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A Cross-Walk of Professional Competencies Involved in Expanded School Mental Health: An Exploratory Study

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Abstract Expanded school mental health (ESMH) programs often involve individuals from a variety of professions working together to address student needs evident across school, family, and community systems. Profession-driven differences in philosophies, expectations regarding confidentiality, and graduate training that reinforces isolated rather than interprofessional approaches to working with students, however, represent real challenges to maximizing the potential of ESMH. To address these issues, this exploratory study identified a common set of competencies to support interprofessional practice in ESMH. A total of 51 competencies were identified across seven theme areas, including: (1) Key Policies and Laws; (2) Interprofessional Collaboration; (3) Cross-Systems Collaboration; (4) Provision of Academic, Social-Emotional, and Behavioral Learning Supports; (5) Data-Driven Decision-Making; (6) Personal and Professional Growth and Well-Being; and, (7) Cultural Competence. Mapping of the competencies to existing accreditation and practice standards for selected professions revealed shared and unique competencies. Implications for workforce development and future research are offered.

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Introduction

Recognizing the impact of social and emotional issues on academic outcomes, federal reform initiatives such as the No Child Left Behind Act of 2001 (P.L. 107-110) and the New Freedom Commission on Mental Health (2003) emphasize the need to maximize resources through partnerships among schools, families, and communities. Expanded school mental health (ESMH) programs are designed to respond to these reform initiatives by offering a broad array of services in support of whole-child development, including assessment and evaluation, consultation, linkage, prevention, and intervention through school–family–community partnerships (Waxman, Weist, & Bensen, 1999; Weist, 1997; Weist, Evans, & Lever, 2003). There is growing research evidence supporting the positive impact of ESMH programs on outcomes such as reduced symptom severity for specific diagnoses (e.g., Owens, Murphy, Richerson, Girio, & Himawan, 2009; Reddy, Newman, De Thomas, & Chun, 2009), improved service integration (Greenberg et al., 2003), and increased system capacity for addressing non-academic barriers to learning (Anderson-Butcher et al., in press).

Expanded school mental health programs maximize resources and broaden efforts to support youth by building on the unique expertise and perspectives of multiple professions (e.g., education, school counseling, social work, psychology, nursing). As a result, interprofessional collaboration, which involves shared decision-making and responsibilities across multiple professions, has become a

critical component within this model of practice (Mellin, 2009a). Collaborating across professions to deliver a full continuum of learning supports requires a common knowledge base that supports an integrated, rather than profession-specific, approach to ESMH practice (Paternite, Weist, Axelrod, Anderson-Butcher, & Weston, 2006). Among the professions, however, there are distinct differences in training, roles, philosophies about youth, terminology, and expectations about the delivery of mental health prevention and intervention services. These differences often jeopardize the effectiveness of ESMH programs (Green et al., 2008; Waxman et al., 1999).

Training Limitations for ESMH Across Professions

Multiple professions are involved in ESMH. Despite the quality training offered within each of these professions, shortcomings in training often limit the effectiveness of ESMH practice (Bemak, 2000; Paternite et al., 2006). For example, community-based mental health professionals (e.g., clinical mental health counselors, clinical psychologists, and social workers) are typically trained to deliver services within the community and are often not trained for practice in educational settings (Paternite et al., 2006). Despite their increasing role in ESMH (Paternite et al., 2006), these professionals may struggle to understand the culture of schools and how their profession-specific best practice strategies complement the goals and policies of schools (Green et al., 2008; Osterloh & Koorland, 1997). Consequently, outcomes measured by community-based mental health professionals often overemphasize clinical outcomes such as reductions in mental health symptoms and underemphasize academic outcomes valued by schools such as attendance, grades, and disciplinary referrals (Green et al., 2008; Weist & Paternite, 2006). Without competence in this area, community-based mental health providers will likely encounter significant difficulties collaborating with school-employed professionals.

Unlike community-based mental health professionals, professionals employed by schools, which include school-employed mental health professionals, teachers, and school nurses, are specifically trained for practice in schools (Flaherty et al., 1998). This training may represent an important opportunity for leadership in cross-professional training related to orienting community-based mental health providers to schools (Paternite et al., 2006). Despite this strength, shortcomings in training among school-hired professionals still remain. Educators, for instance, hold exceptional knowledge and skill in relation to teaching and learning; however, typical educator training programs often lack an emphasis on student mental health and whole-child development (Koller, Osterlind, Paris, & Weston, 2004; Weston, Anderson-Butcher, & Burke, 2008). Similar to community-based professionals, educators may also struggle to understand the complexities of integrating mental health practice and education to support youth. This competency gap among teachers is important because of their critical role within interprofessional ESMH teams, particularly as they serve as key players in the identification, referral, and linkage system (Anderson-Butcher, 2006).

Despite clear gaps, there are also similarities in professional training. School counselors and school social workers, for example, are both credentialed at the master's level and trained to identify and address systemic (e.g., family, school, community) issues that impact student learning and mental health. Likewise, at many institutions, students training in counseling, psychology, and social work are all learning to deliver group interventions using profession-specific curricula, offering little opportunity to practice collaboration across professions. Each profession, in essence, is training practitioners with similar skills and assets for ESMH practice; however, much of that training occurs in profession-specific training programs. Few opportunities exist to build upon shared and unique competencies or engage in cross-professional learning. These examples, and many more like these, signal potential untapped opportunities for cross-training in ESMH practice.

Rationale and Purpose for the Current Study

Given the training needs in ESMH, there has been interest in cross-profession ESMH competencies in the past (Adelman & Taylor, 2000; Paternite et al., 2006). More recently, pre-service programs have developed cross-profession coursework specifically designed for ESMH (Lindsey et al., 2008). Emergent competencies are being proposed for specific professions involved in ESMH (Weston et al., 2008). Further, new coalitions focused on the advancement of the field of ESMH through pre-service and in-service workforce development have arisen. Most notable is the *Mental Health Education Integration Consortium* (*MHEDIC*), an interprofessional consortium inclusive of researchers, practitioners, and graduate students committed to advancing the field of ESMH. National conferences now focus specifically on ESMH (e.g., Annual Conference on Advancing School Mental Health). New journals have emerged to disseminate research in this critical area (e.g., *Advances in School Mental Health Promotion*, *School Mental Health*).

Federal policy and reform initiatives, such as the Annapolis Coalition's Report on Workforce Issues in Behavioral Mental Health (Hoge et al., 2006) and the New

Freedom Commission on Mental Health (2003), have further emphasized the importance of cross-system and interprofessional collaboration for addressing the needs of students. Both have called for innovative workforce preparation programs to include competency development in interprofessional practice and ESMH. An interprofessional approach to ESMH practice is clearly an emerging area of interest. As such, existing policy recommendations call for research to "systematically identify and validate the core competencies for advanced interdisciplinary [*sic*] mental health practice in schools" (Hoge et al., 2006, p. 23). Resultant competencies for all professionals engaged in ESMH can support interprofessional collaboration by identifying a common base of knowledge and opportunities for cross-professional training.

Given this practice and policy context, the current study draws upon initial efforts (Paternite et al., 2006) to identify cross-professional competencies for professionals within ESMH. Utilizing a two-phase exploratory approach, the research team (comprised of individuals representing the counseling, psychology, and social work professions) aimed to identify common competencies that all professionals working in and with schools should possess to practice within ESMH. The study's first research question aims to identify the skills, knowledge, and values that are common across all professions practicing ESMH. These competencies are those that are shared across professions and are distinct from other profession-specific competencies more closely aligned with particular professional practices. The specific research question was as follows:

1. What are the competencies for all professionals in ESMH (e.g., school-employed mental health professionals, educators, school nurses, community-based mental health professionals)?

The study's second research question addressed the need to identify those competencies that are shared and unique across existing accreditation standards for ESMH professions. Specifically, the second research question was as follows:

2. What are the shared and unique competencies for ESMH practice reflected within existing accreditation standards for major school-employed mental health professions?

Method

Expanded School Mental Health Competencies and Establishment of Content Validity

To address the first question, a content analysis of existing profession-specific competencies was conducted. Professional competencies for practice in ESMH within four professions primarily represented in ESMH were examined, including school social work (Anderson-Butcher et al., 2008), special education (Council for Exceptional Children, 2005), general education (Weston et al., 2008; Whelley, 2004), and school health (National Assembly on School-Based Health Care, 2007). Competencies also were analyzed from four interprofessional groups and organizations (i.e. Mintz, 2007; National Assembly on School-Based Health Care, n.d.; National Training and Development Consortium for School Health, 2003; Paternite et al., 2006). In addition, the *School Mental Health Quality Assessment Questionnaire* (SMHQAQ; Weist, Stephan, Lever, Moore, & Lewis, 2006) was examined as it provides indicators of quality ESMH practice. The SMHQAQ includes indicators across several professions and has been used to guide workforce development within MHEDIC and the Annapolis Coalition Report on Workforce Issues in Behavioral Mental Health.

All of the competency lists utilized focused specifically on practice in ESMH. To date, little research has identified competencies specific to this practice and thus available competency lists for this study were limited. Those chosen for analysis here represent only the professions with the most comprehensive competency lists available for study at the time. It is also important to note that there may be other general competencies within each profession; this study focused only on ESMH practice.

Initially, individual competencies or items from each of the 10 different competency lists were collected and entered into a spreadsheet by one member of the research team. Redundancies across the items were noted by indicating that the item had already been identified in a previous list. An inductive analysis of items was completed after all original items were identified. These raw data were organized into broader, mutually exclusive theme areas (Padgett, 1999). Another member of the research team conducted the same data coding process to establish inter-rater reliability. These two members of the research team met to discuss and compare individual analyses and to resolve discrepancies. Items were re-coded and deduced accordingly. Inter-rater reliability was 80% for the resulting competency map.

Following the initial mapping of the competency lists, two methods were used to examine content validity. First, two members of the research team conducted a review of the resultant map. These two individuals were identified as experts in ESMH policy research who also serve on national advisory and editorial boards for journals related to ESMH. In addition, each has practice experience working in the area of ESMH, including professional licensure. Each individual read the competency map and identified areas for improvement, particularly in relation to

redundancy. Then, they met together and combined, eliminated or revised the competency items to eliminate redundancy within and across theme areas and improve clarity. The resulting competency list included only those competency items represented in the majority of original competency lists (6 or greater). Finally, the names of the original theme areas were revised and re-organized to more accurately represent the content of the competency items.

Once the list of revised competency items was complete, experts in ESMH were surveyed to further examine the content validity of the items. Participants were recruited via email through two professional organizations: MHEDIC and the Ohio School Social Work Association. Members received a link to an online questionnaire that asked participants to rate the importance of each competency item by responding to the question, "How important are these competencies for all professionals involved in school mental health promotion and intervention?" Participants indicated their rating for each of the competencies using a five-point Likert-type scale (1 = *Extremely Unimportant* to 5 = *Extremely Important*). Respondents also were provided with a text box where they could provide additional comments, if desired.

Of the 33 individuals who responded to the survey, the majority of respondents (55%, $n = 18$) indicated they were affiliated with a university or college; whereas 33% ($n = 11$) indicated they were affiliated with a school system or local education agency. The sample consisted of professionals from social work (51.5%; $n = 17$), school psychology (18%; $n = 6$), clinical psychology (12%; $n = 4$), educational leadership (9%; $n = 3$), and mental health administration (3%; $n = 1$). Descriptive statistics examined the extent to which each respondent believed that each competency item was an important competency for all professionals involved in ESMH.

Standards Mapping

The second component of the study examined the degree to which the developed competency items were reflected within existing accreditation and practice standards of five professions commonly involved in ESMH. Specific accreditation and practice standards examined included: school psychology (National Association of School Psychologists, 2000); school social work (National Association of Social Workers, 2009); school counseling (Council for the Accreditation of Counseling and Related Educational Programs, 2008); special education (Center for Exceptional Children, 2006); and community mental health counseling (Council for the Accreditation of Counseling and Related Educational Programs, 2008).

Members of the research team independently coded whether standards listed in each of these profession-specific standards tools were represented in the developing competency list. Two of the members also conducted the content validity check of competencies. These members are identified as experts in ESMH policy research, each with practice experience, professional licensure, and positions on national advisory and editorial review boards for journals in ESMH. If the standard was found, it was coded as a "Yes." Inter-rater reliability was established between coders through both percent agreement and the Kappa coefficient (Sim & Wright, 2005). The results of the standards mapping revealed that each of the five disciplines had at least 75% observed agreement across the two raters. Kappa coefficients also were calculated to determine the reliability of ratings as recommended by Sim and Wright (2005). The ratings for school psychology ($\kappa = 0.59$), school social work ($\kappa = 0.43$), and special education ($\kappa = 0.51$), were all considered moderate while the rating for school counseling was considered substantial ($\kappa = 0.65$). The rating for community mental health counseling was considered almost perfect ($\kappa = 0.82$; Sim & Wright, 2005).

Results

Expanded School Mental Health Competencies and Establishment of Content Validity

In total, 1,142 competency items across all 10 lists served as the raw data. These competencies were further reduced to a total of 185 as redundancies across the professions were noted in the resulting map. Eight broad theme areas emerged, including competency items related to: (1) *Policy and Procedures* ($n = 18$); (2) *Interpersonal Skills* ($n = 18$); (3) *Provision of Learning Supports* ($n = 43$); (4) *Multiple Systems in Practice* ($n = 30$); (5) *Facilitation of Professional Growth* ($n = 16$); (6) *General Service Provision* ($n = 10$); (7) *Screening, Assessment, and Intervention* ($n = 40$); and (8) *Cultural Competence* ($n = 10$). Two peer reviewers further reduced the list to 85 competency items. Following this initial refinement, the competencies were then further reduced and collapsed into 49 individual competencies by the two reviewers. These eight broad theme areas were also reduced to seven, as the competency items included in *Provision of Learning Supports* and *General Service Provision* collectively represented a broader theme area: *Provision of Academic, Social-Emotional, and Behavioral Learning Supports*. In addition, the names of the theme areas were revised to maintain consistency across existing ESMH competencies developed for educators and endorsed by members of MHEDIC (Weston et al., 2008). Ultimately, the final list included 49 competency items in seven theme areas. As reported in Table 1, the

resultant theme areas included: (1) *Key Policies and Laws* ($n = 8$); (2) *Interprofessional Collaboration* ($n = 8$); (3) *Cross-Systems Collaboration* ($n = 7$); (4) *Provision of Academic, Social-Emotional, and Behavioral Learning Supports* ($n = 12$); (5) *Data-Driven Decision-Making* ($n = 5$); (6) *Personal and Professional Growth and Well-Being* ($n = 6$); and, (7) *Cultural Competence* ($n = 5$).

The results of the expert panel survey provided support for the importance of all 49 competencies to ESMH. Table 1 outlines the descriptive statistics for each theme area and competency. As reported in Table 1, all seven theme areas had means above 4.00 (ranging from 4.12 to 4.91), indicating that respondents felt that all areas were at least "important." A closer look at the theme areas revealed that respondents indicated that competencies in the area titled *Engagement in Multiple Systems and Cross-Systems Collaboration* were most important ($M = 4.71$, $SD = 0.32$) and competencies in the area titled *Personal and Professional Growth and Well-Being* were the least important ($M = 4.39$, $SD = 0.53$).

The descriptive statistics examining specific competency items revealed that respondents reported that several items were "important" or "extremely important." Most notably, the following competency item had the highest mean: "Collaborates with families in support of healthy student development (e.g., promoting involvement in IEP and 504 meetings and in clinical interventions)" ($M = 4.91$, $SD = 0.30$). Conversely, the following competency item had the lowest mean: "Knows how to provide peer supervision, clinical supervision, and supervision for para-educators" ($M = 4.24$, $SD = 0.87$). Competency items in two theme areas had high variability, including two in *Data-Driven Decision-Making* and two in *Personal and Professional Growth and Well-Being*. Each had standard deviations above 0.80, indicating that respondents reported variable importance for these competency items.

In the open-ended section of the online survey, several respondents indicated that two competencies were missing from the existing list. After reflection, the researchers believed these were important competencies and added them to the overall list. As highlighted in bold in Table 1, the first competency item that was added was in the *Key Policies and Laws* theme area: "Effectively explains key policies and laws to families in a way that facilitates their understanding of their own rights and responsibilities." The second additional competency item, located in the *Provision of Academic, Social-Emotional, and Behavioral Learning Supports* theme area, was focused on the three-tiered model of intervention: "Demonstrates knowledge of the three-tiered model of universal, selected, and targeted levels of intervention and is able to effectively work across all levels." In total, results indicated that the expert panel reported that all 49 competency items were important for ESMH and that two additional competency items also were important.

Standards Mapping

Finally, the results outlined in Table 1 showcase findings from the mapping of competency items across the existing accreditation and practice standards for professions involved in ESMH. As illustrated in Table 1, the standards from each of the five professions (i.e. School Counseling, School Psychology, School Social Work, Special Education, and Community Mental Health Counseling) contained several of the competency items identified in the emergent list, revealing that these accreditation and practice standards reflect the cross-profession competencies for ESMH developed here. More specifically, all seven of the major theme areas were found in each of the professions' standards. Likewise, 43% of the individual competency items were found in the standards of four or more professions and 78% of the competency items were found in the standards of three or more professions. The competency items that make up the *Cultural Competence* theme area contained the fewest number of competencies found in the standards from more than one profession, although the school counseling standards reflected all four of the specific competencies for this area. Additionally, one competency item was not found in any of the standards from the five professions. This item falls under the theme area titled *Engagement in Multiple Systems and Cross-System Collaboration*: "Effectively navigates school-based services through appropriate pre-referral and referral processes."

When comparing across the professions, the community mental health counseling standards contained the fewest competency items than any other profession, containing 31.37% of the competencies. This was followed by the special education standards, which contained 56.86% of the total competencies. The school counseling standards contained 72.55% of the competencies and the school psychology standards contained 76.47% of the competencies. The school social work standards reflected the most competency items (80.39%).

Discussion

This exploratory study sought to develop cross-professional competencies for ESMH practice. In total, 51 individual competency items emerged and were supported through various content validity checks. Together, these competencies synthesize into seven theme areas, each representing a key area necessary for cross-professional practice in ESMH.

Table 1 Results from expert panel content validity check and standards mapping

Competency	*M* (SD)	Included in accreditation standards
1. Key policies and laws	4.58 (0.36)	
1.1. Advocates for policies and practices that support students and families	4.79 (0.49)	SC, SP, SSW, SE
1.2. Effectively represents school mental health to the school	4.76 (0.50)	SSW, SE
1.3. Awareness of professional standards and ethics	4.88 (0.33)	SC, SP, SSW, SE, CMHC
1.4. Implements strategies to address disparities and disproportionality	4.61 (0.70)	SP, SSW, SE, CMHC
1.5. Identifies, describes, and explains key policies such as IDEA and response-to-intervention	4.45 (0.67)	SP, SSW, SE
1.6. Understands typical school improvement planning processes, particularly those specific to the school/district	4.30 (0.64)	SP, SSW, SE
1.7. Understands the political context in the organization and its impact on decision-making	4.30 (0.73)	SP, SSW, SE
1.8. **Effectively explains key policies and laws to families in a way that facilitates their understanding of their own roles and responsibilities**		SP, SSW, SE
2. Interprofessional collaboration: communication and building relationships	4.68 (0.38)	
2.1. Demonstrates effective communication skills with school personnel, families, and community and other stakeholders	4.85 (0.44)	SP, SSW, SE
2.2. Collaborates with others in ways that demonstrates a valuing and respect for the input and perspectives of multiple professionals and disciplines	4.82 (0.39)	SC, SP, SSW, SE
2.3. Builds positive relationships with other school personnel, families, and the community	4.82 (0.39)	SC, SP, SSW, SE
2.4. Participates effectively in teams and structures	4.79 (0.55)	SC, SP, SSW, CMHC
2.5. Provides effective consultation services to teachers, administrators, and other school staff	4.70 (0.59)	SC, SP, SSW, SE
2.6. Facilitates effective group processes (e.g. conflict resolution, problem solving, etc.)	4.64 (0.70)	SC, SP, SSW, CMHC
2.7. Demonstrates knowledge of variances in communication styles	4.48 (0.57)	SE
2.8. Identifies, describes, and explains the differing roles and responsibilities of other helping professionals working in and with schools	4.33 (0.74)	SC, SSW, SE
3. Engagement in multiple systems and cross-systems collaboration	4.71 (0.32)	
3.1. Collaborates with families in support of healthy student development	4.91 (0.30)	SC, SP, SSW, SE
3.2. Collaborates effectively within and across systems	4.85 (0.36)	SC, SP, SSW, SE, CMHC
3.3. Values the input and perspectives of multiple stakeholders	4.79 (0.49)	SC, SP, SSW
3.4. Identifies and knows the protocols for accessing various school- and community-based resources available to support overall school success and promote healthy student development	4.67 (0.54)	SC, SP, SSW
3.5. Effectively navigates school-based services through appropriate pre-referral and referral processes	4.67 (0.60)	None
3.6. Participates effectively in planning, needs assessment, and resource mapping with families and school and community stakeholders	4.61 (0.61)	SP, SSW, SE
3.7. Coordinates and tracks the comprehensive services available within the community to support healthy student and family development	4.85 (0.67)	SC, SP, SSW, SE
4. Provision of academic, social-emotional, and behavioral learning supports	4.65 (0.40)	
4.1. Identifies, describes, and explains risk and protective factors including the characteristics of positive, safe, and supportive classrooms, school climate, and culture that influence academic achievement and healthy development	4.85 (0.70)	SC, SP, SSW, SE
4.2. Identifies, describes, and explains the early signs and symptoms of mental health problems or atypical social-emotional development	4.79 (0.49)	SC, SSW, CMHC
4.3. Knows the role of schools in promoting and supporting mental health of all students	4.76 (0.44)	SC, SSW
4.4. Applies individual and classroom evidence-based strategies for students with learning disabilities, mental illness, physical disabilities, or other needs	4.64 (0.65)	SC, SP, SE
4.5. Demonstrates knowledge of a range of evidence-based learning supports that promotes academic achievement, classroom management, and positive behavior supports for all students	4.64 (0.70)	SC, SP, SE
4.6. Demonstrates an understanding of child and adolescent development	4.61 (0.56)	SC, SP, SSW, CMHC
4.7. Collaborates in the development and implementation of individualized treatment plans, measurable goal setting, and the assurance of continuity of care	4.61 (0.61)	SC, SSW, SE

Table 1 continued

Competency	*M* (SD)	Included in accreditation standards
4.8. Demonstrates knowledge of crisis management and strategies to support student social and emotional needs during times of crisis	4.61 (0.66)	SC, SP, SSW, CMHC
4.9. Demonstrates an ability to prioritize mental health promotion, prevention, and early intervention rather than exclusive delivery of intensive intervention services	4.61 (0.70)	SC, SP
4.10. Provides effective differentiated evidence-based strategies to individualize interventions and appropriately meet the needs of the child and family	4.58 (0.71)	SC, SP, SSW, SE
4.11. Selects, develops, and adapts curricula, instruction, and student assessments that are culturally and developmentally appropriate	4.48 (0.76)	SC, SP
4.12. **Demonstrates knowledge of the three-tiered model of universal, selected, and targeted levels of intervention and is able to effectively work across all levels**		SC, SP, SSW
5. Data-driven decision-making	4.46 (0.53)	
5.1. Uses ongoing assessment to evaluate progress, determine needs and gaps, and shape future interventions	4.64 (0.49)	SC, SP, SSW, SE, CMHC
5.2. Uses clear and effective protocol to assist clinical decision-making for more serious situations	4.58 (0.71)	SC, SP
5.3. Actively uses an evaluation plan to provide measurable results and improve prevention/intervention	4.55 (0.56)	SC, SP, SSW, SE, CMHC
5.4. Conducts a functional analysis of behavior to identify, describe, and explain the multiple determinants of student behavior	4.30 (0.81)	SP, SSW
5.5. Collects, analyzes, and synthesizes data for evidence-based decision-making as a guide to the provision of academic and social/emotional learning supports	4.24 (0.87)	SC, SP, SSW, SE
6. Personal and professional growth and well-being	4.39 (0.53)	
6.1. Seeks support and assistance when needed	4.70 (0.47)	SC, SSW, CMHC
6.2. Participates in professional development and continuing education opportunities to enhance competencies	4.52 (0.71)	SP, SSW, SE
6.3. Identifies and explains the interplay between personal values and professional practice by analyzing assumptions and biases that can impact practice	4.45 (0.67)	SC, SP, SSW, SE
6.4. Builds the capacity of others by providing professional development activities for educators on the identification, referral, and behavior management of social/emotional/behavioral problems in students	4.33 (0.65)	SC, SP, SSW, CMHC
6.5. Understands the relationship between personal growth, self-care, and professional practice	4.24 (0.84)	CMHC
6.6. Knows how to provide peer supervision, clinical supervision, and supervision for para-educators	4.12 (0.39)	SSW, SE
7. Cultural competence	4.70 (0.39)	
7.1. Works effectively with individuals of different backgrounds, cultures, languages, etc.	4.82 (0.39)	SC, SP, SSW, CMHC
7.2. Values diversity and promotes tolerance and respect for others	4.76 (0.56)	SC, SP, CMHC
7.3. Has knowledge of different cultural perceptions of education and mental health and understands how differing cultural perceptions influence mental health and applies culturally competent and ethical practices	4.70 (0.47)	SC
7.4. Examines his/her personal assumptions and biases	4.70 (0.53)	SC, SP, SSW, SE
7.5. Develops strategies for students and families to overcome racial and ethnic barriers within the education system	4.59 (0.71)	SC, SSW, CMHC

SC school counseling, *SP* school psychology, *SSW* school social work, *SE* special education, *CMHC* community mental health counseling. Competency items in bold represent those items added following the expert panel survey as a result of respondent input

The first theme area, *Key Policies and Laws*, includes competency items centered on policies and laws relevant to the practice of ESMH (e.g., Response-to-Intervention; No Child Left Behind). This theme area also includes items related to organizational policies and protocols that impact ESMH. The second theme area, *Interprofessional Collaboration*, often considered the main area for cross-professional practice (Mellin, 2009a), encompasses the skills needed for effective collaboration on ESMH teams. The competency items in this area include effective communication, consultation, and an understanding and respect of diversity across professions. The third theme area,

Cross-Systems Collaboration, includes broader, systemic practice across multiple systems and stakeholders, particularly in relation to school–family–community coordination and partnerships. *Provision of Academic, Social-Emotional, and Behavioral Learning Supports*, the fourth theme area, is perhaps most in line with traditional ESMH practice. This theme area describes the provision of learning supports in several areas (i.e. academic, social-emotional, and behavioral) and practice levels (i.e. micro, mezzo, macro). These learning supports cover the prevention-intervention continuum and emphasize the use of evidence-based practices. The fifth theme area, *Data-Driven Decision-Making*, includes several competency items related to the collection and utilization of data to drive ESMH decisions, including clinical assessments, crisis planning, and program evaluation. *Personal and Professional Growth and Well-Being* includes competency items centered on professional development, supervision, and self-care. Finally, *Cultural Competence* describes knowledge and skills related to practice that value diversity and reflect effective practice across cultures.

Collectively, these competencies are useful as they suggest a common knowledge base and skill set across professionals involved in ESMH. These shared competencies are intended to complement, not supplant, those that are profession-specific, as each profession involved in ESMH has its own competencies in addition to those described here. For example, school social workers need specific knowledge and skill as system change agents and school psychologists have knowledge and skill specific to the development of cognitive/academic skill development. In light of these differences, a deepened understanding and acquisition of knowledge and skills in the seven theme areas will differ based on the profession.

The results of the mapping of competency items across the existing accreditation and practice standards provided further support for the seven theme areas. Evidence supports the existence of common standards and corresponding competencies across the professions of school social work, school psychology, school counseling, special education, and community mental health counseling. One competency item, however, was not represented in the standards of any of the five professions: "Effectively navigates school-based services through appropriate pre-referral and referral processes." While the initial phases of this study indicated that this competency item was important for ESMH practice, the standards mapping indicates that this competency item is not prioritized within the accreditation and practice standards for school counseling, school social work, school psychology, special education, and community mental health counseling. The absence of this competency item within existing standards may point to a specific area for improvement in training in each of these professions.

It is also interesting to note that some uniqueness was found among the five professions across the competency mapping. For instance, community mental health counseling had the fewest preparation standards in the *Key Policies and Laws* theme area, yet the most preparation standards in the *Cultural Competence* area. Alternatively, more school psychology and school social work standards were reflected in the *Engagement in Multiple Systems and Cross-Systems Collaboration* area. In the end, these differences may highlight strengths within each of these specific professions and suggest leadership roles for certain types of professionals in theme areas of value to cross-professional training. Differences among the five professions, however, were most evident when examining community mental health counseling and special education standards, as these professions contained the fewest competency items than did the standards of the other three professions. In the case of special education, this may be due, perhaps, to the emphasis on academic instruction typically apparent in teacher preparation programs (Anderson-Butcher, 2006; Paternite, 2004; Weston et al., 2008). Current efforts aimed at broadening educator pre-service and in-service training to include an emphasis on students' social and emotional needs certainly highlight a more balanced approach to instruction (Koller et al., 2004; Weston et al., 2008). On the other hand, community mental health counseling programs typically train counselors for work with adults in non-academic settings (Mellin, 2009b). As a result, community mental health counselors are likely not well-prepared to address the mental health concerns of children and adolescents in schools. Recently, however, publications within the counseling field are increasingly examining the training needs of counselors who are not school-employed, but whom work with and in school settings (Mellin, 2009b; Mellin, Hunt, & Brislin, 2009; Mellin & Pertuit, 2009; Vanderbleek, 2004). Again, professions are beginning to see the value in a deepened, more expansive skill set for ESMH. The competencies identified in this study may be useful in further guiding training programs due to the enhanced understanding of the cross-professional competencies needed for professionals involved in ESMH practice.

Limitations

While this study's findings address a gap in the emerging ESMH literature, further research could expand upon these findings by addressing two primary limitations discussed herein. First, this study was exploratory in nature and, thus, provided an initial mapping of cross-professional competencies for ESMH professionals. Given procedural limitations, the researchers were unable to conduct an analysis of all available competencies relevant for ESMH. Instead, this

study was limited to specific professions common in the field of ESMH and is only representative of a select sample. In addition, while auxiliary service providers (e.g., speech pathologists, nurses) have valuable contributions in support of ESMH, these professions were not included in the development of these competencies. As such, it is possible that this study did not include other important competencies from different professions that could also inform the research. Additionally, this study did not utilize a standardized format to establish who would be considered an expert in the field. Further studies utilizing more diverse samples might improve our understanding of the competencies needed for effective ESMH practice. It is also important to remember that the competencies in this study are only those that are shared across the professions examined in the present study.

Implications for Workforce Development

Despite the limitations, the competencies for ESMH developed here provide direction for the growing field of ESMH. Several implications for ESMH workforce development emerge. Clearly, these findings indicate that many of the professions involved in ESMH already attend to most of the competencies identified in the present study. This is especially the case for the theme area focused on interprofessional collaboration, given the existing evidence of this area's import for effective ESMH practice (Adelman & Taylor, 2000; Anderson-Butcher & Ashton, 2004; Mellin, 2009a). The competencies identified by the current study indeed could be used as a foundation for creating curricula and programming for all professions practicing ESMH. Although the expert panel indicated that competence in providing supervision was less important for ESMH professionals, these competencies might still be useful as a guide in clinical supervision. Perhaps the competencies could help developing professionals identify important areas for ongoing professional development and continuing education.

In addition, the competencies developed in the present study can serve as a guide for pre-service and in-service professional training programs involved in ESMH. As the findings of this study reveal, some professions' standards contain more of the competencies than others, particularly in the areas of cultural competence and data-driven decision-making. Instructors in school social work, for example, may use these competencies as a guide for increasing attention to cultural competence within relevant classes; while those in school counseling programs may use the Key Policies and Laws competencies to enhance preparation under this domain. It also may be important to consider other ways in which training programs attend to these competencies. The differences across the professions in the cultural competence theme area indicate that perhaps training programs are addressing these training needs in different ways. For instance, some training programs may emphasize the infusion of cultural competence throughout an entire program rather than explicit mention of the specific competencies found in this study. In the end, emergent evidence here suggests that all professionals working in ESMH should be trained in the competencies identified in this study.

Moreover, while some pre-service training has begun (Adelman & Taylor, 2000; Lindsey et al., 2008), these shared competencies could form the foundation of cross-professional training that includes cross-departmental coursework and experiences in addition to other training opportunities. Further, there is also potential for advanced certification programs in ESMH practice. As many community-based mental health professionals likely have little training related to working in and with schools, advanced certification programs that build on the strengths of their home discipline yet build knowledge and skills specific to ESMH would likely be a valuable asset to development of a better trained workforce.

There are also opportunities for cross-training among the many professions practicing ESMH. For instance, several professionals employed by schools are trained specifically for practice in schools (e.g., teachers, school nurses, school counselors), while other professionals have other specific training in mental health service delivery or community linkage systems (Paternite et al., 2006). Given these varying strengths across professions, there is an important opportunity for leadership roles in cross-professional training to broaden the shared knowledge across professions involved in ESMH practice. The standards mapping could also be used to identify potential strengths for taking leadership roles in training. School counselors, for example, appeared to have more training related to cultural competence and are likely well-positioned to lead training focused on addressing diversity in schools. Training for teachers and administrators related to working with families from diverse backgrounds, for example, may be a key leadership task for school counselors (Trusty, Mellin, & Herbert, 2008).

Implications for Future Research

Future research could build upon the findings as ESMH workforce development and training priorities are increasingly valued. This study found that many of the competencies identified here are apparent in the standards of several primary ESMH professions. It remains unclear, however, the extent to which these competencies are present in professionals' experiences and preparation. Cross-professional studies that examine the extent to which professionals feel they were trained to implement these

competencies are underway (Ball, Anderson-Butcher, Mellin, & Green, 2010). Additionally, future studies could assess the skills of those working in the field in relation to these competencies to gain an improved understanding of specific areas of research on strengths and needs in professional development. As many schools and communities are focused on outcomes, research that considers the relationships among the cross-professional competencies, the strength of collaboration among the team, and outcomes valued by schools, families, and communities will likely be valuable for further advancing ESMH (Mellin, 2009a).

More work also is needed to pro-actively engage all professionals working in schools as important collaborators in supporting ESMH. The current study focused on more traditional providers of school mental health services (e.g., social workers, psychologists, counselors) as a first step to identifying competencies for professionals in ESMH. Replication of this study with a specific focus on professions and practice perspectives that were missing from the identification of competencies and standards mapping are particularly encouraged. Professions other than those traditionally identified as mental health service providers (e.g., physical and occupational therapists, school administrators, speech and language pathologists) have a great deal to offer in support of children's emotional and behavioral functioning. Efforts to map these competency items to existing accreditation standards for these professions will likely be an important step toward improving the development of the ESMH workforce.

Conclusion

Given the emerging role of interprofessional teams in ESMH practice (Mellin et al., in press), there has been a focus on cross-professional training designed to better equip professionals practicing in ESMH (Adelman & Taylor, 2000). Until recently, however, there has been a dearth of knowledge and research on the specific knowledge and skills needed for effective practice in this area. This study sought to address this gap in research by utilizing an exploratory approach designed to develop cross-professional competencies for ESMH. The findings of this study identify several theme areas that highlight important cross-professional competencies for practice in ESMH. As an emerging field and growing practice trend, ESMH holds great potential as a key component of overall school improvement (Iachini, Dorr, & Anderson-Butcher, 2008; Anderson-Butcher et al., 2008) and as a critical model to address the increasing mental health needs among children (Weist, 1997; Rones & Hoagwood, 2000). The competencies developed in this study can guide future development of this field and practice area, particularly in relation to workforce training strategies.

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