01; Step 2 *Adjusted* R^2 = .231, p = .888.
* p < .01.

Table 4: Multiple regression analyses for voice and choice in treatment: changes in satisfaction with services in relation to voice and choice in treatment

	Δ in Satisfaction			
	Step1		Step2	
	B	β	B	B
T2 Satisfaction Scores (Caregiver Reported)	0.456	0.499*	0.459	0.503*
Youth Voice and Choice Scores	--	--	-0.032	-0.059

Note. Step 1 Adjusted R^2 = .237, p < .01; Step 2 Adjusted R^2 = .228, p = .595.
* p < .01.

	Δ in Satisfaction			
	Step1		Step2	
	B	β	B	B
T2 Satisfaction Scores (Youth Reported)	0.417	0.451*	0.402	0.435*
Youth Voice and Choice Scores	--	--	0.044	0.082

Note. Step 1 *Adjusted* R^2 = .189, p < .01; Step 2 *Adjusted* R^2 = .181, p = .507.
* p < .01.

Table 5: Multiple regression analyses for voice and choice in treatment: changes in perceived social support in relation to voice and choice in treatment

	Δ in Social Support			
	Step1		Step2	
	B	β	B	β
T1 Social Support	0.348	0.362*	0.352	0.366*
Youth Voice and Choice Scores	--	--	-0.055	-0.015

Note. Step 1 Adjusted R^2 = .119, p < .01; Step 2 Adjusted R^2 = .106, p = .894.
* p < .01.

APPENDIX A: YOUTH INFORMATION QUESTIONNAIRE VOICE AND CHOICE IN TREATMENT AND SOCIAL SUPPORT ITEMS

Voice and Choice in Treatment

1 = If the statement is true in describing your experience
2 = If the statement is false in describing your experience

- I felt free to do what I wanted about getting mental health treatment for myself.
- I chose to get mental health treatment for myself.
- It was my idea to get mental health treatment for myself.
- I had a lot of control over whether I got mental health treatment.
- I had more influence than anyone else on whether I got mental health treatment.

Social Support

1 = Never
2 = Rarely, almost never
3 = Less than half the time
4 = More than half the time
5 = Usually, almost always
6 = Always

- How often can you depend on having someone your own age to talk to?.
- How often can you depend on having an adult to talk to?
- If a problem or emergency arises, how often can you depend on having someone your own age to turn to for help and support?
- If a problem or emergency arises, how often can you depend on having an adult to turn to for help and support?
- How often do you have someone your own age to have fun or hang out with when you want to?
- How often do you have an adult to have fun or hang out with when you want to?