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Learning From The Past and Planning For The Future: The Challenges Of And Solutions For Integrating Aging Into Doctoral Psychology Training

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Abstract

The long forecast “elder boom” has begun. Beginning in 2011, ten thousand members of the “baby boom” generation began turning 65 each day. This demographic shift in our society mandates that pre-doctoral programs in clinical psychology incorporate aging as an integral component of their core and elective training. While fully supporting the concept of broad and general training for predoctoral professional psychology programs, we maintain that the infusion of aging into doctoral psychology training curricula has been inadequate. In this manuscript we provide an overview of geropsychology training models and discuss the challenges involved in incorporating aging to the curriculum of pre-doctoral training in clinical psychology. Potential solutions and examples for accelerating infusion of aging knowledge base are discussed in the context of different geropsychology training models. We conclude that providing services to this rapidly growing segment of our population presents both an employment opportunity to broaden the reach of our profession as well as an ethical responsibility to train future professionals who will practice within their area of knowledge and expertise.

Keywords

Aging; Clinical psychology graduate training; Professional Competence; Ethics; Geropsychology; Professional specialization

The long forecast “elder boom” has begun. Beginning in 2011, ten thousand members of the “baby boom” generation began turning 65 each day. By 2030, the number of older adults will have doubled from its current level to 71 million, creating an “elder boom” generation for the first time in our nation’s history (Federal Inter-Agency Forum on Aging-related Statistics, 2008; LaMascus, Bernard, Barry, Salerno, & Weiss, 2005). In proportional terms the percentage of the U.S. population aged 65 years and older will rise from approximately 4% at the start of the 20th century to approximately 20% by 2050 (He, Sengupta, Velkoff, & DeBarros, 2005). The incidence of chronic diseases increases exponentially with age resulting in tremendous social and medical costs (Rae et al. 2010) that will pose a major economic burden on our society and health care system (Olshansky, Goldman, Zheng, & Rowe, 2009). Further, successful aging, defined as maintenance of high physical and mental function, engagement in social activities and avoidance of disease and disability (Rowe,

1997), is achieved only in a limited segment of the population and is influenced by affiliation to socially defined subgroups (McLaughlin, Connell, Heeringa, Li, & Roberts). Older adults' demands for mental health services are also predicted to markedly increase, as members of the "baby boom" generation experience higher rates of mental disorders and are more accepting of mental health treatments than were prior cohorts of older adults (Knight, Karel, Hinrichsen, Qualls, & Duffy, 2009; Jeste, et al., 1999).

We maintain that it is paramount for pre-doctoral programs in clinical psychology to incorporate aging as an integral component of their core and elective training. Providing services to this rapidly growing segment of our population presents both an economic opportunity to broaden the reach of our profession as well as an ethical responsibility to train future professionals who will practice within their area of knowledge and expertise.

We further maintain that the infusion of Aging into doctoral psychology training curricula has been inadequate. Despite training conference recommendations over the past three decades for greater integration of aging into the general curriculum (Santos & Vandenbos, 1982; Knight, Teri, Wohlford, & Santos, 1995) growth has been modest, as only a minority of programs nationally currently offer an elective course in aging (Hinrichsen, 2003). This seems surprising, as our experience suggests that aging may be readily infused into the general curriculum, as well as into related areas with shared competencies such as neuropsychology or health psychology (Knight, et al, 2009). Although we recognize the need for generalist clinical psychology programs to provide broad training, we also believe that our profession must be responsive to the social and ethical imperatives posed by a rapidly aging population. As both training models and methods of infusing aging into generalist curricula have been extensively described in the literature (APA, 2004; DeVries, 2005; Knight, Teri, Wohlford, & Santos, 1995; Qualls, Scogin, Zweig, & Whitbourne, 2010; Santos & VandenBos, 1982; Teri, Storandt, Gatz, Smyer, & Stricker, 1995), a roadmap and signposts now exist for psychology programs to support greater integration of aging into the general doctoral level curriculum.

In this manuscript we argue that in aging should be incorporated into the training curricula of doctoral programs in clinical psychology. The infusion of aging has been previously discussed in the context of track/specialty training (Qualls, Scogin, Zweig, & Whitbourne, 2010). Here, we focus on the necessity to increase training in aging in the context of a generalist model that applies to a broader range of programs and only briefly review other models. Specifically, we aim to achieve the following: **a)** discuss the upcoming crisis in geriatric mental health **b)** provide a brief overview of geropsychology training models and core competencies **c)** discuss the challenges involved in incorporating aging to the curriculum of pre-doctoral training in clinical psychology **d)** consider potential solutions and examples for accelerating infusion of aging knowledge base **e)** examine historical training challenges and achievements that required modifications of APA criteria for accredited pre-doctoral clinical programs and their relevance to aging **f)** consider professional ethical issues for psychologists regarding training in aging.

The Demographic Imperative: The Upcoming Crisis in Geriatric Mental Health

Workforce data suggest that Psychology, joined by disciplines such as Medicine, Psychiatry, and Social Work (LaMascus, et al 2005; Jeste, Alexopoulos, Bartels, Cummings, Gallo, et al. 1999), currently lacks sufficient numbers of specialized health professionals to meet the needs of the elder boom. Although approximately 200–700 psychologists specialize in working with older adults, it is estimated that 5000 – 7500 gero-psychologists are needed to meet the emerging demand (Jeste, et al. 1999; Qualls et al., 2002). Further, many generalist

psychologists may feel ill-equipped to treat older adults. A survey of APA members found that while almost 70% of psychologists saw older adults in their practices, fewer than 20% had received supervised gero-psychology clinical training, and close to 60% desired more training to inform their work with older adults (Qualls, Segal, Norman, Niederehe, & Gallagher-Thompson, 2002). This gap between the demands of a rapidly aging population and the shortage of practitioners trained in this area, previously referred to as the “Upcoming Crisis in Geriatric Mental Health Care” (Jeste et al., 1999), will become glaringly apparent now that the elder boom has begun, and is sure to reverberate across all healthcare disciplines including doctoral psychology training. Given these workforce realities, and the likelihood that most older adults will be treated by psychologist ‘generalists’, a growing consensus recommends that psychology doctoral training be better informed by the large body of knowledge now available regarding mental health and aging (APA, 2004; Karel, Knight, Duffy, Hinrichsen, & Zeiss, 2010; Knight, et al., 2009; Qualls, 1998).

A Brief History of the Development of Geropsychology Training Models and Core Competencies

The past three decades witnessed a series of task forces and conferences devoted to geropsychology training and practice, which have culminated in the development, refinement, and delineation of training models, practice guidelines, and core competencies specific to professional geropsychology. The “Older Boulder” conference, held in 1982, defined the contours of the extant knowledge base in aging, and developed consensus regarding curricula necessary for academic training in gerontology (Santos & VandenBos, 1982). The 1992 “Older Boulder II” conference was more practice-oriented, and envisioned a model of didactic and clinical training experiences aimed at three training levels: (1) Basic exposure to aging; (2) Generalist training compatible with geropsychology proficiency; (3) Training compatible with geropsychology specialty expertise (Knight, Teri, Wohlford, & Santos, 1995; Teri, Storandt, Gatz, Smyer, & Stricker, 1992). The Older Boulder II conference also resulted in the formation of an Interdivisional Task Force on Practice in Clinical Gero-Psychology (APA, 2000) that developed *Guidelines for Psychological Practice With Older Adults* (APA, 2004) in order to assist practitioners to “evaluate their own readiness for working clinically with older adults [and to seek and use] appropriate education and training to increase their knowledge, skills, and experience” (p. 237). Most recently, the Pike’s Peak conference (Knight, Karel, Hinrichsen, Qualls, & Duffy, 2009), geared to practitioners at any training level who desire to focus on working with older adults, delineated specific attitude, knowledge, and skill competencies for professional geropsychology practice. Concurrent with the development of these training models, the American Psychological Association formally recognized gero-psychology as a *proficiency* (APA, Commission for the Recognition of Specialties and Proficiencies in Professional Psychology, 1998) and more recently as a *specialty* within professional psychology (APA, 2010).

What makes geropsychology training distinct from generalist training at the doctoral level? The Pike’s Peak Model of Gero-Psychology training (Knight, et al., 2009) conceptualized four specificities which define geropsychology as a distinctive practice area and are foundational to focused practice with older adults: (1) An understanding of normal aging derived from research in life span developmental psychology; (2) An understanding of unique aspects of late life psychopathology, including the differential etiology, prevalence, and manifestations of mental disorders in older adults; (3) An understanding of the complex interplay of physical and psychological health factors, and their relationship to functional impairment in this population; (4) An understanding of the “range of age-specific environmental contexts in which older adults are embedded, including family, residential, health care, and community systems that serve older adults” (p. 207). For example,

psychotherapeutic work with an older adult who resides in a long term care setting and exhibits possible signs of personality disorder may require an understanding of normal aging and personality, late life manifestations of personality disorder, neurological disorders that may mimic aspects of this syndrome, and the manner in which behavioral manifestations of this disorder may be attenuated or exacerbated by the long term care system in which the older person resides (Segal, Coolidge, & Rosowsky, 2006; Zweig, 2008). For doctoral programs seeking to integrate aging into the generalist curriculum, both the *Guidelines* above and specificities defined in the Pike's Peak Model provide guidance as to areas wherein doctoral level course content could be augmented.

Few data are available to evaluate the degree to which generalist programs have implemented recommendations of prior training conferences or succeeded in infusing aging into the curriculum. However, available data suggest that growth in elective didactic and/or clinical geropsychology training, whether at the doctoral, internship, or postdoctoral levels has been modest. For example, previous reports indicated that only 21 clinical or counseling programs provided proficiency level training in geropsychology (Qualls, 1998) and only 30% of all programs offered even an elective course in aging (Gatz & Finkel, 1995). More recently, Hinrichsen (2003) reported that 13 programs currently offer substantive training in gero-psychology, and the website of the newly formed Council of Professional GeroPsychology Training Programs (CoPGTP) lists 14 member programs (CoPGTP, 2012). Such data suggest that despite calls for augmented generalist training in aging and the development of geropsychology training models, implementation has lagged behind.

Barriers to Incorporating Aging into the Generalist Curriculum: Where the Rubber Meets the Road

Incorporating pertinent themes of aging to the training curriculum of pre-doctoral clinical psychology programs, has not, in our experience, generally occurred. First, teaching in core areas such as assessment and treatment typically does not provide sufficient exposure to an understanding of normal aging and or of unique aspects of late life psychopathology. For example, cognitive assessment courses typically cover core intellectual assessment tests for adults and children as well as methodological and normative procedures that are necessary to help determine cognitive status, function and possible impairment (Lezak, 2004). However, as formally recognized by the APA Presidential Task Force (APA Presidential Task Force, 1998) the cognitive assessment of older adults is complicated by several factors, such that some age-graded norms may reflect disease rather than normal aging. Rarely infused into coursework is the unique application of longitudinal robust norms for the purpose of diagnosing cognitive impairment and dementia (Holtzer et al., 2008). The assessment and treatment of depression are extensively covered in pre-doctoral programs. However, clinical depression and geriatric depression have been conceptualized as distinct syndromes (Alexopoulos, 2005). Specifically, late-life depression is associated with a higher risk of suicide, greater functional impairment, medical comorbidity, and cognitive impairment, as well as specific biological risk factors such as hormones, menopause status (Freeman et al., 2004) and vascular burden (Mast, Neufeld, MacNeill, & Lichtenberg, 2004). In dementia, unlike the general population, psychopathological features (Holtzer et al., 2003) and depressive symptoms (Holtzer et al., 2005) are uniquely related to cognitive and functional status, respectively. Familiarity with these issues is critical for proper risk assessment and treatment of normal and demented older adults. Another example is concerned with treatment. Although psychosocial treatments of major disorders are extensively studied at the pre-doctoral training level, the evidence base for remediation for age related cognitive decline is typically not covered either in assessment or treatment courses. This is especially noteworthy given the large segment of the population to whom such treatment may be of interest, the economic impact of the cognitive remediation

industry on our society, and the increased interest in this very specific issue in the peer-reviewed literature and media outlets (Steinerman, 2010).

Second, the inter-relationships of physical and psychological health factors, functional impairment, and the environmental contexts in which older adults live are not typically covered in pre-doctoral training program. However, these issues have major impact on the individual and society and are directly relevant to core areas that are of interest to clinical psychologists. For instance, older adults with mobility limitations and disability report having more days of pain, depression, and fewer days of vitality than people without activity limitations (Freedman, Martin, & Schoeni, 2002; Hirvensalo, Rantanen, & Heikkinen, 2000; Manton, 2008). They are less likely to remain in the community, have higher rates of morbidity and mortality, have more hospitalizations, and experience a poorer quality of life (Hirvensalo et al., 2000; Newman, Haggerty, Kritchevsky, Nevitt, & Simonsick, 2003; Newman et al., 2006; Simonsick, Montgomery, Newman, Bauer, & Harris, 2001). Falls present a detrimental mobility failure that is common in older adults with approximately one third of community-residing adults older than 65 years reporting at least one fall each year (Sattin, 1992). Falls result in major adverse outcomes in older adults including injury, institutionalization, and death (Tinetti & Williams, 1997). It is noteworthy that research in our institution provided evidence that cognitive function, executive functions in particular, serves as an important predictor of mobility (Holtzer, Verghese, Xue, & Lipton, 2006) and risk of falls (Holtzer et al., 2007) in non-demented older adults. These findings clearly suggest that psychologists can play an important role in designing and implementing risk assessment procedures and possibly interventions for outcomes that typically have not received much attention in clinical psychology. Indeed, recent findings also showed that cognitive remediation improved mobility in sedentary community residing older adults (Verghese, Mahoney, Ambrose, Wang, & Holtzer, 2010).

A final challenge to incorporating aging more regularly in the doctoral clinical psychology curriculum derives from the relative lack of indigenous demands, resources, and incentives for doing so. Despite the demographic imperatives of a rapidly aging population, a relatively small proportion of graduate students begin training with an expressed interest in aging (DeVries, 2005; Hinrichsen 2000). Further, doctoral programs may find it difficult to recruit faculty with geropsychology expertise or locate practica with training in aging (Pachana, N. A., Emery, E., Konnert, C. A., Woodhead, E., Edelstein, B. A., 2010). Finally, the APA's Committee on Accreditation's strong commitment to preserving "broad and general" psychology training at the doctoral level (APA, 2008) has only recently been modified to allow for specialty programs in "developed practice areas", such as gero-psychology; although such modifications may result in the growth of specialty programs, their impact on generalist programs that currently lack a specialty emphasis is less clear. Thus generalist doctoral programs are likely to continue to prioritize "broad and general training" at the expense of developing substantive specialty practice areas such as geropsychology even when there are demographic imperatives to do so. Due to this longstanding tension between providing broad and more specialized training (see Roberts, 2006; Zlotlow, Nelson & Peterson, 2011), doctoral programs likely have few incentives for offering even elective aging-focused coursework in areas such as geropsychology and neuropsychology. We fully support the concept of broad and general training for predoctoral professional psychology programs, and recognize that expanding an already demanding training curriculum is a challenge. However, it is our contention that our field must also continuously re-examine training priorities in light of socio-demographic changes, epidemiologic trends, and their implications for the delivery of psychological services in our society. As discussed below there have been analogous calls to modify graduate psychology training to ensure adequate exposure to child psychology (La Greca & Hughes, 1999; Roberts, 2006). We believe that it

is imperative to learn from the history of our field and make the necessary changes to the curriculum in a timely manner.

Potential Solutions to Accelerate Infusion of the Aging Knowledge Base: Implementing the Pike's Peak Model

Despite several calls for greater infusion of geropsychology into doctoral psychology training, doctoral programs seeking to infuse geropsychology into the generalist curriculum often face obstacles to implementing didactic, clinical or research training in aging, and may even face institutional impediments. We have outlined common challenges faced by generalist programs, and potential strategies for overcoming them (see Table 1).

Various models of integrating training in aging have been developed, ranging from generalist-infused to specialty-infused models (DeVries, 2005; Qualls, Scogin, Zweig, & Whitbourne, 2010). All share in common the goal of developing geropsychology competencies through training experiences that are sequential and graded in complexity, but differ in the level of competency expected and the structural mechanisms utilized to achieve this goal. Below, we broadly describe three models whereby generalist programs and those with a specialty in aging incorporate geropsychology into the curriculum. We focus on generalist-infused model and briefly compare it to other models (see Table 2), as the specialty-infused models are described in detail elsewhere (Qualls, Scogin, Zweig, & Whitbourne, 2010).

Model 1: Generalist Training Program with Formal Integration of Aging Content

Programs seeking to augment aging content can benefit from tremendous growth in the geropsychology knowledge base and in aging-related fields such as neuropsychology, health psychology, and life span development. Just as the infusion of content related to individual diversity has enhanced the generalist curriculum and fostered cultural competence, so too would *formal* integration of aging content better prepare the next generation of psychologists for the changing demographics patterns that will shape their future practice. Further, the Pike's Peak Model for training in professional geropsychology can serve as a blueprint for curricular development, in that it articulates ten competency areas that provide a focus for aging-related didactic and clinical training that may be initiated at the doctoral level: (1) Attitudes regarding aging and geropsychology practice; (2) General knowledge about adult development, aging, and the older adult population; (3) Knowledge regarding the foundations of clinical practice with older adults; (4) Knowledge regarding the foundations of assessment with older adults; (5) Knowledge regarding the foundations of intervention, consultation, and other service provision; (6) Skills regarding professional geropsychology functioning; (7) Skills regarding assessment of older adults; (8) Skills regarding intervention with older adults; (9) Skills regarding consultation and training; (10) Skills regarding the delivery of services in diverse and non-traditional settings (Knight, et al., 2009).

Doctoral programs seeking to provide training congruent with these competencies can benefit from an extensive bibliography of geropsychology articles, books, electronic references, and related online links developed by the newly formed Council of Professional Geropsychology Training Programs (CoPGTP) and available online at <http://www.uccs.edu/~cpgtp/>. An edited text which describes these competencies in more detail (Molinari, 2011) and a measure developed to evaluate these competencies in trainees at various training levels (*Pikes Peak Geropsychology Knowledge and Skill Assessment Tool*; Karel, Emery, & Molinari, 2010) are also available for programs seeking to upgrade the level of aging training in their curricula.

Although challenges such as limited faculty resources and student interest may at times appear formidable (see Table 1), we and others (DeVries, 2005; Hinrichsen & McMeniman, 2002; Zweig et al 2005) have noted that once there is institutional support, meager resources can at times be leveraged creatively, and that exposure to aging fuels demand. For example, programs with limited access to geropsychology faculty and limited room in the curriculum for electives often recruit adjunct faculty with aging-related training (Neuropsychology; Health psychology; Rehabilitation Psychology; Developmental Psychology) to formally integrate aging-related lectures into existing coursework (e.g. Cognitive Assessment; Clinical Interventions) or research training experiences. Another route is for programs to foster exposure to aging in coursework-related practica (e.g. Clinical Interviewing) by affirmatively providing such services in settings populated by older adults.

Based on our experience, we believe that the formal integration of aging content into the curricula is within the reach of many generalist psychology doctoral programs. However, we also recognize that the degree of exposure to training in aging in generalist programs will be highly variable, as such exposure depends upon the willingness of faculty to infuse geropsychology modules into existing coursework (e.g. “Lifespan Developmental Psychopathology”; La Greca & Hughes, 1999) and the availability of resources within and outside of the training institution to provide research and practicum experiences in gerontology. Due to this variability we did not identify a particular program as an exemplar but rather summarized a range of training experiences that likely exist across pre-doctoral programs (see Table 2).

Models 2 and 3: The Generalist Component Training (GCT) and Professional GeroPsychology Track (PGT)

Doctoral programs that have sought to formalize training in aging have typically chosen one of two paths, known as the *generalist component training* (GCT) or the *professional geropsychology track* (PGT) models, for implementing such training (see Qualls, et al., 2010 for a detailed review). Programs that adhere to the generalist component training (GCT) model provide gero-psychology training as a concentration area within the generalist program. In essence, the GCT model offers programs with limited faculty resources a mechanism to provide *basic exposure to aging* to most doctoral trainees, and to offer some a training experience commensurate with achieving *proficiency* in geropsychology. We use our program at the Ferkauf Graduate School of Yeshiva University (see Table 2) an example for this training model (Zweig, Siegel, Hahn, Kuslansky, Byrne, Fyffe, Passman, Stewart, & Hinrichsen, 2005). Drawing on the GCT model, our program developed a geropsychology concentration that offers a rich array of didactic, research, and clinical training experiences.

Professional Gero-Psychology Track (PGT) model programs utilize a structure in which doctoral psychology students receive generalist training augmented by formalized and sequential geropsychology training. PGT model programs require more resources, but enable students who aspire to a career in geropsychology to develop a high level of *proficiency* or expertise in this area (Qualls, et al., 2010). As previously described by Qualls et al., (2005) the program at the University of Colorado serves as an example for this training model. Specific curricular examples are also summarized here (see Table 2).

Will formally integrating aging content into the curriculum ignite broader interest in aging among doctoral students? Exposure to aging appears to be a key mechanism for igniting interest, as experiencing clinical training with older adults augments knowledge and interest in geropsychology (Hinrichsen, 2000; Hinrichsen & McMeniman, 2002). Our program evaluation data also verified that entering students had an initial interest in aging-related didactic and clinical experiences, but that *exposure* appeared integral to students' endorsement of *interest in post-graduate practice* with this population (Zweig, Siegel, &

Snyder, 2006). Such data are consistent with findings that psychologists who received formal gero-psychology training were more likely as practitioners to provide assessment and other clinical services to older adult populations (Qualls, et al., 2002).

Learning from the Past: Lessons from Clinical Child Psychology

With a few exceptions, the primary focus of the majority of the training programs in clinical psychology in the United States has been on training in the psychological assessment and psychotherapeutic treatment of younger adults. Following several decades of developing models of the core foundations, applications, and training methods in the area of clinical child psychology, as well as continued advocacy by clinical child psychologists, the American Psychological Association designated clinical child psychology as a proficiency, and in 1998 as a “specialty” within clinical psychology (La Greca & Hughes, 1999). Despite these advances and greater recognition of the importance of this training area, clinical child psychology has struggled both to define its distinctiveness (Jackson, Alberts, & Roberts, 2010) and to defend itself from charges of overspecialization when offered at the doctoral level, challenges that likely represent an essential tension between broad and general versus specialty training that exist within our field (Roberts, 2006). In response to critics who might argue that greater infusion of child psychology within generalist training departs from broad and general training, Roberts (2006) cogently asserts that most programs reflect a “monospecialty adultcentrism” and that “Specialization, if properly implemented and integrated in doctoral programs, should provide more breadth than does a traditional doctoral program” (p. 867).

It is our contention that the essential tensions faced by clinical child psychology have their parallel in developments in predoctoral clinical training in the area of geropsychology. As our field studies its own workforce, data will accrue arguing that dedicated training experiences in child or geriatric psychology are essential for psychologists in order to obtain minimal competence to provide psychological services to each respective population. Of note, both fields have argued for greater integration of developmentally relevant content into existing curricula; modified coursework such as Lifespan Developmental Psychology and Lifespan Developmental Psychopathology (La Greca & Hughes, 1999) provide examples of how generalist programs might begin to augment knowledge competencies in both child and geriatric psychology in an expedient and effective manner. Moreover, as discussed in the next section, we strongly believe that modifying the pre-doctoral curriculum has important ethical implications.

A Cautionary Note: Professional Ethical Issues for Psychologists Regarding Training in Aging

According to the APA Code of Ethical Principles (APA, 2002), competence is both aspirational and enforceable. While a conceptual model of competence has been proposed (Rodolfa, Bent, Eisman, Nelson, Rehm, & Ritchie, 2005) achieving and assessing competence remains a challenge, especially for practicing clinicians (Barnett, Doll, Younggren, & Rubin, 2007). A related fundamental principle in the APA Code of Ethical Principles is the mandate to engage in clinical practice within the psychologists’ areas of competence based on their education and training experiences (APA, 2002). It is noteworthy, that compliance with this ethical principle depends, to a significant degree, on a licensed psychologist’s subjective evaluation of their level of competence to provide psychological service to the public across any population or group or for any presenting problems that manifest themselves in a multitude of settings. The challenges that are involved in assessing competence along with the financial pressures that are inherent in independent practice can lead to instances where psychologists engage in practice that is

outside of their area of competence. Indeed, a review of the yearly reports compiled by the APA Ethics Committee reveals that during the last decade complaints about psychologists practicing outside their area of competence were consistently documented (e.g., APA Ethics Committee, 2004, 2005, 2006, 2007).

To our knowledge there is no evidence that the number of cases where psychologists practice outside their areas of expertise has increased in recent years or that the reported cases are concerned with inappropriate services to older adults. However, in a survey of the ethical practices of clinical and counseling psychologists who work with older adults, 31–38% admitted to gaps in knowledge required to work with this population (Yarhouse & DeVries, 2000). The ethical principle mandating psychologists to engage in clinical practice within their areas of competence is the fundamental rationale for promoting the infusion of geropsychology within pre-doctoral training programs. The increase in the elderly population in the United States over the next several decades along with their growing demands for psychosocial and health-related services are sharply contrasted with the predicted shortage of competent geropsychologists. Consequently, if current trends continue unchecked, a possible scenario is that at least a portion of older adults might receive services from generalists who lack basic training in aging, and who knowingly or unknowingly possess less than minimal competence in geropsychology.

Summary and implications

We conclude that it is paramount for pre-doctoral programs in clinical psychology to incorporate aging as a formalized, integral component of their core and elective training. Providing services to this rapidly growing segment of our population presents both an employment opportunity to broaden the reach of our profession as well as an ethical responsibility to train future professionals who will practice within their area of knowledge and expertise. However, currently, training in aging and age-related diseases at the predoctoral level is insufficient. This gap in training is attributed to a number of reasons that were discussed in previous sections of the manuscript. It is our position that both training programs and the APA should act proactively and expeditiously to rectify this limitation. We propose that multiple pathways can be used to incorporate aging into the training curriculum. At the very minimum clinical programs should have one faculty with expertise in clinical and research aspects of aging and age-related disorders. In terms of didactic coursework it will be necessary to formally incorporate aging into core courses including but not limited to psychological assessment, psychopathology and psychotherapy. The addition of one elective course that is specifically designated to cover aging, while appropriate, cannot serve as a substitute for integrating this topic into the broad pre-doctoral curriculum. Furthermore, offering formal training in aging can be a vehicle to extend generalist training in aging within doctoral programs and afford additional opportunities to students who wish to receive more advanced training in this area. It is likely that improved gerontological training at the pre-doctoral level will directly affect internships as well. Students who receive adequate basic training in aging will be better prepared to address the needs of this rapidly growing segment of our population, which, in turn, will enhance their training experience during internship and the quality of psychological services they provide. Finally, we recommend revision of the accreditation guidelines, in a manner similar to multicultural training, to ensure that aging is adequately covered at the predoctoral training level. As reviewed earlier in the article, modifications of the curriculum have taken place in the past to incorporate under-represented areas that are relevant to the broad training in clinical psychology. The coming crisis in geriatric mental health now makes it imperative that doctoral training programs upgrade the integration of aging into the doctoral curriculum.

There are increasing signs that if our field does not act to augment the geropsychology competence of current doctoral trainees, our graduates will be penalized by other authorities. As part of the Patient Protection and Affordable Care Act of 2010, in 2015 the Centers for Medicare and Medicaid Services will require mandatory reporting of use of Physician Quality Reporting System (PQRS) measures by psychologist providers who treat older adults, including evidence-based tools for screening for depression, suicide risk, and elder maltreatment, or the provider will face a financial penalty. Such mandates require that the next generation of psychologists be prepared by their training experiences to utilize such measures in a clinically appropriate manner. Whether or not clinical psychology modifies pre-doctoral training to ensure sufficient exposure to aging themes will have a profound effect on employment opportunities and the quality of care clinical psychologists offer to this growing segment of our society.

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Table 1**Challenges and Strategies for Integrating Gero-Psychology into Doctoral Psychology Training**

<u>Training Domain:</u>	<u>Challenges:</u>	<u>Strategies:</u>
<u>Didactic:</u>		
Exposure to gero-psychology content and courses in curriculum	Lack of room in curriculum for aging-related coursework Limited infusion of aging content into curriculum	Infuse gero-psychology modules into regular coursework (Psychopathology; Cognitive Assessment; Interventions) Develop electives in geropsychology
<u>Clinical:</u>		
Exposure to older adults as part of clinical training	Limited faculty trained in clinical gero-psychology Lack of trainee exposure to older adults as part of clinical training curriculum	Recruit adjunct faculty with aging-related training (Neuropsychology; Health Psychology; etc) "Multiple Paths Model" to expand trainee exposure: Aging-focused case-based didactics; Trial clinical experience with older patient; Clinical practica with major/minor gero-psychology rotation
<u>Research:</u>		
Exposure to gero-psychology as part of research training	Lack of trainee exposure to older adults as part of research training curriculum	Research collaboration which bridges faculty interests and gerontology research base Recruit Adjunct/Voluntary Research Faculty with gero-psychology expertise
<u>Institutional Issues:</u>		
Training model	Need for a coherent model for doctoral training in aging	Consider models of infusing aging training at doctoral level
Competencies	Graduates of doctoral psychology programs lack competencies needed to work with rapidly aging population	Identify necessary gero-psychology competencies and training mechanisms (didactic, clinical, research) to achieve these during doctoral training
Student interest/demand	Few students express interest in aging-training at onset of doctoral work	Give preference to applicants with aging interests; Build aging-related didactic, clinical and research curricula as exposure fuels demand

Table 2

Examples of didactic, clinical and research training in aging

<i>Generalist Training Program with formal integration of aging into curriculum</i>	<i>Courses</i> ^a Life-span development ^a Cognitive assessment ^a Psychopathology ^a Clinical Interventions Electives – variable depending on program's faculty availability and interests	<i>Clinical Experience</i> Course-related practica inclusive of older adult patients; externships that offer clinical training in aging	<i>Research training</i> Variable – depending on the program's faculty research interests; and on relations with other departments within the university or with other institutions that offer active aging research programs
<i>Generalist Component Training (GCT) program with elective concentration on aging:</i> Ferkauf Graduate School of Psychology of Yeshiva University	<i>Courses</i> ^a Life span development ^b Geropsychology Assessment & Treatment ^b Geropsychology seminar/Group supervision ^c Clinical Neuropsychology I ^c Clinical Neuropsychology II ^c Research Seminar I ^c Research Seminar II	<i>Clinical Experience</i> Geropsychology seminar/Group supervision I, II Clinical Neuropsychology I Clinical Neuropsychology II Practica with major/minor geropsychology emphasis	<i>Research training</i> Pre-doctoral project Dissertation
Professional GeroPsychology Track (PGT) Program: University of Colorado-Colorado Springs	<i>Courses</i> ^d Psychology of Aging I ^d Psychology of Aging II ^d Clinical Geropsychology I: Settings and Contexts of Practice ^d Clinical Geropsychology II: Assessment and Treatment Aging themes infused through a variety of courses (see Qualls et al., 2005: Table 1)	<i>Clinical Experience</i> Clinical Geropsychology I: Settings and Contexts of Practice Clinical Geropsychology II: Assessment and Treatment Clinical training in aging available through a variety of supervised training (see Qualls et al., 2005)	<i>Research training</i> Course work and supervision of research are infused through the program leading to a dissertation project

^a APA required course that could include aging-related modules;^b Elective course that is focused on aging – required for aging concentration;^c Elective course that includes aging and dementia modules;^d Required course that is focused on aging.