Please use two references i attached from library & use two additional references.....

Psychological Assessment Report

A psychological assessment report is created by psychology professionals to inform groups or individuals of the assessments appropriate for their current needs. This type of report also includes a summary of the services provided to these groups or individuals. This evaluation is used by the various entities to assess basic needs, competencies, preferences, skills, traits, dispositions, and abilities for different individuals in a variety of settings.

Psychological reports vary widely depending on the psychology professional creating it and the needs being assessed. Some of the psychology professionals who create this type of report include counselors, school psychologists, consultants, psychometricians, or psychological examiners. This type of report may be as short as three pages or as long as 20 or more pages depending on the needs of the stakeholders. Many reports include tables of scores that are attached either in an appendix or integrated into the report. Despite the many variations in assessment reports, most include the same essential information and headings.

Students will choose one of the personality assessment scenarios from the discussions in Weeks Two, Three, or Four to use as the basis of this psychological assessment report. Once the scenario has been chosen, students will research a minimum of four peer-reviewed articles that relate to and support the content of the scenario and the report as outlined below. The following headings and content must be included in the report:

The Reason for Referral and Background Information
In this section, students will describe the reasons for the referral and relevant background information for all stakeholders from the chosen personality assessment scenario.

Assessment Procedures
In this section, students will include a bulleted list of the test(s) and other assessment measures recommended for the evaluation of the given scenario. In addition to the assessment(s) initially provided in the personality assessment scenario from the weekly discussion, students must include at least three other measures appropriate for the scenario.

Immediately following the bulleted list, students will include a narrative description of the assessments. In the narrative, students will examine and comment on the major theoretical approaches, research methods, and assessment instruments appropriate for the situation and stakeholder needs. In order to defend the choice of recommended assessments, students will evaluate current research in the field of personality theories and provide examples of how these assessments are valid for use in the chosen scenario. For additional support of these recommended assessment measures, students will evaluate the standardization, reliability and validity, and cultural considerations present in these personality assessments that make them the most appropriate tools for the given scenario. Students will conclude the narrative by

assessing types of personality measurements and research designs often used in scenarios like the one chosen and providing a rationale for why some of those assessments were not included.

General Observations and Impressions
In this section, students will describe general observations of the client during the assessment period provided in the chosen personality assessment scenario and explain whether the client's behavior might have had a negative impact on the test results. Students will analyze and comment on how the APA's Ethical Principles and Code of Conduct affected the implementation of the personality assessment during the initial process. Based on the observations and analysis, students will assess the validity of the evaluation and make a recommendation for or against the necessity for additional testing.

Test Results and Interpretations
In this section, students will analyze the results of the assessment provided in the chosen personality assessment scenario. Based on the score, students will interpret the personality factors (conscientiousness, openness, emotional stability, introversion, extroversion, work drive, self-directedness, etc.) that are present.

Note: Typically, this section reports test results and is the longest section of a psychological assessment report because the results of all the tests administered are analyzed and reported. Some psychologists report all test results individually, while others may integrate only a portion of the test results. However, in this report, only the assessment presented in the chosen personality assessment scenario will be included.

Summary and Recommendations
In this section, students will summarize the test results. They will provide a complete explanation for the evaluation, the procedures and measures used, and the results and include any recommendations translating the evaluation into strategies and suggestions to support the client. Finally, students will provide any conclusions and diagnostic impressions drawn from the previous sections of the report.

Pathbrite Portfolio
The Masters of Arts in Psychology program is utilizing the Pathbrite portfolio tool as a repository for student scholarly work in the form of signature assignments completed within the program. After receiving feedback for this Psychological Assessment Report, please implement any changes recommended by the instructor, go to Pathbrite (Links to an external site.) and upload the revised Psychological Assessment Report to the portfolio. Use the Pathbrite Quick-Start Guide (Links to an external site.) to create an account if you do not already have one. The upload of signature assignments will take place after completing each course. Be certain to upload revised signature assignments throughout the program as the portfolio and its contents will be used in other courses and may be used by individual students as a professional resource tool. See the Pathbrite (Links to an external site.) website for information and further instructions on using this portfolio tool.

Writing the Psychological Assessment Report

The report:

- Must be six to ten double-spaced pages in length and formatted according to APA style as outlined in the Ashford Writing Center.
- Must include a title page with the following:
  - Title of paper
  - Student's name
  - Course name and number
  - Instructor's name
  - Date submitted
- Must include the required headings and content as listed above.
- Must address the topic of the paper with critical thought.
- Must utilize assessment manuals as necessary to support the inclusion and results of the assessments.
- Must use a minimum of four peer-reviewed sources, at least two of which must be from the Ashford University Library.
- Must document all sources in APA style as outlined in the Ashford Writing Center.
- Must include a separate reference page that is formatted according to APA style as outlined in the Ashford Writing Center.

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THE CRITICAL ROLE OF SCHOOL PSYCHOLOGY IN THE SCHOOL MENTAL HEALTH MOVEMENT

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School mental health (SMH) programs are gaining momentum and, when done well, are associated with improved academic and social–emotional outcomes. Professionals from several education and mental health disciplines have sound training and experiences needed to play a critical role in delivering quality SMH services. School psychologists, specifically, are in a key position to advance SMH programs and services. Studies have documented that school psychologists desire more prominent roles in the growth and improvement of SMH, and current practice models from national organizations encourage such enhanced involvement. This article identifies the roles of school psychologists across a three-tiered continuum of SMH practice and offers an analysis of current training and professional development opportunities aimed at such role enhancement. We provide a justification for the role of school psychologists in SMH, describe a framework for school psychologists in the SMH delivery system, discuss barriers to and enablers of this role for school psychologists, and conclude with recommendations for training and policy. © 2013 Wiley Periodicals, Inc.

Although mental health challenges experienced early in childhood tend to be stable and predictive of negative outcomes later in youth, early prevention and intervention has the potential to alter this negative trajectory (Hill, Lochman, Coie, Greenberg, & Conduct Problems Prevention Research Group [CPPRG], 2004; Lochman & CPPRG, 1995). Unfortunately, only a small percentage of students experiencing mental health problems are identified and receive treatment by "frontline gate-keepers," such as educators, school psychologists, mental health clinicians, or pediatricians (Briggs-Gowan, Horwitz, Schwab-Stone, Leventhal, & Leaf, 2000). In fact, only approximately half of children in need of mental health services actually receive help (Merikangas et al., 2010). In response to this need, school mental health (SMH) programs have progressively expanded over the past several decades (Foster, Rollefson, Doksum, Noonan, & Robinson, 2005; Weist & Murray, 2007). The expansion of SMH programs relates to a range of positive outcomes, such as enhanced access to early intervention, improved academic performance, decreased stigma, and reduced emotional and behavioral disorders (e.g., see Hoagwood, Kratochwill, Kerker, & Olin, 2005; Hussey & Guo, 2003).

As SMH programs are increasingly prominent in efforts to bridge the gap between unmet youth mental health needs and effective services, SMH workforce development will be a key factor in promoting success for students (Hoge et al., 2005). Several professionals, such as school counselors, school psychologists, school social workers, school nurses, and special education teachers, play a critical role in delivering SMH services (Mellin, Anderson-Butcher, & Bronstein, 2011). Generally, each of these professionals has the sound training and experiences needed to deliver quality SMH services and work collaboratively across disciplines (Ball, Anderson-Butcher, Mellin, & Green, 2010). Working collaboratively is important because it is clear that not one discipline can individually address the multifaceted mental health barriers to student learning. Although the remainder of this article focuses on the role of school psychologists in SMH, it is important to remember that more

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effectively meeting the mental health needs of all youth will require the competency and collaboration of all mental health and education professionals (Flaherty et al., 1998).

School psychologists are in a key position to advance SMH and desire this involvement (Curtis, Hunley, Walker, & Baker, 1999; Fagan & Wise, 2007), but research suggests that school psychologists have not been able to assume this role to the degree promoted or desired (Curtis, Grier, & Hunley, 2003; Friedrich, 2010). The purpose of this article is to identify the roles of school psychologists across a continuum of SMH practice and to offer an analysis of current training and professional development opportunities. In the following section, we provide justification for school psychologists' enhanced role in SMH, within a public health framework for prevention and intervention. We then discuss barriers to and enablers of this role for school psychologists and conclude with actionable recommendations for training and practice.

SMH and School Psychology

Similar to other SMH professionals, school psychologists possess a unique blend of knowledge regarding multiple factors influencing SMH programs and services, including developmental risk factors, the impact of behavior and mental health on learning and life skill development, instructional design, organization and operation of schools, and evidence-based strategies for promoting mental health and wellness (see National Association of School Psychologists [NASP], 2010a). Additionally, literature and policy documents from the NASP (2010a, 2010b, 2010c) encourage and delineate a role for school psychologists in SMH (e.g., see Sheridan & Gutkin, 2000). For example, Figure 1 illustrates the NASP Model for Comprehensive and Integrated School Psychological Services, which delineates services that might typically be provided by school psychologists, including "interventions and mental health services to develop social and life skills" (NASP, 2010a, p. 2; Ysseldyke et al., 2006). Along with the NASP standards for graduate training and credentialing, these policy documents indicate not only that practicing school psychologists are expected to provide mental health services to children, families, and schools, but also that quality training that meets professional standards should be provided to them at pre- and in-service levels (NASP, 2010b, 2010c).

Unfortunately, however, this historically has not been the case; despite a desire to offer expanded services, school psychologists have traditionally been limited to heavy psychological assessment caseloads consuming more than 50% of their work (Hosp & Reschly, 2002; Reschly, 2000). But some evidence suggests that school psychologists may be expanding their role and providing more mental health services. In a recent survey of school psychologists, Friedrich (2010) reported that approximately 50% of their work week involved mental health services, such as consultation with school staff and problem-solving teams, social–emotional–behavioral assessment, and various forms of counseling. To further promote this trend, we delineate an expanded role school psychologists could have in providing a continuum of SMH prevention and intervention in the following section. By identifying the role of school psychologists in this manner, we hope to raise awareness of what mental health services school psychologists could be providing within the field of school psychology and among administrators, teachers, other mental health providers, families, and graduate trainers.

SMH Services Provided by School Psychologists

The fields of school psychology and education, in general, are increasingly adopting tiered models of learning; behavioral and mental health services and supports, including School-Wide Positive Behavior Supports (SWPBS; Horner, Sugai, & Anderson, 2010); Response to Intervention (RTI; National Center on Response to Intervention, 2010); and the Interconnected Systems Framework, which bridges SMH practices and SWPBS (Barrett, Eber, & Weist, 2009). These models

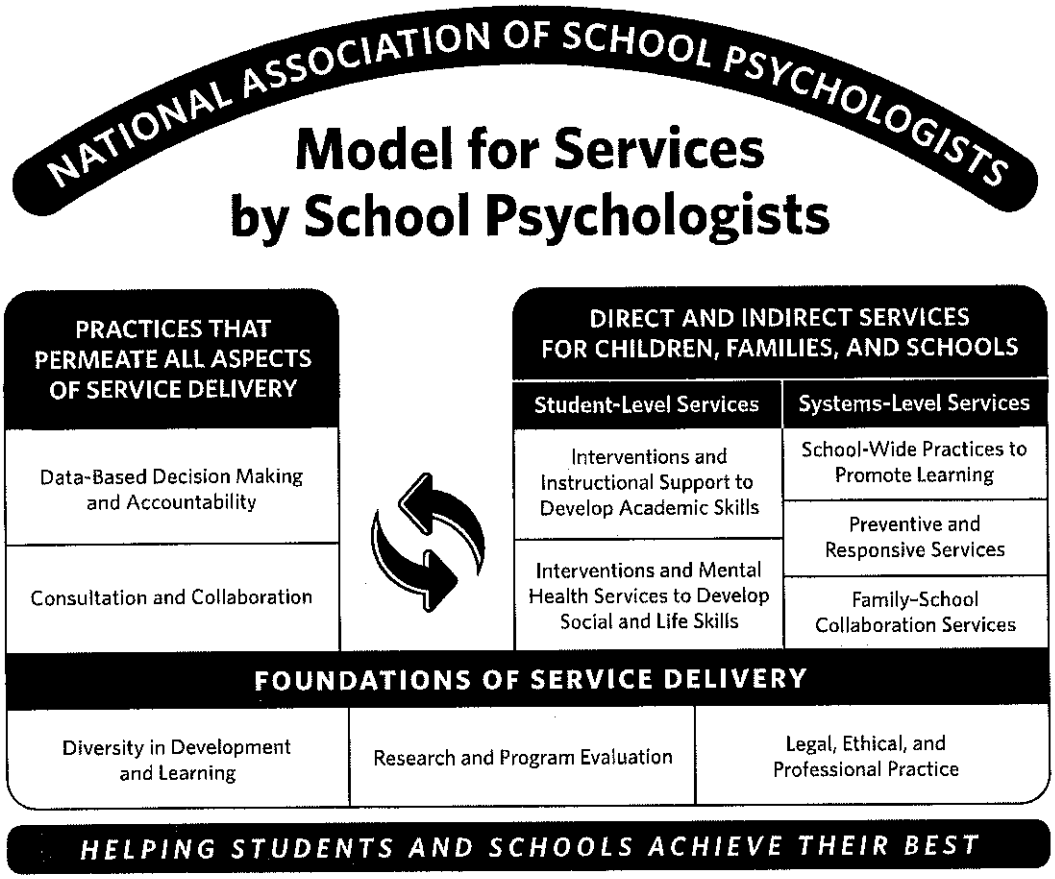

FIGURE 1. National Association of School Psychologists' Model for Comprehensive and Integrated School Psychological Services. (Reprinted from *Model for Comprehensive and Integrated School Psychological Services, NASP Practice Model Overview* [Brochure], by National Association of School Psychologists, 2010, Bethesda, MD: National Association of School Psychologists. Retrieved from http://www.nasponline.org/standards/practice-model/Practice_Model_Brochure.pdf. Reprinted with permission.)

are based on a public health approach and promote a continuum of support, including school-wide prevention, early intervention, and more intense treatment (Gordon, 1983). Given the overwhelming predominance of tiered models in the field, we have conceptualized the role of school psychologists in providing mental health services within and across this framework.

Framework. The public health, tiered model includes prevention and intervention services across three tiers that are commonly called universal, selective, and indicated (Gordon, 1983; O'Connell, Boat & Warner, 2009). As this model has been applied widely in educational settings, the terminology has been modified, resulting in multiple names for each tier across fields. For example, SWPBS and RTI refer to the three tiers as primary, secondary, and tertiary, or Tier 1, Tier 2, and Tier 3 (Horner et al., 2010; National Center on Response to Intervention, 2010). Although the conceptual difference among terminologies is minimal, the inconsistencies across fields have created unnecessary confusion and should be resolved.

In the public health model, all students have access to universal services and practices, and the majority of students (e.g., 80%) will only need this level of support. However, some students

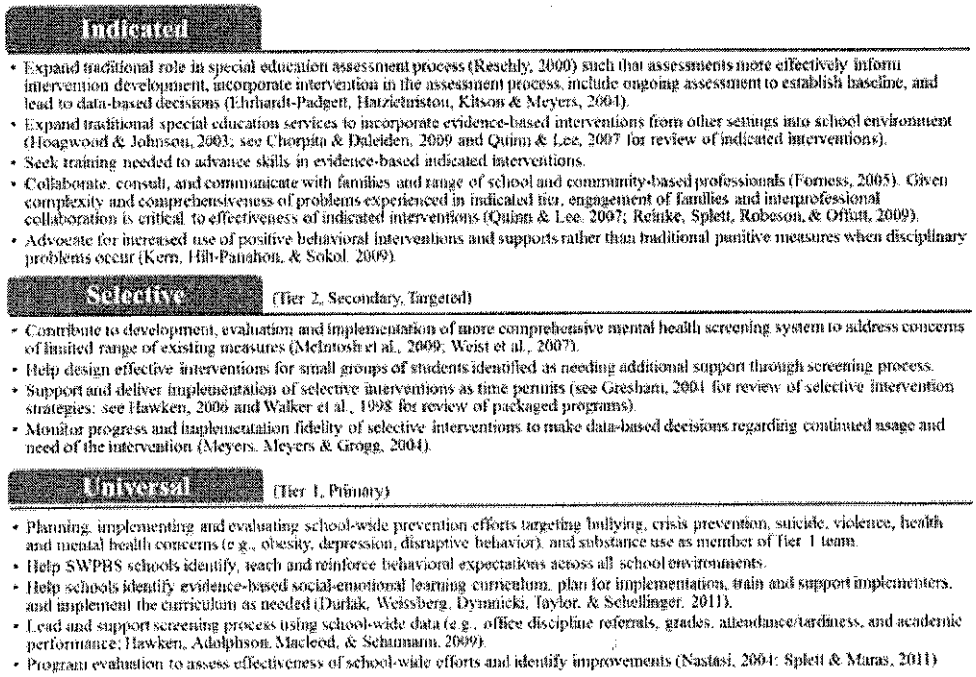

FIGURE 2. The mental health services that school psychologists and other school mental health professionals could provide within and across tiers.

demonstrating emerging difficulties will need selective supports and interventions (e.g., about 15%), whereas an even smaller percentage of students will need indicated treatments (e.g., about 5%; Horner et al., 2010; O'Connell et al., 2009). Commonly, services across these three tiers are provided through a variety of school teams, composed of administrators, teachers, SMH professionals, students, and/or families (Markle, Splett, Maras, & Weston, in press). For example, schools implementing SWPBS and/or RTI may have a school leadership team in charge of universal prevention efforts (Yergat, 2011); intervention, student support, and/or teacher assistance teams at the selective level (Hawken, Adolphson, Macleod, & Schumann, 2009); and multidisciplinary special education teams, wraparound teams, and/or interagency teams at the indicated level (Eber, Sugai, Smith & Scott, 2002; Freeman et al., 2006; Turnbull et al., 2002). The mental health services that school psychologists, as well as other SMH professionals and school teams, could provide are delineated in Figure 2.

School Psychologists and Three-Tiered, Mental Health Services. As illustrated in the bottom box of Figure 2, school psychologists, in collaboration with other school and mental health professionals are involved in planning, implementing, and evaluating school-wide prevention efforts at the universal level. They are critical members of their school's Tier 1 team, as they possess unique knowledge of best practice efforts to prevent mental health concerns, program planning and evaluation, and data-based decision making (NASP, 2010a; Splett & Maras, 2011). At the selective level, as indicated in the middle box of Figure 2, school psychologists have the knowledge and experience to be integrally involved in the screening process, intervention development and delivery, teacher and team consultation to support intervention implementation, and progress monitoring (Gresham, 2008; Hawken et al., 2009; Weist, Rubin, Moore, Adelsheim, & Wrobel, 2007). Finally, at the indicated level (top box of Figure 2), school psychologists' knowledge and skills in assessment, intervention, consultation, and

collaboration position them to be highly qualified and needed in roles delivering interventions, as well as consulting, collaborating, and communicating with families and other school and community professionals (Hoagwood & Johnson, 2003; Weist, 2003). In the following section, factors that may facilitate or hinder the ability of school psychologists to take on an expanded role, such as the one described in Figure 2, are addressed.

Barriers to and Enablers of Best Practices

Although discussion of ideal roles and responsibilities of school psychologists in the provision of SMH services is an important exercise, equally crucial is the exploration of factors that may serve as barriers to or enablers of such responsibilities. Several studies have surveyed school psychologists regarding their actual and desired duties, as well as their perceptions of what assists or hinders their active involvement in SMH (Bramlett, Murphy, Johnson, Wallingsford, & Hall, 2002; Friedrich, 2010; Hosp & Reschly, 2002; Noltemeyer & McLaughlin, 2011; Suldo, Friedrich, & Michalowski. 2010). Some of the facilitating and obstructing factors cited across these sources include time constraints, administrative support, pre-service training and supervision, professional development, cultural awareness, and the frequency and type of referrals made for services.

Time and Personal Prioritization

The type and quality of services that school psychologists are able to provide are affected by the practitioner's available time, which is affected by many time-consuming responsibilities and often itinerant assignments to multiple school buildings. Several studies have shown that school psychologists spend the majority of their time involved in assessment activities, especially as they relate to special education eligibility determinations (Stoiber & Vanderwood, 2008). However, it is not identified as the most valuable activity or the area where professional development was desired (Stoiber & Vanderwood, 2008). Although assessment and special education procedures are necessary roles, their continued dominance has prevented school psychologists from taking on a broader continuum of SMH services (Harrison et al., 2004; Meyers & Swerdlik, 2003). Unfortunately, a dissonance between ideal time allocation and actual duties of school psychologists is often significant (Hosp & Reschly, 2002). In addition, school psychologists are often assigned to multiple schools, meaning there are days when they are unavailable to students and staff at a particular school and unable to meet the mental health needs that arise. Itinerant placements also decrease school psychologists' access to staff and students, making it difficult to become integrated in the school and bring visibility to the breadth of SMH services they can offer (Meyers & Swerdlik, 2003; Suldo et al., 2010).

Conversely, school psychologists with lower student-to-school psychologist ratios and manageable assessment and intervention caseloads report providing more SMH services and seeking more professional development related to social–emotional interventions (Harrison et al., 2004; Meyers & Swerdlik, 2003). Further, the school psychologist's personal desire to provide SMH interventions actually helps to increase involvement in them (Suldo et al., 2010). Despite the desire and time to provide quality SMH services, school psychologists often still encounter barriers related to inadequate and insufficient training, supervision, and professional development in SMH roles and activities.

Training Limitations

School psychologists' training and competence in SMH services is another area that can inhibit, as well as facilitate, the provision of SMH services. For example, Stoiber and Vanderwood (2008) found that surveyed school psychologists reported feeling less competent in providing

prevention/intervention activities than assessment and consultation/collaboration activities. Similarly, in a statewide survey asking school psychologists about their awareness and understanding of the most recent guidelines for school psychology training and practice from Blueprint III (see Figure 1), Noltemeyer and McLaughlin (2011) found that only 25% of respondents reported expertise in the practice domain, "enhancing the development of wellness, social skills, and life skills." School psychologists may feel they are not experts in providing SMH services due to a perceived lack of content knowledge and applied experiences (Suldo et al., 2010). Interviewees in Suldo and colleagues' study (2010) described feeling they had too little exposure to important SMH topics, such as treatment planning and group counseling during pre- and in-service training, likely leading to a lack of confidence in their ability to competently provide these services. Further complicating the problem is the fact that the population of students and families increasingly in need of SMH services are from diverse, multicultural backgrounds for which school psychologists also have insufficient training and supervision (Newell et al., 2010). This is also true for other mental health staff working in schools (Clauss-Ehlers, Serpell, & Weist, in press). These factors present a situation in which SMH providers, including school psychologists, feel underprepared and overwhelmed to broaden their role in SMH programs.

Conversely, school psychologists interviewed by Suldo and colleagues (2010) frequently indicated that sufficient training and/or confidence in one's ability were facilitators of comprehensive SMH services. Specifically, interviewees noted the importance of training experiences that fostered skill development in sufficiently preparing them to engage in a range of SMH activities.

Collaboration With and Engagement of School Personnel

At the school-building level, the relationship and interactions between school psychologists and other school staff impacts the staff's perception of the school psychologist and the breadth of services school psychologists offer. For example, inordinate time allocated to one area of practice (i.e., assessment; Stoiber & Vanderwood, 2008) likely prohibits school psychologists from expanding the services they offer. In schools where school psychologists spend nearly all of their time engaged in special education eligibility determination, other school staff may not realize the breadth of skills school psychologists may possess across the prevention and intervention continuum and therefore may not go to them for help or with concerns (Harrison et al., 2004). As a result, the perception of administrators, other school staff, families, and the community regarding the role and function of school psychologists is likely limited to diagnostic responsibilities in many settings (Harrison et al., 2004; Meyers & Swerdlik, 2003).

Schools' often narrowly-defined emphasis on academics and achievement outcomes also likely limits school psychologists' ability to expand the SMH services they offer (Hoagwood et al., 2005; Severson, Walker, Hope-Doolittle, Kratochwill, & Gresham, 2007). Research over the past two decades has documented that most schools perceive their primary mission to be academics, with the legitimacy of any focus on social–emotional development frequently questioned (Del'Homme, Kasari, Forness, and Bagley, 1996; Lloyd, Kauffman, Landrum, & Roe, 1991). More recently, school psychologists interviewed by Suldo and colleagues (2010) reported that many staff in their schools are exclusively focused on academics and lack concern for students' mental health.

Generating appropriate referrals for services can also be challenging for SMH providers. For example, there is evidence that youth presenting "internalizing" disorders such as depression, anxiety and trauma, interpersonal issues, and developmental problems may be referred for services less often, whereas students showing acting-out behaviors, attention deficit hyperactivity disorder, or clear academic problems are more likely to be referred (Friedrich, 2010). A number of reasons may account for these findings, including inadequate knowledge and training in identifying students'

mental health concerns among most school staff (Severson et al., 2007). The issue of over- and under-referred students limits mental health providers' ability to provide an appropriate, full continuum of SMH services.

In contrast, school psychologists who are supported in delivering SMH services by their building-level administrators and teachers are more likely to engage in a breadth of activities (Suldo et al., 2010). For example, Suldo and colleagues (2010) found that teachers' support of SMH services and expectation of the school psychologist's role to include SMH responsibilities were enablers of school psychologists' ability to engage in related activities.

District and Systems Issues

At the district level, the conceptualization of the school psychologist's role, provision of sufficient resources, and in-house professional development impact the breadth of SMH services school psychologists provide. For example, a prominent theme in focus groups conducted by Suldo and colleagues (2010) was that school psychologists' district-level department and administration's definition of their roles and responsibilities either excluded SMH services or was too ambiguous to facilitate a defined role. In contrast, districts that prioritized SMH services by providing explicit permission to school psychologists to engage in related activities through guidelines for SMH services, job descriptions inclusive of SMH services, district mental health initiatives, and the allocation of sufficient financial and personnel resources, in fact, increased school psychologists' involvement in them (Suldo et al., 2010). Providing internal professional development opportunities related to SMH services also demonstrates support for such activities and ensures a competent workforce (Suldo et al., 2010).

Recommendations to Enhance Involvement and Leadership in SMH

It is clear that school psychologists are in a unique position to influence and shape the evolving SMH agenda. Although effective SMH includes many professional disciplines (see Flaherty et al., 1998), school psychologists bring a particular blend of skills and training that are ideal for leadership roles in this agenda. These skills include, but are not limited to, an understanding of child development, psycho-educational assessment, special education law, consultation methodology, program evaluation, and interventions at both the individual and systemic level. In the final section of this article, several actionable recommendations related to pre-service training, school–university–community partnerships, professional development, and public relations are provided to enhance school psychology's involvement and leadership in SMH.

Recommendation 1: Recruit Students With Interest in SMH Services and Foster Current Students' Motivation

Training programs should enhance recruitment of students with interest in the full continuum of SMH services while striving to build interest among current students. Program applicants and existing providers alike may be evaluated for such attributes using scales of readiness such as the Evidence Based Practice Attitude Scale (Aarons, 2004), observational ratings through role-played treatment or collaboration scenarios, and in-depth interviewing about ideal roles and responsibilities of school psychologists within an expanded SMH framework (Weist, 2003).

Recommendation 2: Intentional Integration of SMH Activities Into Field Experiences

Training programs must ensure that graduates have sufficient content knowledge and applied experiences to build their interest and confidence in delivering SMH services (Perfect & Morris, 2011). This likely requires significant changes to the courses and experiences school psychology

graduate training programs require and provide (Perfect & Morris, 2011). To promote competencies using methods beyond didactic courses, school psychology programs should provide field experiences or practicum courses that specifically include experience in all three tiers of services, including climate enhancement, enhancing team effectiveness, implementing preventive skill training groups, and providing evidence-based individual, group, and family therapy to students while under the supervision of a competent professional (Perfect & Morris, 2011). For this training to occur, more active involvement by school psychology training programs in identifying and recruiting practicum sites to ensure these opportunities will be required. It is likely that it will be difficult for programs to find competent supervisors (e.g., licensed, doctoral-level psychologists) engaged in SMH services, but program administrators should consider including other professionals engaged in SMH services as field supervisors and should seek to increase collaboration between university and field supervisors (Ross, Powell, & Elias, 2002).

Through increased collaboration, training programs can help facilitate improved understanding of the specific experiences their students need and design strategies for providing such experiences. At the University of South Carolina, the first and third author have collaborated with field supervisors of school and clinical–community psychology students to explicitly require and provide a continuum of SMH service opportunities. This initiative has recently been supported by the integration of a grant-funded research project into the practicum course. The research project, Student Emotional and Educational Development (SEED), is testing the feasibility and preliminary impact of an intervention package for middle and high school students with or at risk for developing mood disorders. The intervention is being delivered by advanced school and clinical–community psychology graduate students enrolled in the first author's practicum course in collaboration with social work graduate students and child psychiatry medical residents. The inclusion of this research project as part of the students' practicum experiences is providing them with needed interdisciplinary experience and training in specific evidence-based practices for the treatment of mood disorders, while benefiting the schools and the study through the services delivered by the trainees.

In addition, graduate training programs should ensure that students are aware of factors that may inhibit and/or facilitate their provision of SMH services to better prepare them for real-world practice. Students should be asked to discuss their observations of these factors in the field experiences, and trainers should help students generate solutions to current and future problems they may encounter following graduate school (Suldo et al., 2010).

Recommendation 3: Ensure That Content Courses Provide Sufficient Knowledge Needed to Provide Continuum of SMH Services

School psychology training programs are required to ensure that graduates are exposed to all domains of practice following completion of coursework and to be competent across domains following internship (Ysseldyke et al., 2006). Thus, training programs should compare their course requirements and objectives with the school psychology practice domains, paying particular attention to the mental health and social–emotional domain. Programs would benefit by improving or adding courses related to individual, small-group, and family interventions; crisis prevention and intervention; family-oriented prevention and intervention activities; psychopharmacology; and systems or organizational consultation (Perfect & Morris, 2011; Ross et al., 2002, Suldo et al., 2010).

Training programs should consider offering courses co-taught by a multidisciplinary team of faculty with students from a variety of specialties to provide collaborative experiences and increase prioritization of SMH services across education and mental health fields (Ross et al, 2002; Weist et al., 2005). As described previously, a practicum course taught by the first author integrates the SEED research project, which facilitates collaborative relationships with trainees from other

disciplines (i.e., social work and child psychiatry). As part of this training opportunity, all trainees participate in monthly meetings designed to help them learn more about one another's background and training experiences and then begin to work together in a collaborative, strength-focused manner.

Unfortunately, graduate training programs in school psychology already face a tight timeline when tasked with addressing the breadth of practice domains required by accreditation organizations, making the call for additional coursework a difficult plan to implement. This is especially the case for specialist degrees, such as the Education Specialist (Ed.S.), where trainees are afforded less training time than those in doctoral programs. Training programs should evaluate these issues individually, but the need for refined training may certainly indicate the need for further specialization in the training of tomorrow's school psychologists.

Recommendation 4: Encourage Areas of Specialization Related to SMH Prevention and Intervention Services

Just as one training program cannot realistically provide an adequate depth of training in all practice domains of school psychology, it is also important to acknowledge that one school psychologist simply cannot provide all the school psychology and SMH services indicated by a school's needs or described in this article. It is also true that there are areas in addition to SMH in which school psychologists should be competently practicing, including assessment, pediatric school psychology, and neuropsychology (Reynolds, 2011). For a more in-depth review of the range of services and practices promoted by professionals, see the NASP Model for Comprehensive and Integrated School Psychological Services illustrated in Figure 1 (NASP, 2010a). Given the sheer breadth of knowledge needed by school psychologists facing increasing demands for evidence-based services, professional organizations and governmental accrediting agencies should explore methods of providing specialization in targeted areas of practice, such as SMH prevention and intervention (Reynolds, 2011). The recommendation for areas of specialization is not new to the field of school psychology. Specialization in the area of school neuropsychology was first introduced in 1981 by Hynd and Obrzut and has long been recognized as common practice in academia (Reynolds, 2011). Advanced training in the area of SMH for school psychologists seeking professionally recognized specialization would likely improve the SMH workforce's overall competency and interest in providing expanded services. Likewise, hiring school psychologists with specialized knowledge in the area of SMH is likely to address the time and personnel constraints currently facing the field by more clearly assigning SMH responsibilities, including interventions and mental health services to build the social–emotional and life skills of youth, to highly qualified and devoted staff with minimal assessment caseloads.

Recommendation 5: School–University–Community Agencies Should Partner to Provide Training and Expand Services

A key theme in moving the SMH agenda forward is the advancement of school and university–community partnerships. Such partnerships have several important benefits to the school district, university, and/or community agency, including school and/or community-based learning for undergraduate and graduate students, sustained and enhanced organizational capacity, and staff and organizational development (Ross et al., 2002; Sandy & Holland, 2006). Community and school partners who participated in focus groups conducted by Sandy and Holland (2006) described the inclusion of college students in their settings as supporting initiatives that would have otherwise remained on the back burner and additionally providing staff with greater access to new information and research in the field. Further, when SMH practitioners become supervisors or college educators through university–school partnerships, higher quality pre-service field experiences are provided and

exposure to the fields of school psychology and SMH is increased (Community-Campus Partnership for Health, 2006; Perfect & Morris, 2011; Sandy & Holland, 2006).

Recommendation 6: Professional Organizations Should Emphasize Mental Health Prevention and Intervention Practices in Conferences and Training Programs

School psychologists have identified in-service professional development needs for effective SMH practice (Suldo et al., 2010). For example, Stoiber and Vanderwood (2008) surveyed practicing school psychologists and found their top priorities for professional development were classroom-based behavioral intervention, followed by therapeutic interventions, functional assessment and prevention, key realms of SMH practice. Continued professional development can be pursued in a variety of manners such as graduate courses at local universities and continuing education courses offered at the annual meetings of professional organizations such as NASP, the American Psychological Association, the American School Health Association, and the University of Maryland Center for School Mental Health's annual conference on advancing SMH (see http://csmh.umaryland.edu).

In addition to enhanced offerings related to SMH by these and other professional organizations, it is also necessary for the field to evaluate the effectiveness of current professional development practices and identify strategies for improvement. Traditional professional development practices have been widely criticized for not leading to changes in practice (Joyce & Showers, 2002). Thus, there is a need to enhance in-service training, to embrace principles of adult learning, experiential learning activities, mutual peer support, implementation support and coaching, and a view of intensive life-long learning (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Perfect & Morris, 2011; Weist, Stephan, et al., 2007).

Recommendation 7: School Districts Should Provide SMH Professional Development Opportunities

In-service trainings at the district level underscore the district's commitment to student mental health and reducing barriers to their learning, as well as sustaining effective SMH systems of service (Perfect & Morris, 2011). School districts should prioritize SMH competencies in their professional development opportunities and strive to provide effective professional development beyond traditional in-service meetings, such as group book studies, regularly scheduled supervision, coaching, collaboration, and re-occurring, in-depth, and experiential learning opportunities (e.g., a series of training sessions with opportunities for practice and feedback between meetings; Fixsen et al., 2005; Splett, 2012).

Recommendation 8: Initiate Public Relations Campaign Targeting School Staff, Families, and the Community Regarding SMH Services

In order to be seen as a mental health provider, visibility among and education of key stakeholders (e.g., school board members, school administrators, teachers, families, and community members) is essential (Harrison et al., 2004). School psychologists and other SMH providers should consider proactively providing in-services and/or educational materials to their colleagues, clients, and constituents. To make educators, administrators, decision-makers, families, and community members aware of the range of SMH services school psychologists can provide, these efforts should address the school psychologist's competency in and desire to provide a continuum of SMH services, the importance of these services and their link to academic outcomes, risk factors to identify students at risk for developing mental health concerns, and evidence-based prevention and intervention strategies (Harrison et al., 2004; Ross et al., 2002).

Conclusion

The interdisciplinary SMH field is showing progressive growth related to documented and increasingly recognized advantages in bringing mental health to youth "where they are." School psychologists have played a key role in this field from its inception and are positioned to be in critical leadership roles. This article has focused on increasing such leadership by moving away from traditional constraints (e.g., excessive emphasis on assessment), by purposefully changing the culture of pre-service and in-service education and training, and through specific strategies to expand perspectives and training experiences within school psychology training programs. This discussion has been occurring for at least a decade (see Ross et al., 2002); as exemplified in this special issue, there is critical momentum for a significant enhancement in leadership by school psychologists in SMH.

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UNDERGRADUATE STUDENT PREFERENCES FOR GRADUATE TRAINING IN PSYCHOLOGY: IMPLICATIONS FOR SCHOOL PSYCHOLOGY

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There continues to be a critical shortage of school psychologist practitioners and academicians. Undergraduate students in psychology, education, and other majors (N = 674) from a large comprehensive university in the southwest completed an examiner-made web-based questionnaire designed to assess their attitudes and preferences for choosing graduate training in psychology. There were differences among the participants on Interest in Graduate School, Child Interests, Attitude toward Research, and Exposure to School Psychology. Psychology majors were more interested in graduate school than all other majors in the sample and were more interested in research than "other" majors. Psychology majors reported significantly less exposure to school psychology than "other" majors. Examination of the endorsement patterns of the participants indicated the following. Generally, misconceptions about school psychology were not endorsed at high levels. Sixty seven percent of the sample indicated they would attend graduate school. And 77% of the participants also endorsed items indicating they had interests in focusing on children and child related problems. The participants did specify there were some geographic restraints related to choice of graduate school. Fifty to 60% of the participants agreed they had personal qualifications which would make them highly competitive for graduate school admission. Implications for school psychology recruitment are offered. © 2013 Wiley Periodicals, Inc.

There is an enduring and severe critical shortage of school psychologist practitioners and trainers of school psychologists projected to continue at least until 2020 (Clopton & Haselhuhn, 2009; Curtis, Chesno-Grier, & Hunley, 2004; Curtis, Grier, & Hunley, 2004; Curtis, Hunley, & Grier, 2004; Curtis, Hunley, Walker, & Baker, 1999; Fagan & Wise, 2000; Little & Akin-Little, 2004). The shortage is greater for doctoral-level than for non-doctoral school psychologists and this becomes salient when school psychology tenure-track faculty position openings are examined from year to year (Kratochwill, Shernoff, & Sanetti, 2004; Tingstrom, 2000). Fagan (2008) reported that more than 70 school psychology faculty positions were open from at least 65 training programs across the nation and this has been an ongoing trend for a number of years. Graves and Wright (2007) reported that in a sample of school psychology graduate students, only 3.9% indicated a future career path into academia. Likewise, Baker (2007) reported that 51% of school psychology graduate student respondents indicated that practice was their preferred career choice, 11% indicated that teaching and research as a faculty member in a graduate-level school psychology program was their preferred choice, and 22% considered working first in a practice setting and then moving to a college or university setting. And even though school psychology graduate students have reported a number of benefits of an academic career (i.e., roles and activities, salary and benefits, work environment, and impact of position), they also reported a number of drawbacks and concerns, including job stress, roles and activities, compensation and job availability, and insufficient preparation in graduate school to succeed in academia (Nagle, Suldo, Christenson, & Hansen (2004).

Because there is also a critical shortage of school psychology practitioners, the ratio of school psychologists to students in the public schools also has been adversely affected, as has the implementation of new special education procedures and roles for school psychologists (Curtis et al., 2004). The shortage of personnel is of such importance that it was included in the Future of School Psychology 2002 Invitational conference (2002), and four journals with school psychology

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readership all published special issues that included a focus on the shortages (see D'Amato, Sheridan, Phelps, & Lopez, 2003). The gravity of the situation does not seem to be improving. Obviously, to respond to this persistent demand for school psychologists, it is crucial for school psychology graduate training programs to be resolute in identifying and recruiting qualified applicants for admission. Furthermore, these students need to be retained in the programs, successfully matriculated, and eventually introduced into the varied professional venues where school psychologists are employed. These efforts need to be focused to procure students interested in careers both as school psychology practitioners and as school psychology program faculty in tenure-track faculty positions. In fact, Kratochwill et al. (2004) suggest a number of impact points for directing and retaining individuals into the specialization that might be critical to consider for resolving the personnel shortage of school psychologists, with the first being recruitment into graduate programs. It is logical that undergraduate psychology degree programs could be an important source to target for selection of qualified students who are a good match for school psychology graduate programs and who may ultimately enter the work force as either practitioners or academicians.

There is not much evidence to suggest whether psychology departments are adequately informing students about the graduate specialization areas of psychology, especially school psychology, nor about the potential for careers in the various areas of psychology. Some have asserted that exposure to school psychology in undergraduate psychology education is minimal (Leong & Poynter, 1991; Lucas, Blazek, Raley, & Washington, 2005; Miller & Gentile, 1998). Yet, when Gilman and Handwerk (2001) examined knowledge of clinical, school, and other psychology specializations in undergraduate students from psychology, education, and other majors, they found that, in general, undergraduates across all majors reported slightly higher knowledge of school psychology than clinical psychology. However, this was a small effect and judged by those authors to be not too meaningful (effect size = .20). Moreover, the participants' level of familiarity was reported as only "somewhat knowledgeable." The difference in familiarity between clinical and school specializations was likely accounted for in part by education majors and "other" majors who reported lower knowledge about clinical psychology than did psychology majors. In contrast, psychology majors reported equivalent knowledge about school and clinical specializations. Of note is that the Gilman and Handwerk (2001) participants reported obtaining information about school psychology from nonacademic relational sources, whereas knowledge of clinical psychology was more likely gained through academic coursework. Interestingly, for the psychology undergraduate student participants, knowledge of clinical psychology increased during the first 3 years of school, whereas knowledge of school psychology did not. Thus, Gilman and Handwerk suggested that students receive continued exposure to information about clinical, but not school psychology. More recently Stark-Wroblewski, Wiggins, and Ryan (2006) assessed undergraduate psychology students' interest and familiarity with four psychology specialty areas and a media-popularized role for psychologists: counseling psychology, clinical psychology, school psychology, forensic psychology, and criminal profiling. Stark-Wroblewski et al. posited that effective career decision making is, in part, contingent on accurate career-related information, which may rest on student familiarity and interest. Their data indicated that students were significantly more interested in all of the other areas compared with school psychology and that the students were also more familiar with clinical and counseling psychology areas compared with school psychology, forensic psychology, and criminal profiling. And even though the students were relatively uninformed about clinical psychology and counseling, they were still more informed about those two specializations than school psychology. Finally, the authors also reported that students indicated themselves to be significantly more familiar with than interested in school psychology. Surprised by the finding of disinterest in school psychology in their sample, the authors speculated that students might be unaware that school psychology is a recognized health

service specialization, like counseling and clinical psychology, or that school psychology programs are also often associated with American Psychological Association (APA) accreditation.

There is other evidence that undergraduates do not get much exposure to school psychology. Lucas et al. (2005) examined introductory psychology textbooks for references to educational and school psychology. They found that although there is some material addressing these areas in the texts, in general, the coverage of educational and/or school psychology was minimal. Green, McCord, and Westbrooks (2005) suggested there may be a need for a course directly addressing careers in psychology to inform undergraduate psychology students of their options. Emphasizing this idea, Overstreet (2007) reported that 50% of universities with APA-accredited doctoral programs in school psychology offered an undergraduate course in clinical psychology, whereas no programs offered an undergraduate course in school psychology, and approximately 10% offered an undergraduate course in applied psychology. The problem of exposure to school psychology may also be worsened because many school psychology programs are not housed within departments of psychology but are found in colleges of education. This creates disconnect between school psychology programs and psychology undergraduate students simply because they may not be in close proximity to school psychology programs and therefore do not get exposure to these programs or their faculty. Also, many school psychology faculty housed in education colleges may have minimal or no undergraduate teaching responsibilities unless it is for teacher education programs. Overstreet (2007) suggested that inviting undergraduate students to enroll in graduate introduction to school psychology courses might need to be considered.

Graves and Wright (2007) examined some reasons that doctoral and non-doctoral school psychology graduate students gave for entering their programs. Both groups reported a strong interest in working with children and the desire to be employed in a school system as major factors for pursuing school psychology. Neither group indicated that they were strongly impacted by recruitment attempts by the National Association of School Psychologists (NASP) or the APA (Graves & Wright, 2007). It might be that underexposure to school psychology may be impacting undergraduate student preferences for graduate training in psychology. Graden (1987) speculated long ago that a reason that undergraduate students know very little about school psychology is that there has been a lack of aggressive recruiting practices by school psychology training programs.

Lack of exposure to information about school psychology might also account for misconceptions about the specialization that others have. In fact, misconceptions about school psychology are prevalent among parents, teachers, students, and others such as guidance or school counselors (Davis, McIntosh, Phelps, & Kehle, 2004). Gilman and Handwerk (2001) also reported that psychology majors believed that clinical psychologists performed a much wider range of psychological service delivery than did school psychologists. These types of misconceptions about school psychology may have an adverse impact on undergraduate student choice of school psychology for graduate training. If misconceptions exist, then increasing exposure to school psychology in undergraduate training and increasing education among professionals in educational organizations needs to occur. This could influence the audience and inform the content that needs to be addressed in recruitment.

Apparently, more effective recruitment is needed and is the first step to secure more students to study school psychology and to have careers in the profession. Yet, Lund, Reschly, and Martin (1998) indicated that enrollment in school psychology graduate training programs has not really changed over the past ten years. Knowledge of factors that might influence undergraduate student decision making regarding graduate school preferences is needed to inform the recruitment strategies of graduate programs. Therefore, this study examined variables that might be relevant to undergraduate students who are considering the pursuit of graduate training in school psychology.

Table 1
Demographic Characteristics of Participants

Characteristic	*n*	Percentage of Sample
Gender	674	
Male	255	38
Female	419	62
Ethnicity	673	
Caucasian	556	83
African American	39	6
Hispanic	15	2
Native American	46	7
Asian American	3	0.04
Other	14	2
University Rank	665	
Freshman	209	31
Sophomore	128	19
Junior	163	25
Senior	158	24
Other	7	1%
Major	655	
Psychology	230	35
Early Education	22	3
Secondary Education	54	8
Other	349	53

METHOD

Undergraduate students ($N = 674$) from a large comprehensive university in the Southwest completed an examiner-made web-based questionnaire designed to assess their attitudes and preferences for choosing graduate training in psychology. The study was fully approved by the university's Institutional Review Board and was available for participation through *Experimetrix*, an online experiment scheduling system used to manage the human subjects pool in use by the Department of Psychology, for two consecutive semesters. No incentive for participation was offered, but many of the participants did have a research participation requirement as part of their classes. This requirement could be fulfilled through participation in any of the studies being managed through *Experimetrix*.

All participants were enrolled in undergraduate psychology courses. The data that indicated the specific course enrollment of the participants were not collected. However, the courses included in the *Experimetrix* pool during the semester in which the study occurred were examined post hoc. Those students who were not psychology majors were enrolled in lower-level courses that would fulfill the university general education requirements, that is, Introductory Psychology or Developmental Psychology. Psychology majors were enrolled in those courses as well as various other psychology courses specific to the degree plans of psychology majors.

Table 1 presents the detailed demographic data for the sample. The majority of the participants were Caucasian (83%) and women (62%). Nearly half the sample reported their academic rank as either junior (25%) or senior (24%). Thirty-five percent of the participants were psychology majors, 11% were education majors, and 53% reported other majors. Those students who reported their majors as "other" ($n = 349$) had the opportunity to indicate their specific majors. However, only 133 of those participants did so. Those students who did report their specific majors represented

28 different degree programs from each of the six colleges in the university: Agricultural Science and Natural Resources; Arts and Sciences; Engineering, Architecture, and Technology; Human Environmental Sciences; Education; and Business; some were undeclared majors. None of the degree programs specified by the participants had disproportionate numbers of students compared with the other degrees. The greatest number of these students were in Health Promotion ($n = 6$), Biology ($n = 6$), Sociology ($n = 5$), or undeclared ($n = 8$).

A questionnaire was constructed that consisted of 87 tryout items hypothesized to be related to interest and preferences for graduate training in psychology. The items were scored on a 4-point Likert format: 1 = *disagree*; 2 = *slightly disagree*; 3 = *slightly agree*; and 4 = *agree*. Principal component analyses of the questionnaire yielded seven factors and reduced the item set to 39 items. All items retained on the scale loaded distinctly on their respective factors at .42 or higher. The seven factors were Misconceptions about School Psychology, Interest in Graduate School, Child-Related Interests, Attitude toward Research, Geographic Constraints, Personal Qualifications, and Exposure to School Psychology (see Table 2 for questionnaire items, factor loading coefficients, and subscale Cronbach alphas).

There was a high percentage of freshman participants in the study (31%). It is possible that psychology majors and upperclassmen have more exposure to school psychology than do underclassmen. Therefore, differences in exposure to school psychology were examined by participants' classification and major with a univariate analysis of variance (ANOVA).

A multivariate analysis of variance (MANOVA) was conducted using the questionnaire factor raw score sums as dependent variables and college major as the independent variable. Tests of between-subjects effects were conducted following a significant multivariate effect and pairwise comparisons (Tukey honestly significant difference [HSD]), followed any significant between-subjects effects. Cohen's d effect size estimates for significant pair-wise mean differences were also computed. Also, item-level analyses were conducted to examine the endorsement patterns of the participants across each of the factor areas and are also presented in Table 2.

Results

ANOVA indicated there was no significant main effect for classification, $F(3, 625) = .47$, $p = .71$. There was a significant main effect for major, $F(2, 625) = 3.23$, $p = .04$, and there was no significant major by classification interaction effect, $F(6, 625) = 1.09$, $p = .37$, for differences in exposure to school psychology. A Tukey HSD post hoc test was used to examine the significant main effect within the major. Psychology majors ($M = 6.59$, $SD = 1.77$) reported significantly ($p = .001$) less exposure to school psychology than did "other" majors ($M = 6.03$, $SD = 1.92$).

MANOVA indicated there were some significant differences among the dependent variables by major (Wilks' lambda = .57, $p < .001$). Tests of between-subjects effects indicated the differences occurred on the following variables: Interest in Graduate School, $F(2, 549) = 174.18$, $p < 001$; Child Interests, $F(2, 549) = 28.11$, $p < .001$; Attitude toward Research, $F(2, 549) = 8.66$, $p < .001$; and Exposure to School Psychology, $F(2, 549) = 5.66$, $p = .004$. Pair-wise comparisons of these effects indicated that psychology majors ($M = 24.61$, $SD = 4.93$) were significantly more interested in graduate school than both education ($M = 16.93$, $SD = 4.94$, $p < .001$, $d = 1.56$) and other majors ($M = 16.49$, $SD = 4.84$, $p < .001$, $d = 1.66$); that other majors ($M = 13.93$, $SD = 4.65$) were significantly less interested in child problems than psychology ($M = 16.93$, $SD = 4.51$, $p < .001$, $d = -.65$) or education ($M = 16.36$, $SD = 3.88$, $p < .001$, $d = -.57$) majors; that psychology majors ($M = 8.76$, $SD = 2.82$) were significantly more interested in research than other majors ($M = 7.74$, $SD = 2.58$, $p < .001$, $d = .38$); and that psychology majors ($M = 6.59$, $SD = 1.77$) reported significantly less exposure to school psychology than other majors ($M = 6.03$, $SD = 1.92$, $p = .003$, $d = .30$).

Table 2
Questionnaire Items, Factor Loading Coefficients, and Participant Endorsement Patterns

Scale and Scale Items	Factor Loading	D *n* (%)	SD *n* (%)	SA *n* (%)	A *n* (%)
Misconceptions about School Psychology ($\alpha = .83$)					
School Psychologists are only qualified to work in the schools.	.64	211 (32)	275 (41)	140 (21)	43 (6)
School Psychology programs are not accredited by APA like clinical and counseling programs.	.64	261 (39)	309 (46)	85 (13)	16 (2)
School Psychologists do nothing but give children IQ tests.	.64	403 (60)	207 (31)	45 (7)	16 (2)
School Psychologists only work with special education students.	.63	404 (61)	192 (29)	53 (8)	18 (3)
School Psychologists do not do research.	.61	272 (41)	269 (40)	98 (15)	30 (5)
School Psychologists do not get doctoral degrees.	.59	269 (40)	266 (40)	106 (16)	28 (4)
School Psychologists only work with learning and achievement problems in kids.	.58	264 (39)	285 (43)	103 (15)	18 (3)
School Counselors and School Psychologists are the same.	.58	272 (41)	252 (38)	117 (18)	27 (4)
School Psychology isn't part of mainstream psychology like clinical and counseling.	.55	223 (33)	270 (40)	135 (20)	41 (6)
School Psychologists are not scientist-practitioners.	.53	249 (37)	257 (38)	121 (18)	45 (7)
School Psychologists do not work with emotional and behavior problems in kids.	.51	444 (66)	178 (26)	41 (6)	11 (2)
School Psychologists do not do counseling, therapy, or intervention.	.50	23 (3)	45 (7)	237 (36)	363 (54)
You must have a degree in education to be a School Psychologist.	.43	216 (32)	258 (38)	134 (20)	64 (10)
Interest in Graduate School ($\alpha = .85$)					
I plan to apply to a psychology program for graduate school.	.86	261 (39)	141 (21)	130 (19)	137 (21)
I plan to go to graduate school in clinical or counseling psychology.	.84	291 (44)	150 (22)	136 (20)	92 (14)
I am more interested in graduate study in clinical or counseling psychology.	.77	236 (35)	136 (20)	152 (23)	144 (22)
I plan to apply to doctoral programs shortly after my BS or BA degree is awarded.	.67	323 (49)	157 (24)	111 (17)	74 (11)
I am interested in a graduate program with a specific focus.	.65	234 (35)	130 (19)	173 (26)	137 (20)
I want a graduate program that wants applicants from a psychology program	.54	176 (26)	156 (23)	213 (32)	127 (19)
I plan to attend a program as a full-time graduate student.	.51	119 (18)	99 (15)	176 (26)	274 (41)
I plan to apply to graduate school.	.42	83 (12)	84 (13)	172 (26)	331 (49)
Child-Related Interests ($\alpha = .83$)					

(Continued)

Table 2
Continued

Scale and Scale Items	Factor Loading	D *n* (%)	SD *n* (%)	SA *n* (%)	A *n* (%)
I am interested in the psychological assessment of children.	.76	131 (20)	122 (18)	238 (35)	181 (27)
I am interested in children's learning, behavior, social, emotional adjustment, and disabilities.	.76	75 (11)	110 (16)	220 (33)	266 (40)
I am interested in therapy and counseling with kids.	.68	213 (32)	138 (21)	193 (29)	123 (18)
I want to consult with teachers and parents about child problems.	.64	181 (27)	158 (24)	212 (32)	120 (18)
I am considering becoming a psychologist who works with kids.	.60	249 (37)	156 (23)	182 (27)	82 (30)
I would consider working in a public school system.	.56	158 (24)	124 (18)	192 (29)	199 (30)
Attitude toward Research ($\alpha = .63$)					
I have interest in a career that involves conducting research.	.71	209 (31)	191 (29)	190 (28)	81 (12)
I have a specific interest established for my own research.	.56	264 (44)	215 (32)	137 (21)	49 (7)
I want a program where I need similar research interests as the faculty.	.55	293 (44)	232 (35)	113 (17)	34 (5)
I prefer to apply to a PhD program directly after attaining my BA or BS degree.	.43	248 (37)	187 (28)	129 (19)	104 (16)
Geographic Constraints ($\alpha = .81$)					
I will probably apply to graduate programs close to home.	.83	152 (23)	119 (18)	228 (34)	168 (25)
I plan to apply to programs that keep me close to my family.	.81	191 (29)	173 (26)	201 (30)	104 (16)
I will apply to graduate schools in the geographic region where I live.	.75	135 (20)	125 (19)	192 (29)	216 (32)
Personal Qualifications ($\alpha = .76$)					
My standardized test scores will ensure that I am highly competitive.	.87	118 (18)	191 (29)	250 (37)	109 (16)
My standardized test scores will ensure that I am fairly competitive.	.84	105 (16)	159 (24)	263 (39)	142 (21)
Exposure to School Psychology ($\alpha = .81$)					
I have never heard of School Psychology.	.72	349 (53)	169 (26)	87 (13)	58 (9)
I did not know there was a specialty called School Psychology.	.69	305 (46)	161 (24)	130 (19)	75 (11)

Note. D = Disagree; SD = Slightly Disagree; SA = Slightly Agree; A = Agree; APA = American Psychological Association; BA = Bachelor of Arts; BS = Bachelor of Science; PhD = Doctor of Philosophy.

Examination of the endorsement patterns of the participants indicated the following. Generally, misconceptions about school psychology were not endorsed at high levels, with one exception. Ninety percent of the sample indicated that school psychologists did not conduct interventions, therapy, or counseling. In terms of interest in graduate school, 75% of the sample indicated they would attend graduate school.

Sixty-seven percent agreed they planned to attend graduate programs as full-time students. However, only 28% planned to attend graduate school immediately on the accomplishment of a bachelor's degree. Most of the participants also endorsed items indicating they had interests in focusing on children and child-related problems. Seventy-seven percent of the participants indicated they were interested in children's learning, behavior, social and emotional adjustment, and disabilities, and 62% denoted an interest in the psychological assessment of children. Also, 59% indicated they would consider working in the public schools, and 57% agreed they were considering becoming a psychologist for children.

As far as attitudes toward research go, 40% of the participants indicated they might be interested in conducting research, yet only 28% indicated they had specific research interests, and only a small percentage of participants (22%) agreed they wanted a program in which they need to be matched in research interest with the program faculty. The participants did specify there were some geographic restraints related to choice of graduate school. Most of the participants indicated they would apply to programs that were in the geographic region in which they resided (61%), and 59% agreed they would probably apply to a graduate program that was close to home. Fifty to sixty percent of the participants agreed they had personal qualifications that would make them highly competitive for graduate school admission. Finally, more than 20% of the sample indicated they had never heard of school psychology.

Discussion

Examination of undergraduate student preferences for graduate training in psychology is important because it can provide school psychology programs with areas to focus on in recruitment of qualified applicants, an initial and important impact point suggested by Kratochwill et al. (2004). The seven-factor scale developed for use in this study may be helpful for further understanding of undergraduate majors who might be salient candidates for recruitment into school psychology programs. The factors on the scale had good empirical structure based on logical and construct-relevant items, had good internal consistency, and showed utility in differentiating undergraduate majors on a number of dimensions that might inform recruitment efforts for school psychology programs. On the basis of their responses to items on these dimensions, it can be surmised that undergraduate psychology majors should be prioritized as a targeted recruitment population.

Results from the current study also suggest that a lack of exposure to school psychology does not significantly differ on the basis of the student's level of matriculation. Therefore, undergraduate psychology students at all levels might benefit from exposure to school psychology. Psychology undergraduates appear to be a good fit for school psychology graduate training for a number of reasons. Most psychology undergraduates in the current study indicated significantly more interest in the pursuit of graduate school than either education or other majors. They were also significantly more interested in research than other majors, as interested in child-related problems as education majors, and significantly more interested in child problems than other majors.

Yet, it is troubling that they reported significantly less exposure to school psychology than other majors. Gilman and Handwerk (2001) indicated that undergraduate psychology majors were exposed to the specialization of school psychology by nonacademic relational sources, and Stark-Wroblewski et al. (2006) reported that students were significantly less interested in school psychology than the other health service areas of clinical and counseling psychology. Also, there is evidence that there is minimal coverage of the specialization in introductory psychology textbooks (Lucas et al., 2005) and that recruitment materials for school psychology from both NASP and APA have had little impact (Graves & Wright, 2007). It might be important for school psychology faculty to access psychology undergraduates to inform them about the specialization. Some have suggested a course in applied psychology is needed (Green et al., 2005), and Overstreet (2007) suggested that inviting

undergraduates to enroll in graduate-level introduction to school psychology courses could be a way to inform them. But these two suggestions may not be easily implemented.

Another strategy might be for faculty to procure lists of undergraduate psychology seniors slated for graduation with the purpose of sending them a congratulatory email and an invitation to meet to discuss school psychology graduate training. School psychology faculty might also consider presenting information to psychology department clubs and organizations such as Psi Chi to initiate direct contact with these students and to time these interactions to precede school psychology program admissions timelines. Timing of these efforts might be important. Contact with potential applicants and presentations should occur in the fall semester, which would allow students who were seniors adequate time to become informed about school psychology and to complete an application. This may be critical because most school psychology programs are located in colleges of education and therefore are not likely to be in proximity to undergraduate psychology students or to have contact with this prime recruitment pool. Furthermore, relationships established among school psychology faculty and psychology department faculty and advisors my prove beneficial, particularly if the psychology faculty encourage students to explore the opportunities for graduate training and careers in school psychology.

Examination of the endorsement patterns of the participants was informative. These data suggest that school psychology programs need to expose potential applicants to more information about the role and function of school psychologists, especially as related to mental health functions, such as therapy, intervention, and treatment. Ninety percent of the sample agreed or slightly agreed that school psychologists did not engage in therapy, a prominent role for counseling and clinical psychologists. Undergraduate psychology majors may be better induced to consider school psychology graduate training and careers if informed specifically that school psychologists can provide empirically validated and evidence-based treatments for their clients. However, Caterino and Bacal (2007) surveyed school psychologists in the Southwest and a majority of those participants indicated they did not provide counseling services to children, even though they had received training in that area. Additional investigation of this finding would certainly be warranted since training in therapy and counseling is included in school psychology training.

Generally, misconceptions about school psychology were not endorsed at high levels, but because 25% to 30% of the sample was misinformed, the following might be important points to emphasize when interacting with undergraduates. Many participants reported that school psychologists are only qualified to work in public school environments (27%). Many did not report that school psychology is part of mainstream psychology, like clinical or counseling (26%) psychology, or that most APA-accredited doctoral programs in school psychology identify as scientist–practitioner programs (25%). There was another misconception about school psychology that might make specialization in this area unappealing to psychology undergraduates, that is, a degree in Education is required (30%).

In terms of interest in research only, 28% of the participants indicated having specific research ideas, and only 28% reported wanting to be matched specifically with a faculty for research (22%). Therefore, programs that initially admit bachelor's-level students to graduate programs on the basis of specific faculty match and mentorship might inadvertently dissuade potential graduate students. Undergraduates likely do not have sufficient research experience or familiarity with the school psychology literature to be ready to enter a program with well-developed and researchable substantive questions.

Other particularly interesting findings pertained to geographic constraints of students when they select graduate training. Fifty-nine percent of the sample reported they would apply to programs that were close to home, and 61% indicated they would apply to graduate programs in their region of origin. Perhaps then school psychology programs need to weigh local and regional recruitment

efforts more heavily than national efforts. Students recruited from the local market would have an advantage of not having the expense of non-resident tuition expenses, lowered moving expenses, and other benefits of attending school in their home area related to family priorities.

Twenty-eight percent of the participants planned to apply to graduate school directly from the bachelor's level, and a large percentage of the participants planned to attend graduate school (75%) as full-time students (67%). Considering the large percentage of students who plan to attend graduate school, it might be prudent to recruit potential graduate students while they are still enrolled in their undergraduate programs. This could negate the problem of where to find and access these students post-graduation. This is opportune because 53% of the participants reported their standardized test scores would make them highly competitive for graduate school, whereas 60% thought they would be fairly competitive.

Considering the high levels of child-related interests reported, that is, 62% of the participants were interested in psychological assessment of children, 77% were interested in child adjustment problems and disabilities, 57% were considering being a psychologist who worked with children, and 59% would consider working in the public schools, it appears the participants were a good match for professional school psychology.

A limitation of this study is that the data were collected from a single university in the Southwest, which could limit the generalizability of the findings. A broader and more representative sample is recommended for future studies. In sum, there continues to be a critical shortage of school psychologists. Graden (1987) speculated long ago that there has been a lack of aggressive recruiting practices by school psychology training programs. School psychology programs might find these results informative and, hence, aggressively recruit qualified students into the specialization.

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