

SCHOOL-BASED OCCUPATIONAL THERAPY: PERSPECTIVES ON STRENGTH-
BASED ASSESSMENT AND PROVIDING RELATED INTERVENTIONS FOR
ELEMENTARY STUDENTS WITH MENTAL HEALTH NEEDS

A DISSERTATION

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COLLEGE OF HEALTH SCIENCES

SCHOOL OF OCCUPATIONAL THERAPY

BY

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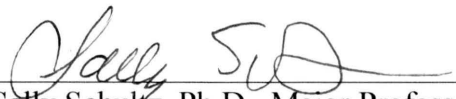
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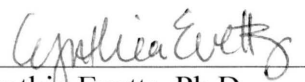
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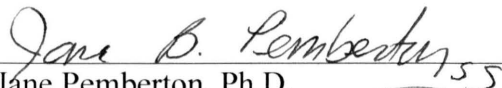
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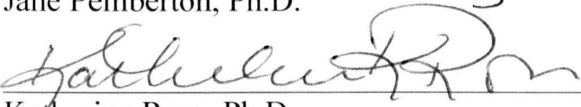
I am submitting herewith a dissertation written by Claudette Voelkel Fette entitled "School-based Occupational Therapy: Perspectives on Strength-based Assessment and Providing Related Interventions for Elementary Students with Mental Health Needs." I have examined this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Occupational Therapy.

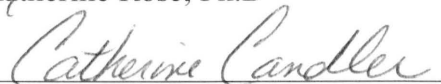

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ABSTRACT

CLAUDETTE VOELKEL FETTE

SCHOOL-BASED OCCUPATIONAL THERAPY: PERSPECTIVES ON STRENGTH-BASED ASSESSMENT AND PROVIDING RELATED INTERVENTIONS FOR ELEMENTARY STUDENTS WITH MENTAL HEALTH NEEDS

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While there has been a call for mental health services for students to shift from a deficit emphasis to a strength-based paradigm (Substance Abuse and Mental Health Services Administration, 2005), school-based services for students with social, emotional, and behavioral needs continues to focus on ameliorating student deficits. The term, *strength-based*, refers to interventions that capitalize instead on student competencies in order to design supportive programming. The purposes of this dissertation are to explore student strengths and occupational therapists' perspectives on strength-based assessment/intervention as well as on their role in the use of strengths to support students who have mental health needs.

This line of research describes the results of three studies aimed at identifying what strengths/competencies for success in middle school are identified most frequently in a 1) review of related educational and psychology literature; 2) survey of select advocates in the IDEA Partnership's National Community of Practice on Collaborative School Behavioral Health; and 3) focus group of school-based occupational therapists.

The occupational therapy perspectives are compared with those from literature and the survey of experts from the National Community of Practice leadership team.

Student strengths were identified across all 3 studies. Grounded theory analysis facilitated their consolidation into 31 strengths, clustered into 5 themes. The themes and strengths were organized into a model to guide strength-based evaluation and intervention, the “Strengths Origins, Process and Effects Network (Strengths-OPEN) Model”. This is an initial step in a line of research intended to yield an interdisciplinary instrument that occupational therapists can use which will provide special education and related services with a tool for designing interventions that will empower students with mental health needs to use their strengths to achieve greater success in transitioning from elementary to middle school. Next steps in the development of the instrument and its potential application both for the broader field of children’s mental health in schools and occupational therapy are discussed.

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CHAPTER I

INTRODUCTION

Statement of the Problem

In 2005, federal agencies called for mental health services for students to shift from a deficit emphasis to a strength-based paradigm (Substance Abuse and Mental Health Services Administration, 2005). However, it appears that school-based services for students with social, emotional, and behavioral needs continue to center on ameliorating student deficits (Kutash, Duchnowski, Sumi, Rudo, & Harris, 2002; Phelps, Zimmerman, Warren, Jellicic, von Eye, A., & Lerner, 2009; Prescott, Sekendur, Bailey, & Hoshino, 2008; Reddy, DeThomas, Newman, & Chun, 2009). Even when a strength-based instrument is used, it appears that services continue to target the student's lowest rated strength as the focus of intervention. This approach is perpetuated by a cross disciplinary emphasis on deficit-focused interventions (Coster, Deeney, Haltiwanger, & Haley, 1998; Epstein, 2004). While occupational therapists may provide related services for students with mental health needs, previous findings suggest that they may be uncertain on when, how, and where to address students' social, emotional, and behavioral needs as part of a strength-based paradigm (Beck, Barnes, Vogel, & Oxford Grice, 2006; McDuff, 2009; McDuff, Schultz, Andersson, & Pemberton, 2009; Schultz, 1991).

Statement of the Purpose

The purpose of the proposed dissertation is to conduct an initial study of occupational therapists' understanding of strength-based assessment/intervention and their perspectives on using such methods with students who have mental health needs. The occupational therapy perspectives will be compared with those in related literature and with those generated by a select set of advocates for students with mental health needs. This dissertation represents the initial step in a line of research intended to yield an interdisciplinary instrument that occupational therapists can use which will provide special education and related services with a tool for designing interventions that will empower students with mental health needs to use their strengths to achieve greater success in transitioning from elementary to middle school.

The research questions are:

1. What social, emotional, and behavioral strengths/competencies for success in middle school are identified most frequently in a review of related educational and psychology literature?
2. What social, emotional, and behavioral strengths/competencies for success in middle school are identified most frequently by a survey of select advocates in the IDEA Partnership's National Community of Practice on Collaborative School Behavioral Health?
3. What social, emotional, and behavioral strengths/competencies for success in middle school are identified most frequently by school-based occupational therapists participating in a focus group?

Rationale

The following presents a review of selected literature on: the rationale for a new strength-based instrument for elementary students with mental health needs; an overview of two frequently used strength-based instruments; and an occupational therapy perspective on strength-based interventions to promote successful performance for students with mental health needs.

Rationale for Development of a New Strength-Based Instrument

Strength-based assessment is defined by Epstein (2004) as the measurement of competencies and characteristics that contribute to successful development and accomplishments, relationships and coping. The need for strength-based measurement is identified in the literature on children's mental health policy, education, and occupational therapy. Current mental health and education systems policies require consideration of strengths and protective factors as prevention strategies; however, it appears that most assessment practices continue to evaluate performance from a deficit perspective (Coster, 2008; Weinstein, 2002). Both Coster (2008) and Epstein (2004) emphasized that a paradigm shift in assessment processes will require instrumentation that is compatible enough with traditional education practices to be accepted, but is guided by a strength-based evaluation process. The literature supports the need for a strength-based instrument that will be more readily accepted by school personnel.

Strength-Based Instruments

There are two widely used instruments that were developed as strength-based instruments to evaluate student performance: the Behavioral and Emotional Rating Scales

(BERS) and the School Function Assessment (SFA) (Coster et al., 1998; Epstein, 2004). The following presents an overview of the methods used to develop these two instruments. Both instruments were grounded by a review of existing measures and a literature review to identify the initial list of items. The items were next reviewed by a selected group of experts. Qualitative methods, e.g., data collected from interview, focus groups, or observation (Creswell, 2003) were not used in the development of either instrument. The predictive validity of the BERS instrument was initially established by testing its potential to discriminate between children with and without severe emotional disturbance. The item pool was reduced and strengths were included using factor analysis to eliminate items that did not covary with other items (Epstein, 2004).

The SFA was developed as a tool to inform individualized education program planning in special education. It provides information about the student's functional strengths and limitations according to age appropriate roles, related tasks, and discrete activities that are units of task performance (Coster et al., 1998). Both the BERS and the SFA include lists of behaviors or attributes that are scored with a forced choice Likert-type scale from 0 – 4. Likert scales denote magnitude for each attribute. Although Likert scales are not actually interval measures, they are frequently treated as such for measurement purposes (McDowell, 2006). The SFA developers used item response theory (IRT) and Rasch analysis to establish/validate the instrument's content and corresponding scales. The instrument was then subjected to various trials with school personnel and review by content experts (Coster et al., 1998).

Occupational Therapy Perspective

Occupational therapists are included as related services providers under IDEA and have deep roots in supporting children's mental health and developmental processes. (American Occupational Therapy Association, 2008; Schultz, 2003). Coster (2008) recently challenged the profession to emphasize strengths in the development of instruments to measure performance and to attend to the effect that the measurement process has on resulting interventions. Occupational therapists have unique perspectives on student role performance that emphasize the use of therapeutically designed activities to increase the student adaptive responses to challenges presented in the school environment. They also function as a team member supporting the teacher and the larger school environment's potential to provide "just right" educational challenges (Hanft & Shepherd, 2008; Schultz, 2003). Occupational therapy is a profession grounded in the use of the individual and environmental factors to promote adaptation that enables successful performance. Schultz (2003) identified the use and benefit of, what she termed, "role shifting" (p. CE-4) experiences in which students participate in real world activities that parallel successful school-based performance. Occupational therapy theory supports the use of students' strengths and their innate drive for mastery in combination with environmental management to promote successful adaptive behaviors.

In spite of occupational therapy's professional roots in mental health and potential contribution to student mental health, recent studies suggest that many therapists have concerns about how to go about providing mental health support for students. McDuff et

al. (2009) found that a convenience sample of therapists working in school practice reported a number of different understandings of their role in meeting the psychosocial needs of children in special education and four of the nine therapists interviewed stated that their pre-professional education had not adequately prepared them to meet the psychosocial needs of students. In a larger survey asking therapists to identify obstacles to providing occupational therapy to students with severe emotional disturbance, Beck et al. (2006) identified role confusion, limited knowledge base of therapists, perceived professional roles and turf conflicts, time and space constraints, lack of efficient teaming and carryover of strategies with other school staff, behaviors of students with emotional disturbance and parental constraints as primary barriers to occupational therapy practice directed toward addressing mental health needs within school settings. As these concerns are identified, use of student strengths is an established promising practice in children's mental health that may help organize evidence based assessment and intervention to support increased student success and to frame pre and post professional education to inform effective practice within occupational therapy building opportunities for increased effective adaptive responses in children with mental health needs in schools.

Method

Preliminary strength-based competency items will be informed by three sources: an extensive review of current literature; feedback from select respondents in the IDEA Partnership's National Community of Practice on Collaborative School Behavioral Health, and qualitative data from focus groups with school based occupational therapists working in the southwest part of the United States. The occupational therapists'

perspectives are compared with those in related literature and with those generated by a select set of advocates for students with mental health needs.

This research consists of three interactive studies. These studies have adhered to accepted institutional review board processes. The following presents an overview of the method that was used in each study.

Study 1: Systematic Review of Literature on Resiliency, Positive Psychology, Occupational Therapy and Psychosocial Performance

This study is an extensive literature review on strength-based assessment, resiliency, positive psychology, and occupational therapy and psychosocial performance to inform initial generation of a set of competency items for middle school students using a Critically Appraised Topics (CAT) method. Beginning with a literature review in qualitative research risks biasing inquiry and so must be carefully designed and grounded through use of systematic methodology for selection of articles (Patton, 2002). The researcher identified specific criteria for the inclusion and exclusion of specific literature for the review to protect against bias. Student strengths were processed using axial and selective coding, and constant comparison within grounded theory techniques (Creswell, 2003; Patton, 2002).

Study 2: Survey of Selected School Mental Health Leaders Regarding Student Strengths and School System Needs to Support Strengths Based Practice

The researcher constructed an encrypted internet-based survey that collected demographic data and open-ended comment on student strengths/competencies from selected members of the IDEA Partnership's National Community of Practice on

Collaborative School Behavioral Health. This was a convenience sample intended to represent a broad cross-section across roles and geographic areas of the United States within the National Community of Practice's diverse membership across local, state and national leaders in school mental health initiatives. The feedback data on necessary student strengths was processed using axial and selective coding, and constant comparison within grounded theory techniques (Creswell, 2003; Patton, 2002). Both the primary investigator and another member of her research committee completed open coding on the data to increase trustworthiness. While the survey was anonymous and it was not possible to identify specific participants, several potential respondents who had been invited to participate were invited to review the manuscript to member check the researcher's analysis.

Study 3: School Based Occupational Therapists - Identification of Student Strengths/Competencies and Discipline Specific Barriers to Psychosocial Practice

Study three consisted of a focus group of school-based occupational therapists practicing in North Texas. A semi-structured interview format drew from the literature review, expert survey and unpublished "dialogue guides" created by occupational therapists regarding their reactions to school-based mental health models (Patton, 2002). Dialogue guides are a specific methodology used within the IDEA Partnership for creating stakeholder dialogue around potentially divisive issues (National Association of State Directors of Special Education, 2005).

This researcher conducted the focus group in conjunction with a regularly scheduled meeting of occupational therapists employed by public schools in Texas

Education Agency's (TEA) Region 10. The focus group was limited to less than 10 participants (Patton, 2002). Participants were invited from diverse school districts, which would have allowed consideration of opinions from across many settings. However, actual participants served predominantly rural areas. Demographic data on participants was also collected. The groups were recorded and transcribed by the primary investigator. Qualitative data was processed using open, axial and selective coding and constant comparison within grounded theory techniques (Creswell, 2003; Patton, 2002). Both the primary investigator and another member of her research committee completed open coding on the data. Participants were invited to engage in member checking the researcher's analysis.

CHAPTER II

STUDY ONE: IDENTIFICATION OF STUDENT STRENGTHS FOR MIDDLE SCHOOL SUCCESS: A SYSTEMATIC REVIEW OF LITERATURE

A Paper Submitted For Publication in the Journal of Occupational Therapy, Schools and
Early Intervention

Claudette Fette, Sally Schultz, Cynthia Evetts, Katherine Rose, Jane Pemberton

This review of literature and resulting model is part of a larger study on strength-based assessment and interventions in public schools. The term, strength-based, refers to interventions that are oriented toward capitalizing on the student's competencies/ attributes in the design of supportive programming (e.g., Cosden, Panteleakos, Gutierrez, Barazani, & Gottheil, 2004; Epstein, Nordess, Gallagher, Nelson, Lewis, & Schrepf, 2005; Stewart & McWhirter, 2007; Suter & Bruns, 2009; Winters & Metz, 2009). A strength-based approach contrasts with the more traditional educational model that focuses on the student's deficits (Phelps, Zimmerman, Warren, Jellicic, von Eye, & Lerner, 2009; Prescott, Sekendur, Bailey, & Hoshino, 2008; Reddy, DeThomas, Newman, & Chun, 2009; Sidhu, Passmore, & Baker, 2006; Winters & Metz, 2009). The purpose of this review was to identify and analyze student strengths that are most frequently cited in the literature and related to successful performance in the middle school setting. Strengths are described in the literature in various ways (e.g., assets, traits, characteristics). The single term, strengths, will be used as an inclusive term throughout

the remainder of this paper. The specific research question for this review was, “*What social, emotional, and behavioral strengths/competencies for success in middle school are identified most frequently in a review of related literature?*” Systematic analysis of the literature yielded a model identified as the Strength-Based Literature: Themes & Related Strengths Identified for Middle School Success. This model is presented in Figure 2.1. Figures 2.1-2.2 both provide a visual conceptualization of the findings. The model suggests the current trends regarding identification of strengths in students who are

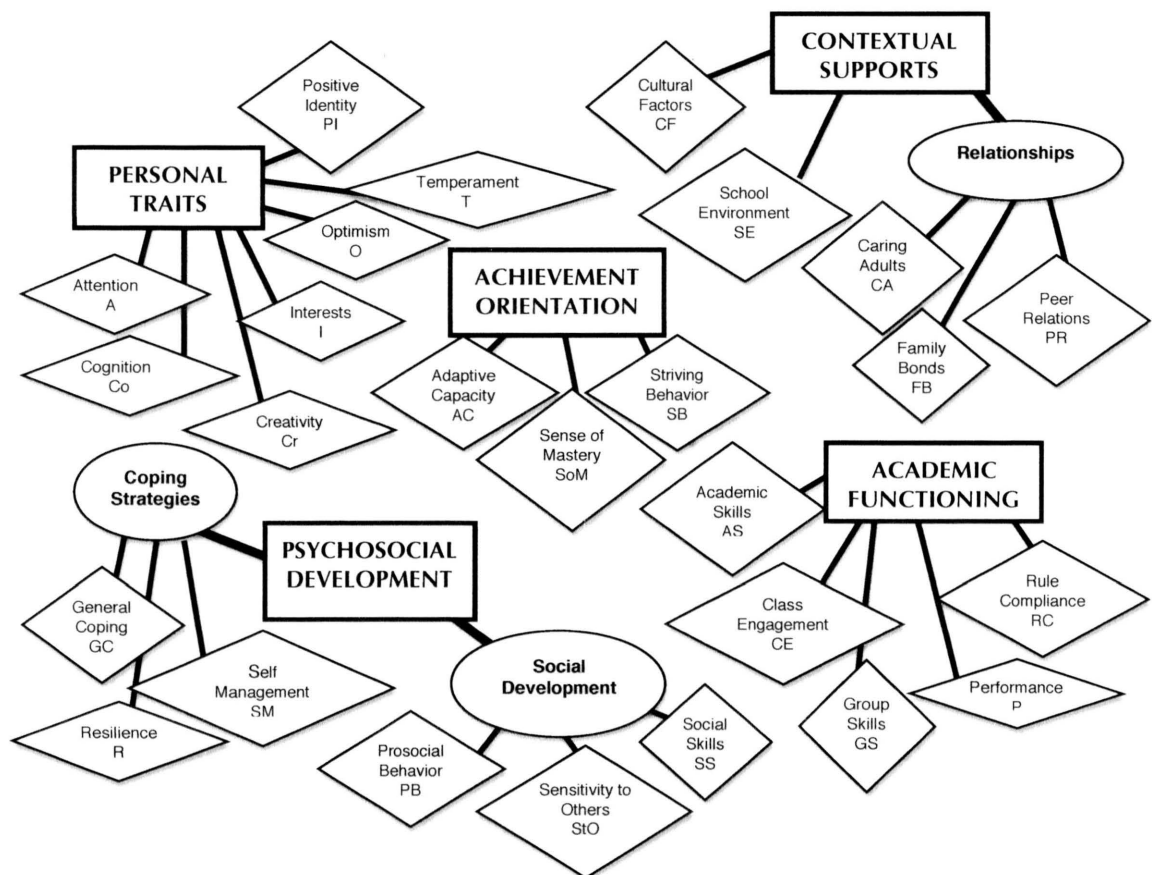


Figure 2.1 Strength-based literature: Themes and related strengths identified for middle school success. Themes are represented in bold, all upper case letters within rectangles. Subgroups of strengths are represented in bold type within ovals. Individual strengths are in diamonds with their abbreviations in upper case type following the strength.

identified as at risk while in elementary school. The following section presents the search process, methods of analysis, and interpretations that resulted in the model.



Figure 2.2 Relative representation of each strength in literature set.

Method - Systematic Review of Literature

The literature review was primarily drawn from professional journals in education, psychology, and occupational therapy published between 2002 and 2010. Details on databases and terms used in the search processes are identified in Tables 2.1, 2.2, and 2.3. The search yielded one hundred thirty-three (133) articles that were caught with search terms related to strength-based content relevant to assessment and/or interventions for students in public schools (grades 4 through 8). Each of the articles was analyzed using the Critically Appraised Topics (CAT) method articulated by Pearson,

Wiechula, Court, and Lockwood (2005). A CAT instrument was developed to appraise the articles specific to the research question (see Appendix A). The instrument was consistent with accepted methods (e.g., Higgins & Green, 2009; Venning, Elliott, Wilson, & Kettler, 2009). The CAT appraisal resulted in fifty-two (52) articles that met one or more of the CAT inclusion criteria. Twenty (20) of the fifty-two (52) articles espoused a relationship between identified student strengths and academic success.

Table 2.1

Search 1 Terms.

Databases	Inclusion Terms	Exclusion (Not) Terms
CINAHL	(1) children* OR child OR youth OR adolescent* OR student* AND (2) (mental health) OR (behavioral health) OR psycho-social AND (3) asset* OR strength* OR resilience OR competence OR competent OR (character strengths)	adult* OR (higher education) OR (high school) OR (cognitive disability*) OR (physical disability*) OR (cerebral palsy) OR residential OR (acute care) OR undergraduate* OR (Substance abuse) OR (early childhood) OR women OR men OR babies OR multisystemic OR impairment* OR psychopathology AND (emotional OR behavioral) AND disorder*

Table 2.2

Search 2 Terms.

Databases	Inclusion Terms	Exclusion (Not) Terms
Education Research Complete, Psychology and Behavioral Sciences Collection, PsychARTICLES, and PsycINFO	Terms in Table 2.1	Terms in Table 2.1 plus: preschool OR (adjustment to disability) OR (adjustment to disease) OR (mental retardation)

Table 2.3

Search 3 terms.

Databases	Inclusion Terms	Exclusion (Not) Terms
CINAHL, Education Research Complete, Psychology and Behavioral Sciences Collection, PsychARTICLES, and PsycINFO	Terms in Table 2.1 plus: achievement OR performance OR adjustment OR (school connectedness) OR (school belonging) OR (school engagement) OR (self-regulated learning) OR learning AND (self esteem) OR (positive emotions) OR coping OR (positive coping)	Terms in Tables 2.1 & 2.2 plus: (young child*) OR men OR women OR residential OR babies OR parenting OR mother* OR family* OR father* OR hypnotherapy OR (nursing student*) OR loss OR fear OR (self defeating*) OR (social support) OR (children with disability*)

Overview of the CAT Data Analysis and Results

The first step was to achieve consolidation of the initial strengths identified in the literature by reducing redundancy. This yielded a total of two hundred seventeen (217) strengths identified in the CAT appraisal. These strengths were assembled and processed using axial and selective coding, and constant comparison within grounded theory techniques (Creswell, 2003; Patton, 2002). This method of processing further consolidated the strengths into twenty-six (26) strengths that affect student success in middle school. These strengths were processed to identify predominant themes. The strengths clustered into five overarching themes. The themes reflect strengths that relate to internal attributes, the urge toward competence, relatedness (to self/others), external conditions/supports, and classroom behaviors. The five themes are presented below in the order of representativeness within the literature set. The corresponding strengths are included alphabetically.

- Personal Traits (7)

Attention, Cognition, Creativity, Interests, Optimism,
Positive Identity, Temperament

- Achievement Orientation (3)

Adaptive Capacity, Sense of Mastery, Striving Behaviors

- Psychosocial Development – Self & Others (6)

General Coping, Resilience, Self-Management

Pro-social Behavior, Sensitivity to Others, Social Skills

- Contextual Supports - External Supports & Relationships (5)

Cultural Factors, School Environment

Caring Adults, Family Bonds, Peer Relations

- Academic Functioning (5)

Academic Skills, Class Engagement, Group Skills, Performance,

Rule Compliance

Figure 2.1 presents a graphic organization of the above-identified themes and related strengths. It is recognized that several of the strengths have overlapping properties. The graphic is intended to provide additional clarification on the subtle differentiations that are attributed to individual strengths based on the theme in which they are located. Table 2.4 provides detail on the frequency of themes and related strengths appearing in the literature set. The number of themes represented in each article organizes the articles. Those that address each of the five themes appear at the top of the list, etc. Although the depth of literature development within each theme was not formally assessed, it appears that Psychosocial Development and Contextual Supports have the greatest elaboration and extent of treatment in the literature. Table 2.5 presents the 26 strengths and their relative frequencies in the literature set. Figure 2.2 presents an additional perspective on the identified student strengths. It provides a visual representation of the frequency of each strength. The font size of each strength was increased by two points for each occurrence within the literature set. Four strengths emerged as most frequently identified within the articles. Striving Behavior emerged as the most frequently identified strength across the literature (presented in 20/52 articles).

Table 2.4

Distribution of Strengths Identified in Systematic Review.

Literature Set Total N=52 Articles*	FREQUENCY OF THEMES & RELATED STRENGTHS (See Figure 2.1 for definitions of below abbreviations)				
	Personal Traits N=32 Articles	Achievement Orientation N=31 Articles	Psychosocial Development N=30 Articles	Contextual Supports N=28 Articles	Academic Functioning N=21 Articles
First Author**/Year					
Hoagwood ... (2007)	T	SB SoM	GC SS	PR	RC
Kalke ... (2007)	I	SB	PB	CA	CE
Mullins-Sweatt ... (2009)	Cr O	AC SB SoM	PB SM StO SS	PR	P RC
Spence (2003)	Co	AC	SM StO SS	FB PR	CE
Spilkin ... (2007)	O PI T	SB SoM	R StO SS	FB	RC
Webb-Johnson (2002)	PI T	SB	SS	CF	CE GS
Firth ... (2010)	O	SB	GC		P
Hawes ... (2004)		AC SB	PB StO	PR	RC
Malekoff ... (2006)	A Cr	SoM	PB StO SS		AS CE GS
Phelps ... (2009)	I PI T	SoM	PB StO SS	FB PR	
Piek ... (2006)		SoM	SS	PR	RC
Pitzer ... (2009)	A O	AC SB	R SM		P
Prescott ... (2008)	Cr O T	SB SoM	R SM	CA PR SE	
Sanne ... (2009)		AC SB	PB StO	PR	RC
Cosden ... (2004)	Co I	SB		FB	

(Continued)

Table 2.4 Continued.

First Author**/Year	Personal Traits	Achievement Orientation	Psychosocial Development	Contextual Supports	Academic Functioning
Cullen-Powell ... (2005)	O PI T		GC SM SS		GS P
Farrell ... (2007)	Co T		StO SS	CA FB PR SE	
Fraser ... (2008)	Co		GC PB	PR	
Javo ... (2009)	PI	SoM			P RC
Kutash ... (2002)	I	SoM	GC		
Leodbeoer ... (2003)		SB		PR	GS
Levine ... (2009)	O T		GC		P
Lindsay ... (2002)	Co I		SS	PR	
Malmivuori ... (2006)	I	AC SB SoM			AS
Poulou (2005)			GC PB R SM StO SS	PR	GS RC
Reddy ... (2009)		SB	SM		AS P
Sidhu ... (2006)	I PI	SB		PR	
Stewart-Brown (2003)	Co		R StO SS	PR	
Barrett ... (2003)		SB		CF	
Boyes ... (2005)	Cr I PI	AC SB			
Chen ... (2004)		SoM		CF PR	
Gomez ... (2007)			PB StO SS	PR	
Lee ... (2009)	O		SS		
Matuszek ... (2003)		AC SB SoM	SM		

(Continued)

Table 2.4 Continued.

First Author**/Year	Personal Traits	Achievement Orientation	Psychosocial Development	Contextual Supports	Academic Functioning
Miller & Lavin (2007)	A PI	SB SoM			
Miller & Coll (2007)			StO SS	FB PR SE	
Pufahl (2007)	Co	SB			
Rodriguez ... (2003)			R	SE	
Tiet ... (2002)	PI	SoM			
Trickey ... (2006)		SoM			CE
Verkuyten ... (2002)	PI			CA SE	
Winters ... (2009)	I			CA FB	
Bayless ... (2008)	Co				
Buckner ... (2009)			SM		
Clarke ... (2006)			GC R		
Dennis ... (2009)					AS
Downey (2008)	PI				
Earls ... (2008)		SoM			
Morgan ... (2008)	I				
Ravens-Sieberer ... (2008)				CA	
Smokowski ... (2007)				CF FB PR	
Suter ... (2009)		SoM			

* Articles are grouped by number of themes addressed within each article (5 to 1).

** Second authors included when there were 2 first authors with the same name

Peer Relations was the second most frequently identified strength (in 19/52 articles). Sense of Mastery surfaced as the third most frequently identified strengths across the literature (in 17/52 articles). Social Skills was the fourth most frequently identified strengths (in 16/52 articles). These four strengths are elaborated upon in the following section.

Table 2.5

Frequency of Strengths Identified in the Literature Set.

Strength	#	N/52
Striving Behavior	20	38.4
Peer Relations	19	36.5
Sense of Mastery	17	32.6
Social Skills	16	30.7
Sensitivity to Others	12	23
Positive Identity	11	21.1
Interests	10	19.2
Prosocial Behavior	9	17.3
Self Management	9	17.3
Temperament	9	17.3
Adaptive Capacity	8	15.3
Cognition	8	15.3
General Coping	8	15.3
Family Bonds	8	15.3
Optimism	8	15.3
Rule Compliance	8	15.3
Performance	7	13.4
Caring Adults	6	11.5
Resilience	6	11.5
Class Engagement	5	9.6
Group Skills	5	9.6
School Environment	5	9.6
Academic Skills	4	7.6
Creativity	4	7.6
Cultural Factors	4	7.6
Attention	3	5.7

Most Frequently Identified Strengths in the Literature

Striving Behavior is the strength that appeared in the literature with the highest frequency (Tables 2.4 & 2.5) and it is organized within the Achievement Orientation theme (Figure 2.1). Striving Behaviors clustered from the literature as behaviors that provide momentum or the “press” for learning as well as the ability to persist in learning. The articles refer to importance of leadership and ambition, autonomy and independence, positive goals and future expectations, self-reliance and strong will, motivation, persistence and seeking challenge, and self-directed learning (Table 2.4). While one article looked at persistence and preference for challenge as self regulatory patterns that supported math learning (Malmivouri, 2006), others framed increased motivation and striving behaviors as an outcome of participation in programs such as arts activities, formative assessment teaching methods and social skills programming (Boyes & Reid, 2005; Leodbeoer, Hoglund, & Woods, 2003; Miller & Lavin, 2007). Still other articles looked at Striving Behaviors within the context of increased task and adaptive behaviors as outcomes that were described as part of a paradigm shift away from a focus on psychopathology and toward positive adaptation as outcomes (Reddy et al., 2009; Sidhu et al., 2006). Examples of suggested proximal outcomes that reflect Striving Behaviors were classroom participation and initiative, challenge seeking, self-directed learning, attention to work quality and academic engaged time (Hoagwood, Olin, Kerker, Kratochwill, Crowe, & Saka, 2007; Kalke, Glanton, & Cristalli, 2007; Miller & Lavin, 2007; Reddy et al., 2009).

Peer Relations is set in the model as part of a Relationships cluster within the theme of Contextual Supports (Figure 2.1). It was the second most frequently identified strength in the literature (Tables 2.4 & 2.5). The literature stressed the importance of friendships, acceptance by peers and popularity. There was particular emphasis on the advantage of having positive, pro-social and non-deviant friendships (Farrell & Barrett, 2007; Gomez & Ang, 2007; Hawes & Dadds, 2004; Hoagwood et al., 2007; Smokowski & Bacallao, 2007). Friendships with conventional or “non-deviant” peers were viewed as protective to provide essential peer modeling and even to protect the child from victimization (Leodbeoer et al., 2003). While “non-deviant” was not specifically defined, the general reference byLeodbeoer et al. included peers who model how to resolve conflict peacefully, and who used more competent pro-social acts to maintain social status and acquire resources rather than use aggressive or coercive strategies. Social connections were presented as particularly relevant to youth with challenges such as homelessness and family illness (Prescott et al., 2008; Sidhu et al., 2006).

While Peer Relations may be considered by many to be part of Psychosocial Development, the systematic analysis of the literature differentiated friendships themselves from the acquisition of social skills that might contribute to the student’s performance within the role of friend. There were several features around which Peer Relations as a strength varied. Two related features that presented as poles were whether the focus of intervention was on skills building to support relationships as an outcome (Poulou, 2005; Spence, 2003), or whether the focus of the intervention was on use of relationships themselves as a change agent or opportunity for building skills as the

outcome (Gomez & Ang, 2007; Phelps et al., 2009; Prescott et al., 2008; Sidhu et al., 2006). Other articles also included variations with some focusing on the use of relationships as a change agent alongside individual skills and other's focused on the broader context (Farrell & Barrett, 2007; Hoagwood et al., 2007; Leodbeoer et al., 2003; Smokowski & Bacallao, 2007).

Sense of Mastery was the third most prominent strength identified in the literature (Tables 2.4 & 2.5). It is coded to the Achievement Orientation theme. Sense of Mastery was universally presented in the literature as feeling competent, confident and accomplished as a learner (Table 2.4). The notion of patterns of self-regulation that support self-efficacy appeared in much of the literature (Hawes & Dadds, 2004; Pitzer, Esser, Schmidt, & Laucht, 2009; Sanne, Torsheim, Heiervang, & Stomark, 2009). Mastery is inherent in the elements of confidence and competence within Positive Youth Development and in specific learning technologies such as Philosophical Inquiry and Formative Assessment as well as creative and task based interventions that rely on active problem based learning (Miller & Lavin, 2007; Phelps et al., 2009; Prescott et al., 2008; Trickey & Topping, 2006). The literature spoke to Sense of Mastery as a strength that both contributed toward academic competency and served as an outcome that perpetuates success. Use of strategies focused on Sense of Mastery and students' internal adaptive processes are grounded in the belief that Sense of Mastery in the form of success experiences precedes competence, which is fundamentally different than the assumption that reducing deficits by building skills is a prerequisite to mastery (Tiet & Huizinga, 2002; Trickey & Topping, 2006).

Social Skills were the fourth most frequent strengths identified in the literature (Tables 2.4 & 2.5). The literature addressed Social Skills in such ways as having effective communication, broad social competence and skills in management of challenging social situations (Table 2.4). Social Skills curriculums featured in the literature document efforts to teach Social Skills. These methods vary from highly structured and hierarchical skill-based formats (Lee, Tiley, & White, 2009; Spence, 2003) to teaching or eliciting the skill within the context of integrated classroom or school wide programming (Gomez & Ang, 2007; Phelps et al., 2009). Components taught or elicited within the Social Skills may be promoted as part of a “pullout” curriculum or driven by the needs of an individual classroom (Cullen-Powell, Barlow, & Bagh, 2005; Malekoff, Salmon, & Steinberg, 2006). One study found that elementary schools tended to positively frame efforts to target teaching social skills, while middle schools and beyond seem to be more negatively focused on reducing behavioral problems (Hoagwood et al., 2007).

Both Striving Behavior and Sense of Mastery are oriented within the theme Achievement Orientation, which suggests that they are highly related constructs. Taken as a whole, these results might indicate that Achievement Orientation could actually be the most prominent area of strengths in the current literature. Both strengths contribute to understanding the importance of motivation and the experience of competence for successful learning. Striving Behaviors such as motivation and persistence facilitate competence, which is within the strength Sense of Mastery that in turn fuels seeking challenges and more Striving Behaviors. Although they are located within different themes, there might be a somewhat similar synergy between Peer Relations and Social

Skills. The ability to attract positive friends is likely enhanced by a child's success in communication and management of social challenges. Peer Relationships and Social Skills are each targeted within specific established practice models. Conversely, while Striving Behaviors and Mastery Orientation strengths are among the most frequently cited strengths in this literature review, theoretical frameworks that specifically targeted these strengths were much less developed.

Overview of the State of Practice

The systematic review of literature revealed five overarching themes: Personal Traits, Achievement Orientation, Psychosocial Development, Contextual Supports, and Academic Functioning (Figure 2.1, Table 2.4). The following provides an overview of the data analysis and the content that was coded together to identify each of the twenty-six (26) strengths. The Table 2.4 provides additional clarification with each article in the review listed by its first author on the vertical axis and each of the themes on the horizontal axis. In the body of the table, codes identify which strengths were represented in each article. The frequency of each strength is listed in Table 2.5. The discussion is organized by themes. The model presented in Figures 2.1-2.2 provides a visual representation of the strengths found in the literature. It is not intended to imply any specific relationship between the themes.

Personal Traits

The consolidation and analysis of the literature resulted in seven (7) strengths: Attention, Cognition, Creativity, Interests, Optimism, Positive Identity, and Temperament. Attention (A) includes the student's ability to follow directions/attention

span as well as the results of attending behaviors such as quality of work versus quantity and comprehension (first authors are identified in Table 2.4, with full citations in the references). Cognition (C) refers to the student's mental health literacy, self-knowledge, accurate interpretation and processing, intelligence, cognitive competence, academic giftedness and clarity of thought. Creativity (Cr) includes use of imagination and fantasy; original expression and inventiveness; openness to ideas; and sense of aesthetics. Interests (I) includes the student's individual skills, interests and hobbies such as interests in animals, math, art, music, dance and athletics. Optimism (O) includes the child's sense of emotional wellbeing; of joy, enthusiasm and eagerness; their excitement seeking and exploration of challenges; and a sense of appreciation, positive mood and affect. Positive Identity (PI) refers to students' self-confidence and sense of self-competence; their positive self-esteem, feelings of self-worth, sense of wellbeing, and happiness with their life and choices; and their capacity for spontaneous authentic personal expression including of their own unique differences. The final strength is Temperament (T). It includes the values and qualities that the youth may display such as hardiness or toughness; being gregarious and having an energetic spirit; being warm and loving; demonstrating the qualities of honesty, fairness, conscientiousness, and/or responsibility; being someone who is idealistic and/or shows courage; spirituality, introspection, and trust; calm, nonviolence, and modesty; and/or sentimentality and sensitivity to others. Personal Traits are the inherent personal capacities that students present with. Whether they see the glass half full or empty, their cognitive abilities, what they like to do and

their temperament are all part of the personality with which they approach every task at school.

Achievement Orientation

This theme includes three (3) strengths: Adaptive Capacity, Sense of Mastery and Striving Behavior. Adaptive Capacity (AC) entails the capacity of reflectiveness and an ability to adapt responses based on their potential effectiveness. It involves being aware of environmental contingencies for social interactions, monitoring the responses of others and adapting one's responses as a consequence. The strength of Adaptive Capacity is about making choices, demonstrating resourcefulness and the ability to adapt; and having a certain curiosity and openness to action and challenges. As discussed in previous section of this paper, the strengths of Sense of Mastery and Striving Behavior were among the four (4) most frequent strengths appearing in the literature set. Sense of Mastery (SoM) includes the student experiencing self as accomplished with a sense of self-competence and self-efficacy specific to learning tasks and academic performance; possessing self-confidence. Striving Behavior (SB) fuels the drive toward mastery and includes a student's leadership qualities, ambition, positive goals and future expectations. It frames self-reliance and strong will, autonomy and independence as strengths and includes student motivation and challenge-seeking behavior, as well as self-directed learning. In summary, the Achievement Orientation theme identifies the need for the student to have the essential underlying energy and drive to learn for success in middle school.

Psychosocial Development

This theme includes two subgroup of strengths; 1.) Coping Strategies, which includes the strengths: General Coping, Resilience, and Self-Management; and 2.) Social Development, which includes the strengths: Prosocial Behavior, Sensitivity to Others, and Social Skills. Coping Strategies feature coping mechanisms that are internal. The first strength, General Coping (GC), includes the student's successful use of active or repressive coping; and/or of relaxation and recreation to support successful management of stressors and risk factors. Resilience (R) includes the capacity for survival in the face of challenge; the ability to use self-preservation strategies such as devaluing tasks if competence declines or self-distraction as needed. It also includes the ability to make effective use of positive self-talk, and use humor constructively. The last strength within the subgroup Coping Strategies is Self-Management (SM). It includes the student's ability to identify and effectively manage emotions; general capacity for self-awareness and self-monitoring; ability to deliberate and self-regulate, manage impulsivity, impatience and anxiety; awareness of the difference between emotions and actions and consequences of behavior; and the ability to reframe and recognize personal strengths as a consequence of difficult life circumstances. The Coping Strategies subgroup is organized around the presence of internal coping mechanisms and the ability to use them successfully to manage life's challenges.

Social Development is the other subgroup within the Psychosocial Development theme. Social Development includes three strengths; Prosocial Behavior, Sensitivity to Others, and Social Skills. These three (3) strengths also support the Psychosocial

Development theme. However, the emphasis is on externalized behaviors. The first strength, Pro-social Behavior (PB), includes the student's sense of helpfulness, their social conscience, altruism, and selflessness. This often manifests in activities such as mentoring younger children and volunteering. It also refers to the ability to ask for and receive help as well as to make positive choices, demonstrate positive conduct and avoid negative influences. Sensitivity to Others (StO) encompasses the student's capacity for empathy, compassion, and kindness; the ability to share; establish attachment to others; consideration for and capacity to understand and value differing experiences and viewpoints. Social Skills (SS) is the last strength included in this subgroup. It was discussed previously as one of the four (4) most frequently cited strengths in the literature. Social Skills are those behaviors that enable students to successfully negotiate interactions with peers, teachers and others in their environment. Social skills include effective verbal communication including the student's ability to effectively express feelings and assert wants and needs; respond to and give negative feedback; demonstrate adequate conversation skills and manage situations such as job interviews and dating. Social skills also include nonverbal communication skills such as active listening, recognition of social cues, and attending to personal appearance. Social Skills also include skills in conflict resolution and effective management of social challenges. The Social Development subgroup of strengths supports the student's capacity for successful connection with other people by enabling the desire and capacity to communicate and be helpful. Overall, the theme Psychosocial Development is about the student's level of psychological health and relationship readiness. It includes having a toolkit of both

internal strategies to manage stress and adversity, and capacity for external interactions including empathy for others and communication skills.

Contextual Supports

As a theme, Contextual Supports includes five (5) strengths. The first two are Cultural Factors and School Environment. The other three (3) are strengths clustered into a subgroup categorized as Relationships. It includes Caring Adults, Family Bonds and Peer Relations strengths. The five Contextual Supports strengths are discussed in this section.

Cultural Factors (CF) focuses on those strengths that were presented in the literature as essential for students who are members of minority cultures. Strengths varied broadly, but seemed to be strongly influenced by the nature of the family relationships. For example, increased identification and involvement in the majority culture was seen as a strength for some Latino students but not so for others based on levels of conflict with their families (Smokowski & Bacallao, 2007). The literature supported the importance of relationships with host friends and teachers, peer acceptance and recognition of differing meanings of behaviors in minority cultures (Barrett, Sanderegger, & Xenos, 2003; Chen et al., 2004; Webb-Johnson, 2002). The School Environment (SE) strength centers on the quality of the classroom and school environment and includes general references to a positive environment with high quality educational opportunities. The literature advocated for specific strategies such as matching group activities in the classroom to specific child interests, use of art for reflection or goal setting, and creating a focus on

skill development rather than retaining a traditional focus on temporally removed and competitive outcomes such as grades.

Caring Adults, Family Bonds and Peer Relations make up the Relationships cluster in the Contextual Supports theme. Relationships are differentiated from those social strengths identified under the Psychosocial Development theme. Here, the strengths are the external network of people who provide the student stability and/or support. The Caring Adults (CA) strength includes the components of the student's connections to school, family and community; the social support and available mentors, meaningful relationships with specific teachers; and other adults who model positive values and behaviors. Family Bonds (FB) emphasizes the benefit of youth having strong attachments along with a sense of familial "rootedness". Family Bonds also includes the student's active engagement in and sense of having a good fit within the family; relationships with siblings; sharing emotions and communication at home, parental attachment and trust as well as parental monitoring; potential engagement with family in activities such as positive problem solving, chores and responsibilities in the home; and positive school-home relationships. Whether they were presented as an outcome, the relationship itself was the media to support building successful performance, or whether they were part of a broader, multifaceted approach, the identification of Peer Relations (PR) as one of the top four strengths in the literature speaks to its critical importance as a strength. In the Positive Youth Development (PYD) framework, Peer Relations are used as a change agent within the fifth component of the PYD model, Connections, which are positive, bidirectional bonds with people and institutions that provide positive

opportunities to build skills (Gomez & Ang, 2007; Phelps et al., 2009). The Relationships cluster stresses the importance of adults at home, school and community as well as of having friends. The strengths within the theme of Contextual Supports speak to the importance of students' environments in supporting successful performance. Recognition of strengths as they are understood within specific cultures, a supportive school environment, solid friendships and caring, and committed adults, all enable student success.

Academic Functioning

The fifth and final theme, Academic Functioning includes the strengths of Academic Skills, Class Engagement, Group Skills, Performance, and Rule Compliance. Academic Skills (AC) refers to specific underlying abilities in language arts and math such as relating to spoken and written word, identifying letter sounds, recognizing sight vocabulary, copying and writing letters, using correct grammar, reading aloud fluently, recognizing and/or using developmental spelling, using picture cues, recalling important facts and ideas from stories, using a variety of literature, retrieving math facts, applying math concepts, problem solving and completion of math worksheets, as well as lacking fear of and liking specific subjects.

Class Engagement (CE) includes the student's willingness to be academically engaged and specific behaviors such as class participation, raising their hands in class, listening purposefully, requesting information; and expressing personal opinions and experiences in the context of class discussions. Group Skills (GS) consists of behaviors that facilitate group performance such as working positively within groups; active

encouragement/support of fellow students, and responding to others' ideas in conversation and in classroom discussion. Student strengths in this area include cooperative behaviors such as listening to directions and taking responsibility, taking turns, collaborative work behaviors and participation in teams. Performance (P) consists of the student's sense of purposefulness and coherence; of order and regularity; the ability to attribute success to effort and maintain work habits; complete homework and regularly attend school. Rule Compliance (RC) involves the student understanding behavioral rules and coping well with limits; demonstrating obedience and dutifulness; and compliance with authority. Generally, the strengths within the academic functioning theme are academic and functional classroom behavioral components that undergird student performance.

Discussion

The following discussion presents examples of strength-based interventions drawn from the analysis of the literature set. For purposes of discussion, they are organized around the five themes presented in the model. The themes overlap in real-world experiences. Children/students may present with multiple strengths that may cross themes in numerous ways in a given situation. A more extensive review of the literature on the state of strengths based practice is presented in a companion manuscript (Fette & Schultz, 2011).

Interventions - Personal Traits

In their study of homeless youth, Prescott et al. (2008) used students' creativity as an entrance to work across all areas. Boyes and Reid's (2005) literature review of the

benefits of student participation in the arts found positive effects on self-esteem, motivation, cognition and academic achievement were related to participation in high quality creative arts programming. Specific findings included increased temporal-spatial performance secondary to listening to music, math and spatial reasoning from playing music, verbal skills from classroom dramatic activity, and nonverbal reasoning from dance. Malekoff et al. (2006) described the use of a poetry club that was designed to build upon student's creativity and positive attributes and asserted the need for integration of academic and behavioral goals. The authors asked teachers for a list of academic goals and created therapeutic group goals by embedding them within academic needs as identified by the teachers. Personal Traits provide potential entry points for student driven planning and intervention.

Interventions - Achievement Orientation

Buckner, Mezzacappa, and Beardslee (2009) correlated self-regulation skills with increased adaptive responses to circumstances both in terms of environmental stressors and academic challenges. Two approaches to use this information are to 1) support skill development within struggling youth or to 2) identify opportunities within youth and their environments that might be used to enable successful adaptive responses to challenges. This theme of Achievement Orientation supports enabling adaptive responses whereas strengths within the Psychosocial Development theme are used to support skill development.

Several authors identified the importance of adaptive behaviors although their language varied somewhat. Sidhu et al. (2006) advocated attending to positive adaptation

rather than limiting focus to decreasing psychopathology. Firth, Greaves, and Frydenberg (2010) compared coping styles of youth with learning disabilities to non learning-disabled youth and argued for the need to promote active and adaptive coping for students with learning disabilities. They stated that successful students with learning disabilities are more likely to attribute success to effort. Miller and Coll (2007) stated the importance of children having opportunities to excel in domains that facilitate expression of their unique talents. Earls, Raviola, and Carlson (2008) recommended that intervention “elicit the strength, agency and problem solving capabilities of children” (p. 308).

The construct of adaptive responses appears to lie unstated under active teaching and learning strategies such as philosophical enquiry, formative assessment and solution-focused intervention. Trickey and Topping (2006) described philosophical enquiry as an active, collaborative learning technology somewhat like formative assessment or problem based learning techniques. The authors cited the need for children to experience real success and to realize that their success is the result of their own effort. They further stated that academic success precedes self-esteem. In their study of the use of formative assessment teaching strategies with upper primary school aged students, Miller and Lavin (2007) found that with the introduction of this relational teaching method in which students focus on the processes of learning and co-creation of ideas, students’ levels of self-esteem, self-competence, self-worth, learning autonomy and self-directed learning increased. Task groups such as those described by Prescott et al. (2008) and Malekoff et al. (2006) also used student strengths to actively engage students and build a sense of mastery for students.

Interventions - Psychosocial Development

Social skills, self-management, effective coping and prosocial behaviors are the focus of many theoretical frameworks used to support student mental health in schools. Cullen-Powell et al. (2005) observed increased confidence, initiation of conversation, calm, positive group work, awareness of their behavior and its consequences, school attendance, expression of emotions and satisfaction with self in a weekly pilot group practicing self-regulation and calming strategies for children transitioning from elementary to middle school. Spence (2003) reviewed assessments and interventions based in the framework of social skills training programs. She favored behaviorally based interventions using modeling, coaching, behavioral rehearsal, role play, feedback and reinforcement for producing short term improvement in targeted social skills. Poulou (2005) provided teachers with a list of seventeen basic emotional, social and cognitive skills and had them rank them in order of importance. In this study, teachers ranked the following skills as the top three needs of students: 1) Recognition and identification of emotions, 2) Expression of emotions, and 3) Assessment of emotional intensity. Generally they ranked emotional skills as more needed than cognitive or communication skill sets. Social skills training curriculums are a widespread practice that share the premise that there is a set of basic attributes that once mastered facilitate successful performance.

Interventions - Contextual Supports

Miller and Coll (2007) stated the importance of opportunities to build competence and to display that competence within the context of peers. Leodbeoer et al. (2003) found

that a student's positive interaction with peers and self-directed, cooperative participation in classroom tasks were protective. Although, they did not recognize any strength-based theory, several authors detailed social and/or communication skills to support successful social participation (Cullen-Powell et al., 2005; Mullins-Sweatt, Smit, Verheul, Oldham, & Widiger, 2009; Poulou, 2005; Spence, 2003). Authors working from a Resiliency theory foundation saw relationships with peers as a protective factor (Farrell & Barrett, 2007; Smokowski & Bacallao, 2007). Prescott et al. (2008) stated that a central element in their intervention with homeless youth was building connections by making friends, belonging to a community and finding mentors.

In her literature review focused on fostering educational resilience, Downey (2008) recommended development of the classroom as a caring community. In addition to individual student attributes, Downey identified three groups of critical ecological findings in the literature that she labeled Teacher-Student Rapport, Classroom Climate, and Instructional Strategies. She suggested building rapport by providing students opportunities to use their strengths and abilities and emphasizing effort, while setting high but realistic expectations and building relationships with students by showing them respect. Classroom Climate employed choice and meaningful opportunities to use student assets to support student responsibility. Recommended Instructional Strategies included the use of cooperative learning strategies, cross age tutoring and the creation of roles for students. In their study of elementary student satisfaction, Verkuyten and Thijs (2002) also concluded that school satisfaction is not only determined by individual characteristics but also in part by the classroom context. Rodriguez, Wigfield, and Eccles

(2003) asserted the need to focus on proximal skill development rather than distal competitive outcomes such as winning or grades to protect children's self-esteem and increase their investment and engagement in activities.

Positive Youth Development authors further connect providing both positive relationships and opportunities to experience competence. Gomez and Ang (2007) asserted that schools are ideal venues for fostering Positive Youth Development because of their ability to provide positive 1) people, 2) places, and 3) opportunities to promote positive development. First, adults in the schools need to be accessible to youth and provide both encouragement and limits. Relationships support by listening, comforting, appreciating, challenging and assisting young people. Schools act as positive places for development when they provide for safety, set healthy boundaries and rules that are just, give appropriate autonomy and assure that the educational tasks are meaningful and relevant. Opportunities range from social and emotional learning and embedding tasks supporting positive development within the curriculum to extracurricular opportunities ranging from athletics to community service.

Interventions - Academic Functioning

The interventions within the articles that included Academic Functioning strengths included many already described above and represented a cross-section of the interventions provided in schools. They included school-wide preventative approaches that sought to enhance social competence (e.g. Leodbeoer et al., 2003) and collaborative, intrinsically motivating, creative groups that intentionally integrated academic and behavioral goals (e.g. Malekoff et al., 2006; Trickey & Topping, 2006). Strategies that

appeared to rely on the identification of limitations in social skills as targets for remediation were featured prominently (e.g. Poulou, 2005; Spence, 2003). There were also programs that appeared to represent a blend of skills training and experiential group interventions, most of whom focused on social development (e.g. Cullen-Powell, et al., 2005; Malmivouri, 2006). Many articles identified decreases in deficits as strengths (e.g. Dennis, Berch, & Mazzocco, 2009; Javo, Ronning, Handegard, & Rudmin, 2009; Spilkin & Ballantyne, 2007). Academic Functioning strengths were featured as outcome indicators in many studies (e.g. Reddy et al., 2009), although Hoagwood et al. (2007) noted that most evidence-based reviews have ignored academic functioning as an outcome.

Conclusions

The foundation of strength-based practice is the identification of the strengths that a student presents with and the use of those strengths as the basis of their individual education plan. The basic premise of strength-based practice is that building upon strengths forms a solid foundation and enables successful performance that then perpetuates more success. This study has identified student strengths in the literature and organized them into five themes. A companion manuscript presents the state of strength-based interventions and related practice frameworks that were identified in this review of literature (Fette & Schultz, 2011). The level of development of theoretical frameworks within each of the themes varies. While extant student strengths are frequently not initially stated as a resource upon which to build student intervention in the literature, the literature did identify student strengths. In this identification of student strengths in recent

literature, the importance of Striving Behaviors, Peer Relations, Sense of Mastery, and Social Skills are strongly supported.

Specific theoretical frameworks for intervention that incorporate student strengths include resiliency, social and emotional learning, school-wide positive behavioral interventions and supports, systems of care and wraparound, developmental assets and positive youth development (Fette & Schultz, 2011). Several elements of practice varied across the literature. Interventions described in the literature varied along a continuum from externally driven to internally driven methods with limited discussion of the impact of each on student adaptive behaviors. Another challenge that was evident was the tendency to state decreases in deficit indicators as strengths. There was not a comprehensive database describing potential student strengths and their use.

Of the themes identified in this study, Psychosocial Development included the most developed theoretical frameworks and interventions. While it included two of the three most frequently occurring strengths in the literature, Achievement Orientation appeared to have the least developed theories to ground their use for potential intervention. The literature failed to provide a mature theory to explain the relationship of striving behaviors, adaptive capacity and sense of mastery in youth to increased achievement. Tiet and Huizinga (2002) stated lack of studies looking at internal adaptive processes of youth and suggested potential utility of exploring a composite measure of resilience that looks at distinct areas of adaptation. They highlight the need to study strengths and attempts at adaptive responses among not only youth who are identified as resilient but also those whose attempts to adapt may be less socially appropriate.

Occupational therapy provides a theoretical perspective that may contribute to the understanding of the internal adaptive processes of students. Sensory Integration is a theory that features use of children's active adaptive responses to just right challenges within childhood occupation (Ayres, 1979, Schaaf & Davies, 2010). Occupational Adaptation (OA) builds upon the focus on facilitation of adaptive responses with theory that specifically identifies and targets the internal adaptive response mechanism to support change (Schultz, 2003, 2008; Schultz & Schkade, 1992). OA supports the student being engaged in carefully designed occupations that enable a balance of challenge and competence that supports the student's experience of relative mastery. Interventions grounded in OA are congruent with interventions based on student strengths described especially within the themes Personal Traits, Contextual Supports and Achievement Orientation.

Relevance and Recommendations for Research

Hoagwood et al. (2007) stressed the need to reframe the current understanding of mental health in schools, pulling it out of isolation and into the broader mission of schools, and called for research to build the capacity for mental health to support educational attainment. Research within a framework of student strengths could provide a vehicle for retooling school based mental health and shifting the focus from the old model of identifying and remediating student deficits to one of identification of individual strengths to meaningfully drive individual education plans build on student competencies that also serve to extend their capacity for adaptively responding to learning.

Future research needs to continue to identify and build an expanded repository of potential student strengths. The model developed in this research does not articulate relationships across themes. Future research might include investigation regarding the effect of specific personal traits on Achievement Orientation and on the success of specific interventions; what synergies and patterns exist across strengths and what does that suggest in terms of optimal interventions? Theory needs to be developed to support increased understanding and facilitation of Achievement Orientation strengths.

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CHAPTER III

STUDY TWO: IDENTIFICATION OF STUDENT STRENGTHS FOR MIDDLE SCHOOL SUCCESS: SURVEY OF LEADERS FROM THE NATIONAL COMMUNITY OF PRACTICE ON SCHOOL BEHAVIORAL HEALTH

A Paper Submitted for Publication in *Advances in School Mental Health Promotion*

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This survey of national leaders in school based mental health and the resulting model of strengths for middle school success is part of a larger study on strength-based assessment and interventions in public schools. Leaders were identified based on their participation in the IDEA Partnership's National Community of Practice on School Behavioral Health (CoP-SBH). The IDEA Partnership is a coalition of over fifty stakeholder groups funded by the federal Office of Special Education Programs with the mission of improving outcomes for students and youth with disabilities. It funds a number of cross-stakeholder groups specific to critical issues. This community of practice is a network of leaders from diverse stakeholder groups in school based mental health sponsored jointly by the National Association of State Special Education Directors and the Center for School Mental Health at the University of Maryland. It functions through issue focused "practice groups" to support best practices in the field. The leaders of the twelve practice groups act as the leadership team of the CoP-SBH along with its sponsors.

The term, strength-based, refers to interventions that are oriented toward capitalizing on the student's competencies/attributes in the design of supportive programming (e.g., Cosden, Panteleakos, Gutierrez, Barazani, & Gottheil, 2004; Epstein, Nordess, Gallagher, Nelson, Lewis, & Schrepf, 2005; Stewart & McWhirter, 2007; Suter & Bruns, 2009; Winters & Metz, 2009). A strength-based approach contrasts with the more traditional educational model that focuses on the student's deficits (Phelps, Zimmerman, Warren, Jellic, von Eye, & Lerner, 2009; Prescott, Sekendur, Bailey, & Hoshino, 2008; Reddy, DeThomas, Newman, & Chun, 2009; Sidhu, Passmore, & Baker, 2006; Winters & Metz, 2009). The purpose of this study was to have leaders in the field of school based mental health identify critical student strengths that are related to successful performance in the middle school setting, the state of practice related to use of student strengths in schools and the current needs for educational reform. This was accomplished through a survey of national leaders across school mental health disciplines and roles.

Method - Survey of Mental Health Leadership

The research question for this study is "What social, emotional, and behavioral strengths for success in middle school performance are identified most frequently by a survey of select advocates in the IDEA Partnership's National Community of Practice on School Behavioral Health?" Forty-one members of the CoP-SBH leadership team and two leaders from the "sister" Center for School Mental Health at UCLA were invited to participate in this survey. These groups were chosen to participate in the survey because of their familiarity with strengths-based practice, their geographic diversity and the broad

representativeness of the scope of roles in school-based practice (e.g., policy-making, mental health, education or related services practice experience, administrative roles, family members, etc.). The web-based encrypted survey link was emailed to potential participants who first were asked to read an informed consent document and agree before entering the actual survey. The survey was developed with five demographic questions and five open ended questions asking about student strengths and needs for strength-based practice (see Appendix B).

Twenty-one or almost 49% of the leaders invited to participate in the survey completed it. Among the respondents were 2 local, 4 state, and 5 national professional association representatives; 3 state education agency administrators; 2 state and 2 federal technical assistance providers; 4 related services providers; an itinerant school mental health provider; 4 family members of a child with mental health needs; 5 statewide family network representatives; 2 university professors in related services and 3 in mental health; a community mental health administrator; a school mental health program administrator; a youth programs coordinator; and a retired teacher. Respondents were broadly representative of diverse geographic regions of the United States (see Table 3.1). When asked for their school experience, 85% reported experience at the elementary and 80% at the middle school levels. Experience in special education was reported by 80% and 71% reported experience in regular education. Participants also stated involvement in transition supports, after school programs, alternative education and early intervention and positive behavioral supports (see Table 3.2).

Table 3.1

Regions Represented by Respondents.

Regions (State abbreviations in parenthesis)	N	%
New England (NH, VT, ME, RI, MA)	3	14.2
Middle Atlantic (NY, NJ, PA)	3	14.2
South Atlantic (WV, VA, NC, SC, GA, FL, DE, MD, DC)	6	28.5
East south central (KY, TN, MS, AL)	0	0
East north central (WI, IL, MI, IN, OH)	4	19
West north central (ND, SD, NE, KS, MN, IA, MO)	1	4.7
West south central (TX, OK, AR, LA)	1	4.7
Mountain (MT, ID, WY, NV, UT, CO, AZ, NM)	0	0
Pacific (WA, OR, CA, AK, HI)	2	9.5
Nationwide	10	47.6

Respondents reported leadership in supporting the extension of best practices in education. All reported participating in presentations with over 85% presenting to parents, teachers and/or administrators at the local level, another 85% presenting at regional or state level education conferences, and 80% percent presenting at national conferences.

Engagement in cross disciplinary workgroups addressing issues related to student, teacher and school performance was stated by 80% and additional 80% participated in workgroups within their professions to address school based practice. Over 80% of respondents had done writing in the field, with 52% having created materials to support education reform,

52% having written in professional organization publications or district newsletters and another 38% having been published in peer-reviewed journals.

Table 3.2

Educational Involvement of Participants.

Levels, areas of practice	N	%
Preschool and/or Kindergarten	12	57.1
Elementary (grades 1, 2 3, 4, 5)	18	85.7
Middle School (grades 6, 7, 8)	17	80.9
High School (grades 9, 10, 11,12)	16	76.1
Regular or General Education	15	71.4
Special Education	17	80.9
Transition Supports	14	66.6
Early Intervention / Positive Behavioral Supports	11	52.3
Alternative Education Settings	10	33.8
After School Programming	4	19.0

Results - Student Strengths for Middle School Success

This study is part of a larger line of research that began with a systematic review of literature that identified and analyzed student strengths most frequently cited in professional journals in education, psychology, and occupational therapy published between 2002 and 2010 (Fette, Schultz, Evetts, Rose, & Pemberton, 2011). Student strengths were consolidated into 26 strengths and then organized into five themes using grounded theory analysis techniques. The five themes are Academic Functioning, Achievement Orientation, Contextual Supports, Personal Traits, and Psychosocial Development. Member of the expert panel in the current study were asked to state up to

seven student strengths that they saw as most important for middle school success and then were asked to explain why each strength was important. The strengths and explanations of importance were then processed using line-by-line coding and constant comparison within grounded theory (Creswell, 2003; Patton, 2002). The listing of strengths, as well as participants' responses to the "so what" question for each strength, mapped onto the original five themes from the literature review. Three strengths; health, community participation, and school foundations were added, bringing the total number of strengths from the initial 26 to 29. Additionally, because the responses to the question of why each strength was important also mapped onto the five themes and 29 strengths, it is possible to begin to examine the potential interaction of relationships across strengths.

First, it is important to differentiate between the strengths listed by the respondents and those that emerged from the coding of the responses to the "so what" question. For clarity, the initial responses to the request to list the strengths that are important for middle school success are identified as "origin" strengths, whereas the strengths identified from the respondents' explanations of why the strengths were important are identified as "effect" strengths. The themes and strengths are listed on the vertical axis of Table 3.3. The 26 strengths identified from the literature review are discussed in depth in Fette et al. (2011) and the reader is invited to that manuscript for an in depth review of each of the strengths and themes. Here they will be described briefly with a focus on the data from the survey of school based mental health leaders and how it extends the original data from the literature. The five themes are presented below in the order of representativeness within the

strengths as origin in this study. The corresponding strengths are included alphabetically with the three new strengths that emerged from this survey italicized.

- Contextual Supports - External Supports & Relationships (7)
Community Participation, Cultural Factors, School Environment,
School Foundations, Caring Adults, Family Bonds, Peer Relations
- Achievement Orientation (3)
Adaptive Capacity, Sense of Mastery, Striving Behavior
- Personal Traits (8)
Attention, Cognition, Creativity, *Health*, Interests, Optimism,
Positive Identity, Temperament
- Psychosocial Development – Self & Others (6)
General Coping, Resilience, Self-Management
Pro-social Behavior, Sensitivity to Others, Social Skills
- Academic Functioning (5)
Academic Skills, Class Engagement, Group Skills, Performance,
Rule Compliance

Whereas the literature review identified Personal Traits most frequently, the results from the analysis of the survey data added two strengths to Contextual Supports and identified strengths within it most frequently as origin strengths needed for middle school success. Interestingly, Cultural Factors were not identified in this survey in either origin or effect strengths. Table 3.3 lists the frequency of each strength as an origin in the first column to the right of the listing of themes and strengths. The next column to the right lists the

frequency of each strength as an effect. The last column on the right lists the number of effect strengths that are identified as resulting from the strengths listed in column one as an origin. Table 3.4 presents the origin strengths and the specific codes of the strengths that were identified as correlating effects from each origin.

Figures 3.1 and 3.2 present an additional perspective on the identified strengths. They provide a visual representation of the frequency of strengths as either origin or effect. The font size for each strength was increased by six points for each occurrence within the survey. Figure 3.1 represents the relative frequency of strengths as origins and Figure 3.2 represents their relative strength as effects as identified in this survey. Striving Behavior emerged as the most frequent origin strength identified by the participants, followed by Social Skills, Sense of Mastery and Adaptive Capacity which generally agrees with the findings of the literature review which identified Striving Behavior first, then Peer Relations as second, Sense of Mastery as third and Social Skills as the fourth most frequently identified strengths (Fette et al., 2011). The relatively lower ranking of Peer Relations was the major difference between the frequencies of the top ranked strengths in the two studies.

Most Frequently Identified Strengths in Survey

Striving Behavior is the strength that was identified in this study as an origin strength with the highest frequency (Table 3.3) and as an effect strength with the second highest frequency (Tables 3.3 & 3.4). Striving Behaviors are organized within the Achievement Orientation theme. Striving Behaviors clustered from the literature as behaviors that provide momentum or the “press” for learning and the ability to persist in

Table 3.3

Strengths Within Themes; Frequency as Origin, Effect, and Number of Effect Strengths from Each Strength as an Origin.

THEMES & Strengths	Frequency as Origin	Frequency as Effect	# of Effect Strengths from theme/strength in column 1
<u>Contextual Supports</u>	28	18	47
CP Community Participation	5	4	11
SF School Foundations	5		7
SE School Environment	5	1	5
PR Peer Relations	5	4	12
FB Family Bonds	5	3	7
CA Caring Adults	3	6	5
CF Cultural Factors	-	-	-
<u>Achievement Orientation</u>	26	33	14
SB Striving Behavior	10	22	6
SoM Sense of Mastery	8	5	7
AC Adaptive Capacity	7	6	1
<u>Personal Traits</u>	22	19	28
PI Positive Identity	4	9	8
T Temperament	4	1	5
Co Cognition	4	-	6
H Health	4	8	3
I Interests	2	-	3
O Optimism	2	1	1
Cr Creativity	1	-	-
A Attention	1	-	2
<u>Psychosocial Development</u>	19	30	31
SS Social Skills	9	4	11
R Resilience	4	8	17
StO Sensitivity to Others	3	6	1
SM Self Management	2	3	1
GC General Coping	1	4	1
PB Prosocial Behavior	-	5	-
<u>Academic Functioning</u>	9	28	8
AS Academic Skills	4	3	3
P Performance	3	24	4
GS Group Skills	1	-	-
RC Rule Compliance	1	-	1
CE Class Engagement	-	1	-

Table 3.4

Strengths with Origins and Effects.

EFFECTS	Contextual Supports	Achievement Orientation	Personal Traits	Psychosocial Development	Academic Functioning
ORIGINS	CP(4), SE(1), PR(4), FB(3), CA(6)	SB(22), SoM(5), AC(6)	PI(9), T(1), H(8), O(1)	SS(4), R(8), StO(6), SM(3), GC(4), PB(5)	AS(3), P(24), CE(1)
<u>Contextual Supports</u>					
CP Community Participation	CA(2)	SB(2) SoM	H(2)	SS R PB	P
SF School Foundations		SB SoM		PB	AS(2) P(2)
SE School Environment		SB(2)	PI T H		
PR Peer Relations		SB(2)	PI H(2)	R(2) PB	P(3) CE
FB Family Bonds		SB(2)	H	R SM	P(2)
CA Caring Adults		SB(2)	PI	R	P
<u>Achievement Orientation</u>					
SB Striving Behavior		SB(2)	H	PB	P(2)
SoM Sense of Mastery	CP		PI(3) O	SM	P
AC Adaptive Capacity				SM	
<u>Personal Traits</u>					
PI Positive Identity		SB(2) AC	PI	StO(4)	
T Temperament	PR FB			PB	P(2)
Co Cognition		AC			AS P(4)
H Health				R	P(2)
I Interests	CA	SB		SS	

(Continued)

Table 3.4 Continued.

ORIGINS	EFFECTS	Contextual Supports	Achievement Orientation	Personal Traits	Psychosocial Development	Academic Functioning
<u>Personal Traits Continued</u>						
O Optimism					R	
A Attention			SoM			P
<u>Psychosocial Development</u>						
SS Social Skills	CP PR FB CA		SoM AC		StO(2) GC(2)	P
R Resilience	CP PR(2) FB CA(2)		SB(3) AC(2)	PI H	SS GC(2)	P
StO Sensitivity to Others			SE			
SM Self Management					SS	
GC General Coping					R	
<u>Academic Functioning</u>						
AS Academic Skills			SB(2)			P
P Performance			SB SoM AC	PI		
RC Rule Compliance		CP				

(N is stated in parentheses for effects stated more than once)

learning (Fette et al., 2011). The respondents stated the importance of curiosity, motivation and persistence, goal setting, and independent decision making. Striving Behavior was identified as an effect strength more than twice as often as it was identified as an origin (Table 3.3).

Social Skills were the second most frequent strength identified as an origin strength (Table 3.3). It is within the theme Psychosocial Development and in the literature it includes having effective communication, broad social competence, and skills in handling challenging social situations (Fette et al., 2011) which aligns closely with participant's descriptions of essential social skills as effective communication, ability to engage and get along with others, and having skills to manage conflict and sustain relationships. Effects of Social Skills included increased sympathy toward others and successful coping, increased success in family, peer and community roles and relationships, increased involvement with caring adults, increased sense of mastery, adaptive capacity, and health (Table 3.4).

Sense of Mastery was the third most often stated origin strength (Table 3.3). It is within the Achievement Orientation theme. Sense of Mastery was universally presented in the literature review as feeling competent, confident, and accomplished as a learner (Fette et al., 2011). Participants went on to include the importance of self-awareness and understanding one's own strengths and learning styles, having a sense of control and skills, and knowledge that they excel in something.



Figure 3.1 Relative frequency of strengths as origins.
Text increases in font size by 6 points for each citation.

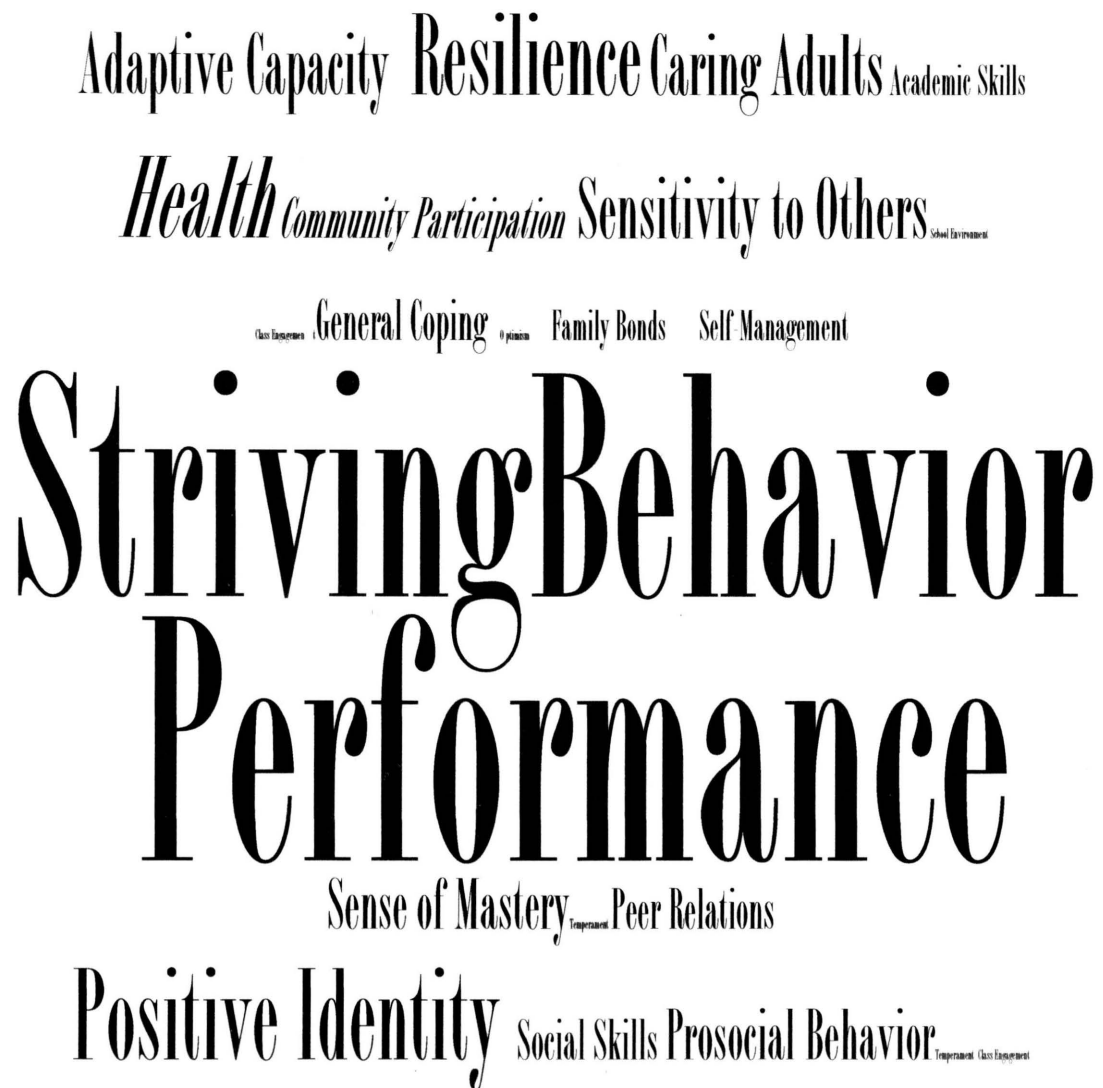


Figure 3.2 Relative frequency of strengths as effects.
Text increases in font size by 6 points for each citation.

The most frequently stated effect strengths were Performance within the theme of Academic Functioning, followed by Striving Behavior within the Achievement Orientation theme. Those two strengths combined represented nearly 36% of all of the stated effects. Identified less than half as frequently as either of the two front-runners, Positive Identity was the third most frequently stated effect.

Overview of the Strengths

This section describes the strengths identified from both the prior literature review and the current survey of mental health leaders. The strengths are organized into groups within the five themes.

Contextual Supports

As a theme, Contextual Supports includes seven strengths. The survey participants added two to those identified in the literature review; Community Participation and School Foundations. The literature review identified Cultural Factors and School Environment as well as three strengths that cluster into a subgroup categorized as Relationships, which includes Caring Adults, Family Bonds and Peer Relations strengths. The seven Contextual Supports strengths are discussed briefly in this section.

It is interesting that Community Participation (CP) did not emerge from the literature review, but was strongly supported in the data from this survey. Respondents endorsed the importance of meaningful community participation, and a sense of belonging, and commitment to roles in community. Effects of Community Participation include increased exposure to caring adults, opportunities to support striving behaviors and sense of mastery, health, social skills, resilience, prosocial behavior, and academic performance (Table 3.4). Another strength that emerged from this survey rather than the previous literature review was that of School Foundations (SF). Participants stated the importance of a strong elementary school foundation to support middle school success, which includes having acquired foundational academic and study skills, and having

experienced themselves as successful in elementary school. Stated effects from School Foundations are increased academic skills and performance in middle school, prosocial behaviors, striving behavior, and sense of mastery (Table 3.4). In the related literature, the School Environment (SE) strength centers on the quality of the classroom and school environment and calls for a positive environment with high quality educational opportunities (Fette et al., 2011). Respondents in this survey stated the need to use education to engender a sense of civic duty through specific civics courses, encouraged hands on and high interest learning opportunities, and assuring youth have a voice in determining what they are learning, and in setting their educational goals. Effects from School Environment include increased striving behavior, positive identity, temperament, and health (Table 3.4). Cultural Factors (CF) focuses on those strengths that were presented in the literature as essential for students who are members of minority cultures. They were not endorsed in this survey probably because there was not a question that asked for the impact of culture on strengths. The literature supported the importance of relationships with host friends and teachers, peer acceptance, and recognition of differing meanings of behaviors in minority cultures (Barrett, Sanderegger, & Xenos, 2003; Chen et al., 2004; Webb-Johnson, 2002).

Caring Adults, Family Bonds, and Peer Relations make up the Relationships cluster in the Contextual Supports theme. Relationships are different from the social strengths identified under the Psychosocial Development theme in that they are the external network of people who provide the student stability and/or support. The Caring Adults (CA) strength in the literature review included the student's connections to school

and community, social supports and mentors, meaningful relationships with specific teachers, and other adults who model positive values and behaviors (Fette et al., 2011). Participants in the survey affirmed the importance of strong role models and a network of people with positive relationships with youth both to support ongoing performance and to turn to when they are facing challenges. Effects from Caring Adults include increased striving behavior, positive identity, resilience, and academic performance (Table 3.4).

Family Bonds (FB) in the literature review emphasize the benefit of youth having strong family support including the student's active engagement in and sense of having a good fit within the family, parental attachment and trust as well as parental monitoring, engagement with family in activities, chores and responsibilities, and positive school-home relationships (Fette et al., 2011). Respondents endorsed the importance of family engagement and positive relationships between home and school, and reported increased striving behavior, health, resilience, self-management, and academic performance as effects of Family Bonds (Table 3.4).

Peer Relations (PR) were the second most frequently identified strength in the review of literature, which stressed the importance of friendships, acceptance by peers and popularity and on the advantages of positive, pro-social, and non-deviant friendships (Fette et al., 2011). These attributes were echoed in the current survey. Effects identified as a result of Peer Relations include increased striving behavior, positive identity, health, resilience, prosocial behavior, academic performance, and classroom engagement (Table 3.4). The strengths within the theme of Contextual Supports speak to the importance of students' environments in supporting successful performance.

Achievement Orientation

This theme includes three strengths: Adaptive Capacity, Sense of Mastery, and Striving Behavior. Adaptive Capacity (AC) is the ability to adapt responses based on their potential effectiveness. Adaptive Capacity in the literature review is stated as making choices, demonstrating resourcefulness, and the ability to adapt; and having a certain curiosity and openness to action and challenges (Fette et al., 2011). Respondents endorsed the importance of inquisitiveness, willingness to try new things, question and challenge, flexibility and the ability to adapt to new environments, and of problem solving. The primary effect stated from Adaptive Capacity was that of self-management (Table 3.4).

As discussed previously in this manuscript, the strengths Sense of Mastery and Striving Behavior were among the three most frequent strengths appearing as origin strengths in this survey. They were also among the four most frequently cited in the literature review (Fette et al., 2011). The literature review states that Sense of Mastery (SoM) includes the student experiencing self as accomplished with a sense of self-competence, self-efficacy specific to learning tasks, and academic performance (Fette et al., 2011). Effects from Sense of Mastery included increased community participation, optimism, self-management, positive identity, and academic performance (Table 3.4). Respondents to this survey stressed the need for a student driven component to mastery with specific need to attend to the student's own knowledge of their strengths. The literature states that Striving Behavior (SB) includes a student's leadership qualities, ambition, motivation and challenge-seeking behavior, positive goals and future

expectations and it frames self-reliance, strong will, autonomy, and independence as strengths (Fette et al., 2011). Effects that were stated as flowing from Striving Behavior included the perpetuation of further striving, health, pro-social behaviors, and academic performance (Table 3.4). As stated earlier, Striving Behavior provides the press or drive for learning. In summary, the Achievement Orientation theme identifies the need for the student to have the essential underlying energy and drive to learn for success in middle school.

Personal Traits

The consolidation and analysis of the literature resulted in seven strengths: Attention, Cognition, Creativity, Interests, Optimism, Positive Identity, and Temperament (Fette et al., 2011). This survey supported those identified in Fette et al. (2011) but also added a new strength, the strength of Health. Health (H) was endorsed by respondents as an important strength to support middle school performance as evidenced by its occurring twelve times in the coding of survey responses (Table 3.3). Physical and mental health were specifically stated as requisite strengths supporting readiness for learning; including being well fed, rested, having symptoms of physical and mental illness well controlled, and being free of medication side effects.

From the literature review, Attention (A) includes both the student's ability to follow directions and attend as well as the results of attention such as quality of work and comprehension (Fette et al., 2011). Attention was affirmed in the survey as focus, and its effects were reported as sense of mastery and academic performance (Table 3.4). In the literature review, Cognition (C) refers to the student's knowledge of themselves and of

mental health, accurate interpretation and processing, intelligence, academic giftedness, and clarity of thought (Fette et al., 2011). Survey participants endorsed the importance of good cognitive skills and functioning to support learning, and stated adaptive capacity, academic skills, and especially academic performance as effects of cognition (Table 3.4).

Creativity (Cr) includes use of imagination and fantasy, original expression and inventiveness, openness to ideas, and sense of aesthetics within the literature review (Fette et al., 2011). Creativity was supported in the expert panel survey as an origin only, described as the willingness to challenge the status quo. The respondent who stated it did not respond to the question of why it was important so a connection to its effects could not be made.

Interests (I) includes the student's individual skills, interests, and hobbies such as interests in animals, math, art, music, dance, and athletics (Fette et al., 2011). Survey respondents identified the importance of the development of healthy interests and of a specific interest in learning. Effects of Interests include increased availability of caring adults, striving behavior, and social skills (Table 3.4).

In the literature review, Optimism (O) includes the child's sense of emotional wellbeing, joy, enthusiasm and eagerness, excitement seeking, exploration of challenges, sense of appreciation, positive mood, and affect (Fette et al., 2011). Respondents supported the importance of hope, a belief in a positive future, and a sense of humor; and stated the predominant effect of Optimism as resilience (Table 3.4).

The literature review supported Positive Identity (PI) as student self-confidence, positive self-esteem, sense of wellbeing, happiness with their life, and capacity for

spontaneous authentic personal expression (Fette et al., 2011). Respondents identified the importance of positive affect and especially self-respect. Positive Identity was the third most frequently identified effect. In turn its effects include increased striving behavior, adaptive capacity, further sense of positive identity, and sympathy toward others (Table 3.4).

The final strength in this theme is Temperament (T) which, in the literature review, includes the values and qualities that the youth displays such as hardiness or toughness, being gregarious and energetic, being warm and loving, demonstrating honesty, fairness, conscientiousness, responsibility, idealism, courage, spirituality, introspection, trust, calm, nonviolence, modesty, and/or sentimentality (Fette et al., 2011). Temperament strengths as origins affirmed by participants included responsibility, honesty, and integrity. Effects of Temperament included peer relations, family bonds, prosocial behavior, and academic performance. Personal Traits are the inherent personal capacities and attributes students present with and with which they approach each school task (Fette et al., 2011).

Psychosocial Development

The theme of Psychosocial Development includes two subgroups of strengths; 1.) Coping Strategies, which includes the strengths: General Coping, Resilience and Self-Management; and 2.) Social Development, which includes the strengths: Prosocial Behavior, Sensitivity to Others, and Social Skills. Coping Strategies feature coping mechanisms that are internal (Fette et al., 2011). The first strength, General Coping (GC),

references the student's repertoire of coping strategies. This survey supports the aspect of the use of humor and the effect stated from General Coping was resilience (Table 3.4).

In the literature review, Resilience (R) is survival in the face of challenge. Survey respondents endorsed Resilience as supporting successful coping with stressors and included increased community participation, peer relationships, family bonds, and caring adults as its effects. Effects included improved striving behavior, adaptive capacity, positive identity, health, social skills, general coping, and academic performance (Table 3.4).

The last strength within the subgroup Coping Strategies is Self-Management (SM), which includes the ability to identify and effectively manage emotions, and general capacity for self-awareness, self-monitoring, and self-regulation. In this survey, respondents included emotional regulation and containment. The effect strength described was increased social skills (Table 3.4). The Coping Strategies subgroup is organized around the use of internal coping mechanisms to successfully manage life's challenges.

Social Development is the other subgroup within the Psychosocial Development theme. Social Development includes three strengths; Pro-social Behavior, Sensitivity to Others, and Social Skills. The emphasis of these strengths is on externalized behaviors (Fette et al., 2011). In the literature review, the first strength, Pro-social Behavior (PB), includes the student's conscience, altruism, and ability to make positive choices (Fette et al., 2011). In this survey, Pro-social Behavior was not stated as an origin, only as an effect stemming from temperament, striving behavior, community participation, school

foundation, and peer relation strengths (Table 3.4). Sensitivity to Others (StO) in the literature review involves the student's empathy, kindness, ability to share and their attachment to others (Fette et al., 2011). Respondents described respect for diversity, social adaptability, compassion, and reported sensitivity to others as having a positive effect on school environments (Table 3.4).

Social Skills (SS) is the last strength included in this subgroup. It was the second most frequently reported strength in this survey. In the literature review, Social Skills are behaviors such as communication and self-expression, which enable students to successfully interact with peers, teachers and others in their environments (Fette et al., 2011). Participants stated the ability to engage others, communication, emotional, behavioral, relationship, and negotiation skills with effects in community participation, peer relations, family bonds, caring adults, sense of mastery, adaptive capacity, sensitivity to others, general coping, and performance (Table 3.4).

The Social Development subgroup of strengths supports the desire and ability for successful connections with other people. Overall, the theme of Psychosocial Development is about the student's psychological health and relationship readiness. It includes having both internal strategies to manage stress and adversity, and the capacity for interactions and relationships with others (Fette et al., 2011).

Academic Functioning

The fifth and final theme, Academic Functioning includes the strengths of Academic Skills, Class Engagement, Group Skills, Performance, and Rule Compliance. In the literature review, Academic Skills (AS) refer to specific underlying abilities in

subject areas such as language arts and math (Fette et al., 2011). Respondents stated the importance of basic skills in math and reading, knowledge in navigating the school system, and having a commitment to improving skills. They reported the effects of Academic Skills as increases in striving behavior and academic performance.

Class Engagement (CE), in the literature analysis, includes the student's academic engagement and class participation (Fette et al., 2011), but it was only stated as an effect of positive school environments in this study (Table 3.4). In the analysis of literature, Group Skills (GS) involves working positively within groups, supporting fellow students, listening to directions, taking responsibility, taking turns, and participation in teams (Fette et al., 2011) and was endorsed as a strength for middle school success as enjoyment in groups by a participant in this survey although the respondent did not elaborate as to why it was important so no connections are made to effects. Rule Compliance (RC) in the literature review involves understanding behavioral rules and adhering to limits (Fette et al., 2011). A study participant reported the importance of acceptance of supervision to success in middle school as well as within the community with its effect stated as community participation (Table 3.4).

In the literature review, Performance (P) consists of the student's work habits, sense of purpose, ability to attribute success to effort, and attendance (Fette et al., 2011). Survey participants described the importance of good study and organizational skills, goal setting and a commitment to complete projects that they start. Effects from increased Performance included improved striving behaviors, sense of mastery, adaptive capacity, and positive identity (Table 3.4). Performance was itself the most frequently stated effect

strength in this study (Figure 3.2). Overall, the strengths within the Academic Functioning theme are academic and functional classroom skills and behaviors that support student performance (Fette et al., 2011).

Discussion

The outcome of this study surveying leaders in school mental health is a preliminary model for building strength-based interventions and identifying outcomes for students in middle school. Because respondents stated effects related to specific student strengths, correlations were suggested between initial or origin student strengths and their resultant or effect strengths. Figure 3.3 organizes this data on relationships between strengths into a model that may be used to guide practice and research; Strengths Origins, Process and Effects Network (Strengths-OPEN) Model.

Student Strengths as Origins and Effects

Survey participants were asked to identify the seven strengths that they believed to be most important for middle school success and then they were asked to describe why each of the strengths they identified were important. Their descriptions of why the strengths were important began to describe the outcomes or effects of the original strengths that they listed. Both the strengths originally listed by participants and the effect strengths also mapped onto the five themes and strengths identified in the previous systematic review of literature as well as within this survey. Comparing the frequency that themes and strengths were listed as either origin (strengths listed as important for middle school success) and/or effect (strengths listed as outcomes or effects of the origin

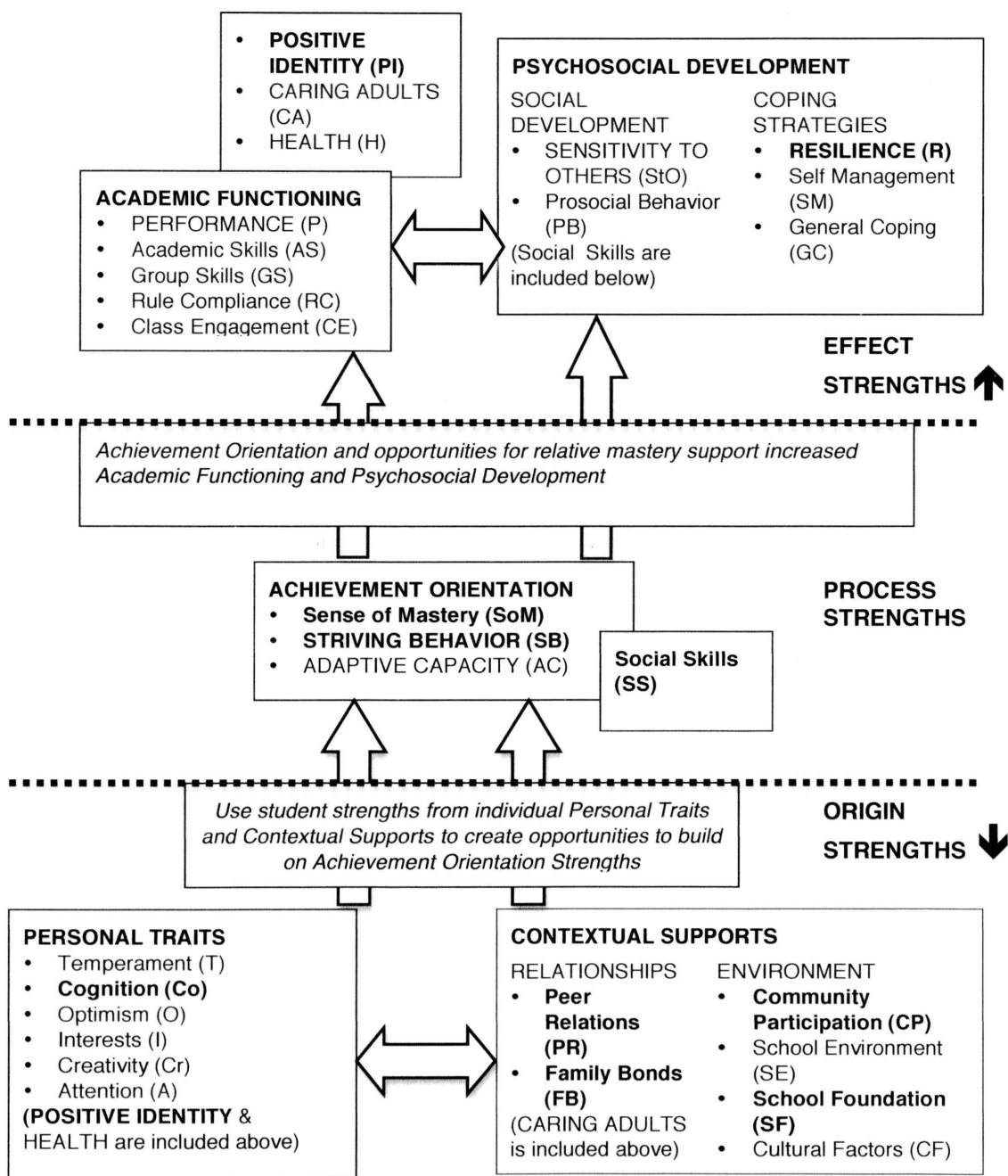


Figure 3.3 Strengths, Origins, Process and Effects Network (Strengths-OPEN) Model. Strengths as origins for more than 5 effects are in bold type. Strengths that were cited as effects more than 5 times are in all capital letters. Strengths that are placed on a level separate from their theme are referenced with their theme and placed in unlabeled boxes at the level that corresponds with their frequency.

strengths) provides the opportunity to think about potential relationships across strengths, both individually and in groups.

The two themes with strengths stated more frequently as origin than effect are Contextual Supports and Personal Traits (Table 3.3). As predominantly origin strengths, they provide an entry into authentic strength based practice, which seeks to build upon existing student strengths. Strengths such as family, peers, caring adults, community participation, and school environments; and personal identity, temperament, cognitive abilities, health, interests, optimism, creativity, and attention are somewhat readily identifiable attributes from which to build a positive student profile. They provide an accessible start to the process of developing a strength-based plan. An evaluator might begin with brief checklists for home and school, scanning for Contextual Support as well as Personal Trait strengths that may be identified and used to develop an occupation based intervention that will in turn identify and facilitate Achievement Orientation strengths which would then be used to support Academic Functioning and Psychosocial Development Strengths (Figure 3.3).

Three of the most frequently stated origin strengths are found within the theme of Achievement Orientation, which supports consideration of its use in the model as a platform for strength based intervention. The use of Striving Behavior, Sense of Mastery and Adaptive Capacity strengths are supported in literature as facilitating opportunities for students to succeed and experience themselves as agents (Earls, Raviola, & Carlson, 2008; Miller & Coll, 2007) as well as in promoting positive, active and adaptive coping (Firth, Greaves, & Frydenberg, 2010; Sidhu, Passmore, & Baker, 2006). The second most

frequently stated origin strength by participants is Social Skills, which is also the only strength within the Psychosocial Development theme that is more frequently cited as an origin than an effect. The relative increase in frequency of Peer Relations as a strength in the literature versus in the expert responses in the survey may be related to relative increased prevalence of small group social skill interventions in the literature (Fette et al., 2011). In the model, preliminary interventions are identification of student interest, temperament, creativity, cognition, learning styles, attention, and identity strengths and planning for incorporation of school, peer, family, caring adult, and community strengths. Rather than identifying areas of deficit to target, the focus is on identification of strengths to use in the facilitation of Striving Behaviors, Adaptive Capacity, and Sense of Mastery within active engagement in carefully designed occupations. Social Skill strengths are taken into the design of the social aspect of the task, e.g. in specific social qualities of the activities such as whether it occurs in a solitary, parallel, associative, or collaborative context.

Interventions in schools need to support academic performance. Performance within the theme of Academic Functioning was heavily cited in the expert survey as an effect strength, which confirms its importance as an outcome of mental health services and supports provided within schools. Hoagwood, Olin, Kerker, Kratochwill, Crowe, and Saka (2007) also stressed the need to push mental health in schools into the broader mission of education and called for research to build the capacity for mental health to support educational attainment. Because of their prevalence as effect strengths, Academic Functioning and Psychosocial Development are represented at the outcome level at the

top of the model in Figure 3.3. Except for Social Skills, which was cited most often as an origin, the strengths within Psychosocial Development were most frequently identified as effects in this study. The strengths at this level could be tracked as outcome measures to evaluate student progress.

Research within a framework of student strengths can support retooling school based mental health and shifting the focus from the old model of identifying and remediating student deficits to one that builds on student competencies and serves to extend their capacity for adaptively responding to learning. The foundation of strength-based practice is the identification of the strengths that a student presents with and the use of those strengths as the basis of their individual education plan. The Strengths-OPEN model seeks to organize the data from this research to inform a preliminary framework to support use of student strengths to guide individualized planning and intervention.

Future Directions

The basic premise of strength-based practice is that building upon strengths enables successful performance that then perpetuates more success. Hoagwood et al. (2007) stated the prevalence of deficit-focused interventions in middle school and the need to attend to proximal academic outcomes such as individual academic engagement and changes in classroom and school climate. They also stated the need to address the appropriate intensity and timing of interventions for optimal effect and use of resources. Research needs to look at which students benefit from occupation based interventions and critical prerequisites need to be established. For example, is there a level of cognitive ability that is necessary to benefit from processes targeting adaptive capacity? Are there

patterns to which strengths profiles benefit from specific interventions? What are optimal intensities and lengths of intervention? What length of time is optimal to support generalization into the classroom and what models are most effective?

Interdisciplinary knowledge bases such as Csikszentmihalyi's (1990) Psychology of the Optimal Experience or Flow, Positive Psychology (Peterson & Seligman, 2004), Resilience (Bernard, 2004; Ungar, 2004), Multiple Intelligences (Gardner, 1993), and occupation-based practice (Crist, Royeen, & Schkade, 2000; Kramer, Hinojosa, & Royeen, 2003) should be used thoughtfully to inform practices designed to deliberately build upon student strengths. Such integrative approaches may promote an increased understanding of the use of students' strengths to facilitate their success in school.

Bazyk (2011) cited Positive Youth Development as a practical application of Positive Psychology's focus on building on positive qualities to promote positive mental health. The three pillars of positive psychology, (1) positive emotion and subjective experience, (2) positive psychological and social functioning/traits and (3) positive institutions were seen as pivotal. Many of the origin strengths that were identified in this study under the themes of Personal Traits and Contextual Supports are also represented in positive psychology's second and third pillars. Additionally, the focus on exploration and mastery within participation in activity in the first pillar of positive psychology (Bazyk, 2011) is similar to the second tier of process strengths within the theme of Achievement Orientation in the Strengths-OPEN model. A difference is the focus on the role of experience in producing positive emotion as the change agent within the framework of positive psychology versus the emphasis of the direct effect of strengths embedded in

experiential, occupation based intervention facilitating striving behavior, mastery and adaptive capacity in the emerging model presented in this manuscript.

Additional research needs to be completed that examines the use of student strengths as the foundation for interventions grounded in congruent practices such as Positive Youth Development (Phelps et al., 2009), Wraparound (Epstein et al., 2005; Walker & Bruns, 2006), and Occupational Adaptation (Schultz, 2003; 2008). Positive Youth Development (PYD) is presented as a counter to the prevalent deficit models. Its basic premise is that positive outcomes are the result of strengths of the developing youth along with support from their environment. It frames the elements of successful intervention as building the “5Cs”, which are; 1) Confidence, 2) Competence, 3) Character, 4) Caring, and 5) Connection; to facilitate a transition to a contributing member of society (Phelps et al., 2009).

Wraparound is a practice within systems of care that deliberately centers on the strengths of the child and family as the basis for a planning process to build supports in the community to facilitate successful performance (Suter & Bruns, 2009; Walker & Bruns, 2006; Winters & Metz, 2009). Kutash, Duchnowski, Sumi, Rudo, and Harris (2002) discussed the need to deliberately train school staff in identification of strengths to offset the inherent conflict within special education where eligibility is determined by deficits.

Occupational Adaptation is a framework within occupational therapy that targets the youth’s internal adaptive processes (Schultz, 2003; Schultz, 2008). Schultz (2003) stated the need to provide opportunities for students to experience themselves as agents

of change within meaningful activity. She asserted that occupational therapy should focus on promoting and eliciting students' ability to generate positive adaptive responses, and engage in active evaluation of the outcome of their efforts. She identified such therapeutic interventions as being essential to the student learning the relationship between actions and outcomes, adapting to produce more satisfying results, and progressing toward increased mastery and a sense of real-world competence. This treatment approach incorporates activities that are both meaningful to the student, but also present an inherent demand for the student to engage in adaptive responses to challenges that emerge naturally within the unfolding of the activity. The treatment approach purports that the natural urge toward competence is fueled by the internal reward experienced through therapeutically directed "learning through doing". Schultz (2003) also emphasized the significance of providing students with what she identified as *role-shifting experiences*. That is, the process of engaging students in those very roles/activities, which they may have never experienced in the school environment. All of these practice models share a focus on student strengths to ground practice and would benefit from research to track their outcomes in terms of effects on student strengths and school performance.

Conclusions

Earls et al. (2008) stated that future research designs should "elicit the strengths, agency and problem solving capacities of children in part to offset what has been overemphasis on deficits" (p 8) that interfere with academic success in the determination of eligibility for special education. By beginning with youths' Personal Trait strengths

and their Contextual Supports, we may collect positive information from which to build interventions that actively engage. Active engagement in meaningful tasks creates opportunities for students to build upon their strengths, increase striving behaviors, mastery, and flow. As youth appraise their performance within meaningful occupation and adapt, they increase their adaptive capacity. Use of proximal academic performance measures and social development as outcomes enable us to effectively identify and track success that is directly relevant to student performance. Research is needed to continue to inform a repertoire of intervention strategies specifically adapted to meet the needs of individual students. Measurement that captures individual student strengths and supports use of those as a means of tracking outcomes needs to be carefully and thoughtfully developed. We can more effectively target interventions by building evidence-bases to inform which supports are offered to which students at what length, duration, and frequency. With limited resources and critical student needs, it is essential to assure that our efforts to support students are both effective and efficient.

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CHAPTER IV

STUDY THREE: STUDENT STRENGTHS AND STRENGTH-BASED PRACTICE: IMPLICATIONS FOR SCHOOL-BASED OCCUPATIONAL THERAPY

A Paper To Be Submitted For Publication in the American Journal of Occupational
Therapy

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This manuscript describes the third of three inter-related studies intended to develop a model of students strengths related to middle school success. The proposed model is part of a larger study being conducted by this researcher on development of strength-based assessment and interventions in public schools. The term, *strength-based*, refers to interventions that capitalize on student competencies in order to design supportive programming. A strength-based approach contrasts with a more traditional educational model that identifies student deficits as targets for remediation (Hoagwood, Olin, Kerker, Kratochwill, Crowe, & Saka, 2007; Kutash, Duchnowski, Sumi, Rudo, & Harris, 2002; Reddy, DeThomas, Newman, & Chan, 2009). In this manuscript, as well as in the larger line of research, strengths include both individual student characteristics and specific supports in the various environments available to individual students.

The first study in this line of research consisted of a systematic analysis of student strengths most frequently cited in education, psychology, and occupational therapy professional journals published between 2002 and 2010. Grounded theory analysis

identified a set of twenty-six (26) strengths that organized into five themes (Fette, Schultz, Evetts, Rose, & Pemberton, 2011). The second study, also using grounded theory techniques, included a survey of identified leaders in the National Community of Practice on School Behavioral Health (a national working network facilitated by the IDEA Partnership dedicated to advancing mental health support and intervention in schools). The twenty-one (21) respondents were asked to identify the most important student strengths to support middle school success and the outcomes of those strengths. Their responses supported the set of themes/strengths identified in Study I (Fette, Schultz, et al., 2011) and identified three (3) additional strengths (Fette, Evetts, Schultz, Pemberton, & Rose, 2011). The third study, addressed in this manuscript, consisted of a focus group with occupational therapists currently practicing within school-based settings. The addition of occupational therapists adds another dimension for the development of the above referenced strength-based model.

Occupational therapists are one of the identified related services included as part of special education programming in the public schools. Many of the students that occupational therapists serve experience psychosocial difficulties as an issue secondary to the reason for referral. However such psychosocial problems may emerge as even more debilitating. Study III continued the line of inquiry on identification of strengths for middle school success, but added a subset of inquiry specific to occupational therapists and their perspectives on the role of occupational therapy in addressing the psychosocial needs of students in public schools. The second area of inquiry was added in this study in order to contribute to the growing interest in the literature on identifying the preparation

and competencies of occupational therapists to address psychosocial needs of students in public schools (e.g., Beck, Barnes, Vogel, & Oxford Grice, 2006; McDuff, Schultz, Andersson, & Pemberton, 2009). This manuscript presents the results of the third study and relevance of the results to the model of student strengths.

Review of Related Literature

Evaluation and intervention are driven by theories that attempt to explain behavior and provide an effective framework for designing encounters that will positively impact performance. The following provides a condensed overview of literature on occupational therapy as an education-related service for students with psychosocial needs in the public schools.

Several recent articles on school-based occupational therapy for students with psychosocial needs appear to share the perspective that identification of deficits and remediation will result in improved performance (e.g., Case-Smith & Archer, 2008; McDuff et al., 2009; Sepanski & Fisher, 2011). That is, they seem to be primarily grounded by the traditional deficit-focused model of educational interventions for students at risk. In addition, literature on school-based occupational therapy tends to target interventions that are focused on one of three modes of intervention: sensorimotor, behavioral, or social skills.

Several recent authors have attempted to identify and study the method and theoretical foundation for occupational therapy with students with psychosocial needs. Bazyk (2007) cited the Occupational Therapy Practice Framework's (AOTA, 2008) emphasis on social participation as support for the use of occupational therapy for

students with psychosocial needs in the public schools. One study (McDuff et al., 2009) focused on identifying the specific strategies that therapists used to address student psychosocial needs. Therapists reported that “improving social skills” was the most frequently used strategy. Bazyk (2011) suggested that therapists should consider the use of mental health promotion frameworks that emphasize building students’ strengths and resources as a vehicle to foster mental health and well-being in the public schools. Such frameworks are typically based on the creation of supportive environments, reduction of stigma and facilitation of overall social and emotional health among the student population at large (e.g., Bazyk, 2011; National Association of Secondary School Principals, 2011; Office of Special Education Programs Technical Assistance Center on Positive Behavior Interventions and Supports, 2011). The most prevalent tools are developing positive behavior support initiatives and providing teachers with classroom strategies that promote social and emotional well-being and a positive school environment (e.g., Gomez & Ang, 2007; Hoagwood et al., 2007; Leodbeoer, Hoglund, & Woods, 2003; Phelps, Zimmerman, Warren, Jelicic, von Eye, & Learner, 2009). Coster (2008) addressed the broader issue of measurement. She spoke to the issue of instrumentation and the inherent effect of measurement tools. She challenged occupational therapists to shift their focus and emphasize strengths in the development of instruments to measure performance. Her perspectives serve to caution therapists that the very process of what is measured tends to produce assessment-driven interventions and related outcomes.

Occupational therapists have long emphasized the use of therapeutically designed activities to increase the student's adaptive responses to challenges in their environment (e.g., Ayres, 1979; Huss, 1981; Howe & Briggs, 1982; King, 1978; Kleinman & Bulkey, 1982; Schultz, 2003; Yerxa, 1967). Jackson and Arbesman (2005) completed a literature review of evidence-based practice to guide occupational therapists on addressing the psychosocial needs of children and youth. The review asserted that occupational therapists have a unique perspective to support students in the learning environment. This perspective is based on a well-honed set of practice guidelines that are guided by principles of task analysis, activity design, child development, and group dynamics. Jackson and Arbesman also emphasized that occupational therapy for students with psychosocial needs should be congruent with students' interests and developmental level and facilitate targeted social and behavioral skills. Other authors have clarified the role of the occupational therapist as a team member that can support both the teacher and the larger school environment's potential to provide the "just right" educational challenges for students with psychosocial needs (Downing, 2011; Hanft & Shepherd, 2008; Schultz, 2003).

Method - Focus Group with Occupational Therapists

Occupational therapists with more than two years experience as an occupational therapist were invited to participate in the focus group through a Regional Education Service Center in a southwestern state. While the particular service center includes rural, suburban and urban school districts, only therapists working in small town and rural districts responded. This researcher had no personal or professional relationships with

any of the five (5) participants in the focus group. Details of the group's demographic responses are presented in Table 4.1. The therapists reported a wide range in years of school-based practice (2-15 years). Most served families with varying socioeconomic

Table 4.1

Demographics.

Participant #	1	2	3	4	5
Years worked in OT	>25	10-15	15-20	5-10	10-15
Other areas of practice	Psych, geriatric, physical disabilities rehabilitation	0	Pediatric hand, home health, rehabilitation	Preschool and early intervention	ECl, pediatric hospitals, home health
Years in school-based OT	15-20	10-15	10-15	1-5	1-5
Population density	rural	rural	rural	rural	rural
Socioeconomic levels served	low	low, middle, upper	low, middle	low, middle, upper	low
Special Ed. Eligibilities served	AU, DD, LD, MR, OHI	AU, DD, ED, LD, MR, OHI	AU, DD, ED, LD, MR, OHI	AU, ED, LD, MR, OHI	AU, ED, LD, MR, OHI
Did education prepare to address mental health needs?	Yes – but not specific to children	Not entirely in school; experience prepared	Not for children; prepared self with CEUs	NO	“Touched surface”

Special Education Eligibilities – Autism (AU), Developmental Disabilities (DD), Emotionally Disturbed (ED), Learning Disabilities (LD), Mental Retardation (MR), Other Health Impaired (OHI)

resources. Three stated that their professional-level education had provided some degree of preparation for serving students with psychosocial/mental health needs. However, four of the five therapists agreed that they had acquired most of their skills in this area from direct work experiences and/or continuing education rather than from their academic preparation.

Each of the focus group participants (N=5) signed informed consent and were digitally recorded. The focus group was facilitated by this researcher. The process included an interview guide consisting of eight questions (see Appendix C). The Institutional Review Board at Texas Woman's University approved the process and questions. The first five questions probed for the therapists' perspectives on essential student strengths for successful performance in middle school. The remaining three questions addressed the therapists' perspective on the role of occupational therapists in supporting students' psychosocial and/or mental health needs in schools. The recordings were transcribed and then erased. The transcription was processed using line-by-line coding and constant comparison within grounded theory (Creswell, 2003; Patton, 2002). The results of the focus group are compared with the twenty-nine (29) strengths and five (5) themes identified in the first two studies (Fette, Evetts, et al., 2011; Fette, Schultz, et al., 2011).

Results - Strengths Identified by Focus Group

Table 4.2 presents the frequency of themes and related strengths from Study I and Study II along with the strengths identified by the focus group. The specific results of Study III are presented in the following discussion. For purposes of clarity, strengths are italicized and bolded. Themes are presented in all-caps and bolded. The following

Table 4.2

Frequency of Strengths Identified Across Studies I, II and III.

THEMES/Strengths	Study I Lit. Rev. Frequency	Study II Leaders Frequency	Study III Occ. Ther. Frequency	Total Strengths (I, II, III)
CONTEXTUAL SUPPORTS				
(Environmental Strengths)				
Community Participation	-	9	2	11
Cultural Factors	4	-	3	7
Material Possessions	-	-	4	4
Respect from Others	-	-	9	9
School Environment	5	6	7	18
School Foundations	-	5	2	7
Subtotals	9	20	27	56
(Relationships)				
Caring Adults	6	9	2	17
Family Bonds	8	8	7	23
Peer Relations	19	9	11	39
Subtotals	33	26	20	79
(CS) TOTALS	42	46	47	135
ACHIEVEMENT ORIENTATION				
Adaptive Capacity	8	13	9	30
Sense of Mastery	17	13	2	32
Striving Behavior	20	32	2	54
(AO) TOTALS	45	58	13	116
PERSONAL TRAITS				
Attention	3	1	-	4
Cognition	8	4	3	15
Creativity	4	1	-	5
Health	-	12	-	12
Interests	10	2	-	12
Optimism	8	3	-	11
Positive Identity	11	13	7	31
Temperament	9	5	2	16
(PT) TOTALS	53	41	12	106

(Continued)

Table 4.2 Continued.

THEMES/Strengths	Study I Lit. Rev.	Study II Leaders	Study III Occ. Ther.	Total (I, II, III)
<u>PSYCHOSOCIAL DEVELOPMENT</u>				
Coping Strategies (Internal)				
General Coping	8	5	1	14
Resilience	6	12	2	20
Self Management	9	5	-	14
Subtotals	23	22	3	48
Social Development (External)				
Prosocial Behavior	9	5	1	15
Sensitivity to Others	12	9	3	24
Social Skills	16	14	4	34
Subtotals	37	28	8	73
(PD) TOTALS	60	50	11	121
<u>ACADEMIC FUNCTIONING</u>				
Academic Skills	4	7	2	13
Class Engagement	5	1	-	6
Group Skills	5	1	-	6
Performance	7	27	1	35
Rule Compliance	8	1	-	9
(AF) TOTALS	29	37	3	69

presents the strengths from the focus group's discussion in response to questions on student strengths needed for middle-school success as well as several strengths that emerged in their discussion of the role of occupational therapy in addressing students' psychosocial/mental health needs. The group's comments were analyzed for consistency with the strengths identified in Study I and II.

The participants identified *Peer Relations*, *Adaptive Capacity*, and *Respect from Others* most frequently in their discussion of the most important strengths for middle school success. *Peer Relations*, however, emerged as most prominent in that it was most

frequently stated and by consensus of participants in the discussion itself. The group stressed the importance of friends to “sit with at lunch” and to “hang out with” after school as well as the effect that positive peer groups have on individual behavior and academic performance. The therapists described *Adaptive Capacity* as being “critical for students to cope” with their individual differences as well as with the changing peer clicks, language usages and demands for subtle shifts in the balance of academic and social demands that occur in the various school environments. Participants strongly voiced the need for school personnel to “...find out what the kid’s needs are – it should be child or student centered even though we are in that educational environment.” This content emerged as a new strength that the researcher identified as *Respect from Others*.

The focus group’s remarks were concentrated within the theme of **CONTEXTUAL SUPPORTS** as the primary group of strengths needed for middle school success (Table 4.2). While the therapists in the focus group also identified strengths within all five themes, they identified two **CONTEXTUAL SUPPORT** strengths that had not previously been identified in Study I or II. These two new strengths are *Respect from Others* and *Material Possessions*. *Respect from Others* is particularly notable as it was as one of the most frequently identified student strengths (see previous comments). The content that resulted in this researcher identifying *Respect for Others* did not occur, however, during the questions that targeted discussion on student strengths. It occurred during the second phase of the focus group in which participants were asked to discuss their perspective on the role of occupational therapy in addressing student’s psychosocial and/or mental health needs in the public schools. The term *Material*

Possessions was generated to identify a new strength not identified in the previous two studies. That content related to the importance that objects, clothes, etc., garnered for students in gaining “status” in middle school. These responses occurred within the discussion of strengths that students use to cope or compensate when demands exceed their capacity.

Identification of Strengths in the Context of Strengths-OPEN Model

The student strengths identified in the focus group were compared to those identified in Study I – the literature review (Fette, Schultz, et al., 2011), and Study II – survey of leaders in the field of school mental health (Fette, Evetts, et al., 2011). The *Strengths Origin, Process and Effects Network* (Strengths-OPEN) Model (Figure 4.1) presents a graphic organization of the five themes and related strengths as identified in Studies I, II, and III. The reader is referred to the two previous studies in this line of research for further discussion on the strengths within each theme. The model begins at the base of Figure 4.1 with the selection of **CONTEXTUAL SUPPORTS** and **PERSONAL TRAITS** strengths. These are used to build opportunities at the next level up, within **ACHIEVEMENT ORIENTATION** and *Social Skills*. At the top of the model, outcomes include positive effects in *Health*, *Positive Identity*, and increased access to *Caring Adults*, but predominantly feature strengths from the **ACADEMIC FUNCTIONING** and the **PSYCHOSOCIAL DEVELOPMENT** themes (Fette, Evetts, et al., 2011). The following section provides a brief introduction to the five Themes/Related Strengths. However, the focus is on data gathered from the focus group.

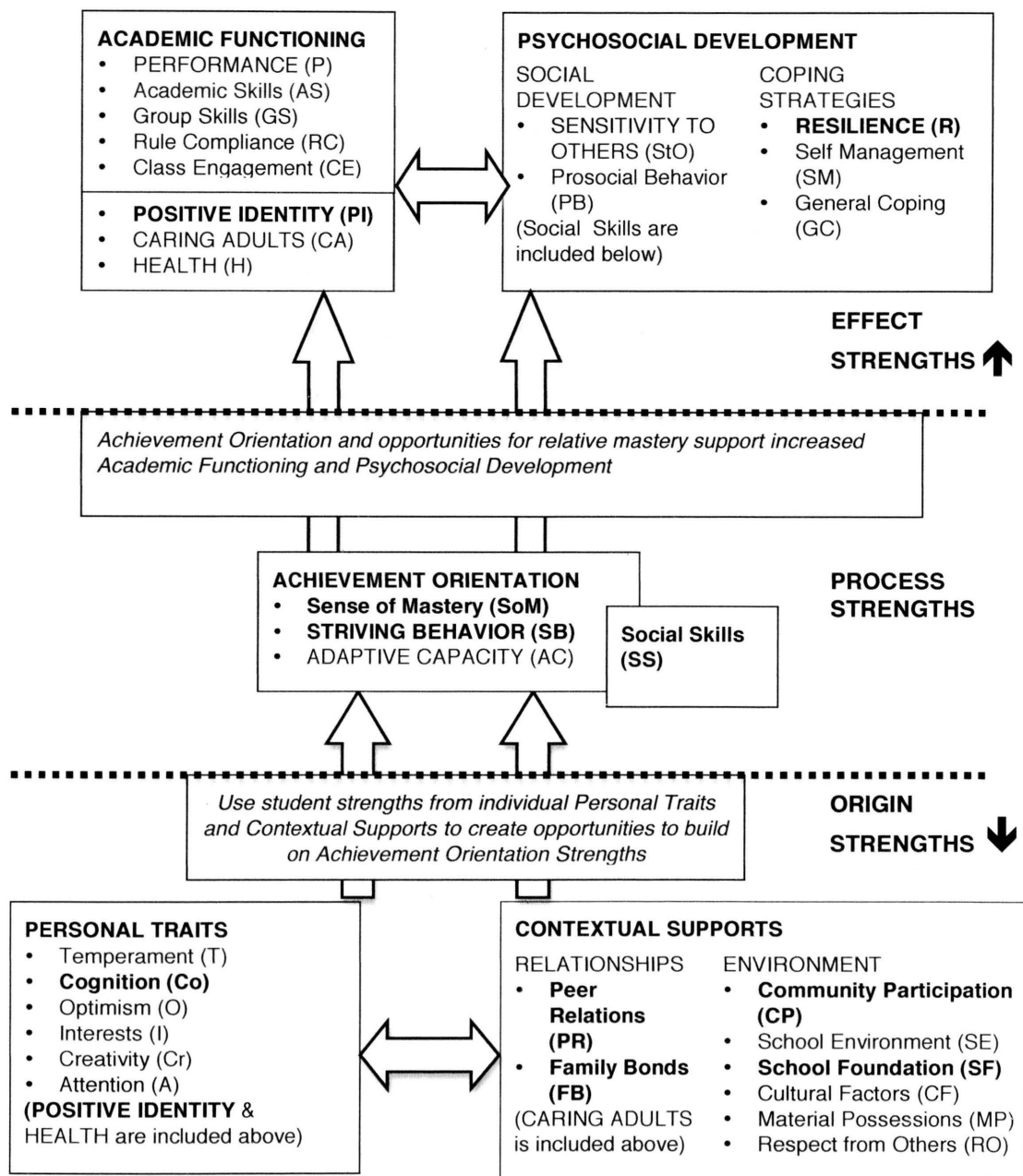


Figure 4.1 Strengths, Origins, Process and Networks (Strengths-OPEN) Model.

Strengths as origins for more than 5 effects are in bold type. Strengths that were cited as effects more than 5 times are in all capital letters. Strengths that are placed on a level separate from their theme are referenced with their theme and placed in unlabeled boxes at the level that corresponds with their frequency.

CONTEXTUAL SUPPORTS: The theme that was most strongly supported by the focus group discussion (Table 4.2) was **CONTEXTUAL SUPPORTS**. This theme includes two categories of strengths: Environment and Relationships. Environment strengths include *Community Participation*, *Cultural Factors*, *Material Possessions*, *Respect from Others*, *School Environment* and *School Foundations*.

Participants cited *Respect from Others* most frequently within the Environment cluster. They described *Respect from Others* as respect for student needs and preferences and accommodation of such. Therapists reported having been requested to provide support for activities that the student did not value or which were developmentally inappropriate and discussed using respect for the student as a guiding principle. Sometimes they reported that this meant presenting the individualized education plan (IEP) goals and requirements to the student and respecting their disagreement and frustration with the demand and/or developing an alternative with the student that the student found acceptable. They stated the need to attend to the potential social consequences of extra equipment and therapy in a school setting, listening to the student, being sensitive to their feelings and sharing control.

School Environment was the second most frequently stated Environmental strength. Occupational Therapists described part of their role as helping reframe and advocate for students to create a more supportive environment. They explained supporting the physical needs of students by providing sensory motor strategies school-wide such as enabling regular movement and creating quiet spaces that all students could use to help calm and self-regulate. Participants described their contributions to problem

solving for a broad range of needs from assuring that kids with lots of equipment and potential barriers were situated in the classroom in ways that enabled social participation, to reframing specific behavior to assure that students had the opportunity to take developmentally appropriate risks and even to get into trouble on occasion. Participants saw themselves as advocates for students. The focus group participants identified student knowledge about specific socially acceptable behaviors from campus to campus as well as having a peer group to move with to the next academic level as important strengths.

Material Possessions was another new strength identified by this focus group. Therapists identified students showing off their possessions and the importance of wearing the “right brands” in middle school as enabling strengths. The respondents all served rural school districts and their discussion of **Cultural Factors** largely centered on the issues of rural students. They discussed the decreased diversity of rural communities and the stability of social groups over time in rural settings. This translates to a static social structure that does not tend to vary within a single grade cohort over time, although it may vary broadly from cohort to cohort in levels of acceptance and tolerance of differences. Some focus group participants stated that they facilitated participation in community activities and intentionally supported **Community Participation** for students.

Relationship strengths include **Caring Adults**, **Family Bonds** and **Peer Relations**. As discussed previously, participants unanimously supported **Peer Relations** as the most important strength. They spoke about the need to belong to some group as universal and described a developmental process of trying on groups and styles to see which fits. Focus group participants stated that students need to find their place within a relatively pro-

social group. They asserted that middle school students need someone to eat lunch with, to hang out with after school and benefit from positive peer pressure toward engagement in activities such as band, theater, choir, or similar groups. Focus group participants stated the following type of content about the importance of ***Peer Relations***:

The social group that you get into can also affect the academic and the behavior so the group that you start running with is probably going (to influence whether) you are making grades or (are) the alley kid that smokes.

Rural youth may have fewer choices regarding peer groups, staying with the same peers throughout elementary school and even into middle school.

Therapists' comments identified ***Family Bonds*** as a significant strength. Families have some influence over the choice of peer groups, and are a source of problem solving and support both materially and emotionally. Participants stated that youth benefit when family are able to provide a safe haven to work through and practice responses to challenges as well as a source of advocacy for their needs. Conversely, therapists reported feeling caught in a bind when family pushed for achievement that was in conflict with the student's goals and beliefs about what was important. Participants also saw themselves as resources for families and reported seeking to educate parents, youth, and school staff. Therapists also supported the strength ***Caring Adults***, stating the need to identify specific people at the middle school level in advance and begin to build relationships while the student is still in elementary school. They also identified the occupational therapist as one of the caring adults that students can count on at the upper elementary and middle school levels.

ACHIEVEMENT ORIENTATION: Three strengths are included in the **ACHIEVEMENT ORIENTATION** theme; *Adaptive Capacity*, *Sense of Mastery*, and *Striving Behavior*. Therapists in this focus group supported the importance of *Adaptive Capacity*. They identified *Adaptive Capacity* as critical in the student's coping with their own individual differences from norms, and with the challenges of shifting peer demands, and language usages. Participants discussed core challenges that middle school students face around having to build new peer relationships and reestablish one's place in the group as they moved from elementary to middle school. They talked about rapid changes in language that are confusing and require the student to shift use of terms that have had one consistent usage and now have variable meanings based on different contexts. A therapist in the focus group stated:

There is a change in language about in middle school; if I call you a butthead that could be like a term of endearment but in elementary school that was "I don't want to play with you on the playground. You are a butthead." But in middle school, butthead is, "Hey, what's up butthead?" (and) you still can't say it in front of your teacher.

Participants identified tensions between making adults and peers happy and many situations that require divided attention between academic and social demands that require students have the ability to effectively adapt their responses.

Participants in this focus group also supported *Sense of Mastery* and *Striving Behavior* but less robustly than in the two previous studies where both strengths were among the most frequently cited (Fette, Evetts, et al., 2011; Fette, Schultz, et al., 2011).

This discussion framed a general sense of mastery in a social context. Participants discussed the need for students to experience themselves as competent and even to develop alternative means to do this. One therapist gave an example that embodied both *Sense of Mastery* and *Striving Behavior*. A youth used his walker to race down inclines faster than his peers could on mere feet. The student needed to use the tools at his disposal to engage in risk taking behavior and push limits just like his peers and he did so quite successfully.

PERSONAL TRAITS: PERSONAL TRAIT strengths previously identified included *Attention, Cognition, Creativity, Health, Interests, Optimism, Positive Identity,* and *Temperament* (Fette, Evetts, et al., 2011; Fette, Schultz, et al., 2011). The three PERSONAL TRAITS supported in this focus group discussion were *Cognition, Positive Identity,* and *Temperament*. Group participants depicted *Cognition* as the capacity to grasp concepts and expectations. *Positive Identity* was identified in the literature review, the expert survey and by this focus group. Therapists stated the importance of knowing who one is and being all right with it, having good self-esteem, being grounded and able to ask for what one needs. *Positive Identity* enables a positive sense of self that embraces differences from typical norms and enables feelings of confidence and happiness. Therapists in the focus group described this as:

They are pretty confident in who they are, even though they get in a tough spot, they can say, “This is who I am and I am OK with it.”

Another example of *Positive Identity* is:

Thinking about all the kids that I know ... I bet the kids who had a good self-esteem, are solid at 12, 13 years old, I could count on my fingers. The other ones are still looking; they may be leaning one direction or another but they are definitely still looking around. So if they have that “groundedness” ... that would be a great strength.

This group stated the importance of *Temperament* as having a good personality.

PSYCHOSOCIAL DEVELOPMENT: The theme **PSYCHOSOCIAL DEVELOPMENT** includes two subgroups of strengths; a) Coping Strategies, which includes the strengths: *General Coping*, *Resilience*, and *Self-Management*; and b) Social Development, which includes the strengths: *Pro-social Behavior*, *Sensitivity to Others*, and *Social Skills*. Coping Strategies feature coping mechanisms that are internal (Fette, Schultz, et al., 2011). The group’s discussion supported *General Coping* in their references to “letting things roll off your back”, and *Resilience* as the student’s use of humor and reframing rejection by peers to decrease its importance.

Social Development is the second subgroup within the **PSYCHOSOCIAL DEVELOPMENT** theme. Social Development includes *Pro-social Behavior*, *Sensitivity to Others*, and *Social Skills*. The emphasis of these strengths is on externalized behaviors (Fette, Schultz, et al., 2011). Therapists supported *Pro-social Behavior* in a comment that encompassed both it and *Sensitivity to Others* in referencing a youth practicing advocacy skills first by standing up for someone else, which then evolved into increased self-advocacy capability later. Several participants referenced *Sensitivity to Others* as a

strength that supported success. For example, a student had developed a strategy of complementing other students, which resulted in others wanting to include the student in spite of otherwise less desirable traits. ***Social Skills*** were supported as the need for youth to know what is socially acceptable behavior in school. Participants in the group agreed that social skills are more important for middle-school success than academics.

ACADEMIC FUNCTIONING: Interestingly, the least frequently stated strengths in the focus group were those within the theme of **ACADEMIC FUNCTIONING**. This theme includes the strengths of ***Academic Skills, Class Engagement, Group Skills, Performance, and Rule Compliance***. Much like the results from the previous two studies, the focus group participants identified underlying ***Academic Skills*** as necessary for middle school success. They discussed the need to have either handwriting skills or adaptive equipment to enable sufficient speed for note taking. Participants in the focus group identified management of materials as both a challenge and a critical strength for middle school success, which was coded to ***Performance*** in the data.

In toto, occupational therapists in this group strongly emphasized three of the strengths included under the theme of **CONTEXTUAL SUPPORTS: *Peer Relations, School Environment and Family Bonds***. They also identified the value of ***Adaptive Capacity*** and ***Positive Identity*** as student strengths that support middle school success. The analysis of the data from the focus group added two strengths that had not been identified in the two prior studies in this line of research, ***Material Resources*** and ***Respect from Others*** (see previous section of this paper for additional detail).

Role of Occupational Therapy in Addressing Students' Psychosocial Performance

The therapists in this focus group voiced their perspective that occupational therapy should be participating in supporting school mental health. They endorsed the need for therapists to address the student's psychosocial issues if they present, regardless of the primary reason for referral (e.g. handwriting, coordination, etc.). The therapists' perspective is congruent with the profession's long-standing commitment to occupational therapy being provided in a holistic manner (that is, treating the child as a "whole"). Additionally, the therapists were positive about their role in serving students with primary mental health needs. The therapists identified that the press for them to address mental health issues was largely a result of the needs that they themselves identified as called for on each campus. The next step was to elicit support from team leaders and/or administrators to promote their providing interventions for students with mental health needs. Participants stated their perspective that even though there are no limitations in special education laws that prohibit occupational therapy from providing mental health supports and interventions under IDEA, occupational therapists are rarely identified to provide mental health services. The group agreed that they often brought what they viewed as a "common sense" perspective to school mental health teams. The discussion clustered around three roles/activities for occupational therapists in addressing the psychosocial and/or mental health needs of students. These three roles are a) Team Member, b) Advocate, and c) Therapist.

Occupational Therapist - Team Member

Participants supported occupational therapy's role as an agent of the school environment with the capacity to have an effect on both physical and human aspects of students' environments. They described applying Universal Design for Learning to increase accessibility for all students. They also described their helping schools to reframe their perspective on student limitations and provide programming to support students' physical, social, emotional, and occupational needs. Examples included a student having been placed where she was segregated from peers and couldn't see the teacher's instruction to the class – because there was only one desk in the room that would accommodate a wheelchair. The therapist suggested an alternate arrangement of the classroom that allowed her to sit with her peers and be able to see the teacher. Another therapist offered that she had recommended the school have a “chill out” space for students to use when they are having coping difficulties.

In addition to specific support in managing the physical environment, the therapists described their actions as team members in direct support of student mental health. Members of the focus group discussed working with other professionals in schools who are specifically tasked with addressing behavioral needs. They stated the importance of bringing occupational therapy's unique point of view as an added component of a multidisciplinary team rather than a duplication of other roles. Participants reported satisfaction with their work as a member of multidisciplinary behavioral assessment teams and the inclusion of information on psychosocial functioning as part of their occupational therapy assessment process. The group voiced

the desire to be viewed as a source for referrals to both school and community mental health providers. The participants shared that they regularly sought to inform teachers about positive behavioral and instructional strategies that can be used to support all of the students in their classrooms.

Occupational Therapist - Advocate

The group's participants defined a role for occupational therapists as advocates for children within all areas of the school, with parents and in the community, and supported the need to teach effective self-advocacy to students. They discussed the need to help a student reframe behaviors that he or she may see as positive but which are viewed negatively by school personnel. Conversely, school personnel can be helped to reframe their understanding of the student's negative behavior.

The participants spoke to the need for occupational therapists to also function as an advocate for students in the classroom, on the bus, in the lunchroom and on the playground. One therapist described the need to help ensure that students have access to opportunities to appropriately interact with peers, and even to get into trouble now and again. Another therapist offered that what she loved about working in a rural community was the increased opportunity to support student involvement in a broad scope of family and community activities (e.g., sports, church, community mental health agency activities, etc.).

Therapists also spoke about their role in providing support/education for parents to be better able to support the student's goals at home. The group emphasized their role in helping the student learn how to self-advocate in various environments. For example,

the therapist may help the student be able to effectively assert their needs with teachers and classmates or to communicate their disagreement with an IEP goal to parents and teachers.

Occupational Therapist – Intervention

Therapists in the focus group described therapeutic use of themselves and the intervention process as critical components of occupational therapy in schools. As discussed in the added **CONTEXTUAL SUPPORT** strength entitled ***Respect from Others*** in the Strengths-OPEN model, therapists supported the need to closely listen to students and respect their perspective about their feelings, performance, and preferences. They asserted that therapy should be child-centered and collaborative rather than prescriptive. Advocacy seemed to often become part of the intervention process. Participants described conflict between the therapist and the student as an opportunity to increase the alliance between the therapist and student as well as for the student to practice developing self-advocacy skills within an *in vivo* context. Such exchanges were used to help the student practice new behaviors.

Occupational Therapy – Perceived Needs

While participants affirmed a role for occupational therapy in supporting school mental health, they also identified barriers that limit their ability to participate more effectively in addressing the needs of students with psychosocial or mental health issues. These barriers can be grouped as either 1) Systemic or 2) Professional.

Systemic problems include needs for acceptance of the occupational therapist as a member of mental health team, processes to support multidisciplinary teamwork that

include occupational therapy, and adjustments in workload to enable such participation. Some members of the group felt comfortable with asserting the potential contribution of occupational therapy to established team members, however others felt the need to have some entity designate occupational therapy as a discipline that is a bona fide member of the school's student assistance or mental health team. They seemed to need an external "stamp of approval" or official authorization. The therapists strongly voiced a need for time to be allocated for team meetings, sharing observations and joint planning to coordinate student supports. The focus group also articulated professional barriers as a lack of evaluation tools, a specific theoretical framework, and guidelines for providing psychosocial interventions.

Discussion - Most Frequent Strengths

Focus group participants most frequently stated *Peer Relations*, *Adaptive Capacity*, and *Respect from Others* as the most important strengths for middle school success. They supported **CONTEXTUAL SUPPORTS** more strongly than the data from Study I or Study II, and most of their discussion maintained the importance of context. All of the participants considered *Peer Relations* to be the single most important factor contributing to student well-being. This supports findings in occupational therapy literature, which identified development of social skills as the most frequent form of psychosocial intervention (McDuff et al., 2009). *Peer Relations* and social participation permeated the discussion of strengths as well as the discussion on the roles of occupational therapy in supporting psychosocial performance in schools. Therapists continued their emphasis on facilitating environments to promote social participation.

Most of the data attributed to the strength ***School Environment*** appeared during their discussion of occupational therapy's role in school mental health rather than from the initial discussion on student strengths. This was also the case in the emergence of the data on student's need for ***Respect from Others***. Perhaps thinking in the context of student mental health and psychosocial performance facilitated different connotations when thinking about student performance. Setting the discussion in this context may have supported and strengthened the participant's thoughts about student psychosocial performance within a contextual framework. Participants supported the importance of ***Adaptive Capacity*** as the need for flexibility in responses to successfully negotiate their changing landscapes. Even their discussion of ***Adaptive Capacity*** was framed within shifts in contextual and social demands in the transition from elementary to middle school that youth must navigate.

Occupational therapists participating in this focus group affirmed occupational therapy's role in supporting student mental health. However, the therapists in this group identified the need for more specific guidance on assessment and intervention methods. The emphasis on **CONTEXTUAL SUPPORTS** in this study lends support to the identification of these strengths as part of a strength-based assessment. It is suggested that these strengths along with those that the student exhibits as part of **PERSONAL TRAITS** could be used by therapists to help create therapeutic opportunities to facilitate the students' experience of mastery at the process/intervention level of the *Strengths-OPEN Model* (Figure 4.1), which can result in increased adaptive capacity and successful performance. The therapists' emphasis on Peer Relations also suggests the importance of

enfolded social participation as an integral part of therapeutic interventions in both small group interventions as well as within the classroom.

Limitations of Study

While the focus group participants were not known to the researcher or recruited for any identified interest in mental health, the focus group title referred to the emphasis on students with mental health needs. Consequently, therapists could have self-selected due to their interest in the identified topic of student strengths and mental health. In addition, the title may have inadvertently turned away therapists who did not feel that occupational therapy should play a role in serving students with mental health needs or using student strengths. The group was small with only five therapists, all practicing within the same region. Generalizability is questionable. In addition, each of the participants practiced in a rural setting. This may have affected their willingness to engage in mental health secondary to reduced availability of mental health services in rural settings. The results call for additional study with therapists working in diverse population densities.

In addition, the first author has a longtime interest in student mental health and strength-based practices. Her involvement in established mental health workgroups and initiatives as well as her familiarity with occupational adaptation theory could have biased her toward identification of therapist statements as related to specific strengths in the coding process. Furthermore, the sequence of this focus group occurring after the literature review and expert survey portions of this research may have influenced the qualitative analysis of the data in this portion of the research.

Next Steps and Recommendations for Continued Development

Both established occupational therapy literature and this focus group support the importance of *Peer Relations* and follow the logic that *Social Skills* development is an area of potential intervention by occupational therapists. However the identification of social skill deficits to then target for remedial training is not consistent with a strength-based approach. Furthermore, literature demonstrates a fairly established tradition of meeting the need for social skill development within other disciplines in the school-based mental health field (Cullen-Powell, Barlow, & Bagh, 2005; Farrell & Barrett, 2007; Lee, Tiley, & White, 2009; Poulou, 2005; Spence, 2003) whereas interventions supporting increased adaptive responses are less fully addressed.

Occupational therapy contributes unique capabilities for occupation-based interventions to provide interventions that are focused on increasing the student's adaptive behavior versus the prominent emphasis on deficit reduction. Within occupational therapy, social aspects can be embedded into a more holistic context and thereby produce results that are more generalizable. Occupational Adaptation provides a theoretical framework and guidance to facilitate effective therapeutic use of self and intervention that targets improvement in the student's adaptive functioning (Schultz, 2003; Schultz, 2008). This framework is consistent with the process or intervention level of the Strengths-OPEN model.

Next steps should include the development and piloting of an instrument that is guided by Occupational Adaptation (OA) theory (Schultz, 2008) and the Strengths-OPEN Model (Fette, Evetts, et al., 2011). The ideal instrument should function to design

interventions and track student progress in developing new adaptive behaviors. Outcome measures would be student-centered and focused on increases in student strengths including the sense of mastery that the student experiences within his or her various school environments. The notion of measuring the individual's sense of mastery (i.e., relative mastery) is a key concept within OA theory and is proposed as fundamental to strengths-based interventions. Relative Mastery consists of the individual's personal evaluation of satisfaction to self and others, efficiency and effectiveness of responses (Schultz, 2008). The Strengths-OPEN model should include student/environment satisfaction, effectiveness and efficiency within individually selected strengths and areas of performance.

The top tier of the Strengths-Open model (Figure 4.1) represents the strengths most frequently cited as effect or outcome strengths in the expert survey (Fette, Evetts, et al., 2011). Baseline performance measures on items within **ACADEMIC PERFORMANCE** and **PSYCHOSOCIAL DEVELOPMENT** should also be included in the evaluation tool, not as areas to target for intervention but rather to track generalization of adaptive responses.

Conclusions

The findings from this study identify the potential effect that occupational therapists could have in helping to promote system-wide mental health/well-being as well as individualized programming for students with primary mental health needs. Occupational therapists have unique perspectives to contribute in support of children's mental health. The therapists in this study identified the desire to address psychosocial

needs and promote overall mental health. They provided examples of practices in which they fulfill this role.

The therapists in this focus group identified the need for a guiding framework, evaluation tools and more guidance on intervention. The product of this line of research to date is the development of a multi-disciplinary framework intended to provide a structure to study the effectiveness of strength-based programming and interventions in public schools. This framework, the Strengths-OPEN model, provides an initial vehicle to study the effectiveness of a strength-based approach for students with psychosocial needs. The model has a multidisciplinary orientation and is applicable to occupational therapy as well as other disciplines addressing students psychosocial functioning in the school setting. A strength-based approach for school-based occupational therapy would necessitate a paradigm shift away from the deficit-orientation that guides much of contemporary practice. However, a strength-based approach is congruent with the profession's core values and resonates with many of the practices described by the therapists in this focus group.

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CHAPTER V

SYNTHESIS OF FINDINGS ACROSS STUDY I, II, AND III

The series of studies included in this dissertation had two over arching aims. The first was to identify those student strengths that are related to successful transition into middle school. The long-term goal of this line of research is to develop and test evaluation and intervention processes grounded by these strengths. The second aim was to explore the perspectives of occupational therapists on student strengths and on the role of occupational therapists as a mental health provider in school-based settings. Three over arching research questions guided the analysis. The original research questions are as follows:

1. What social, emotional, and behavioral strengths/competencies for success in middle school are identified most frequently in a review of related educational and psychology literature?
2. What social, emotional, and behavioral strengths/competencies for success in middle school are identified most frequently by a survey of select advocates in the IDEA Partnership's National Community of Practice on Collaborative School Behavioral Health?
3. What social, emotional, and behavioral strengths/competencies for success in middle school are identified most frequently by school-based occupational therapists participating in a focus group?

Chapters II, III, and IV present the specific findings related to these research questions. Chapter V serves to provide the reader with a synthesis of the findings across the three studies. This synthesis presents: a) a revised set of definitions that integrates the findings from each study, b) an analysis of the findings across the three studies, and c) a discussion on the relevance of the findings for future research on strength-based educational interventions.

Consolidation of Themes and Strengths Descriptions

This series of three studies included a systematic review of literature that identified twenty-six (26) strengths grouped into five themes, a survey of national leaders in school-based mental health that added three (3) strengths, and a focus group with school-based occupational therapists that added two (2) strengths bringing the total to thirty-one (31) strengths grouped into five themes. The following presents an overview of the strengths and themes. For clarity, the **Themes** are presented in bold, flush left headings and the respective *Strengths* that are the focus of discussion are presented in bold, italicized type with only the first letters capitalized. Where strengths are discussed as effects or outcomes of another strength, they are not presented in bold or italicized type. The definition of each strength are syntheses of content from the three studies. The order of the **THEMES** reflects the total frequency count from Study I, II, and III (see Table 5.1).

Contextual Supports

This theme includes nine strengths clustered into two subgroups: Environmental Strengths and Relationships. Environmental Strengths includes *Community*

Table 5.1

Frequency of Strengths Identified Across Studies I, II and III.

THEMES/Strengths	Study I Lit. Rev. Frequency	Study II Leaders Frequency	Study III Occ. Ther. Frequency	Total Strengths (I, II, III)
CONTEXTUAL SUPPORTS				
(Environmental Strengths)				
Community Participation	-	9	2	11
Cultural Factors	4	-	3	7
Material Possessions	-	-	4	4
Respect from Others	-	-	9	9
School Environment	5	6	7	18
School Foundations	-	5	2	7
Subtotals	9	20	27	56
(Relationships)				
Caring Adults	6	9	2	17
Family Bonds	8	8	7	23
Peer Relations	19	9	11	39
Subtotals	33	26	20	79
(CS) TOTALS	42	46	47	135
PSYCHOSOCIAL DEVELOPMENT				
Coping Strategies (Internal)				
General Coping	8	5	1	14
Resilience	6	12	2	20
Self Management	9	5	-	14
Subtotals	23	22	3	48
Social Development (External)				
Prosocial Behavior	9	5	1	15
Sensitivity to Others	12	9	3	24
Social Skills	16	14	4	34
Subtotals	37	28	8	73
(PD) TOTALS	60	50	11	121
ACHIEVEMENT ORIENTATION				
Adaptive Capacity	8	13	9	30
Sense of Mastery	17	13	2	32
Striving Behavior	20	32	2	54
(AO) TOTALS	45	58	13	116

(Continued)

Table 5.1 Continued.

THEMES/Strengths	Study I Lit. Rev.	Study II Leaders	Study III Occ. Ther.	Total (I, II, III)
<u>PERSONAL TRAITS</u>				
Attention	3	1	-	4
Cognition	8	4	3	15
Creativity	4	1	-	5
Health	-	12	-	12
Interests	10	2	-	12
Optimism	8	3	-	11
Positive Identity	11	13	7	31
Temperament	9	5	2	16
(PT) TOTALS	53	41	12	106
<u>ACADEMIC FUNCTIONING</u>				
Academic Skills	4	7	2	13
Class Engagement	5	1	-	6
Group Skills	5	1	-	6
Performance	7	27	1	35
Rule Compliance	8	1	-	9
(AF) TOTALS	29	37	3	69

Participation, Cultural Factors, Material Possessions, Respect from Others, School Environment, and School Foundations. Relationship strengths include *Caring Adults, Family Bonds, and Peer Relations.* This theme speaks to the importance of students' environments and relationships in supporting successful performance.

Community Participation refers to sense of belonging, meaning, and commitment to roles in community (Studies II & III). It facilitates outcomes across all five themes, supporting increased access to caring adults, and increased striving behavior, sense of mastery, health, social skills, resilience, prosocial behavior, and academic performance (Study II, Table 3.4).

Cultural Factors identifies the importance of differing meanings of behaviors in diverse cultures, which also may be influenced by levels of conflict with family members and family levels of identification with specific cultures in minority cultures (Study I, Table 2.4). Rural communities may have decreased diversity and a static social structure with varying levels of acceptance and tolerance of differences for students with disabilities (Study III).

Material Possessions includes a student wearing the right brands and using goods and possessions to gain status (Study III).

Respect from Others consists of people who work or interact with students showing consideration for student needs and preferences by (Study III).

School Environment refers to the presence of a positive classroom and school environment with high quality educational opportunities. It includes strategies such as matching group activities to specific child interests, use of art for reflection or goal setting, and creating a focus on skill development rather than grades (Study I, Table 2.4). It is hands on and high interest learning opportunities, using education to build a sense of civic duty in civics courses, and giving youth voice in determining academic content, and in setting educational goals (Study II). Schools need to support the physical, social and developmental needs of students and facilitate participation school-wide (Study III). Strong school environments facilitate effects of increased striving behavior, positive identity, temperament, and health (Study II, Table 3.4).

School Foundations takes in the importance of a strong elementary school foundation to build social, academic and study skills, as well as successful experiences

and peer groups to move with to the next academic level (Studies II & III). This foundation supports outcomes in increased striving and prosocial behaviors, health, and academic performance (Study II, Table 3.4).

Caring Adults includes meaningful relationships with specific teachers and other adults who model positive values and behaviors, and provide connections to school, family, and community (Study I, Table 2.4). These relationships form an ongoing network of support for performance and to turn to when in need (Study II). Students benefit from building relationships in advance at the middle school level while still in elementary school (Study III). Striving behaviors, positive identity, resilience, and academic performance are positive outcomes from building these relationships (Study II, Table 3.4).

Family Bonds encompass a sense of familial “rootedness” and attachment. It is active engagement and a good fit within the family, relationships with siblings, trust, sharing emotions, and communication at home (Study I, Table 2.4). It includes parental monitoring, material and emotional support, engagement with family in activities such as positive problem solving, chores and responsibilities at home, and positive school-home relationships (Studies I, II & III). Youth benefit from a safe haven to work through and practice responses to challenges and from advocacy for their needs (Study III). Having this stable base supports outcomes in increased striving, health, resilience, self-management, and academic performance (Study II, Table 3.4), and influences peer group choices (Study III).

Peer Relations contain acceptance by positive, non-deviant friends who model prosocial behavior and peaceful conflict resolution (Study I, Table 2.4; Study II; Study III). Students need to find their place and go through a developmental process of trying on groups and styles to see which fits (Study III). They need someone to eat lunch with, to hang out with after school, and they benefit from positive peer pressure toward engagement in activities such as band, theater, choir, or similar groups (Study III). Rural youth may have fewer choices regarding peer groups, staying with the same peers throughout elementary school and even into middle school (Study III). Effects stemming from strong peer relationships include increased striving, health, positive identity, prosocial behavior, resilience, classroom engagement, and academic performance (Study II, Table 3.4).

Psychosocial Development

This theme includes two subgroups of strengths; a) Coping Strategies, which feature coping mechanisms that are internal and includes the strengths: **General Coping**, **Resilience**, and **Self-Management**; and b) Social Development, which features externalized behaviors and includes the strengths: **Prosocial Behavior**, **Sensitivity to Others**, and **Social Skills**. Overall, the theme **PSYCHOSOCIAL DEVELOPMENT** is about the student's level of psychological health and relationship readiness. It includes having both internal strategies to manage stress and adversity, and capacity for external interactions including empathy for others and communication skills.

General Coping includes the ability to use active or repressive coping, relaxation, and recreation for successful management of every day stressors and risk factors (Study I,

Table 2.4). It was described as “letting things roll off your back” (Study III). The outcome of effective general coping was stated as increased resilience (Study II, Table 3.4).

Resilience consists of flourishing in the face of stressors and risk factors and the ability to use self-preservation strategies such as devaluing tasks if competence declines, self-distraction, positive self-talk, or humor to manage responses to adversity (Study I, Table 2.4; Study III). Resilience supports successful coping with stressors (Study II) and has positive outcomes across all the themes with specific effects in increased family, peer, and caring adult relationships; increased community participation, striving behavior, adaptive capacity, positive identity, health, social skills, general coping, and academic performance (Study II, Table 3.4).

Self-Management involves capacity for self-awareness and self-monitoring; ability to deliberate and self-regulate; manage impulsivity, impatience and anxiety; awareness of the difference between emotions, actions, and consequences of behavior; and the ability to reframe and recognize personal strengths as a consequence of difficult life circumstances, and to identify and manage emotions (Study I, Table 2.4); and demonstrate emotional regulation and containment (Study II). Successful self-management results in increased social skills (Study II, Table 3.4).

The next subgroup, Social Development, includes three strengths that are more externally focused.

Prosocial Behavior includes the student’s positive conduct, sense of helpfulness, social conscience, altruism, selflessness, and avoidance of negative influences. It includes

mentoring younger children and volunteering (Study I, Table 2.4). Youth may practice advocacy skills first by standing up for someone else (Study III).

Sensitivity to Others refers to students' capacity for empathy, compassion, and kindness; ability to share; establish attachment to others; consideration for and capacity to understand and value differing experiences and viewpoints (Study I, Table 2.4), and their complementing others (Study III). Its outcome is to contribute to a positive school environment (Study II, Table 3.4).

Social Skills are effective verbal and nonverbal communication including the ability to express feelings and state wants and needs; respond to and give negative feedback; listen actively, recognize social cues, attend to personal appearance, hold a conversation and manage situations such as job interviews and dating (Study I, Table 2.4; Study II). It is the ability to engage and get along with others, and also having skills to manage conflict and sustain relationships, and to know what is socially acceptable behavior in school (Studies II & III). Its effects are to increase access to supportive relationships and opportunities for community participation, sense of mastery and adaptive capacity, sensitivity to others, general coping, and academic performance (Study II, Table 3.4).

Achievement Orientation

This theme includes three strengths: ***Adaptive Capacity***, ***Sense of Mastery***, and ***Striving Behavior***. These strengths contribute to understanding the importance of having the essential underlying energy and drive to learn for success in middle school.

Adaptive Capacity consists of resourcefulness and the ability to adapt, the capacity to make choices, being curious and open to challenges as opportunities, and the ability to reflect and adapt responses based on their potential effectiveness. It includes being aware of environmental contingencies for social interactions, monitoring responses, and adapting their responses as a consequence (Study I, Table 2.4). It is inquisitiveness, willingness to try new things, and to question and challenge, flexibility and the ability to adapt to new environments, and problem solving (Study II). Its outcomes are the student's successful coping with their own individual differences and with the challenges of shifting peer demands and language usages (Study III), and increased self-management (Study II, Table 3.4).

Sense of Mastery is a sense of self-competence, self-efficacy, and accomplishment specific to learning tasks and academic performance (Study I, Table 2.4). It includes an intrinsic drive to mastery, the importance of the student's knowledge of their own strengths (Study II), as well as the need for students to experience themselves as competent in the context of their peers (Study III). Its effects are increased community participation, positive identity, optimism, self-management, and academic performance (Study II, Table 3.4).

Striving Behavior encompasses student leadership, ambition, motivation, positive goals and future expectations, self-reliance, strong will, autonomy, and independence (Study I, Table 2.4). It is the drive for learning (Study II) and challenge-seeking behaviors (Studies I & III). Its effects include perpetuating further striving, health, prosocial behavior, and academic performance (Study II, Table 3.4).

Personal Traits

The literature review resulted in seven strengths within this theme: *Attention*, *Cognition*, *Creativity*, *Interests*, *Optimism*, *Positive Identity*, and *Temperament*. The expert survey added *Health* bringing the total to eight. The strengths within this theme are the inherent personal capacities that students present with. Their outlook, wellbeing, cognitive abilities, and what they like to do are all part of the personality and state of being that they bring to every task at school.

Attention includes is the ability to follow directions, attention span, and the results of attending behaviors such as quality of work versus quantity and comprehension (Study I, Table 2.4). It is also the ability to focus (Study II) and its effect is an increased sense of mastery (Study II, Table 3.4).

Cognition contains self-knowledge, mental health literacy, accurate interpretation and processing, intelligence, cognitive competence, academic giftedness, and clarity of thought (Study I, Table 2.4). It facilitates learning, and the capacity to grasp concepts (Study II) and expectations (Study III). Its effects are increased adaptive capacity, academic skills, and performance (Study II, Table 3.4).

Creativity encompasses original expression and inventiveness, the use of imagination and fantasy, openness to ideas, and aesthetics (Study I, Table 2.4). It includes willingness to challenge the status quo (Study II).

Health includes physical and mental health, and is being well fed, rested, having symptoms of physical and mental illness well controlled, and being free of medication

side effects (Study II). It facilitates readiness for learning and has positive effects in increasing resilience and academic performance (Study II, Table 3.4).

Interests consist of the student's skills, fascinations and hobbies such as attractions to animals, math, art, music, dance, and athletics (Study I, Table 2.4). It reflects the importance of healthy exploration and engagement in targeted subjects and of a specific interest in learning (Study II). Outcomes of this strength are increased striving behaviors, social skills, and increased access to caring adults (Study II, Table 3.4).

Optimism is the child's sense of emotional wellbeing, joy, enthusiasm and eagerness, their excitement seeking and exploration of challenges, and a sense of appreciation, positive mood and affect (Study I, Table 2.4). It includes the importance of hope, a belief in a positive future, and a sense of humor (Study II). Its effect is increased resilience (Study I, Table 3.4).

Positive Identity pulls together self-confidence, positive self-esteem, feelings of self-worth, sense of wellbeing, and happiness with life and choices, as well as capacity for spontaneous authentic personal expression including of their own unique differences (Study I, Table 2.4). It is self-respect and the importance of knowing who one is and being satisfied with ones self, having good self-esteem, and being grounded (Studies II & III). Its outcomes include increases in striving behavior, adaptive capacity, and sensitivity to others as well as further perpetuation of positive identity (Study II, Table 3.4).

Temperament includes having specific values and qualities such as hardiness or toughness, gregariousness, being energetic, being warm and loving, demonstrating fairness, conscientiousness, idealism, courage, spirituality, introspection, trust, calm,

nonviolence, modesty, sentimentality (Study I, Table 2.4), integrity, responsibility honesty (Studies I & II), and/or having a good personality (Study III). Effects of temperament include increased peer and family relationships, prosocial behaviors, and academic performance (Study II, Table 3.4).

Academic Functioning

The final theme includes *Academic Skills*, *Class Engagement*, *Group Skills*, *Performance*, and *Rule Compliance*. Generally, the strengths within the academic functioning theme are academic and functional classroom behavioral components that undergird student performance.

Academic Skills consist of specific underlying abilities related to spoken and written word such as recognizing letter sounds and sight vocabulary, copying and writing letters, using correct grammar, reading aloud fluently, recognizing and/or using developmental spelling, using picture cues, using a variety of literature, and recalling important facts and ideas (Study I, Table 2.4; Study II). They also include applying math concepts, problem solving and completion of math worksheets, as well as lacking fear of or liking a specific subject (Study I, Table 2.4; Study II), knowledge in navigating the school system, and having a commitment to improve skills (Study II). It includes use of adaptive equipment to enable sufficient speed for note taking (Study III). Effects include increased striving behavior and academic performance (Study II, Table 3.4).

Class Engagement includes the student's willingness to be academically engaged and behaviors such as class participation, raising hands, listening, requesting information, and sharing opinions and experiences in class discussions (Study I, Table 2.4).

Group Skills are cooperative behaviors in groups such as listening to directions and taking responsibility, supporting and responding to fellow students, taking turns, collaborative work behaviors, team participation, cooperative behaviors (Study I, Table 2.4), and enjoyment in groups (Study II).

Performance brings together a sense of purposefulness and order, crediting effort for success, work habits, homework completion, and school attendance (Study I, Table 2.4). It includes good study and organizational skills, goal setting and a commitment to project completion (Study II), and management of materials (Study III). Effects coming from this strength include increases in striving, sense of mastery, and adaptive capacity, as well as positive identity (Study II, Table 3.4).

Rule Compliance consists of understanding of behavioral rules, obedience, and coping with authority, and limits (Study I, Table 2.4), and acceptance of supervision (Study II). Its outcome was stated as increased opportunities for community participation (Study II, Table 3.4).

Comparison of Results Across Studies One, Two and Three

The following discussion presents a comparison of the relative frequencies of strengths identified in each of the three studies and an examination of the understanding of student strengths and the models that emerged from each of the studies. This section concludes with an overview of strength-based practices that were identified within the context of conducting the three studies.

Frequencies of Identification of Specific Strengths

Table 5.1 presents the frequencies for each strength and theme across each of the three studies as well as the overall or total number of citations for each strength. The most frequently stated strength overall was *Striving Behavior* in the **ACHIEVEMENT ORIENTATION** theme. *Striving Behavior* was also the most frequent strength identified in both the literature review and the expert survey. The second most frequently identified strength was *Peer Relations* in the **CONTEXTUAL SUPPORTS** theme. *Peer Relations* was the most frequently cited strength in the focus group and the second most frequent in the literature review. The third most frequently stated strength overall was *Performance* in the **ACADEMIC FUNCTIONING** theme. *Performance* was the second most frequently identified strength within the expert survey.

CONTEXTUAL SUPPORTS is the theme that contains the greatest number of strengths. Its strengths were the most frequently identified in the focus group which strongly supported the importance of student's having respect from others, relationships with peers and family, and a positive school environment. **PSYCHOSOCIAL DEVELOPMENT** is the theme with the second most frequently stated strengths. It included the strength, *Social Skills*, which was the third most frequently stated strength within the expert survey. Social skills interventions are well developed and widely used in the school mental health field. In contrast, strengths within the **ACHIEVEMENT ORIENTATION**, the theme with the next highest frequency of strengths stated, have limited development of intervention and assessment in the field. **ACHIEVEMENT ORIENTATION** is the theme with the third most frequently identified strengths. It's

strengths, *Adaptive Capacity*, *Sense of Mastery*, and *Striving Behavior*, all fell into the top three highest frequency strengths in at least one of the three studies. *Sense of Mastery* was the second most frequently stated strength in the expert survey, and *Adaptive Capacity* the second most frequently observed by the focus group.

The literature review in Study I strongly supported the importance of relationships, especially *Peer Relations*, and externally focused social development, particularly *Social Skills*; internally driven *Striving Behaviors*, *Sense of Mastery*, and *Adaptive Capacity*; *Interests* and *Positive Identity* as recognized strengths.

The expert survey in Study II robustly identified the importance of *Striving Behaviors* and *Performance* which both feature a strong connection to occupation, as do other strengths recognized by the expert group in *Positive Identity*, *Sense of Mastery*, *Adaptive Capacity*, and *Community Participation*. The experts also solidly valued *Relationships*, *Social Skills*, *Resilience*, and *Health*.

The focus group in Study III soundly favored the importance of relationships, especially *Peer Relations* but also with *Family Bonds*, and in their recognition of the importance of *Respect for Students* from others working with them. They valued students' *Adaptive Capacity* and *Positive Identity*.

Models and Proposed Relationships Across Strengths in Practice

The review of literature and analysis in the first study identified twenty-six (26) strengths and organized those into five themes. Figure 2.1 presents a graphic organization of those results as a static model. It is static because no relationships across strengths or

themes were suggested beyond clustering the strengths into themes. Figure 2.2 provides a graphic representation of the relative frequency of each of the strengths in the literature.

The second study surveyed select national leaders in school-based mental health who constituted an expert panel and the analysis of their survey responses confirmed the five themes and added three strengths bringing the total to twenty-nine (29) strengths. The participants were each asked to identify up to seven strengths that they identified as supporting middle school success and then to state why each strength was important. In their responses to the “Why is each strength important?” question, the experts stated expected outcomes or effects from each of the originally stated strengths. Because the responses to the question of importance also mapped onto the 29 strengths, it was possible to begin to theorize relationships across the strengths. For clarity, the initial responses to the request to list the strengths that are important for middle school success are identified as “origin” strengths, whereas the strengths identified more often from the respondents’ explanations of why the strengths were important are identified as “effect” strengths. The “origin” strengths and themes are assumed to generate “effect” strengths and themes. Where specific themes and strengths are stated as origins, they are listed on the vertical axis of Table 3.4. The horizontal axis identifies where themes and strengths are identified as effects. Figure 4.1 (Study III) organizes this data on relationships between strengths into a model that may be used to guide practice and research, the Strengths Origins, Process and Effects Network (Strengths-OPEN) Model. Based on the frequency that themes or even specific strengths identified as an origin or effect, they are placed at three levels in the model with the strengths stated predominantly as origin at the base

informing initial data collection both as baseline data and to inform development of the interventions at the process level. The middle section of the model is the process or intervention level of the model, which includes strengths frequently listed as origin and as effect. The top section of model represents the strengths most frequently cited as effect or outcome strengths in the expert survey and will be used to track meaningful outcomes for students.

The third study gathered a focus group of occupational therapists working in rural school districts in the southwest and asked them to identify student strengths. Beyond including the two additional strengths within **CONTEXTUAL SUPPORTS** at the base, the third study did not change or extend the Strengths-OPEN model. Occupational therapy theory and literature are used to discuss implications for next steps and future research within the field.

Strengths in Practice

Study one. The basic premise of strength-based practice is that building upon strengths enables successful performance that then perpetuates more success. In the discussion of the review of literature in the first study, the five identified themes from the initial organization of strengths were used to order interventions from the literature that addressed each theme. Interventions in the theme **PERSONAL TRAITS**, use student strengths such as creativity to craft activity based interventions in which students use their strengths to build skills needed for academic success (Malekoff et al., 2006; Prescott et al., 2008). The literature advocated use of interventions facilitating positive adaptation (Sidhu et al., 2006), agency (Earls et al., 2008), and mastery (Miller & Coll, 2007) within

the theme of **ACHIEVEMENT ORIENTATION**. Active teaching and learning strategies closely align with the focus on facilitating internal drive and sense of mastery and increasing student adaptive capacity (Malekoff, et al., 2006; Miller & Lavin, 2007; Prescott, et al., 2008; Trickey & Topping, 2006).

Interventions within the **PSYCHOSOCIAL DEVELOPMENT** theme featured the most extensively developed and utilized frameworks in the literature. There are many social skills programs documented (e.g., Cullen-Powell et al., 2005; Poulou, 2005; Spence, 2003). Within **CONTEXTUAL SUPPORTS**, several authors either focused on building connections with peers (e.g., Gomez & Ang, 2007; Leodbeoer et al., 2003; Prescott et al., 2008) or facilitating supportive relationships and environments (e.g., Downey, 2008; Verkuyten & Thijs, 2002). Hoagwood et al. (2007) stated that deficit-focused interventions in middle school prevail, and highlighted the need attend to proximal academic outcomes such as individual academic engagement and changes in classroom and school climate. Interventions found in the literature that used strengths within the theme of **ACADEMIC FUNCTIONING** included school wide positive behavior support interventions that leaned heavily on extrinsic motivators (Leodbeoer et al., 2003) and collaborative, intrinsically motivating, creative groups that intentionally integrated academic and behavioral goals (Malekoff et al., 2006; Trickey & Topping, 2006).

Study two. Because the Strengths-OPEN model (Figure 3.3) began to suggest relationships between the strengths, it enabled building framework to guide evaluation, intervention and research. The model's use of three tiers to support intervention was

presented to a general school based mental health audience in the discussion section of the second study. Interventions occur at the second tier, labeled “Process Strengths” and include a) the strengths within the **ACHIEVEMENT ORIENTATION** theme which focuses on facilitating occupation based intervention that is built from student strengths identified in the previous level, and b) ***Social Skills*** interventions that also embed their programming within activities that support areas of strength identified at the base of the model.

Study three. Occupational therapists are included as related services providers under IDEA and have deep roots in supporting children’s mental health (American Occupational Therapy Association, 2008; Schultz, 2003) yet therapists report that they do not feel prepared to support students with mental health needs (Beck et al., 2006; McDuff et al., 2009). In the third study, the focus group input on occupational therapy’s role and needs for participation in school based mental health, salient occupational therapy literature and theory were used to suggest next steps in development of assessment and practices specific to occupational therapy.

Strengths as Framework for Evaluation

An aim of this dissertation was to ground a line of research intended to yield an interdisciplinary instrument that occupational therapists can use as a tool for designing interventions that will empower students with mental health needs to use their strengths to achieve greater success in transitioning from elementary to middle school. Coster (2008) challenged Occupational Therapists to emphasize strengths in the development of instruments to measure performance and to attend to the effect that the measurement

process has on resulting interventions. Occupational therapists have unique perspectives on student role performance that emphasize the use of therapeutically designed activities to increase student adaptive responses to challenges presented in the school environment.

Evaluation using the Strengths-OPEN model (Study II) should occur at two levels, a) initial evaluation of student strengths to support building strength-based intervention, and b) evaluation of student outcomes. The initial evaluation should collect data on strengths within students' **CONTEXTUAL SUPPORTS** and **PERSONAL TRAITS**. These strengths would also be used to design interventions based on these strengths. Traditional evaluation includes the process of identifying deficits and designing interventions to remediate the identified deficits. In contrast, a strength-based evaluation and intervention process identifies what is working well and seeks to facilitate increased mastery within areas of strength. This relies on the assumption that increased striving, successful adaptive capacity and mastery facilitate an internal shift in students adaptive responses that then generalize to more successful responses in other areas. The strength-based evaluation should not seek to identify skills in need of remediation; however, the evaluation could include some baseline data for the outcomes evaluation described in the next paragraph.

Outcomes should measure effectiveness using the Strengths-OPEN model by describing qualities that show an increase in a student's effect strengths at the top of the model. Outcomes could measure some strengths identified in the initial evaluation looking for increases in Relative Mastery through tracking efficiency, effectiveness and satisfaction to self and others in areas of particular importance to the student.

Measurement of outcomes should also follow the assumption that there should be evidence of generalization of adaptive responses across strengths that were not targeted within the initial evaluation and intervention stages. An instrument grounded in this model should support collection of outcome data on the following strengths: a) *Positive Identity* b) availability of *Caring Adults* and c) *Health*. Within **PSYCHOSOCIAL DEVELOPMENT** it would identify a) *General Coping*, b) *Resilience*, c) *Self-Management*, d) *Prosocial Behavior*, and e) *Sensitivity to Others*. Within **ACADEMIC FUNCTIONING** it would identify levels of a) *Performance*, b) *Academic Skills*, c) *Group Skills*, d) *Rule Compliance*, and e) *Class Engagement*.

Future Directions and Next Steps

Occupational therapy has unique contributions to make in support of children's mental health. The product of this line of research to date is a framework grounded in student strengths to support research into effective occupational therapy practice within schools. Next steps will be to develop a set of instruments and interventions grounded by both the Strengths-OPEN model and the Occupational Adaptation (Schultz, 2003; Schultz, 2008) frame of reference. These would need to be piloted with small groups of upper elementary school aged students. Finally, outcomes research should be conducted using the instruments and related interventions to contribute to building the evidence base for strength-based interventions supporting successful transition from elementary to middle school.

Ongoing basic research should continue with both inductive and deductive research to explore student strengths and the relationships across specific strengths. There

are likely additional strengths that could be identified beyond those found in this initial exploration. Questions regarding student strengths could include: What synergies occur across strengths that could contribute to strength-based expectations for student performance? Are there patterns across strengths and areas of deficit that would enable some introductory level of strength-based assumptions for students that present with only deficits identified?

Hoagwood et al. (2007) stated the need to address the appropriate intensity and timing of interventions for optimal effect and use of resources. Research needs to critically examine which students benefit from specific genres of occupation based interventions and prerequisites need to be established. For example, is there a level of cognitive ability that is necessary to benefit from processes targeting adaptive capacity? Are there patterns to which strengths profiles benefit from specific interventions?

Research supporting evidence-based practice within school-based occupational therapy should also support workload concerns. Occupational therapists may be concerned regarding the impact of adding students with mental health needs to their existing workload. Additionally, as an occupational therapist working in the schools, this researcher sees students lingering on caseloads without a clear focus on expectations of outcomes. Ongoing research should focus on identification of optimal intensities and lengths of intervention. Questions might include; What length of time is optimal to support increased Relative Mastery and generalization of Achievement Orientation strengths into successful classroom performance? What models are most effective at specific stages of student progress (e.g. pull-out, integrated/push-in, consultative)? A

framework for therapists to evaluate issues regarding their own efficacy, and the efficiency of occupational therapy workforce allocation could have useful applications across populations currently served in school-based practice.

The review of literature, expert survey and focus group provide evidence underpinning the use of student strengths to facilitate increased performance for students at risk of school failure. The Strengths-OPEN model offers a preliminary organization of student strengths to facilitate the design and implementation of supportive evaluation and intervention processes grounded by these strengths.

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APPENDIX A

Critical Appraisal Instrument for Review

Critical Appraisal Instrument for Review

page 1 of 3

Author _____ **Year** _____

Title _____

Journal _____

Criteria	Yes	No	Comments
1) Specific student strengths are identified			
a. and correlated to school success			
2) State of practice related to use of student strengths versus deficits is addressed			
3) OTHER emergent constructs to support identification/use of student strengths ... IDENTIFY:			

MUST HAVE 1, 2 OR 3 IDENTIFIED FOR INCLUSION IN REVIEW

Method

Setting _____

Participants _____

AGES OF POPULATION ADDRESSED IN STUDY

4a) Addresses students in grade 4			
4b) Addresses students in grade 5			
4c) Addresses students in grade 6			
4d) Addresses students in grade 7			
4e) Addresses students in grade 8			
4f) Addresses students generally in elementary grades			
4g) Addresses students in middle school grades			
4h) Other (state)			

QUALITATIVE STUDIES

Criteria	Yes	No	Comments
5) Philosophical perspective/theory is congruent with research methodology			
6) Research methodology and research questions or objectives are congruent			
7) Research methodology and collection and analysis of data are congruent			
8) Influence of researcher on research and vice-versa is addressed			
9) Participants and their voices are represented			
10) Research is ethical, approved by IRB?			
11) Conclusions appear to flow from the analysis or interpretation of the data			

QUANTITATIVE STUDIES

Criteria	Yes	No	Comments
12) Type of intervention/study; IDENTIFY:			
a. Does it have a control?			
b. Was the sample randomly assigned?			
13) Which instruments were used? LIST:			
14) Strengths are identified as an outcome			
15) Outcomes assessed using objective criteria.			
16) Criteria for inclusion in groups clearly identified.			
17) Data analysis appears appropriate.			
18) Conclusions appear to flow from the analysis or interpretation of the data, bias is controlled for			

EXPERT OPINION/DISCUSSION, POSITION, POLICY & METHODOLOGY PAPERS

Criteria	Yes	No	Comments
18) The author(s) appear to have standing.			
19) Sources of opinion are clearly identified.			
20) Conclusions flow from the author(s) analysis and appear to fit into the larger body of work or extend it.			
21) Critical apriori and seminal work is referenced and is congruent with the argument/opinion.			
22) Opinions based in logic /experience are clearly argued.			
23) Interests of students/objects of research are the central focus of the opinion.			
24) Addresses a critical issue to the field.			
25) Opinion is supported by peers.			

[illegible]

Notes:

This image shows a single page of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

APPENDIX B

Survey Questions

Survey Questions

- Please select which of the following roles most applies to you (choose one):
 - Local school administrator
 - State Education Agency administrator
 - State Technical Assistance/Education Agency support provider
 - Local Professional Association representative
 - State Professional Association representative
 - National Professional Association representative
 - Teacher
 - Related Service provider
 - Itinerant School Mental Health provider
 - Campus-based School Mental Health provider
 - Family member of child with mental health needs
 - Local family advocate
 - Statewide Family Network representative
 - National Family network representative
 - University professor in education
 - University professor in related service field
 - University professor in school mental health field
 - Researcher
 - Federal Technical Assistance Partner
 - Other _____
- Choose which region(s) of the country that you currently live and work in
 - New England (NH, VT, ME, RI, CT, MA)
 - Middle Atlantic (NY, NJ, PA)
 - South Atlantic (WV, VA, NC, SC, GA, FL, DE, MD, DC)
 - East South Central (KY, TN, MS, AL)
 - East North Central (WI, IL, MI, IN, OH)
 - West North Central (ND, SD, NE, KS, MN, IA, MO)
 - West South Central (TX, OK, AR, LA)
 - Mountain (MT, ID, WY, NV, UT, CO, AZ, NM)
 - Pacific (WA, OR, CA, AK, HI)
- Which educational levels/areas have you been involved with?
 - Preschool and Kindergarten
 - Early Elementary (1st, 2nd, 3rd, 4th, 5th)
 - Middle School (6th, 7th, 8th)
 - High School (9th, 10th, 11th, 12th)
 - Transition supports
 - Special Education
 - Regular Education
 - After school programming

- Alternative education settings
 - Early Intervention/Positive Behavioral Supports
- How many years have you been “directly” involved in education related work?
 - 1-5
 - 5-10
 - 10-15
 - 15- 20
 - 20- 25
 - more than 25 years
 -
- Which of the following school-based mental health promotion activities have you participated in directly?
 - Cross disciplinary workgroups addressing specific issues related to student /teacher/school performance
 - Workgroups within my profession to address school based practice
 - Publication within professional organization or district newsletters
 - Peer reviewed publications
 - Local presentations for teachers, parents, administrators, etc
 - State and/or Regional Conference Presentations within education field
 - National Conference Presentations within education field
 - Creation of materials to support education reform (ie Dialogue Guides, curriculum for educators or providers in schools)
 - Other _____

Survey Questions: Student Strengths and Needs for Strengths Based Practice

1. What do you see as the top 4 most important areas of education that are in need of reform? Please explain why each need is important.
2. What are the top 7 most important student strengths for middle school success? Please explain why each strength is important.
3. Based on your experience, how would you describe the state of strengths based intervention in schools?
4. Based on your experience, describe the top 4 needs of teachers’ to enable them to better support strengths based practices in school. Please explain why each need is important.
5. Based on your experience, describe the top 4 needs of systems to enable them to better support strengths based practices in school. Please explain why each need is important.

APPENDIX C

Focus Group Interview Guide

Focus Group Interview Guide

1. What basic competencies do children/youth need to succeed in middle school?

Prompts: What kinds of ...

- a) academic competencies?
- b) social/emotional competencies?
- c) physical competencies?
- d) behavioral competencies?

2. How do successful children/youth adapt when they are faced with challenges that demand some attribute that they don't have?

Prompts:

- a) What specific behavioral approaches to these challenges do students use that seem to increase their success?
- b) What specific student attitudes support successful adaptation to challenges?
- c) What successful social strategies do youth use effectively to increase their capability ... with peers, ... with teachers?
- d) What other strategies do youth use to cope with these problems?

3. Within the middle school environment, what are the biggest challenges that youth face? Prompts: academic, social, peer group choices, family, changes in routines

4. Please think of instances when students trying to be competent in some way might be seen as acting out or engaging in negative behaviors?

Prompts: Like when ...

- a) speaking out looks like talking back but could also be seen as an adaptation for decreased short term memory
- b) fading into the wallpaper looks like avoidance but could be clever use of peers strengths to compensate for a learning difficulty
- c) hanging out with a gang looks like antisocial behavior but represents a desire to belong

5. What are some strengths/needs that middle school students have that we have not yet discussed?

6. Within your practice, how do you meet the psychosocial needs of students across special education?

7. How do you participate in supporting education for students with mental health needs?

8. What would you need to support mental health practice within your role? Prompts: professional development, staffing, workload ...

APPENDIX D

TWU IRB Approval Letter



School of Physical Therapy
8194 Walnut Hill Lane, Suite 201
Dallas, TX 75231-4365
Phone: 214.706.2300 FAX: 214.706.2361
www.twu.edu/pt

May 10, 2010

Ms. Claudette Fette
2708 Glenwood Lane
Denton, TX 76209

Dear Ms. Fette:

*Re: School-Based Occupational Therapy: Perspectives on Strength-Based Assessment and
Providing Related Interventions of Elementary Students with Mental Health Needs*

Your application to the IRB has been reviewed and was approved on 5/10/2010. This approval is valid for one (1) year. The study may not continue after the approval period without additional IRB review and approval for continuation. It is your responsibility to assure that this study is not conducted beyond the expiration date.

Any changes in the study or informed consent procedure must receive review and approval prior to implementation unless the change is necessary for the safety of subjects. In addition, you must inform the IRB of adverse events encountered during the study or of any new and significant information that may impact a research participant's safety or willingness to continue in your study.

Remember to provide copies of the signed informed consent to me at the Presbyterian campus when the study has been completed. Include a letter providing the name(s) of the research(er), the faculty advisor, and the title of the study. Upon receipt of these consent forms the committee will issue a statement ending its involvement with this project. Graduation may be blocked unless consents are returned.

The Institutional Review Board is pleased to acknowledge your sense of responsibility for ethical research. If you have any questions concerning this review, please contact me at (214) 706-2361 or email SLin@twu.edu.

Sincerely,

Dr. Suh-Jen Lin, Chair

Institutional Review Board - Dallas

cc: Dr. Catherine Gaudler, School of Occupational Therapy - Dallas
Sally Schultz, School of Occupational Therapy - Dallas
Graduate School



APPENDIX E
TWU IRB Extension Letter



Institutional Review Board

Office of Research and Sponsored Programs
P.O. Box 425619, Denton, TX 76204-5619
940-898-3378 FAX 940-898-4416
e-mail: IRB@twu.edu

April 18, 2011

Ms. Claudette Fette
2708 Glenwood Lane
Denton, TX 76209

Dear Ms. Fette:

*Re: School-Based Occupational Therapy: Perspectives on Strength-Based Assessment and
Providing Related Interventions of Elementary Students with Mental Health Needs (Protocol
#: 16109)*

The request for an extension of your IRB approval for the above referenced study has been reviewed by the TWU Institutional Review Board (IRB) and appears to meet our requirements for the protection of individuals' rights.

If applicable, agency approval letters must be submitted to the IRB upon receipt PRIOR to any data collection at that agency. A copy of any signed consent forms and an annual/final report must be filed with the Institutional Review Board at the completion of the study.

This extension is valid one year from May 10, 2011. Any modifications to this study must be submitted for review to the IRB using the Modification Request Form. Additionally, the IRB must be notified immediately of any unanticipated incidents. If you have any questions, please contact the TWU IRB.

Sincerely,

Dr. Suh-Jen Lin, Chair
Institutional Review Board - Dallas

cc. Dr. Catherine Candler, School of Occupational Therapy - Dallas
Sally Schultz, School of Occupational Therapy - Dallas
Graduate School