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**Mentoring in the training cycle of clinical and counseling
psychology doctoral students: a critical review of the literature**

Hélène Farr

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Pepperdine University
Graduate School of Education and Psychology

MENTORING IN THE TRAINING CYCLE
OF CLINICAL AND COUNSELING PSYCHOLOGY DOCTORAL STUDENTS:
A CRITICAL REVIEW OF THE LITERATURE

A dissertation submitted in partial satisfaction
Of the requirements for the degree of
Doctor of Psychology

by

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Under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements of the degree of

DOCTOR OF PSYCHOLOGY

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TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
DEDICATION	vii
ACKNOWLEDGMENTS	viii
VITA	ix
ABSTRACT	xi
Chapter I: Introduction.....	1
Specific Aims and Objectives	2
Literature and Background	2
Mentoring.....	3
Mentor.....	3
Protégé	4
Formal Mentoring	4
Informal Mentoring.....	5
Differences Between Supervision and Mentoring	5
Types and Functions of Mentors.....	6
Motives to Mentor.....	7
The Mentoring Process	8
Mentoring Relationships	9
Gender Differences in Mentoring	10
Successful Mentoring Relationships and Effective Mentors	12
Importance of Matching Mentor and Protégé	12
Benefits of Mentoring	14
Benefits Specific to Mentors.....	15
Benefits Specific to Protégés	16
Graduate Students and Pre-Licensure Clinicians.....	18
Minorities, Women, Individuals with Disabilities, and LGBTQ Individuals	19
Obstacles and Potential Costs of Mentoring.....	22
Ethical Considerations	23
Prevalence of Mentorship in Mental Health Training	26
Chapter II: Method.....	29
Purpose and Scope of Review.....	29
Self of the Researcher/Literature Analyst.....	29
Researcher's Bias and Issues of Validity	30
Analysis Procedure	32

Stage I: Inclusion and Exclusion Criteria	32
Stage II: Collection of Relevant Literature	33
Stage III: Organization and Summarization of the Literature	34
Stage IV: Critical Analysis and Synthesis of Empirical Studies	36
Stage V: Findings.....	38
 Chapter III: Results	 39
Document Selection	39
Characteristics of Empirical Documents	41
Research Design.....	41
Sample Sizes	41
Average Ages of Participants.....	42
Major Themes	42
Need for More Research/Competence-Based Mentoring	42
Cultural Awareness	43
Multicultural Mentoring.....	43
Challenges for Students of Color and Minorities	44
Challenges for International Students	44
Benefits of Mentoring	44
Benefits Specific to Protégés	45
Benefits Specific to Mentors.....	46
Mentoring Functions	46
Professional Mentoring Functions	46
Psychosocial Mentoring Functions	46
Matching in Formal Mentoring.....	47
Mentoring Support	47
Mentoring Relationships and Mentors' Characteristics.....	48
Mentoring Categories and Types of Mentoring Relationships	48
Resources and Guidelines	48
Challenges and Ethical Issues	48
Prevalence of Mentorship	49
What Students Want from Mentorship	49
 Chapter IV: Discussion	 50
Benefits of Mentoring	50
Multicultural Mentoring.....	51
Matching in Formal Mentoring.....	53
Prevalence of Mentoring in Psychology Training	54
Challenges and Ethical Issues.....	55
Clinical Training Implications	56
Limitations	56
Guidelines/Recommendations	57
Guidelines for Institutions and Universities	57
Mentoring Options	58

Mentors' Guidelines.....	58
Summary of Recommendations.....	58
Gaps in the Current Literature/Future Research	60
REFERENCES	61
APPENDIX A: Literature Analysis Flow Chart.....	76
APPENDIX B: Empirical Studies Summary Tables	78
APPENDIX C: Coding Frequency Table	109
APPENDIX D: Process Notes	120
APPENDIX E: Databases Search Results	137
APPENDIX F: NHS Approval for Non-Human Subject Research.....	145

LIST OF TABLES

	Page
Table 1: Sample Empirical Study Summary.....	35
Table 2: Sample Coding Frequency.....	36
Table 3: Sample Databases Search Results	40

DEDICATION

To my daughter, Olivia, and my son, John-Guillaume: thank you for accompanying me on this long journey. You have been encouraging and patient every step of the way. It means the world to me to see pride in your eyes. I love you, Mom.

To my mother who valued education before her heartbreaking battle with Alzheimer's disease and would have been so proud and to my father, a man of honor, great kindness, grace, and class, fly-fisherman extraordinaire who always saw the best in everyone, who laughed and smiled a lot, and was a fabulous storyteller: merci!

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My sisters, Mireille and Christiane, flew from France for my Master's degree graduation and promised they would be back when I walk as Dr. Farr. My cousin, Jacques, has been a source of strength and pep talks. Their support, confidence in my ability to finish what I started, and pride have been invaluable.

My friends, Patty and Frank, Suz and Mike, and all the gang were by my side all the way and will be there when this confinement is over and we can celebrate together. Champagne is on ice.

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ABSTRACT

This dissertation presents a critical review and analysis of the literature on mentoring in clinical and counseling psychology training programs. It provides background information on the mentoring process and a detailed analysis of current empirical research pertaining to mentoring in the training cycle of clinical and counseling psychology doctoral trainees through predoctoral internship and postdoctoral fellowship to licensure. The goal of this review is to highlight the importance and benefits of mentorship for mentors, protégés, institutions or universities, and for the profession of psychology. There are few studies focused on mentorship during psychology training, therefore recommendations are made for future research.

Chapter I: Introduction

How does one become a psychologist? The journey, which entails navigating graduate school and internship, passing the licensing exam, and starting a career is long and transformative. This transformation happens over many years not only at the professional but also at the personal level (Cobb et al., 2018; Lee et al., 2009). It often involves juggling both studies and transitional life events such as becoming engaged or married, starting a family, or taking care of elderly parents (Green & Hawley, 2009). It is a multi-faceted process that goes well beyond didactic instruction. Indeed, the clinical training cycle involves many different aspects such as practica, internship, clinical supervision, research, and presentations. All of these activities are well integrated into this complex journey. Yet, another important piece in training to be a competent psychologist, mentoring, is not given a formal “place” in the training experience! In fact, mentoring appears to be both under-used and under-researched (APA, 2006a; 2006b; Johnson, 2000, 2002; Van Vliet, Klingle, & Hiseler, 2013). However, mentoring is invaluable and unique. The benefits of mentoring are well documented in the business world where it is found to positively impact the career trajectory and personal wellbeing of both mentors and protégés (Clarke, Harden, & Johnson, 2000); Feeney & Bozeman, 2008; Forehand, 2008; Lee & del Carmen Montiel, 2010; Ragins & Kram, 2007). Forehand (2008) makes the point that mentoring in psychology is necessary for the future of the profession, so why are mentoring and mentoring research still lagging behind in the training process of clinical and counseling psychologists (Woo, Lu, & Bang, 2018)?

This critical review will examine the theoretical and empirical literature on mentoring in clinical and counseling psychology with the goal of highlighting gaps in knowledge, identifying areas for future research, outlining the benefits of mentoring for the mentor and protégé and the

clients, as well as providing recommendations for optimal integration of mentoring in education and training. It will focus on the current state of mentoring and the characteristics unique to the mentoring process will be further examined during the analysis phase of the critical review.

Specific Aims and Objectives

This critical analysis of the literature aims to:

1. Provide a review of relevant research on psychological education and training as it relates to mentoring;
2. Review and evaluate current mentoring practices and trends in the training cycle of clinical and counseling psychology doctoral students;
3. Examine the benefits of mentoring to the mentor and the protégé' s professional development;
4. Identify ethical issues and risks of mentoring in psychologists' training process;
5. Highlight culturally aware models of mentoring (e.g., mentoring ethnic minorities; mentoring from a culturally humble perspective); engaging someone from a cultural lens; and
6. Offer practical suggestions for how to foster a mentoring culture in clinical and counseling psychology programs.

Literature and Background

This section will offer context for this critical review by providing definitions of key terms and presenting literature that describes important elements of the mentoring process, different types of mentors and mentoring functions, the motives to mentor, and the mentoring process structure (i.e., the initiation stage, the cultivation stage, the separation stage, and the redefinition stage). It will examine the literature on mentoring relationships including gender

differences, characteristics of successful mentoring relationships and effective mentors, the importance of a good match between mentors and protégés, and the benefits of mentoring for both mentors and protégés. In particular, it will look at benefits for protégés based on their graduate and early career status or their cultural identity (e.g., racial or ethnic minority, gender, individuals with disabilities, and LGBT individuals). It will then explore the obstacles, risks, and ethical considerations specific to mentoring within psychology training. Finally, it will look at the prevalence of mentoring in mental health training.

Mentoring originates in ancient Greece. In Homer's *Odyssey*, Mentor is the name of the wise counselor who advises and protects Ulysses' son, Telemachus, against his mother's unwelcome suitors until his father's return. Below are definitions of key terms used in this critical review of the literature.

Mentoring. There are many similar definitions of mentor and mentoring in the literature. According to Ragins & Kram (2007), "mentoring is a developmental relationship that is embedded within the career context" (p. 5). In an article about mentoring women graduate students in professional psychology, Williams-Nickelson (2009) defines mentoring as the process by which integration occurs in a developmentally appropriate timeframe, explaining:

Mentoring is a type of interpersonal relationship that changes over time and includes the intentional process of nurturing, support, protection, guidance, instruction, and challenge within mutually agreed upon and ethical parameters that include the integration of personal and professional aspects of an individual's life. (p. 286)

Mentor. According to Williams-Nickelson (2009), a mentor is "a person in an individual's chosen profession who is actively working to integrate a new person into

a professional role. The mentor feels some responsibility for the successful development of the mentee's career" (p. 286).

A mentor is often described as a more established, older professional who provides a less advanced, usually younger, student or colleague with professional, psychosocial, and emotional support to promote the protégé's career and personal growth. The mentor is invested in the protégé's success (Allen, 2003; APA, 2006a; 2006b; Haggard, Dougherty, Turban, & Wilbanks, 2011; Johnson, 2002, 2007; Mertz, 2004).

While most people associate the role of mentor with middle age – by that time people have reached a certain degree of professional achievement, and most people associate wisdom with age – it is not necessarily true. Sometimes a mentor can be a same-age or even younger peer with a special expertise of interest to the protégé (APA, 2006a, 2006b).

Protégé. Within the literature, both terms, “mentee” or “protégé” are used. To ensure continuity, the term, “protégé” is used exclusively throughout this study. A protégé(e) is an individual who benefits from the knowledge, connections, and influence of a more senior or established individual in his or her field, albeit the help provided can go beyond professional development to include psychological support (Ragins, 2016; Ragins & Krams, 2007).

Formal mentoring. There is a distinction between formal and informal mentoring. Both mentors and protégés described informal mentoring relationships as more helpful and rewarding than formal relationships (Johnson, 2002).

Formal mentoring is developed within an organization to ensure a protégé's professional development. Mentors are required to help protégés with career goals, networking, and to navigate office politics. It is a fairly short partnership, usually lasting one year, and it has a start

and end date. Mentors and protégés sometimes go through training about mentoring and/or are given guidelines concerning the expected frequency of contact. The organization matches the partners.

Informal mentoring. Informal mentoring relationships are spontaneous and voluntary and are not always recognized as mentoring relationships (APA, 2006a). They evolve over several years through mutual liking, common interests, and other similarities such as demographics, attitude, race, sexual orientation, or culture (Alvarez, Blume, Cervantes, & Thomas, 2009; APA, 2006b). Informal relationships are most often initiated by the protégé. The quality of informal mentoring relationship is usually more involved than that of formal mentoring ones because the members of the dyad are intrinsically motivated to start and maintain the relationship. While the focus of most mentoring relationships, especially formal mentoring relationships, is to benefit the protégé, an informal relationship allows for more reciprocity and meets the needs of both parties (Chao, 2009).

Differences between supervision and mentoring. It is important to differentiate between supervision and mentoring. Mentoring is mostly an informal relationship between mentor and protégé and involves a variety of support functions. While there is some crossover, and supervision and mentoring are indeed on a continuum with transactional supervision at one end, mentoring at the other end, and transformational supervision laying some place closer to the mentoring end, mentoring and supervision are not interchangeable (Johnson, 2007; Johnson, Jensen, Sera, & Cimborra, 2018, Karel & Stead, 2011). Placement on the “Mentoring Relationship Continuum” (MRC) is based on the level of involvement, reciprocity, and mutuality of the relationship (Johnson, Skinner, & Kaslow, 2014). Many people use the term mentoring broadly and apply it to any relationship where they observe any kind of career-related or

psychosocial support. Nonetheless, in spite of some similarities and overlapping functions, especially at the transformational level of supervision, supervision and mentoring also present some major differences. The most salient difference pertains to the evaluative function of supervision – which exacerbates the dyad’s power differential – and the fact that the ultimate beneficiaries of supervision are the protégé’s clients and the profession (Falender & Shafranske, 2012, 2014; Kaslow & Mascaro, 2007). In contrast, mentoring relationships primarily and intentionally promote the protégé’s professional and personal development. Therefore, mentoring relationships, especially informal relationships, which are voluntary and often initiated based on mutual interest and liking, provide a wider range of professional, psychosocial, and emotional functions to the protégé than supervision, a time-limited mandatory training requirement to which supervisors and supervisees are formally assigned (Cobb et al., 2018). At the same time, Drotar (2013) and Rowe-Johnson (2018) make a good argument for the importance of establishing specific skill-based mentoring strategies in formal mentoring training programs to follow the competence-based supervision model.

Types and functions of mentors. The literature describes different types of mentors. Primary mentors are those mentors who constitute the inner core of the mentoring relationship; they are supportive and influential and have an intimate bond with the protégé. Secondary mentors: these mentors are part of a larger, less intimate circle; they comprise faculty, supervisors, and peers. The “mentoring exosphere” consists of individuals who have a more distal relationship with the protégé; they are role models, friends, practicum peers, or research team partners (Johnson et al., 2014, p. 1077).

Typically, a mentor fulfills two kinds of functions: professional and psychological functions. Career-oriented functions advance a protégé’s professional success (Mertz, 2004).

This can include (a) an intentional professional role model and a sponsor (e.g., someone who supports the protégé in professional organizations or for promotions), (b) mentors with more organizational commitment who provide more role model functions (Weinberg & Lankau, 2011), (c) a coach providing advice, encouragement, feedback, and knowledge; as a protector from negative work situations and to help the protégé navigate office politics, (d) someone who promotes a protégé's professional growth by demonstrating trust in his or her abilities and encouraging him or her to undertake appropriately challenging tasks in order to increase performance and skills, and (e) someone who shares his own internal and external network thus offering professional exposure to senior decision-makers. Mentors' higher status means that they have the power to advance the protégé's career either directly or by influencing others who are in a position to do so (Haggard et al., 2011; Johnson, 2007; Mertz, 2004).

Psychological functions involve acting as a role model offering support, caring, confirmation, counseling, friendship, and acceptance, and helping the protégé feel comfortable in professional settings; mentors facilitate self-exploration, which helps the protégé's identity formation and may also offer emotional support in family matters or other areas (e.g., church or community; APA, 2006a).

Motives to mentor. Janssen, vanVuuren, and deJong (2014) describe different motives to mentor: (a) self-focused motive refers to a continuum between mentoring for external motives (i.e., salary, part of the job) and intrinsic motive (i.e., sense of enjoyment in helping protégé), (b) protégé-focused motive entails having a selfless, positive attitude toward helping the protégé, (c) relationship-focused motive aims to foster a positive relationship with the protégé with an expectation of reciprocity (i.e., the mentor expects something in return), (d) organization-focused

motive refers to helping a protégé because it benefits the team, (e) unfocused motive describes unconscious and unplanned mentoring, not focused on a certain individual or a certain need.

The mentoring process. The mentoring process includes several stages. The initiation stage is the first stage of the mentoring process. The initiation stage lasts six to 12 months during which mentors and protégés become better acquainted and set their expectations (Ensher & Murphy, 2011). The mentoring partnership is most often initiated by the protégé who is seeking an experienced, established, successful professional. For their part, mentors look for gifted individuals who are also teachable. Sometimes, a mentor will find a protégé to help him or her complete a project (e.g., conducting research or running experiments). In informal mentoring, matching occurs through professional or social interactions (APA, 2006a). In a formal mentoring relationship, the program instigates the partnership (APA, 2006a; Ensher & Murphy, 2011; Feeney & Bozeman, 2008).

The cultivation stage is when the mentoring actually happens. This stage may last from two to five years. It is the first stage of mentoring during which learning and development occur. The greatest amount of psychosocial and career support is provided during this stage (Ensher & Murphy, 2011).

The separation stage marks the end of the mentoring relationship. This could be at the end of a year, when most formal partnership end because protégés are moving on to new programs. In the case of an informal relationship, it could mean that both mentor and protégé recognize that the protégé no longer needs the same level of support and the relationship is ready to either be terminated or move to the next, more collegiate level (APA, 2006b; Ensher & Murphy, 2011; Feeney & Bozeman, 2008).

The definition stage corresponds to a phase of change, when both mentor and protégé agree that the relationship is at a turning point and can only continue on different terms by evolving into a more collegial relationship as friends or peers (APA, 2006b; Ensher & Murphy, 2011).

Mentoring relationships. Mentoring relationships can be task-focused or relationship-focused; met daily or infrequently; be short or long-term, albeit most are long-term (APA, 2006a, 2006b). They can exist in a variety of settings: in organizations (e.g., American Psychological Association (APA)); in the community; on the internet or via telephone; in dyads or groups; and within national or international networks. They are usually developed over time and are long-lasting, and are characterized by intimacy, mutuality, collegiality, collaboration, and reciprocity. Traditional mentoring occurs between individuals of different status (e.g., established professional and early career professional; professor and student). The past years have seen the rise of peer mentoring (i.e., between professional or social equals) as well as step-ahead mentoring where the mentor is one step ahead of the protégé in the organizational hierarchy or career progression (Ensher & Murphy, 2011). Wagner and du Toit (2018) contend that interdisciplinary near-peer mentoring in professional training is a good way to introduce protégés to their future role in a multidisciplinary team. Research on the relational mentoring of women doctoral students indicates that a feminist model of mentoring promotes identity transformation in both the doctoral student and the advisor and even effects changes in the culture of the doctoral program (Gammel & Rutstein-Riley, 2016). The main difference between traditional mentoring and feminist, relational mentoring is how hierarchical power is handled. This model emphasizes psychosocial support, professional collaboration, and a bi-directional relationship between mentor and protégé (Chan, Yeh, & Krumboltz, 2015).

Haggard et al. (2011) conceptualized the mentoring relationship as a psychological contract based on the costs-benefits “social exchange theory” and in which each member of the dyad feels a degree of mutual obligation. They obtained data from a self-report survey of 90 alumni of a business school. Obligations included relational obligations and transactional obligations (e.g., career/instrumental support). They found that both mentors and protégés perceived obligations for themselves and the other member of the dyad. Both members in informal mentoring relationships reported more self-relational obligation than individuals in formal relationships. Informal protégés also reported more self-transactional obligations than those in formal relationships (Haggard & Turban, 2012).

Ensher and Murphy’s (2011) Mentoring Relationship Challenges Scale found that different relational challenges occurred depending on (a) the stage of the mentoring relationship (i.e., the initial stage is linked to less challenges than later stages), (b) the type of mentor (i.e., peer mentors are less likely to present relational challenges than “traditional” or “step-ahead” mentors), (c) the mentoring context (i.e., protégés in informal mentoring relationships enjoy more career support than those in formal dyads., (d) the gender of the mentor (i.e., male mentors are more likely to provide relational challenges than female mentors), and (e) the level of satisfaction derived from the relationship by protégés (i.e., protégés in satisfying mentoring relationships reported more relational challenges and actually appreciated being tested by their mentor in relation to their career goals).

Gender differences in mentoring. Female mentors tended to spend more one-on-one time with female protégées than with male protégés. From a biological theory perspective, the fear of perceived sexual impropriety in a cross-gender relationship, may prompt the partners to limit their contact to working hours in an office setting, which can curtail the development of

friendship. However, the desire to avoid any perception of unprofessional behavior caused female protégées to use their time with their male mentor very efficiently (Weinberg & Lankau, 2011; Young, Cady, & Foxon, 2006). Female protégées with female mentors often reported receiving more psychosocial support than male protégés. This may have been due to the fact that they felt comfortable in a same-gender relationship (Kao, Rogers, Spitzmueller, Lin, & Lin, 2014; Weinberg & Lankau, 2011).

Male mentors with either male protégés or female protégées reported experiencing the same level of satisfaction with their formal program. At any rate, any negative effects of cross-gender mentoring tended to decrease over time as mentors, male and female, became more efficient and the positive effect of time was reported by all dyads (Weinberg & Lankau, 2011). Female protégées perceived mentors as role models more often than their male counterparts (Young et al., 2006). Men reported receiving more developmental support (i.e., career-related) than women, but gender roles (i.e., masculine versus feminine) rather than gender (i.e., male or female) influenced the level of developmental support received. Protégés with more androgynous roles received the most mentoring (Young et al., 2006).

Results of a survey by Kao and colleagues (2014) showed that the interaction of either professional mentoring functions or psychosocial mentoring functions with the gender composition of the mentoring dyads influenced the level of resilience experienced by the protégé. Career mentoring functions were a stronger predictor of resilience in cross-gender mentoring relationships than in same-gender dyads whereas psychosocial mentoring functions were associated with more resilience in same-gender dyads. In both cross-gender and same-gender dyads, resilience was stronger in mentoring relationships that were also supervisory relationships (O'Brien, Biga, Kessler, & Allen, 2010).

Male students training to become psychologists are a minority in a predominantly female environment yet enjoy traditional male societal power. They are described by Sbaratta, Tirpak, and Schlosser (2015) as a “privileged minority” p. 337). They contend that male-male advising relationships could provide empathic role modeling counteracting the effects of traditional strict male socialization (e.g., male advisor modeling components of male norms such as confidence and stoicism as well as emotional expressiveness).

Successful mentoring relationships and effective mentors. Effective mentoring depends primarily on the fit between mentor and protégé. Within the formal mentoring frame, the characteristics that have the biggest influence on the effectiveness of the relationship include having clear objectives, being goal-oriented, carefully selected participants to ensure the best possible match, and good training for both mentor and protégé. Effective mentoring answers the protégé’s needs for career guidance, professional identity development, as well as in ethical and moral matters (Ragins & Kram, 2007).

Good mentors are invested in their protégés’ success. They are good role models and have excellent interpersonal skills. They are friendly, understanding, approachable, patient, respectful, dedicated, compassionate; they act with integrity, and give honest feedback; they all have high professional skills, self-confidence, are organized, and model good work habits (Allen, Eby, & Lentz, 2006a; 2006b).

Importance of matching mentor and protégé. The goodness of fit between mentor and protégé is primordial in ensuring a successful mentoring relationship (APA, 2006b; Bozeman & Feeney, 2008; Lundgren, 2012). In a survey by Allen et al. (2006b), protégés and mentors who played a more active role in the matching process reported a greater degree of satisfaction in the relationship. If mentor and protégé are not well-matched, the relationship will fail (Chao, 2009).

This is the case in formal mentoring relationships where participants have little input in the selection process. Factors that could help human resources department professionals involve recruiting participants from a large pool of applicants to maximize a good fit between dyads; collecting specific information about each participant's needs and strengths and reviewing evaluations by past participants about relational dynamics within mentoring dyads (Chao, 2009). According to the social exchange theory, the mentoring relationship requires the same costs and benefits considerations as any other relationship. The costs to the mentor involve time, effort, and the risks versus the benefits of being associated with the protégé; the benefits for the mentor include career revitalization and the opportunity to gain new perspectives from the protégé. The costs to the protégé are those of time and effort and the risk of offending an influential mentor; the benefits are increased visibility and exposure thanks to being associated with the mentor, access to his network, and receiving advice (Young et al., 2006).

Bozeman and Feeney (2008) proposed a "Goodness of Fit" model outlining the key elements of an effective match between mentor and protégé. This model conceptualizes mentoring from a social exchange perspective based on perceived acceptable fit between the mentor and protégé's preferences, endowments, and knowledge shared. The mentor's endowments are his knowledge, experience, and psychosocial skills. What the protégé offers are his or her knowledge and experience, communication skills, and learning capacity. Preferences are the value the mentor puts on communicating his knowledge and experience and the value the protégé puts on receiving particular types of knowledge. Knowledge refers to the content of the social exchange (e.g., knowledge of office politics). The best fit occurs when the mentor's knowledge meets the protégé's desires and the mentor values transmitting it, and when the protégé is capable of receiving this knowledge, understanding, and assimilating it.

Another way of looking at matching is through the similarity-attraction paradigm. People are drawn to individuals who are similar to them. Young et al. (2006) found that in mentoring relationships, similarities in career interests and goals, work habits, and communication skills are factors in the similarity-attraction paradigm whereas gender and demographics are not. However, a study conducted by Blake-Beard, Bayne, Crosby, and Muller (2011) highlighted that many undergraduate and graduate students and post-doctoral fellows, especially women and students of color, deemed matching by gender and/or race to matter. Students in a same race or same gender mentoring dyad reported receiving more support and reported more commitment to their organization and profession when they perceived similarities between themselves and their mentor, albeit this did not translate into better academic outcomes (Blake-Beard et al., 2011; Mitchell, Eby, & Ragins, 2015). Hu, Baranik, and Wu (2014) argue that protégés' positive core self-evaluation (CSE) and mentor s' altruism may moderate the effect of mentor-protégé dissimilarity.

Benefits of mentoring. The following discussion on benefits of mentoring relies on both empirical and theoretical articles, and therefore, it is important to note that many of the benefits identified in theoretical articles are theorized or hypothesized benefits of mentoring.

Career success is often associated with two career experiences: working hard and receiving mentorship (Ng, Eby, Sorensen, & Feldman, 2005). Mentoring is a reciprocal relationship that usually benefits both participants (Clark et al., 2000; Kalpazidou Schmidt & Thidemann Faber, 2016). Protégés and mentors in informal mentoring relationships reported more objective (i.e., career trajectory, compensation, promotions) and psychosocial benefits (i.e., satisfaction with career) than individuals engaged in formal mentoring (Ragins & Kram, 2007). Studies of formal and informal mentoring in business organizations, where it is common

practice, have found it to be a predictor of objective benefits or protégés (i.e., increased networking opportunities, career success, and higher income) and subjective rewards for both mentors (i.e., enhanced career satisfaction and prestige) and protégés (i.e., greater satisfaction with their training program and career choice (Feeney & Bozeman, 2008; Lee & del Carmen Montiel, 2010; Ng et al., 2005).

Benefits specific to mentors. While mentoring is perceived as beneficial to the protégé, recent research is acknowledging that mentoring is reciprocal and mentors also benefit from the mentoring relationship. After conducting a meta-analysis, Ghosh and Reio Jr. (2013) uncovered that mentors reported more satisfaction than non-mentors in terms of career satisfaction and success, commitment to their organization, “turnover intent,” and performance. Mentors providing career help had more successful careers; psychosocial mentoring functions lead to more organizational commitment; and role modeling promoted better job performance (Ghosh & Reio jr., 2013). Bozionelos (2004) found the amount of mentoring functions provided by mentors to be positively correlated with the amount of both objective and subjective career success they enjoyed. Additionally, Allen et al. (2006) conducted a survey in a health care setting to examine the relationship between being a mentor and career success (e.g., salary, promotions, and job satisfaction) were positively correlated to being a mentor. Job satisfaction was also linked to mentoring in a cross-sectional study targeting health professionals in a county mental health agency. Practitioners who perceived themselves in a mentoring relationship were more likely to express satisfaction with their work and enjoy more prestige if their protégés were successful. The mentoring functions most predictive of job satisfaction were sponsoring, assigning challenging tasks, and demonstrating trust (Lee & del Carmen Montiel, 2011). Kalpazidou Schmidt and Thidemann Faber (2016) used a grounded theory approach to examine

the ex-ante and ex-post evaluation of a pilot mentoring program for early career female researchers. They too concluded that mentoring relationships benefited both protégés and mentors, which for the mentors translated to career success, prestige, and personal satisfaction. In a study evaluating the factors conducive to mentor satisfaction within a formal mentoring relationship, Martin and Sifers (2012) discovered that perceived knowledge and confidence lead to greater mentor satisfaction. They concluded that agencies should provide the mentors with initial training and ongoing support to foster self-confidence and satisfaction with the mentoring process. Other research into formal mentoring examined how the mentoring program design (i.e., training, voluntary participation, and input with protégé matching) and institution support affected the mentor's perception of costs and benefits. Greater input to the matching process and management support resulted in greater mentor satisfaction (Parise & Forret, 2008). Baranik, Roling, and Eby (2010) determined that perceived management support related to sponsorship, exposure, visibility, and role modeling were particularly likely to foster mentor's job satisfaction and organizational commitment.

Benefits specific to protégés. People who have been mentored enjoy more career and personal benefits than those who have not. In particular, graduate students who are mentored during their training report more direct training, support, encouragement, acceptance, role modeling, and sponsorship (Allen, Eby, Poteet, Lentz, & Lima, 2004; Allen et al., 2006; Eby, Allen, Evans, Ng, & Dubois, 2008; Johnson, 2007). Other benefits appreciated by the mentored students were higher achievement, enjoying a long-lasting friendship with their mentor, benefiting from emotional and career support, and having a safe place to self-explore and find their identity (Eby et al., 2008; Johnson, 2007; Johnson et al., 2014). Overall, research has found that 91% of protégés perceived their mentoring relationship as positive (Clark, Harden, &

Johnson, 2000). Protégés' benefits are evidenced by objective measures such as increased networking opportunities, higher income, and promotions (Feney & Bozeman, 2008, Lee & del Carmen Montiel, 2011; Ng et al., 2005; Ragins & Kram, 2007). Subjective measures include protégés declaring themselves significantly more satisfied with their graduate program and career choice (Clark et al., 2000; Ng et al., 2005). Ragins and Kram (2007) found that having several mentors increased the protégés' social capital (e.g., networking) more than having a single mentor. They also looked at various other beneficial paths: the Human Capital path in which mentoring functions (e.g., providing challenging assignments, coaching, and role modeling) promote the acquisition of career-related knowledge and skills; the Movement Capital path, in which information from the mentor enhances the protégé's access to intra- and inter-organizational opportunities; the Path-Goal Clarity path, in which the mentor can increase the protégé's sense of career efficacy; the Values Clarity path, in which the mentor's acceptance, confirmation, counseling, guidance, feedback, and friendship help the protégé make career and life choices (Ragins & Kram, 2007).

Tonitandrel, Avery and Phillips (2007) examined the effect of mentor success, relationship duration, and the amount of mentoring received on the protégés' leadership performance after the mentorship relationship ended. They found that receiving more mentoring functions was beneficial for the protégés both professionally and personally if the mentor was successful and hurt the protégés if the mentor was not successful. The effect on protégés' future performance was moderated by the duration of the relationship a successful mentor led to a more successful future performance from protégés whereas longer relationships with unsuccessful mentors led to protégés' less successful performance post mentoring relationship.

Graduate students and pre-licensure early career professionals (ECPs). Graduate students and pre-licensure professionals can greatly benefit from mentoring. Graduate students compete for internship placement in a field becoming more and more overcrowded. ECPs are at the pre-licensure stage or have received their doctoral degree within the last seven years. ECPs represent about one quarter of the American Psychological Association (APA) membership, albeit 75% of them do not belong to any division (Green & Hawley, 2009). Fouad (2003) described the needs of graduate students and ECPs at different points of their professional journey. Advanced interns, postdoctoral fellows, and pre-licensure ECPs are at the early establishment phase of their career. They continue to work on establishing congruency between their inner world and the outside world. Their development tasks include stabilizing their job and advancing their self-concept. ECPs rarely have mentors and their development is inner-focused (Fouad, 2003).

One of the major developmental tasks of students and ECPs is developing a professional identity. The concept of professional identity involves the integration of personal (e.g., values, morals, perceptions) and professional (e.g., roles, ethics, behaviors) characteristics in the context of a professional community. Seven categories of experiences foster professional identity: (a) providing services to clients; (b) the positive impact of training; (c) giving and receiving supervision; (d) having role models and mentors; (e) harmony between the personal and professional self; (f) induction into the professional community; and (g) an emerging sense of expertise (Gibson, Dollarhide, & Moss, 2010).

Today's ECPs are more likely to be juggling multiple roles than earlier generations of ECPs. Many ECPs start their career with low income and a significant amount of student debt. ECPs from PsyD programs incur the highest amount of student debt, which they often start

repaying while in low-paying postdoctoral fellowships required by some states' pre-licensure. Some ECPs are simultaneously catching up with developmental milestones put on hold during graduate school (e.g., getting married, having children) or taking care of elderly parents, and are having difficulty balancing personal and professional commitments. The American Psychological Association Presidential Initiative on Work and Families (APA, 2004) reported that women, who are the majority in the field, still take on most of the responsibilities of childcare and eldercare. Additionally, ECPs may find themselves in multidisciplinary professional settings where they feel isolated as they are no longer receiving structured support from clinical supervision or from their cohort. ECPs and graduate students are therefore most likely to benefit from a mentoring relationship in which their mentor models career skills (e.g., networking) and balancing personal and professional life (Chao, 2009; Green & Hawley, 2009; Lee et al., 2009; Williams-Nickelson, 2009).

Minorities, women, individuals with disabilities, and LGBTQ individuals. Park-Saltzman, Wada, and Mogani (2012) and Wedding, McCartney, and Currey (2009) emphasize the importance of “culturally-sensitive” mentoring for Asian international students. In effect, the same idea applies to other groups. There is a discrepancy between the growing number of minority groups in the United States population and the shortage of minority researchers in the mental health field (Jeste, Twamley, Cardenas, Lebowitz, & Reynolds, 2009). In fact, minorities, women, individuals with disabilities, and individuals from the LGBTQ community are underrepresented in high positions in psychology (e.g., tenure-track) and report receiving less mentoring than other groups and require a tailored approach (Campbell & Erikson Cornish, 2018; Chan, 2008; Chan et al., 2015; Yager, Waitzkin, Parker, & Duran, 2007). Of course, the above identification can occur in any combination (e.g., being an African American woman with

disabilities who identifies as bi-sexual), which makes finding a mentor more difficult and even more primordial. Women, who are the majority in psychology, still face a glass ceiling with the same barriers as in other fields (e.g., lack of access to decision makers who are often male) (Williams-Nickelson, 2009). Minority professors are overwhelmed by requests to mentor (Alvarez et al., 2009). This creates a vicious circle leading to low access to mentoring for many individuals who would most benefit from it due to stereotypes and préjugés (Chan, Yeh, & Krumboltz, 2015; Daughty, Gibson, & Abels, 2009; Henderson Daniel, 2009; Russell & Horne, 2009; Williams-Nickelson, 2009). Chan et al. (2015) proposed a grounded theory of multicultural mentoring that includes five important themes: “(a) career support tailored for ethnic minorities, (b) relationality between mentor and protégé, (c) significance of contexts, (d) interconnections across contexts, and (e) multidirectionality of interactions between contexts” (p. 592). Chan et al. (2015) further emphasized the need for mentors’ multicultural competence entailing being sensitive to their protégés as well as their own culture-shaped biases and perspectives and approaching the mentoring relationship with humility. A survey conducted with 290 doctoral students from scientist-practitioner and practitioner-scholar programs showed mentors to be valued by all participants and the two mentoring functions deemed most helpful to be pragmatic support (i.e., navigating one’s graduate program and finding a job) and emotional support (Mangione, Borden, Nadkarni, Evarts, & Hyde, 2018). The graduate student population has become increasingly diversified over the last few years and there has been progress in addressing racial, ethnic, and gender diversity. As health service psychology requirements for accreditation more and more include the integration of research and practice, students and early career psychologists will reach out to multiple mentors in different settings to support them in

managing a variety of roles (i.e., dissertation chair, research supervisor, clinical supervisor, peer mentor, etc.; Mangione et al., 2018).

Several programs promote the career advancement of minority members. Exemplars are the Minority Research Infrastructure Support Program (MRISP) providing individual and group learning for junior minority scholars at the University of New Mexico; the Mentorship and Education Program (MEP) offering intensive training institutes and intensive training. Both programs were highly successful, but there are not enough similar programs to satisfy the demand for mentoring opportunities throughout the country (Henderson Daniel, 2009; Waitzkin, Yager, Parker, & Duran, 2006; Yager et al., 2007).

Students and professionals with disabilities are also underrepresented in educational and vocational programs and therefore are unlikely to find a mentor with disabilities. While it is not essential, having a mentor with disabilities who can model coping techniques and achieving academic and career goals and share information and resources, can be particularly empowering. In contrast, mentoring programs coordinators may not always be aware of the logistical challenges posed by disabilities (e.g., transportation issues, written materials not available in different formats). Nonetheless, individuals with disabilities who are receiving mentoring report valuing mentoring relationships that focus on their capabilities and foster a positive sense of identity (Daughty, Gibson, & Abel, 2009).

LGBTQ students not only face the same educational challenges as heterosexual students, they also live with the stereotypes and stigma that are still, subtly or overtly attached to their sexual orientation. If they identify with a minority ethnic group, their challenges are compounded. They have, therefore, different mentoring needs than heterosexual students. Mentors, LGBTQ or heterosexual, need to understand and be willing to discuss these needs, and

be aware that protégés may be at different stages of the coming out process, a major life event likely to affect not only personal but also professional and academic life (Russel & Horne, 2009).

Obstacles and potential costs of mentoring. Problems happen in any relationship. Gormley (2008) found that the factors most often affecting dysfunctional mentoring relationships were the protégés' misperceptions about their mentors and vice versa including mentors' problems the protégés were not aware of; protégés' mental issues; conflict; and the professional culture within which the mentoring relationship took place. Eby and McManus (2004) researched from the mentors' perspective the role of the protégés in difficult mentoring relationships. Seventy percent of the 161 mentors who participated in the study reported one or more negative mentoring experiences. Examples of negative experiences pertained to "exploitative (4%)" and "ego-centric (3%)" protégé behavior, "malevolent deception (4.7%)," "sabotage (2%)," and "harassment (1%)" (Eby & McManus, 200). The most reported relational issues included the protégé's below expectations performance and unwillingness to learn. Gormley (2008) described the negative consequences of dysfunctional relationships as similar to those experienced in domestic violence situations (i.e., stress, anxiety, depression, feeling inadequate, and fearfulness). Negative vocational consequences involved a lowered sense of competency, less job satisfaction, reduced job performance, and less interest in the mentoring relationship. A study conducted by Eby, Butts, Durley, and Ragins (2009) examined how "good" versus "bad" mentoring experiences influenced the subjective perception of the mentoring relationship from mentors and protégés' perspective. They concluded that "bad" is stronger than "good" (p. 89) for protégés' outcomes whereas bad experiences were linked to mixed mentors' outcomes. So, why do people remain in mentoring relationships after a negative experience? Burk and Eby (2010) examined the factors moderating the negative experience and

the intention to end the relationship from the protégé's perspective. They found that the perception of few mentoring options and fear of retaliation predicted that protégés stayed in a dysfunctional relationship.

According to Ragins and Scandura (1999), individuals with previous mentoring experience were likely to the mentoring process while individuals who had never mentored were likely to focus on the drawbacks of the partnership. Other challenges to mentoring may involve a mentor's perception that a protégé could become too dependent and demand too much time, ask for favors, or expect to be involved in the mentor's work. Another obstacle to seeking mentoring could stem from students and junior professionals feeling intimidated to contact more senior members in their field (Ragins & Kram, 2007; Ragins & Scandura, 1999).

Ethical considerations. There are ethical concerns to be vigilant about in mentoring relationships, including abuse of power, dual relationships entailing boundary crossing, and incompetent mentors (Rosenberg & Heimberg, 2009; Schlosser & Foley, 2008). The mentoring relationship is power-based and hierarchical (e.g., rank, status; Johnson, 2002, 2008). This power imbalance is exacerbated when gender, ethnicity, sexual orientation, and disability are also involved (e.g., paternalistic behaviors on the part of the mentor that do not promote protégés' autonomy versus supported self-direction; Manathunga, 2007; McDonald & Hite, 2005). Protégés often rely on mentors for recommendation letters, or to open the door to career opportunities while having limited choices for mentoring relationships. Examples of misuse of power would be a mentor taking credit for a protégé's work (e.g., APA Ethics Code 8.12: Publication Credit) or delaying a dissertation defense in the interest of the personal research project. Dual relationships (e.g., APA Ethics Code 3.05: Multiple Relationships) can be romantic (e.g., an affair between a professor or a clinical supervisor and a student) or non-

romantic (e.g., babysitting a mentor's children; Rosenberg & Heimberg, 2009). Conflict of interest due to a dual relationship may also occur when professors or clinical supervisors are asked for a letter of recommendation for students with whom they have close mentoring relationship, thus filling the dual roles of advocate and gatekeeper for the profession.

Managing these competing roles of advocacy, mutuality, and evaluation requires careful training for the mentor role including strong boundaries assessment and maintenance, the ability to provide honest gatekeeping feedback, and encouraging protégés to seek several mentors (Johnson, 2008). Additionally, some mentors are incompetent (e.g., mentors who are unavailable to provide mentoring functions) or even harmful (e.g., punitive, hypercritical mentors). Furthermore, any serious breach of ethics by the mentor or protégé, or underperformance by the protégé could result in damage to the other partner's reputation by association (Rosenberg & Heimberg, 2009).

Ethical issues can also arise when senior graduate students mentor less advanced students. Graduate students or peer mentors are seen as more accessible and more approachable than faculty members by their protégés and are therefore in a good position to meet the needs of minority students who have limited access to faculty mentors (Brown 2016; Brown & Sheerin, 2018). However, they are still developing their own professional identity and do not always have the appropriate competence to teach clinical skills or the experience to guide someone through a complicated ethical issue. Additionally, peer mentors may enter in dual relationships (e.g., romantic relationship) that could be detrimental to the mentorship relationship. Peer mentors and their protégés may also experience a conflict of interest if they happen to compete for the same position. Equally important is the fact that information exchanged between a peer mentor and protégé is not classified as confidential and the protégé should be appraised of the

possibility that a conversation will be shared with the peer mentor's supervisor (Brown, 2016; Brown & Sheerin, 2018).

There are particular issues one needs to be mindful of when mentoring minority students who may not have been previously exposed to the Eurocentric college or graduate school culture. These individuals may feel alienated from their predominantly male Caucasian professors and harbor some basic distrust of educational institutions due to historical or personal abuses. Mentors should self-reflect in order to become aware of their own cultural assumptions toward students of color, women, older individuals, or individuals from a different sexual orientation (Alvarez et al., 2009). Culture replication occurs when minority protégés are assimilated into the dominant culture at the expense of their own cultural identity. In interviewing Australian supervisors, Mathunga (2007) found that many of them adopted an unconscious paternalistic attitude when talking about helping international students fit into the Australian culture as well as into their specific research department's culture. Finally, while some researchers such as Young et al. (2006) contend that there is no difference between men and women's access to mentoring, others differ in opinion, citing the prevalence of high-status Caucasian males within organizations and their tendency to choose protégés similar to them in informal relationships (McDonald & Hite, 2005).

Weil (2001) proposed mentoring as an honorific function that constitutes a moral obligation. This may be especially true for academic institutions whose mission statement is to promote transformative growth. Based on the reviewed literature, mentoring is indeed described as being transformational and one of the most powerful experiences of the training cycle. There is therefore a need to create a culture of mentoring and this can be achieved by developing

resources and rewards demonstrating the valued status of mentorship and reinforcing the time and efforts investments of both mentors and protégés (Kaslow & Mascaró, 2007).

Prevalence of mentorship in mental health training. Despite the documented benefits of mentoring for both mentors and protégés, mentoring relationships are not to be taken for granted. Johnson, Koch, Fallow, and Huwe (2000) conducted a cross-sectional study that included 752 psychology doctoral students (60% PhD students in clinical psychology and 40% PhD students in experimental psychology). Only 60% of respondents reported having a mentor in graduate school. Of these, clinical PhD students reported less mentoring (53%) than experimental PhD students enrolled in research-oriented university-based programs (69%). Students cited the unavailability and lack of time of faculty members, their program's lack of interest in mentoring, the absence of well-matched mentors, and not thinking they needed a mentor as reasons for not having a mentor (APA, 2006a, 2006b; Johnson, 2000, 2002).

Additionally, in a survey study of 787 doctoral students (69% PhD students, 31% PsyD students; 70% women, 30% men), PsyD students reported being mentored less often than PhD students. Several reasons were suggested for the lower rates of mentoring in PsyD programs: (a) program diffusion (i.e., PsyD programs usually send their students to external sites for practica and internship, which results in less opportunities to interact with faculty and less opportunity to form a relationship in time-limited practica or internship); (b) less student-faculty collaboration in research activities; (c) larger cohorts leading to higher student-faculty ratio; and (d) relatively shorter time requirement for degree completion (Clark, Harden, & Johnson, 2000). However, when 115 training directors from APA-accredited clinical psychology doctoral programs answered a survey on mentoring, they estimated that 82% of doctoral students had a mentor (Dickinson & Johnson, 2000; Johnson et al., 2000). A majority of respondents (85% of the

training directors who answered this item) felt that mentoring was important and stated that their program supported mentoring for all interested participants. Results from 83 training directors who answered how their program rewarded mentors show that although they endorsed the value of mentoring, few reported providing tangible rewards to mentors, citing intrinsic rewards instead.

A more recent study by Mangione et al. (2018) found that 79% of students from scientist-practitioner and practitioner-scholar clinical psychology programs reported having a mentor in graduate school, which is an improvement on earlier statistics. There is still a difference between PhD and PsyD students, with PhD students reporting more mentoring relationships, but it is smaller. However, this change may be accounted for by the students using their own definition of mentoring and not always distinguishing between supervisory and mentoring activities. Block-Lerner, McClure, Gardner, and Wolanin (2012) studied the challenges to mentoring encountered by PsyD students. They suggested the creation of Practitioner Research Vertical Teams (PRVTs). In this model, teams of faculty members are formed based on research and population of interest and theoretical approach. Students choose a team at the start of their training and remain with that team until graduation. Preliminary survey results found that students engaged in PRVT teams are satisfied with their training experience and report low intention to leave their program.

Mentoring is remarkable in that it encompasses both professional and psychosocial support for the protégé. However, since the mentoring process is not well incorporated into the training and education of clinical or counseling doctoral students and certainly not systematic, more so in PsyD than PhD programs (Clark et al., 2000; Mangione et al., 2018), students must be self-motivated in seeking a mentor. Consequently, many psychology students undertake their

training and professional development without the dedicated mentoring support of a seasoned practitioner. This is why this critical review of the literature on mentoring focuses on the training cycle of clinical and counseling students in view of highlighting the important role of mentoring and need for further research (Allen et al., 2004; Lee & del Carmen Montiel, 2020, 2011; Mangione et al., 2018; Ragins & Kram, 2007).

Chapter II: Method

Purpose and Scope of Review

This critical analysis of the literature is designed to give a snapshot view of the state of mentoring in the training and career development of graduate students and postdoctoral fellows in clinical and counseling psychology. It aims to call attention to the fact that mentoring is currently under-used in practice and in terms of research. This review will highlight the importance of integrating mentoring early in the training of clinicians. This critical review of the literature will then discuss the clinical implications of incorporating mentoring into the training and early career of clinicians (e.g., from professional and developmental perspectives) and provide suggestions to promote a mentoring culture in clinical and counseling psychology training.

Self of the Researcher/Literature Analyst

As a student in a clinical doctoral program, I started my training with a medium size, friendly, culturally diverse yet very cohesive and cooperative 26 student cohort in a department with supportive faculty, clinical supervisors, and administrative staff. The consensus amongst students was that we were the lucky ones to have been accepted into this competitive and well-respected program. We were prepared to work hard and help each other succeed. What dawned on me as early as the first semester was that, in effect, we could only turn to each other when feeling vulnerable or uncertain about how to navigate the program. Of course, professors had an open-door policy and were happy to help with didactic questions and clinical supervisors gave us full support and guidance with client-related issues at the university community clinics. All of them, however, either had or were likely to have in the future a position that entailed a power differential and evaluative role. I conceptualized our training as one giant, continuous interview.

Personal insecurities and problems were discussed during carpooling commutes to and from school. I also turned hopefully to my assigned peer supervisor for support; however, this relationship also involved a degree of formality, something I fully understood when I became a peer supervisor myself later in the program.

Students were always encouraged to join and become active in professional associations. We were also offered a course on professional development with guest speakers on various career options during the semester before internship. Many of my peers wished this course had been included earlier in the program as it would have clarified career paths and strategies. Looking back, this was also a place in my training where I may have benefited from engaging with a mentor in the field to cultivate a mutually satisfying mentoring relationship unencumbered by conflicts of interest and thus free to offer us both personal and professional support. However, I progressed without a mentor.

Since beginning my training, I have noticed an increasing effort from professional associations at the national, state, and county level to create networking opportunities specifically intended to introduce graduate students and early career professionals to potential mentors. Nonetheless, students and early career professionals already engaged in hectic studies, work, and life commitments may miss these opportunities. I acknowledge that I am passionate about introducing mentoring opportunities early in the training process and I have paid particular attention to counter my own bias by using a rigorous and systematic process in the selection and analysis of the literature presented.

Researcher's Bias and Issues of Validity

While every effort was made to achieve as much objectivity as possible, researcher's bias, involving decisions based on the personal values of a single investigator, was unavoidable.

With this in mind, the researcher reviewed the criteria for validity and reliability in qualitative research. Validity depends on the “appropriateness of the tools, processes, and data” (Leung, 2015, p. 325) i.e., the research questions(s) must be appropriate for the research goal(s), the method has to adequately answer the research question(s), and the research design has to fit the methodology. The aims and objectives of this study were to provide a review of the literature on mentoring in clinical and counseling psychology training including benefits, risks/ethical issues, multicultural factors, and suggestions to promote a mentoring culture and for future research. These goals were a good match for the research questions: “What is the state of mentoring in psychology training today and what can be done to improve it?” A qualitative approach consisting of reviewing the current literature on mentoring in psychology training aligned with the research questions.

The research design, which consisted of detailed reading and re-reading of the selected documents, developing a summary table for each document (see Sample Empirical Studies Literature Summary Table 1 and Appendix B: Empirical Studies Summary Tables) and using a text analysis software, QDA Miner Lite, in order to further identify and organize themes (see Sample Coding Frequency Table 2 and Appendix C: Coding Frequency Table) is appropriate for a literature review. Reliability in qualitative research depends on “consistency” i.e., while the same level of reliability obtained in quantitative research cannot be expected in qualitative research, results of other researchers should be “consistently similar” (Leung, 2015, p. 327). In this study, consistency was sought by conducting systematic comprehensive data searches to identify all documents meeting inclusion criteria (see Sample Databases Search Results Table 3 and Appendix E: Databases Search Results), by reading and re-reading the selected documents, and by discussing and checking the identified themes with the study chairperson and keeping a

detailed record of steps followed in developing these themes (see Appendix D: Process Notes; Leung, 2015). Additionally, in accordance with Noble and Smith's (2015) "truth value" concept, which involves uncovering biases and "assumptions," (p.34) the researcher reflected on her own values regarding mentoring in psychology training and acknowledges her positive bias on the desirability and benefits of mentoring. The "Self of the Researcher/ Literature Analyst" section above describes how passionate she is about mentoring and its benefits, and this discussion describes efforts made to decrease and minimize researcher's bias.

Analysis Procedure

The methodology employed in this review and critical analysis of the literature on mentoring in doctoral level clinical and counseling psychology training included several stages (see Appendix A: Literature Analysis Flow Chart) and integrated qualitative, thematic analysis (e.g., Braun & Clarke, 2006) of the documents reviewed. Stage I included the application of inclusion and exclusion criteria, Stage II described the steps involved in the collection of the literature and other resources, Stage III involved a thematic approach to organizing and summarizing the relevant literature, Stage IV included further critical analysis comparing codes within and between documents, Stage V described the themes and results of the analysis. Each stage is described in the sections to follow.

Stage I: Inclusion and exclusion criteria. In order to confine the literature search to the most relevant publications and documents, inclusion and exclusion criteria were developed:

1. Analyzed literature must directly address mentoring in clinical and/or counseling psychology training, and only documents pertaining to mentoring in the training cycle of psychologists were included in the final analysis.
2. Mentoring may be defined or described as formal or informal mentoring

3. Due to the scarcity of research, the time span for the reviewed empirical documents pertaining specifically to mentoring in clinical and counseling psychology training covered the years 2007 to 2019. Every effort was made to confine the majority of all reviewed publications to the last ten years.
4. Empirical studies, theoretical papers, professional journal articles, and book chapters were included.
5. Due to the scarcity of research on mentoring in psychology, publications on mentoring in higher education and mentoring in general without time constraint were included in view of providing background information of the mentoring process. Every effort was made to include mostly articles pertaining to the training cycle of clinical or counseling psychologists within the 2007-2019 time range.

Stage II: Collection of relevant literature and resources. This critical analysis of mentoring in psychology doctoral training literature included systematic searches of multiple databases including: PsycINFO, PsycARTICLES, and Google Scholar. The database searches occurred in three phases and databases search results were recorded to include the number of sources yielded from each search and additional tables to further compare and summarize the search results were developed.

Phase one focused on mentoring in higher education and business and on the mentoring process in general. Keywords used in this phase included combinations of the following: higher education, mentoring, mentor, protégé(s), mentee, formal mentoring, informal mentoring, mentoring relationships, professional development, career development, mentoring benefits, mentoring risks, and mentor-protégé/ mentor-mentee matching. Documents identified in this

phase were included in the background section of this dissertation to provide a comprehensive understanding of the mentoring process. These documents were not part of the critical analysis and discussion.

Phase two focused on documents relevant to mentoring during the training cycle of psychologists. These documents were examined in the critical analysis and discussion. Keywords search included the following key words and combinations of key words: *mentoring, mentor, gender, minorities, disabilities, sexual orientation or LGBTQ, culture, multicultural relationships, cultural competence or cultural awareness, multicultural factors, cultural humility, ethnicity or race, mentoring benefits, mentoring risks, mentor-protégé or mentor-mentee, training, mentoring or mentorship or mentor program, clinical training, psychology* was described separately. The PsycINFO and PsycARTICLES searches entailed systematically using the same key terms in similar sequences (e.g., search #1 on PsycINFO and PsycARTICLES started with the term *mentoring*, then *psychology* and *training* were added. Google searches did not yield additional articles.

In phase three, additional documents were identified through a review of each publication's reference section. The overall yield of these searches was reported in the analysis.

A preliminary literature search yielded 9,902 publications (i.e., articles and book chapters) pertaining to the mentoring process in general and in higher education, 1,947 publications on mentoring in psychology, and 612 publications on mentoring in psychology training.

Stage III: Organization and summarization of the literature. All documents were read, reviewed and summarized, and an initial review of the content of each document was summarized and organized in individual tables/ tracking grids (see Appendix B: Empirical Studies Summary Tables and a sample below).

Table 1

Sample Empirical Study Summary

Citation

Chi-Yin Chung, R., Bemak, F., & Talleyrand, R. (2007). Mentoring within the field of counseling: preliminary study of multicultural perspectives. *International Journal of Advanced Counseling*, 29, 21-32. Doi: 10.1177/s10447-006-9025-2

Research design

Semi-structured interviews using 12-item questionnaire followed by 90-minute in-depth interviews about participants' perception of mentoring and mentoring relationships

Total N

N=20 graduate students in a Master's degree counseling education program; 12 females, eight males; nine African Americans, all born in the U.S.A; four Asian Americans, one born in the U.S.A., three born in Korea; seven Latina/o Americans, two born in the U.S.A., five born in Spanish speaking countries (e.g., Columbia, El Salvador)

Selection criteria

Purposive sampling: emails sent to 60 students of color in counseling program (30% response rate)

Research question(s)/purpose

Explore the mentees' perspective about the influence of culture on their mentoring relationship

Mentoring definition

Mentoring entails support, teaching, protecting, guiding, nurturing, supervising, and advising

Results/ Key findings

Cultural mentoring themes: (a) African Americans : trust, comfort, honesty, respect, guide/ helper/leader, strong emphasis on the extended family, personal growth, and spirituality; (b) Latina/o Americans: comfort, respect, teacher/student/guide, strong emphasis on family and interpersonal relationships; (c) Asian Americans: trust/Comfort, respect/ age differences in the relationship, teacher/ student/Guide, long-term relationships, and personal growth; and (d) common themes across groups: trust/comfort/honesty, respect, and teacher/ student/guide

Conclusions and implications

Racial and ethnic background of interviewed mentees influenced their perception of and expectations for mentoring

Recommendations for effective multicultural mentoring: (a) understand the influence of culture, race, ethnicity, the levels of acculturation, and racial/ ethnic identity in a cross-cultural relationship; (b) mentoring should provide a safe place for the mentees; and (c) mentors should understand the cultural socialization and acculturation processes and the mentees' conceptualization of mentoring

Major theme(s)

Importance for the mentors to be culturally aware/ sensitive and competent

All individual tables included similar headings: (a) Citation; ((b) Document type, (e.g., empirical or theoretical); (c) Research design; (d) Sample description; (e) Research question(s)/ purpose; (f) Definition of mentoring; (g) Results/ summary of key findings, (h) conclusions/ implications; and (i) Major theme(s). The documents were ready to be uploaded into a qualitative text analysis software program, QDA Miner Lite, to facilitate the analysis process.

Stage IV: Critical analysis and synthesis. Upon identifying, reading, summarizing (on a table/ grid) and organizing the relevant literature into QDA Miner Lite, the investigator looked for themes within the articles in order to develop categories (i.e., main themes) and codes (i.e., sub-themes) for further analysis (Braun & Clarke, 2006). Detailed process notes were recorded to show how themes were refined (see Appendix D: Process Notes; Noble & Smith, 2015). The studies were finally uploaded into a text analysis software, QDA Miner Lite, which was used to further define themes through reading and re-reading the documents. This software was also used to keep track of the frequency with which the themes appeared across all the studies (see Appendix C: Coding Frequency Table and example below).

Table 2

Sample Coding Frequency

Category	Code	Sub-code 1	Sub-code 2	Cases
Benefits of Mentoring	Advocacy			1
	Bidirectional benefits			6
	Career benefits			5
	Importance/positive impact of mentoring			13

(continued)

Category	Code	Sub-code 1	Sub-code 2	Cases
	Psychosocial Benefits			4
	For field at large			5
	For institutions/ Universities	General benefits		1
		Recruitment/ retention of minority trainees		4
		Students' retention/ satisfaction (all students)		2
	For mentors	Career productivity		2
		Career satisfaction		3

As the investigator re-read and reviewed multiple times each document, the initial categories and codes were refined and defined, highlighting emerging patterns and categories (Braun & Clarke, 2006). For example, “cultural awareness” emerged as a major themes or category subsequently divided into sub-themes or codes such as “challenges for students of color/minorities.” If warranted, more than one code was linked to a particular word, sentence, or paragraph. For example, the same paragraph pertaining to the importance of using mentoring approaches specific to minorities was linked to the code “mentor’s multicultural education/awareness/humility” and the code “understand the influence of culture, race, ethnicity, gender, and sexual orientation.” When a new code emerged, the investigator, in collaboration with the faculty advisor, integrated the code into the analysis, examining it against the other documents. Codes were combined and connections between codes described. For example, under the umbrella of “benefits for protégés,” “career success,” “promotions,” and “higher salary” were combined into one code. Additionally, the identified codes were included in an expanded summary table (see Appendix C: Coding Frequency Table). For example, the code “awareness of protégé’s contexts” (i.e., family, community, culture, gender, etc.) appeared in six articles. Tables assisted in organizing the information and identifying the emerging and

overarching themes related to mentoring in doctoral level clinical training (Braun & Clarke, 2006). For example, a recurring theme was the importance of multicultural education for mentors. Themes were further defined and applied to all documents. The final themes included cultural awareness, mentoring functions, benefits of mentoring, mentoring relationships, matching, guidelines for mentors and institutions or universities, evidence-based mentoring, risks/challenges/ethical issues, what students want from mentorship, predicting mentorship satisfaction, prevalence/kind of mentoring, the mentoring process, benchmark for evaluating success/redefinition/ending relationship, and mentoring support.

Overall, patterns and themes emerged from the codes, and the themes were further described and refined and presented in the analysis findings (Braun & Clarke, 2006). The researcher kept track of the above process (see Appendix D: Process Notes).

Stage V: Findings. Continuing with a thematic approach (Braun & Clarke, 2006), a comparison of all documents enabled a summarization of findings across codes. This process enabled the investigator to observe how many articles mentioned a certain theme. The themes directly addressed mentoring in doctoral level clinical and counseling psychology training. In addition, as a way to check for accuracy, the investigator re-reviewed several documents to ensure they provided an accurate representation of the themes (Braun & Clarke, 2006).

Chapter III: Results

This chapter offers a description of the review findings pertaining to mentoring during the training cycle of clinical and counseling psychology students that were included in the analysis. It is comprised of three sections. Part One identifies the documents, including how database searches were conducted, the key terms used, and the number of documents selected for the critical analysis. Part Two describes the nature of these documents, including their research design, sample sizes, and average ages of the participants. Part Three presents major themes that will then be examined in detail.

Document Selection

Phase One of the database searches identified 65 empirical and theoretical documents meeting the criteria for inclusion. Thirty-six systematic searches were conducted via PsycINFO and PsycARTICLES using key words and combinations of key words including *mentoring*, *mentor*, *gender*, *minorities*, *disabilities*, *sexual orientation* or *LGBTQ*, *culture*, *multicultural competence* or *cultural awareness*, *multicultural factors*, *cultural humility*, *ethnicity/race*, *mentoring benefits*, *mentoring risks*, *mentor-protégé* or *mentor-mentee*, and *matching*, *psychology training*, *mentoring* or *mentorship*, or *mentor* or *mentor program*, *clinical training*, *psychology graduate students*, *practicum* or *internship* or *fellowship*. In search One on PsycINFO, after identifying 9902 documents pertaining to mentoring and adding further filters such as the nature of the documents (i.e., only peer-reviewed scholarly articles) and a date range, other key terms were added (i.e., and *psychology* and *training*). The articles meeting the inclusion criteria without duplication came to a running total of 39 documents. Similar sequences of key terms were entered for both PsycINFO and PsycARTICLES searches (see example below and Appendix E: Databases Search Results).

Table 3

Sample Databases Search Results

Database/Search #	Searches by Key Terms	# of Results	Running Totals
PsycINFO			
Search #1			
	“mentoring”	9902	
	Limit to scholarly (peer reviewed) journals	5898	
	AND “psychology”	1947	
	AND “training”	612	
	Limit date to 2007-2019	465	
	Appear to meet document criteria	40	
	With removal of duplicates	39	39

Phase Two entailed searching the reference list of the selected documents to identify additional articles. A grand total of 65 documents, both empirical studies and theoretical articles, were identified as meeting inclusion criteria. Further review yielded 34 empirical studies and 27 theoretical articles relevant to this study. All articles were entered in individual summary tables (see Appendix A: Literature Summary Tables). These summary tables helped in identifying important points and major themes (see Appendix E: Process Notes). After another detailed examination, a final grand total of 29 empirical studies and 26 theoretical articles were selected for this study. At that time, it was decided that the theoretical articles would be included in the background section of chapter One and the critical analysis and discussion in chapters three and four would focus on the 29 empirical studies.

Characteristics of the Empirical Documents

The following is a summary of the nature of the 29 empirical documents identified, including their research design, sample sizes, and the average ages of the participants.

Research design. Out of 29 empirical articles, 11 were quantitative studies and 18 were qualitative in nature (see Appendix A, Literature Summary Tables). Eleven documents were surveys (de Dios et al., 2013; Doran, Galloway, Ponce, & Kaslow, 2018; Fiske, Zimmerman, & Scogin, 2011; Fleck & Mulins, 2012; Landsberger et al., 2013; Lundsford, 2012; Parent & Oliver, 2015; Prouty, Helmeke, & Fischer, 2016; Remaker, Gonzales, Houston-Amstrong, & Sprague-Connors, 2009; Taylor & Neimeyer, 2009; Williams-Nickelson, 2009); 11 documents were case studies (Alvarez et al., 2009; Bardone-Cone, 2018; Burney et al., 2009; Chao, 2009; Henderson Daniel, 2009; Johnson et al., 2014; Jones, Perrin, Heller, Hailu, & Barnett, 2018; Milburn, Hamilton, Lopez, & Wyatt, 2019; O'Neil et al., 2015; Sanders & Steinberg, 2012; Watts-Jones, Ali, Alfano, & Frederick, 2007); two documents used semi-structured or in-depth interviews (Chi-Yin Chung, Bemak, & Talleyrand, 2007; Lam & Chan, 2009); two documents used a grounded theory approach (Chan, 2008; Chan et al., 2015); one document used a phenomenological approach (Wagner & du Toit, 2018); and three documents used a mixed method approach (Mangione et al., 2018; Murdock, Stipanovic, & Lucas, 2012; Pfund, 2014).

Sample sizes. The sample size for surveys averaged $N = 165$ and ranged from $N = 10$ (Doran et al., 2018) to $N = 477$ (Lundsford, 2012). For case studies, the sample size averaged $N = 1.5$ and ranged from $N = 1$ (Bardone-Cone, 2018; Johnson et al., 2014; O'Neil et al., 2015; Sanders & Steinberg, 2012; Watts-Jones, 2007) to $N = 4$ (de Dios et al., 2013), and interviews averaged $N = 14.5$, ranging from nine to 20. For grounded theory studies, the sample size was

$N = 28$, ranging from 24 to 32; and for mixed methods studies, the sample size was $N = 200$, ranging from 28 to 290.

Average ages of participants. Not all studies indicated the participants' ages. Of those that did mention ages, faculty or supervisor mentors' ages ranged from 40 to 74 years old and students' ages ranged from 21 to 55 years old.

Major Themes

All the empirical studies were uploaded into a text analysis software, QDA Miner Lite, and major themes that emerged included: (a) need for more empirical research in view of developing evidence-based mentoring; (b) cultural awareness; (c) benefits of mentoring; (d) mentoring functions; (e) matching in formal mentoring; (f) mentoring support; (g) mentoring relationships and mentors' characteristics; (h) mentors' categories and types of mentoring relationships; (i) guidelines; (j) challenges and ethical issues of mentoring; (k) prevalence of mentoring in psychology training programs; and (l) what students want from a mentoring relationship (see Appendix C: Coding Frequency Table). The studies are presented in order based on the number of times a key word, phrase, combination of words, or paragraph (linked to one of the above themes) was mentioned across all 29 studies. For example, the combination of words, "matching in formal mentoring" appears in 13 out of 29 studies. Themes appearing in the greater number of studies are presented first followed in descending order by themes mentioned in fewer studies.

Need for more research/competence-based mentoring. The need for more research, especially empirical research, is mentioned within the body of the text of 18 out of 29 studies, pertaining to mentoring in psychology including the impact of ethnicity, gender, and sexual orientation on the mentoring relationship (e.g., Fleck & Mulins, 2012; Jones et al., 2018;

Mangione et al., 2018; O'Neil et al., 2015; Parent & Oliver, 2015; Prouty et al., 2016; Wagner & du Toit, 2018). Bardone-Cone (2018) describes mentoring as a relational competence and more research is indeed needed to achieve the goal of competence-based mentoring (Alvarez et al., 2009; Bardone-Cone, 2018; Chan, 2008; Pfund, 2014).

One study by Prouty et al. (2016) describes the Mentorship in Clinical Training Scale (MiCTS), a correlational survey designed to measure the degree of satisfaction experienced by protégés in a mentoring relationship. It comprises four scales: (a) career mentoring (e.g., networking, navigating jobs and internships, learning the secret rules); (b) clinical mentorship (introduction to new models, help with ethical problems); and (c) psychosocial mentorship (e.g., safety, acceptance, personal confirmation, egalitarian relationship, friendship).

Cultural awareness. Cultural awareness is a prominent theme that emerged in the literature review. In this review, cultural awareness involves realizing the importance of multicultural mentoring and the challenges encountered by students of color and minorities including the particular challenges faced by women of color (WOCs). Additionally, one study is dedicated to the challenges of mentoring international students (Alvarez et al., 2009).

Multicultural mentoring. The need to provide mentors with multicultural education to enhance their cultural awareness and cultural humility is mentioned in 13 studies (e.g., Alvarez et al., 2009; Bardone-Cone, 2018; Mangione et al., 2018; Murdock et al., 2012; Prouty et al., 2015; Remaker et al., 2019; Williams-Nickelson, 2009) and the importance of engaging in multicultural mentoring appears in six of these studies. Six studies also address the need for mentors to be aware of their protégés' contexts (i.e., family, university, profession, community, culture, gender, sexual orientation; Alvarez et al., 2009; Chan et al., 2015).

Another important theme mentioned in six studies pertains to the fact that academia has its own culture or inside story, which makes pursuing an academic or research path difficult for students of color, minorities, first generation students, and women as all are under-represented in prominent academic positions and therefore lacking inside knowledge and guidance (e.g., Alvarez et al., 2009; Chan, 2008; Remaker et al., 2009; Watts-Jones et al., 2007).

Challenges for students of color and minorities. Challenges unique to students of color and ethnic minorities are mentioned in 12 studies (e.g., Alvarez et al., 2009; Bardone-Cone, 2018; Chan, 2008; Chan et al., 2015; Chi-Yin Cheng et al., 2007; de Dios et al., 2007; Jones et al., 2008; Mangione et al., 2018; Parent & Oliver, 2015; Remaker et al., 2009; Watts-Jones et al., 2007).

Within this category, challenges of both race and gender encountered by women of color (WOCs) are mentioned in six studies (e.g., Bardone-Cone, 2018; Chan et al., 2015; Jones et al., 2015; Prouty et al., 2009; Remaker et al., 2009) and challenges met by women in general appear in five studies (Bardone-Cone, 2018; Mangione et al., 2018; Prouty et al., 2016; Williams-Nickelson, 2009).

Challenges for international students. The number of international students is growing and while mentoring issues specific to this population appear in only two studies, one study by Alvarez et al. (2009) deals in its entirety with the importance of addressing international students' particular challenges such as homesickness, English as a second language, immigration (i.e., student visas), financial resources from abroad, racism, stereotypes, and cultural differences.

Benefits of mentoring. The positive influence of mentoring is mentioned in 13 out of 29 studies with findings that suggest that mentoring offers both personal and professional

advantages highlighted in most studies (Bardone-Cone, 2018; Chan, 2008; Chan et al., 2015; Chao, 2009; de Dios et al., 2015; Doran et al., 2018; Fiske et al., 2011; Lam & Chan, 2009; Lundsford, 2012; Mangione et al., 2018; Murdock et al., 2012; O'Neil et al., 2015; Prouty et al., 2016; Remaker et al., 2019; Taylor & Neimeyer, 2009; Williams-Nickelson, 2009). The benefits of mentoring are characterized as bidirectional in six of these studies. General career benefits are mentioned in five studies and general psychosocial benefits appear in four studies. Benefits for the profession of psychology are discussed in five studies and benefits for institutions and universities in terms of improved recruitment and retention of minority students appear in four studies.

Benefits specific to protégés. Several studies describe the benefits of mentoring for protégés (e.g., Bardone-Cone, 2018; Chan, 2008; Chan et al., 2015; Chao, 2009; de Dios et al., 2012; Doran et al., 2018; Fiske et al., 2011; Lam & Chan, 2009; Mangione et al., 2018; O'Neil et al., 2015; Prouty et al., 2016). These benefits include: (a) career success, promotions, and a higher salary (mentioned in 11 studies); (b) more presentations and publications, more research productivity and opportunities, professional identity development, and satisfaction with one's training program (mentioned in nine studies); (c) improved personal growth, confidence, attitude, and motivation (mentioned in seven studies); (d) more connections to professional network (mentioned in six studies); (e) emotional and psychological support, general career benefits, and satisfaction with career choice (mentioned in five studies); (f) clinical identity development (mentioned in four studies); and (g) career advice and support as well as increased interest in research (mentioned in three studies).

Benefits specific to mentors. Personal satisfaction and career rejuvenation are mentioned in four studies and career satisfaction appears in three studies (Chao, 2009; Fleck & Mulins, 2012; Lam & Chan, 2009).

Mentoring functions. Mentoring functions appear in 13 studies and comprise a broad range of activities including professional functions and psychosocial functions (e.g., Bardone-Cone, 2009; Chan, 2008; Chan et al., 2015; Doran et al., 2018; Fleck & Mulins, 2012; Mangione et al., 2018). In fact, the idea that mentoring focuses both on the personal and professional needs of the protégés appears in 10 of these studies.

Professional mentoring functions. The mentoring functions performed by mentors most valued by protégés are mentioned in 13 studies (e.g., Bardone-Cone, 2018; Doran et al., 2018; Taylor & Neimeyer, 2009). They include: (a) providing connections and networking opportunities, sponsoring, protection, and writing letters of recommendations (mentioned in 13 studies); (b) coaching and role modeling (mentioned in 12 studies); (c) imparting knowledge, assigning challenging tasks, and providing feedback (mentioned in 10 studies); (d) professional development/professional identity (mentioned in eight studies); (e) being proactive, working on goals, and teaching unwritten rules (mentioned in six studies); (f) help with grants, publications, presentations, and research (mentioned in four studies); and (g) giving gifts, financial assistance, and other resources (mentioned in three studies).

Psychosocial mentoring functions. Protégés appear most appreciative of psychosocial mentoring support mentioned in 11 studies (e.g., Alvarez et al., 2009; Lam & Chan, 2009; Mangione et al., 2018; O’Neil et al., 2015). Psychosocial functions include: (a) emotional support, trust, sharing stories about the mentor’s career journey, humor, friendship, and advice (mentioned in 11 studies); (b) role modeling work-life balance, which is particularly relevant for

students managing career and personal commitments such as marriage or childbearing (mentioned in 10 studies); (c) acceptance, encouragement, validation, and advocacy (mentioned in nine studies); and (d) talking about race,, giving time, being responsive and flexible, and good communication (mentioned in six studies).

Matching in formal mentoring. The importance of matching by race or ethnicity is mentioned in 13 studies on which protégés explain that working with someone who has faced similar experiences of racism and discrimination increases mutual understanding and trust (e.g., Alvarez et al., 2009; Bardone-Cone, 2018; Chan, 2008; Chan et al., 2015; Chao, 2009; Chi-Yin Chung et al., 2007). However, participants in three studies remarked that partners with different racial or ethnic backgrounds could also make good pairings as long as they learned from their cultural differences (Bardone-Cone, 2018; Mangione et al., 2018; O’Neil et al., 2015).

Mentoring support. Five studies highlight the importance of mentoring support from the American Psychological Association (APA) and other organizations. Mentoring networking events and resources on the APA website, such as the Introduction to Mentoring Guide for Mentors and Mentees and the APA Mentoring Program to honor mentors provide the field with insights into the importance of mentoring in training (Alvarez et al., 2009; APA, 2006a, 2006b; Burney et al., 2009; Chao, 2009). Support from institutions and universities (mentioned in eight studies) includes networking opportunities and other resources such as brochures describing the mentoring process and the research and clinical interests of potential mentors. However, there is a need for more support, more involvement in promoting mentoring programs, more training, and more recognition and rewards for the mentors (e.g., Chan et al., 2015; de Dios et al., 2013; Fiske et al., 2011; Fleck & Mulins, 2012; Jones et al., 2018; Mangione et al., 2018; Rowe-Johnson, 2018).

Mentoring relationships and mentors' characteristics. Interpersonal relatedness, mutuality, friendship, and trust are characteristics of mentoring relationships that set them apart from purely professional relationships. They are mentioned in six studies as are qualities of effective mentors such as being knowledgeable, open-minded, genuine, responsive, and friendly. Reciprocity, mutuality, and collegiality are other characteristics of mentoring relationships.

Mentors categories and types of mentoring relationships. Within this section, the idea that peer mentors are more approachable and more accessible than faculty mentors who may intimidate students and have more responsibilities to attend to is mentioned in five studies (Chan, 2008; Doran et al., 2018; Fleck & Mulins, 2012; Mangione et al., 2018; Murdock et al., 2012). The concept that several mentors are needed to feel the needs of a protégé appears in four studies (Bardone-Cone, 2018; Johnson et al., 2014; Mangione et al., 2018; O'Neil et al., 2015). Jones et al. (2018) found informal mentoring relationships to be more effective and more appreciated by both mentors and protégés than formal mentoring relationships.

Resources and guidelines. Five studies mentioned the importance of providing mentors not only with multicultural education, but also with rewards and other resources such as networking events and brochures (Chao, 2009; Fiske et al., 2011; Fleck & Mulins, 2012; Mangione et al., 2018; Milburn, Hamilton, Lopez, & Wyatt, 2019).

Challenges and ethical issues. Boundary issues (e.g., protégés contacting mentors at inopportune times or expecting to be given research positions) were mentioned in three studies (Alvarez et al., 2018; Murdock et al., 2012; Williams-Nickelson, 2009) and the difficulties of navigating dual roles (e.g., the role of supervisor with evaluative responsibilities versus the role of mentor characterized by a more reciprocal and collegial approach) appear in three studies (Murdock et al., 2012; O'Neil et al., 2015; Williams-Nickelson, 2009).

Prevalence of mentoring. Research on mentorship in psychology training programs mentioned in three studies found a higher number of mentoring relationships in PhD than PsyD programs (e.g., Fiske et al., 2011; Johnson et al., 2014; Mangione et al., 2018). Reasons for this difference included the integration of mentoring in research-oriented programs, the higher faculty to student ratio in PsyD programs, and the higher number of part-time or adjunct faculty members in professional psychology, leaving less time for mentoring activities (e.g., Mangione et al., 2018; Williams-Nickelson, 2009).

What students want from mentorship. Three studies mentioned the fact that students want both emotional and career support from their mentors (Doran & Galloway, 2018; Fiske et al., 2011; Mangione et al., 2018). Students of color, Asian, and Latina/o students want what is valued in their respective culture. For example, Asian students want a teacher/guide relationship and prefer an older mentor because in their culture age commands respect. They also value loyalty and expect the mentoring relationship to be long-lasting. Latina/o students and students of color appreciate the friendship aspect of the mentoring relationship (i.e., the mentor is regarded as an extended family member). Across all cultures, students value mutual respect, trust, honesty, and feeling comfortable with their mentor. They all hope to become more confident and experience personal growth. Additionally, Latina/o and African American students valued a component of spirituality in the mentoring relationship.

Chapter IV: Discussion

This critical review of the literature aimed to analyze the current state of mentoring in psychology training programs, in particular in the training of clinical and counseling psychology doctoral students and pre-licensed clinicians. The biggest surprise and disappointment come from the lack of empirical research in that area as evidenced by the mere empirical 29 studies that are the focus of this dissertation. Most current studies consist of case studies and surveys and achieving competence-based mentoring will require significantly more research in the future. The results of this review will be discussed below.

Benefits of Mentoring

While the APA, institutions, and universities are making significant progress toward integrating mentorship into psychologists' training, we are far from the culture of mentoring often found in other professions. This is a shame since, even based on the few studies available, the positive impact of mentorship is noted in theoretical literature and by several empirical researchers (e.g., Bardone-Cone, 2018; Doran et al., 2018; Mangione et al., 2018; Prouty et al., 2016; Remaker et al., 2019). Indeed, the benefits of mentorship, especially informal mentorship, are bidirectional and recognized by both mentors and protégés as an essential part of their training or career experience (e.g., Chan et al., 2015; Chao, 2009; Murdock et al., 2012). It is worth noting that amongst students reporting not having a mentor, over 90% express a desire to have one or several mentors (Mangione et al., 2018; Williams-Nickelson, 2009). Mentors report enhanced personal satisfaction and rejuvenation, increased pride when they contribute to their protégés' success, prestige, commitment to the profession, and more career productivity (e.g., Chao, 2009; Fleck & Mulins, 2012; Lam & Chan, 2009; Mangione et al., 2018; Murdock et al., 2012). The majority of protégés (91%) rate their mentorship experience as very helpful (Fiske et

al., 2011) as mentorship appears to have a positive impact on their academic success (e.g., faster dissertation, degree completion, and licensure), their career (e.g., presentations, publications, securing tenure, promotions, and positions, and higher salary than students who were not mentored), and their personal life including their health (Chao, 2009; de Dios et al, 2013). Moreover, the professional support (e.g., career advice, guidance, and constructive feedback) as well as emotional support (e.g., cultural connection, guidance, role modeling) provided by mentors play a significant part in protégés' satisfaction with their training and choice of career (Fleck & Mulins, 2012; Lam & Chan, 2009). Indeed, according to graduate students who have been or are being mentored, the benefits of mentoring trickle down to their families and communities, as well as the profession (Chan et al, 2015).

The benefits of mentoring for institutions and universities include improved recruitment and retention of minority students and faculty and increased retention and satisfaction in the training program for all students (O'Neil et al., 2015). All these advantages are why mentoring is an essential part of training and thus, further research and attention is needed.

Multicultural Mentoring

The biggest take-away from this study is the importance of multicultural mentoring. In spite of the limited, literature on this subject, it is obvious that a growing number of students of color and minority students are entering the field of psychology (Mangione et al., 2018). Therefore, providing mentoring opportunities to enhance their training experience and graduation rate is worthwhile. Moreover, the influx of minority populations in the United States is creating a need for more therapists with similar racial and ethnic identities (Alvarez et al., 2009; Mangione et al., 2018; Remaker et al., 2019). Mentoring minority students will ensure that their racial or ethnic group will not be under-represented and underserved in the future

(Alvarez et al., 2009; Chan et al., 2015; Chao, 2009; de Dios et al., 2013; Williams-Nickelson, 2009).

The need to provide mentors with multicultural instruction to meet the mentoring needs of students of color and diverse minorities or cultural groups, including women of color, women in general, international students, first generation students, LGBTQ students, and low socio-economic status students, is evident. Students of color and minorities face unique challenges. Their history is filled with experiences of racism, discrimination, lack of support, indifference or outright hostility, and microaggressions (Watts-Jones et al., 2007) and their values about family commitments may clash with the demands of graduate school (Alvarez et al., 2009). International students also often deal with a language barrier, isolation, and culture shock. For example, time management (e.g., setting priorities, arriving on time to appointments) may be viewed differently in their country of origin, which may lead to stressful situations. They also often have to address complicated immigration and financial issues (Alvarez et al., 2009). First generation students do not have a road map for graduate school. This is new territory for them as they are not familiar with the culture of academia (Chan, 2008). They do not have family role models who could explain the system or the benefits of having a mentor. As a result, they may not even be aware of mentoring options.

Students of color will benefit from formal mentoring support. Some may need to work, therefore having little time to invest in finding a mentor and starting and maintaining a mentoring relationship. Students may also come from a collectivist culture where they are expected to spend any free time fulfilling commitments to their immediate and extended family (Alvarez et al., 2009). Low socio-economic status students share some of the same challenges as first generation students. They have to work and/or deal with financial aid or hardship and are

unlikely to have been exposed to the culture of academia (Parent & Oliver, 2015). Additionally, students of color and cultural minorities need mentoring to help them face the challenging task of negotiating the world of academia and research with its hidden rules and alliances (Alvarez et al., 2009; Chan, 2008; Remaker et al., 2019; Watts-Jones et al., 2007).

Matching in Formal Mentorship

The quality of the relationship is primordial to mentorship success (Johnson et al., 2014; Prouty et al., 2016). Due to the under-representation of minority faculty or supervisors in clinical and counseling psychology programs, there are not enough similar basic identity mentors to meet the specific needs of students of color and minority groups. Therefore, minority mentors end up informally mentoring more than their share of students. They usually do not receive any recognition for this work which takes them away from other responsibilities and hinders their professional progress. These issues need to be addressed in training programs (Alvarez et al., 2009; Jones et al., 2008).

Women of color compound the issues of gender and race (e.g., Bardone-Cone, 2018; Chan et al., 2015; Jones et al., 2008; Parent & Oliver, 2015). This means that since there are less women than men in senior roles and amongst these very few are women of color, they have even less role models than male students of color. The consensus appears to be that matching by basic identity similarity such as race or ethnicity does matter as students of color report feeling more comfortable with a mentor who has endured the same race-related obstacles (e.g., Alvarez et al., 2009; Bardone-Cone, 2018; Chan, 2008; Chan et al., 2015, Chao, 2009; Chi-Yin Chung et al., 2007). However, some study participants contend that sharing the same race or ethnicity with a mentor is not as important as having a mentor who has received multicultural training and who approaches the relationship with cultural awareness and humility. In fact, some mentors and

protégés express that coming from varied backgrounds presents a good opportunity to learn about cultural differences (Bardone-Cone, 2018; Mangione et al., 2018; O’Neil et al., 2015). By contrast, mentors who lack multicultural training or awareness can cause a breach of trust with minority group protégés, so matching based on race and ethnicity is worth considering when developing a mentoring relationship (e.g., Chan, 2008; Fiske et al., 2011). This is another important issue for training programs to address with psychology students of color.

A good match makes for a successful relationship and the partners’ involvement in the matching process ensures a better fit. This partners’ participation happens automatically in an informal mentoring relationship and can also be encouraged in a formal mentoring relationship with the help of networking events and large pools of potential partners (O’Neil et al., 2015). When mentor and protégé not participating in the matching process is very detrimental as they may end up not sharing goals or not demonstrating the same level of commitment to the relationship. This may result in unresponsiveness and the end of the relationship.

Prevalence of Mentoring in Psychology Training

Coming from a PsyD training program, it is shocking to learn of the prevalence of mentorship in PhD versus PsyD programs (e.g., Fiske et al., 2011; Johnson et al., 2014). The rather unclear definition of mentoring activities may have impacted this estimate (Mangione et al., 2018). However, the discrepancy may involve a greater interest in mentoring in research-focused programs, a higher faculty-student ratio, and more adjunct faculty (i.e., less time to mentor) in a PsyD program (Block-Lerner et al., 2012). PsyD students also spend time away from campus during training, which reduces the opportunities to become closer to faculty members. It will be important for program directors to address these obstacles and challenges.

Challenges and Ethical Issues

Challenges faced by mentors and protégés are worth considering. Lack of commitment to the mentoring relationship (Chao, 2009) leading to its termination and role confusion can apply to either or both partners (Fiske et al., 2011). This is important as it may cause the protégé or mentor to be disappointed and discouraged and not seek or offer mentoring support in the future. Mentors who experience difficulty with time commitment needed for regular meetings and other mentoring activities (Fleck & Mulins, 2012; Williams-Nickelson, 2009) may resent not being recognized or rewarded for their work and time investment (William-Nickelson, 2009). They may also find navigating dual roles stressful (e.g., as both a mentor and a supervisor with evaluative responsibilities; Murdock et al., 2012; O'Neil et al., 2015; Williams-Nikelson, 2009) and have difficulty with boundaries (e.g., Alvarez et al., 2009; Bardone-Cone, 2018; Murdock et al., 2012) . Clinical training programs need to identify ways to address these concerns.

Protégés may experience a cognitive clash with their mentor and find themselves struggling for independence (Doran et al., 2018; Lam & Chan, 2009). They may experience a conflict of interest if they apply to the same position as their mentor or feel exploited if they are not given credit for their research or for articles they have co-authored (Doran et al., 2018). They may find that their mentor is not a good match and lacks cultural awareness and sensitivity or experience resulting in emotional disconnection and bad advice (e.g., Chan, 2008; Chan et al., 2015; Chao, 2009). They may also have an unmotivated, unresponsive mentor (Chao, 2009; Remaker et al., 2009). The short-term negative outcomes of dysfunctional mentorship can include decreased learning and depressed mood while long-term negative effects can include higher stress in future workplace relationships, increased job turnover, and lower job satisfaction.

Mentorship integrates issues of race, identity, expectations, and boundaries. These issues are complicated and require careful consideration from training programs.

Clinical Training Implications

Mentorship, especially informal mentorship appears effective in promoting both personal and professional development for protégés (Chao, 2009; Jones et al., 2018). Moreover, protégés recognize their mentor's influence in developing their professional and clinical identity by sharing their knowledge about clinical work. They appreciate their mentor's support and advice when dealing with complicated cases or ethical problems (Williams-Nickelson, 2009). This support from competent and more experienced professionals is bound to benefit patients/clients. Promoting the mentorship of clinical or counseling psychology students of color, ethnic minorities, women, LGBTQ students, or any other cultural minority group will help them thrive in their career and increase the number of same identity therapists available to underserved populations. Additional guidelines, suggestions, and recommendations are presented below.

Limitations

While there is extensive data on mentoring in other fields, mentoring in psychology, and in particular in the narrow area of clinical and counseling graduate students' training cycle, is not well-researched. As a result, the background section of this review of the literature is based on both theoretical articles and empirical studies. It is therefore worth noting that the findings, for example findings about the benefits of mentoring are hypothesized. Additionally, the analysis section of this review of the literature is based on a small a number of available empirical studies. Finally, major themes entered as categories and codes into the text analysis software, QDA Miner Lite, were developed by a single investigator and therefore subject to coder's bias.

Guidelines /Recommendations

Guidelines for institutions and universities. Institutions and universities would benefit from considering the importance of providing mentorship to all trainees and the need for more mentors (Fiske et al., 2011). Focusing on mentoring would involve highlighting mentoring during the hiring process of faculty and supervisors (Johnson et al., 2014), establishing a mentoring program independent of clinical supervision (i.e., limiting the use of direct supervisors as mentors), and appointing a faculty mentoring program coordinator (O'Neil et al., 2015). It is important to allow both mentors and protégés to participate in the matching process, albeit it is a good idea to streamline this process by asking students to submit two choices for their mentor within a few days of a networking event (O'Neil et al., 2015). Also, institutions and universities could create mentoring resources in the form of brochures describing potential mentors' areas of clinical and research interests, organize mentoring networking events, and provide large pools of mentors to offer more choices and better meet the needs of protégés including having the option of matching with a mentor with similar racial or ethnic identity (Fiske et al., 2011; Fleck & Mulins, 2012; Mangione et al., 2018; O'Neil et al., 2015). Clear exit strategies should be developed at the start of the mentoring program to enable participants to easily find a replacement mentor in case of a n unsatisfactory match. (O'Neil et al., 2015). The program should be flexible enough to allow mentors to meet their other responsibilities and include mentorship training covering both the mentoring process and multicultural awareness and sensitivity (Chi-Yin Chung et al., 2007; de Dios et al., 2013; Johnson et al., 2014). Furthermore, there could be built-in regular meetings between mentors and the mentoring program coordinator as well as regular feedback on the effectiveness of the program (de Dios et al., 2013; O'Neil et

al., 2015). Additionally, universities and institutions could honor and provide rewards to excellent mentors (Chao, 2009).

Mentoring options. Peer mentors are a popular alternative to faculty, supervisor, or advisor mentors. They offer support without evaluative functions and students deem them more accessible and approachable than more senior mentors. Protégés vying for or planning to run in the future for leadership positions within the American Psychological Association of Graduate Students (APAGS) appreciate the support of mentors who are currently or have recently filled these positions as they share the same challenges, albeit senior APA leaders make powerful allies (Chan, 2008; Doran et al., 2018; Fleck & Mulins, 2012; Mangione et al., 2018; Murdock et al., 2012).

Multi-level mentoring is another effective way for institutions and universities to provide mentoring to a greater number of individuals and to meet their needs at a level appropriate for their training status. In this model, faculty, advisors, or supervisors provide mentoring support to postdoctoral fellows who intern mentor interns who can mentor less advanced graduate peers (Bardone-Cone, 2018).

Mentors' guidelines. Mentors are encouraged to develop a collaborative mentorship plan clarifying goals, expectations, personal boundaries, and the parameters of mentoring (e.g., respect their own needs for work and private time) at the start of the relationship. They should strive to understand the influence of cultural context on their protégés and their conceptualization of mentoring (Alvarez et al., 2009; Mangione et al., 2018; Remaker et al., 2009).

Summary of Recommendations

This review of the literature sheds light on the role of mentoring in clinical training and the possible implications for those involved. Below is a summary list of recommendations based

on the above section of this review. It is intended as a quick reference for program directors and those involved in training psychologists:

1. Offer mentoring to all trainees (Fiske et al., 2011)
2. Find out job applicants' interest in mentoring and highlight mentoring in the hiring process (Johnson et al., 2014)
3. Send questionnaires to all faculty members and postdoctoral fellows to enquire about their interest in mentoring, including their areas of expertise, research interests, and theoretical approaches, in order to increase the pool of mentors available to meet the needs of trainees and improve the chance of providing mentors with similar basic identities (e.g., Fiske et al., 2011; Fleck & Mulins, 2012; O'Neil et al., 2015)
4. Identify why potential mentors may not want to participate in a mentoring program (O'Neil et al., 2015)
5. Create a mentoring program independent from supervision and flexible enough not to compete with mentors' other responsibilities (Chi-Yin Chung et al., 2007; O'Neil et al., 2015)
6. Appoint a faculty mentoring program coordinator and arrange regular contact between the program coordinator and participants (O'Neil et al., 2015)
7. Offer mentoring and co-mentoring opportunities early in the training cycle
8. Provide instruction about the mentoring process and multicultural education to mentors (O'Neil et al., 2015)
9. Develop clear exit strategies for negative relationships at the onset of the program (O'Neil et al., 2015)

10. Provide mentoring resources (i.e., brochures and networking events; Chi-Yin Chung et al., 2007; O'Neil et al., 2015)
11. Offer recognition and rewards to exceptional mentors (e.g. include a mentoring award during commencement ceremonies, ask students to vote for the best mentor, facilitate an end-of-the-year luncheon for mentors and protégés to celebrate the mentors, or offer financial compensation for time spent on mentoring activities (Chao, 2009)
12. Obtain regular feedback from all participants (e.g., de Dios et al., 2013; O'Neil et al., 2015)
13. Mentors should strive to understand the influence of culture, race, ethnicity, disabilities, gender, and sexual orientation on the protégés' expectations and conceptualization of mentoring (e.g., Alvarez et al., 2009; Chi-Yin Chung et al., 2007; Mangione et al., 2018)
14. Mentors should develop a collaborative mentorship plan and clarify expectations and boundaries (Alvarez et al., 2009)

Gaps in the Current Literature/Future Research

There is an obvious dearth of empirical research on mentoring in psychology including the influence of gender and sexual orientation on mentoring relationships (e.g., Prouty et al., 2016). This is surprising since women are a majority in the field of psychology and people are becoming more educated and open about sexual orientation. There are a few studies dealing with the impact of race and ethnicity on mentoring, but more are needed. Moreover, with only one study dedicated to developing mentoring competency benchmarks, there is room for extensive research addressing mentorship training and effective practices (Sanders & Steinberg, 2012).

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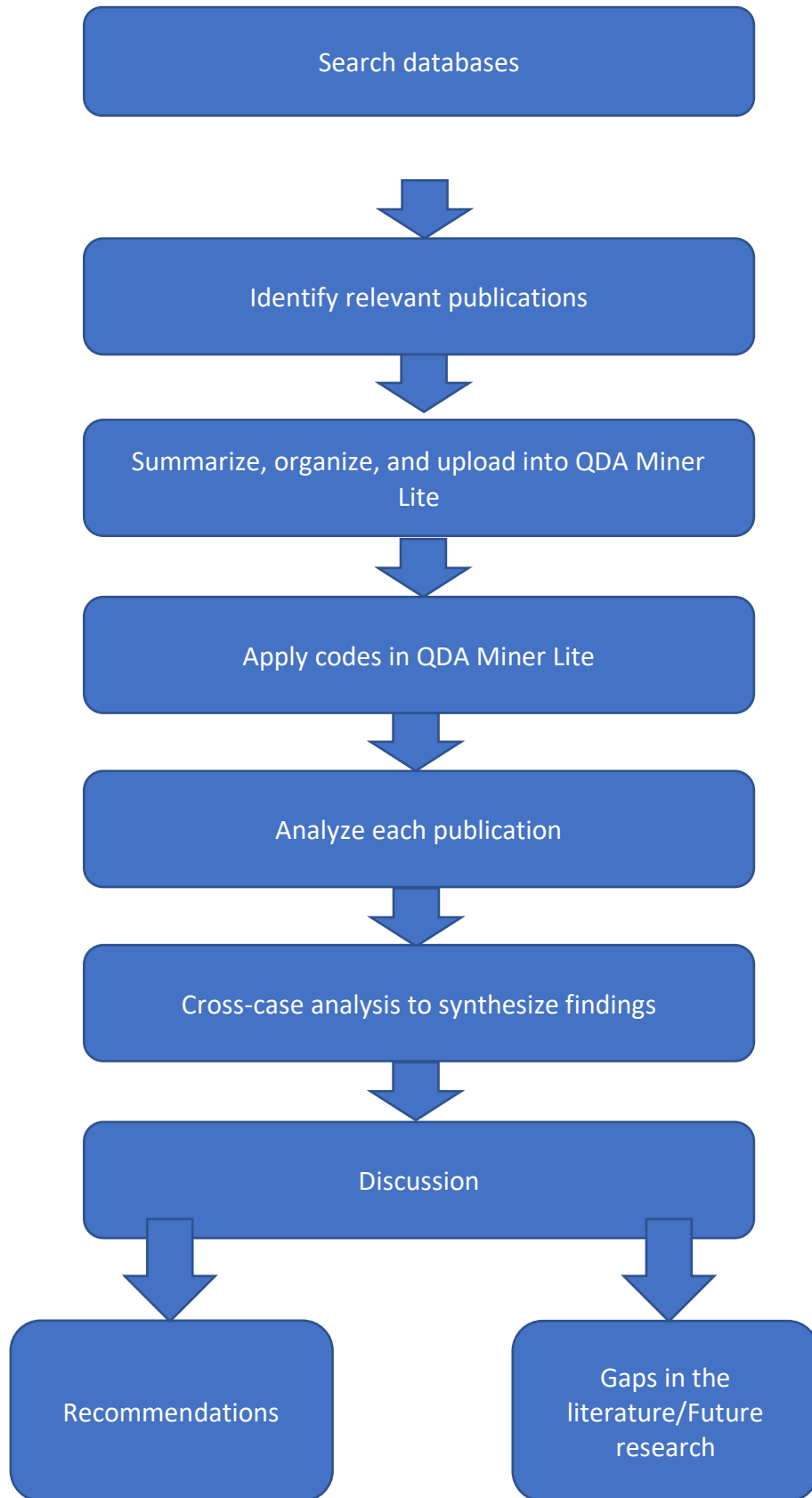
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APPENDIX A

Literature Analysis Flow Chart



APPENDIX B

Empirical Studies Summary Tables

Citation

Alvarez, A., Blume, A., Cervantes, J., & Rey Thomas, L. (2009). Tapping the wisdom tradition: Essential elements to mentoring students. *Professional Psychology: Research and Practice*, 40(2), 181-188. doi: 10.1037/a002256

Research design

Qualitative case studies

Total N

N = 3

Selection criteria

Graduate students of color from historically marginalized socio-racial groups

Research question(s)/ purpose

Examine the relevance of race, ethnicity, and culture in the mentor-protégé relationship
Identify challenges to mentoring students of color

Mentoring definition

Mentoring promotes the protégé's sequential professional development as well as personal and social development in relations to career

Results/Key findings

Unique needs of students of color
Students of color may not be familiar with the culture of academia

Conclusions and implications

Mentors need to support protégés in navigating culture of academia

Major theme(s)

Unique challenges of students of color require additional expertise from mentors

Citation

Bardone-Cone, A. M. (2018). Mentoring in clinical psychology. *The Behavior Therapist*, 41(5), 264-267

(continued)

Research design

Qualitative case study

Total N

N = 1

Selection criteria

Author self-selected based on personal experience as a protégée and mentor in clinical psychology

Research question(s)/ purpose

Highlight some of the most recent research on mentoring
Give a personal perspective from both mentor and protégée's point of view

Mentoring definition

Mentoring is a reciprocal personal relationship between a more experience individual who acts as a guide and a less experienced individual

Results/Key findings

Positive impact of mentoring in the training and early career of doctoral students and clinicians

Conclusions and implications

Mentoring improves students' experience in graduate school (e. , greater research self-efficacy, decision to pursue a career in academia, greater involvement in professional activities

Major Theme(s)

Importance of mentoring through multicultural lens,
Students should have more than one mentor to meet all their needs

Citation

Burney, J., Celeste, B., Davis Johnson, J., Klein, N.C., Nordal, K., & Portnoy, S. (2009). Mentoring professional psychologists: Programs for career development, advocacy, and diversity. *Professional Psychology: Research and Practice*, 40(3), 292-298. doi: 10.1037/a0015029

Research design

Case study

Total N

N = 4

(continued)

Selection criteria

Programs pairing graduate students and early career psychologists with experience psychologists interested in ethical business practice, legislative and regulatory advocacy, and ethnic minority leadership development

Research question(s)/ purpose

To emphasize the importance of mentoring in forming future advocates for profession
To examine four mentoring programs: the MPA Student and ECP Mentoring program, the Texas Psychological Association Externship Program, the SLC, Federal Advocacy Network, and the CLS Diversity Initiative

Mentoring definition

An informal, unofficial, voluntary, self-selected, relationship in which a more experienced individuals provides expertise to a less experience individual

Results/Key findings

Students need help developing advocacy and leadership

Conclusions and implications

All four programs share a common and central topic: advocacy in professional psychology

Major theme(s)

Importance of mentoring to form future leaders for the profession

Citation

Chan, A. W. (2008). Mentoring ethnic minority, pre-doctoral students: An analysis of key mentor practices. *Mentoring & Tutoring: Partnership in Learning*, 16, 263-277.
doi: 10.1080/13611260802231633

Research design

Qualitative grounded theory

Total N

N = 39; 19 mentors and 20 protégés

Selection criteria

Being part of an ethnic minority

Research question(s)/ purpose

What are the practices mentors use with ethnic minority protégés?

(continued)

Mentoring definition

Mentoring is an organizational socialization of the protégés

Results/Key findings

Lack of representation of minorities in academia makes mentoring the best way in

Conclusions and implications

Mentoring opens the doors by imparting insider's knowledge

Major theme(s)

Unique needs of minority students; mentoring is a door opener

Citation

Chan, A., Yeh, C., & Krumboltz, J. D. (2015). Mentoring ethnic minority counseling and clinical students: A multicultural, ecological, and relational model. *Journal of Counseling Psychology, 62*, 592-607. doi: 10.1037/cou0000079

Research design

Qualitative study using grounded theory approach

Total N

N = 24; nine faculty members and 15 students

Selection criteria

Purposeful sampling to identify recipients of awards in mentoring

Research question(s)/ purpose

To identify effective practices to mentor ethnic minority protégés

Mentoring definition

Mentoring involves a more seasoned professional providing professional and emotional support to a student or less experienced clinician

Results/Key findings

Effective mentors provide career support and guidance specific to the needs of minority protégés

Conclusions and implications

Mentors must be aware of protégés' contexts (e.g., family, community, culture, history)

Major theme(s)

Importance of multicultural awareness and sensitivity

(continued)

Citation

Chao, G. (2009). Formal mentoring: Lessons learned from the past. *Professional Psychology: Research and Practice*, 40(3), 314-320. doi: 10.1037/a0012658

Research design

Case study of an APA pilot program on mentoring created for early career psychologists; participants in the program provided program evaluation

Total N

N = 1

Selection criteria

Psychologists attending the April 2006 consolidated meeting of APA committees

Research question/purpose

Review a pilot program of formal mentoring to develop directives for future formal mentoring

Mentoring definition

Mentors are experienced professionals who are personally invested in the career development of a less experienced protégé

Results/Key findings

Formal mentoring focuses on the protégé's development whereas informal mentoring is more bidirectional and more intense but less visible

Conclusions and implications

The matching process is critical in formal mentoring but there is not enough current research

Major theme(s)

Both partners have to be involved in the matching process and be committed

Citation

Chi-Yin Chung, R., Bemak, E., & Talleyrand, R. (2007). Mentoring within the field of counseling: A preliminary study of multicultural perspectives. *International Journal for the Advancement of Counseling*, 29, 21-32. doi: 10.1007/s10447-006-9025-2

Research design

Semi-structured interviews followed by 90-minute in-depth interviews

Total N

N = 20 graduate students in Master's degree counseling education program

(continued)

Selection criteria

Emails sent to 60 students of color

Research question(s)/ purpose

Explore the protégés' perspectives about the influence of culture on the mentoring relationship

Mentoring definition

Mentoring is a process that involves support, guiding, advising, and nurturing

Results/Key findings

Protégés have expectations and value different aspects of mentorship based on their own cultural values

Conclusions and implications

Racial and ethnic background influenced perceptions and expectations of mentorship

Major theme(s)

Importance for mentors to be culturally aware and competent

Citation

De Dios, M., Kuo, C. Hernandez, L., Clark, U., Wenzel, S., Boisseau, C., Hunter, H., Reddy, M., Toulou-Shams, M., & Zlotnick, C. (2013). The development of a diversity mentoring program for faculty and trainees: A program at the Brown Clinical Psychology Training Consortium. ABCT Association for the Behavioral & Cognitive Therapies. *The Behavior Therapist*, 36(5).

Research design

Survey

Total N

N = 14 mentees (matched to 14 mentors)

Selection criteria

Training directors, trainees, and faculty within DPHB, the training Consortium and CAAS

Research question(s)/ purpose

Report on the development and implementation of a pilot formalized diversity mentoring program

Mentoring definition

N/A

(continued)

Results/Key findings

Racial/ethnic minorities are under-represented in the health field and face barriers to promotion and retention and are open to harassment and bias

Conclusions and implications

There is a need for recruiting, training, and retaining minority trainees and faculty
Formal mentoring programs are more likely to promote diversity and informal ones since minority students are often excluded from informal opportunities

Major theme(s)

Need for more institutionalized formal diversity mentoring

Citation

Doran, J., Galloway, M., Ponce, A., & Kaslow, N. (2018). Leadership mentoring: A survey of early career psychologist leaders. *Mentoring & Tutoring: Partnership in Learning*, 26(2), 165-182. doi: 10.1080/13611267.2018.1471339

Research design

Survey: participants involved in mentoring relationships answered questions about their major leadership roles in psychology

Total N

N = 10

Selection criteria

Early career psychologists who had leadership roles (Chair or co-Chair) of the American Psychological Association Graduate Students (APAGS) or the Committee for Early Career Psychologists (CECP) between 2011 and 2016

Research question(s)/ purpose

Learn about the participants' experience of mentoring to explore how this influenced their leadership development

Mentoring definition

N/A

Results/Key findings

Peer mentoring was very important for promoting success in leadership; protégés with leadership ambitions appreciated being mentored by individuals who were holding or had recently held leadership positions.

(continued)

Conclusions and implications

Mentoring for leadership has a significant place in the development of student and early career Leaders

Major theme(s)

Importance of mentoring students for leadership at the national level. Peer mentoring for leadership has a unique value

Citation

Fiske, A., Zimmerman, J. A., & Scogin, F. (2011). Geropsychology mentoring: A survey of current practices and perceived needs. *Educational Gerontology, 37*, 370-377. doi: 10.1080/03601277.2011.553558

Research design

Online survey

Total N

N = 29

Selection criteria

Clinical geropsychologists or clinical psychology students interested in aging

Research question(s)/ purpose

Survey current mentoring practices and needs in geropsychology

Mentoring definition

N/A

Results/Key findings

79% of participants reported having received mentoring; 75% met in person weekly

Conclusions and implications

Mentoring occurs with most geropsychology trainees and professionals

Major theme(s)

Mentoring in geropsychology occurs frequently, is valued, and seen as long-term

(continued)

Citation

Fleck, C., & Mulins, M. (2012). Evaluating a psychology graduate student peer mentoring program. *Mentoring & Tutoring Partnership in Learning*, 20(2), 271-290.
doi: 10.1080/13611267.2012.687157

Research design

Online survey

Total N

N = 60

Selection criteria

Peer mentoring program graduate participants

Research question(s)/ purpose

To evaluate a peer mentoring program in graduate school

Mentoring definition

Mentoring's influence on an individual's development is life-long

Results/Key findings

Mentoring is related to positive outcomes (e.g., care, motivational, attitudinal, behavioral, health-related, relational)

Conclusions and implications

Pair matching and preparedness were not found to be essential aspects to include in graduate peer mentoring programs

Major theme(s)

Psychosocial support and networking help were the most valued mentoring functions

Citation

Henderson Daniel, J. (2009). Next generation: A mentoring program for black female psychologists. *Professional Psychology: Research and Practice*, 40(3), 299-305.
doi: 10.1037/a0013891

Research design

Case study of pilot mentoring program for Black female psychologists

Total N

N = 12

(continued)

Selection criteria

Black female participants were found via a Leadership Education training program and meetings attended by postdoctoral fellows in psychology

Research question(s)/ purpose

Examine a pilot mentoring program for Black women psychologists in tested in pursuing a research career

Mentoring definition

Mentoring describes a relationship in which an individual uses his/her skills and expertise to advance the career of a less experienced colleague

Results/Key findings

Black women are under-represented in positions of power in psychology and need the support of a mentor

Conclusions and implications

Goals of mentoring program: reduce isolation, deconstruct the research sub-culture, explain the mentoring process, prepare protégées for bicultural lives as professional Black women, and focus on self-care

Major theme(s)

Black women need mentors to palliate the lack of role models

Citation

Johnson, W. B., Skinner, C. J., & Kaslow, N. J. (2014). Relational mentoring in clinical supervision: The transformational supervisor. *Journal of Clinical Psychology, 70*(11), 1073-1081. doi: 10.1002/jclp.22128

Research design

Case study

Total N

N = 1 clinical psychology intern

Selection criteria

Acceptance in pre-doctoral internship program

(continued)

Research question(s)/ purpose

The Mentoring Relationship Continuum (MRC) model is used to examine transformational supervision, which involves many mentoring functions. Characteristics and differences between supervision and mentoring are examined

Mentoring definition

Elements of trainer-trainee mentorship in graduate settings: (a) greater demonstrated mentor's experience and achievement; (b) enduring personal relationship; (c) increasingly reciprocal

Mentoring definition (cont.)

and mutual relationship; (d) career and emotional support; (e) intentional role modeling (f) some identity transformation in the trainee; (g) a safe place for self-exploration

Results/Key findings

Strong mentoring is linked to satisfaction with training; supervision and mentoring are distinct training concepts; training psychologists are imprecise in their use of the term mentor and there is a tendency to label all training relationships as mentoring

Conclusions and implications

The MRC model helps us understand mentoring in the context of assigned roles (e.g., advising, supervising, teaching). In the ideal situation, training relationships will progress across the mentoring continuum toward more mutuality, reciprocity, career and psychological support

Major theme(s)

Strong mentoring predicts students' satisfaction with their training program, doctoral degree completion, career opportunities, professional identity, and professional success

Citation

Jones, H., Perrin, P., Heller, MB., Hailu, S., & Barnett, C. (2018). Black psychology graduate students' lives matter: Using informal mentoring to create an inclusive climate amidst national race-related events. *Professional Psychology: Research and Practice*, 49(1), 75-82. doi: 10.1037/pro0000169

Research design

Qualitative case study

Total N

N = 175 faculty and graduate students in psychology department; five authors of this case study (three faculty; two doctoral students; three African Americans, two Caucasians; four cisgender women, one cisgender man)

(continued)

Selection criteria

Faculty and graduate students in Virginia Commonwealth University psychology department

Research question(s)/ purpose

Highlight the importance of informal mentoring for students of color and the need for more empirical and theoretical research on the subject

Mentoring definition

Informal mentoring is perceived by both mentors and mentees as more effective than formal mentoring in promoting professional and personal development

Results/Key findings

Black students and faculty are underrepresented in doctoral programs and minority faculty members are expected to provide informal mentoring to minority students without any extra acknowledgement or consideration (tenure, promotion) from their program

Conclusions and implications

Importance of multicultural competence and need for a greater number of minority mentors; programs are encouraged to recognize and reward the time spent providing informal mentoring

Major theme(s)

Importance of hiring culturally diverse faculty members

Citation

Lam, K., & Chan, D. (2009). Mentoring relationship in counselor development. *Asian Journal of Counseling, 16*(1), 33-49.

Research design

Qualitative: in depth 90-120 minutes interviews to examine both professional and personal life

Total N

N = 9 counselors in private practice or universities/agencies

Selection criteria

Counseling professionals

Research question(s)/ purpose

Explore how mentoring influenced the personal and professional development of counselors

(continued)

Mentoring definition

In Chinese culture, a mentor provides wisdom and guidance and a mentee shows respect whereas in Western culture, the relationship is more equal and collaborative

Results/Key findings

Personal development domain: the mentor helped identify strengths, explore identity issue, offered encouragement. Professional development domain: the mentor helped with career development, acted as coach and role model, influence protégé's counseling approach

Conclusions and implications

Primordial impact of mentoring on personal and professional development; protégés respected their mentors and appreciated the benefits of mentoring; they expected to be provided with wisdom but also to be independent and not always practice in the shadow of their mentors

Major theme(s)

Mentoring should address both the professional and emotional need of protégés; protégés appreciated life mentors more than professional mentors

Citation

Landsberger, S., Scott, E., Hulvershon, L., Chapleau, K., Dias, D., & McFouglas, C. (2013). Mentorship of clinical-track junior faculty: Impact of a facilitated peer-mentoring program to promote scholarly productivity. *Academic Psychiatry, 37*, 288-289. doi:10.1176/appi.ap.12100177

Research design

Survey in the year preceding the facilitated mentoring group (2009-2010) and the first year of mentoring group; participants were asked about the number of publications, presentations, and grant awards earned during the two time periods

Total N

N = 11

Selection criteria

Faculty who participated in the mentoring program; control group of faculty who did not participate

Research question(s)/ purpose

Examine scholarly productivity as a result of mentoring

(continued)

Mentoring definition

Mentoring is a long-term, often informal way of helping junior colleagues become productive scholars

Results/Key findings

A facilitated peer-mentoring and traditional junior-senior mentoring model increased scholarly activity in junior-level protégés

Conclusions and implications

Differential response rate between the non-member and member groups; limitations: small sample size, retrospective rather than prospective design

Major theme(s)

This study focused on scholarly activities and further research about other benefits of mentoring is needed (e.g., networking, skills, promotion)

Citation

Lundsford, L. (2012). Doctoral advising or mentoring? Effects on student outcomes. *Mentoring & Tutoring: Partnership in Learning*, 20(2), 251-270.
doi: 10.1080.13611267.2012.678974

Research design

Survey

Total N

N = 477

Selection criteria

Students with high research activity who began their doctoral program between August 2000 and January 2003 and enrolled in EdD or PhD programs

Research question(s)/ purpose

How do doctoral students experience mentoring? Is receiving psychosocial and career mentoring directly related to students' satisfaction with their advisor, more publications, and presentations, and faster degree progress? Are there conditional effects (i.e., do psychosocial and career mentoring operate independently or together on students' outcome?)

Mentoring definition

Two kinds of mentoring: career focused (e.g., sponsoring, coaching, protection, providing challenging assignments) and psychosocial focused (e.g., role modeling, acceptance, counseling, and friendship)

(continued)

Results/Key findings

Most students felt mentoring contributed to their success, satisfaction with advisor, more publications, presentations, and progress on degree milestones

Conclusions and implications

Students value mentoring

Mentoring was significantly related to students' positive outcomes

Types of mentoring and discipline interacted to predict the number of publications

Major theme(s)

Mentoring leads to more satisfaction with advisor, more publications, and faster progress with degree milestones

Citation

Mangione, L., Borden, K.A., Nadkarni, L., Evarts, K., & Hyde, K. (2018). Mentoring in clinical psychology programs: Broadening and deepening. *Training and Education in Professional Psychology, 12*(1), 4-13. doi: 10.1037/tep0000167

Research design

Mixed method: 31-item Qualtrics electronic questionnaire asking if participants felt mentored in graduate school, how they defined mentoring, who provided it, areas in which they felt mentored, and the importance of racial and ethnic identity; open-ended and forced-choice questions

Total N

N = 290

Selection criteria

Directors of doctoral programs distributed invitations to participate in this study to students in their program

Research question(s)/ purpose

How can we broaden and deepen the concept and experience of mentoring in view of the growing diversity of graduate students and their different mentoring needs?

Mentoring definition

Mentoring is a reciprocal process in which a more experienced professional helps the professional and personal development of a less experienced individual

(continued)

Results/Key findings

79% of the participants who answered stated that they had a mentor since they started graduate school; more PhD than PsyD students had a mentor

Conclusions and implications

97% of students mentored viewed mentoring positively

Major theme(s)

Most students viewed mentoring positively and perceived they had a mentor. It is important to start mentoring early in a training program and to match partners by race and ethnicity. Multiple mentoring relationships (e.g., for different areas) provide more support than a single mentoring relationship

Citation

Milburn, N. G., Hamilton, A. B., Lopez, A., & Wyatt, G. E. (2019). Mentoring the next generation of behavioral health scientists to promote health equity. *American Journal of Orthopsychiatry*, 89(3), 369-377. doi: 10.1037/ort0000415

Research design

Qualitative case study

Total N

N = 18 HA-STTP scholars

Selection criteria

Participants in UCLA HIV/AIDS, Substance Abuse, and Trauma Training Program (HA-STTP)

Research question(s)/ purpose

Examine UCLA HA-STTP, a two-year mentoring and training program for 20 (five per year over five years) early career health scientists to promote research using scientifically sound, culturally collaborative, and population-centered approaches

Mentoring definition

N/A

Results/Key findings

This program focuses on research skills not usually offered in training programs and that recognizes the unique contexts of participants (e.g., family, culture, community, etc.)

(continued)

Conclusions and implications

Participants were interested in more individual time with their mentors; they wanted to learn about their mentors' journey (e.g., career path, obstacles, successes)

Major theme(s)

Importance of personal connections: a yearly dinner during which Personal connections are key in successful mentoring

Citation

Moss, J., Gibson, D., & Dollarhide, C. (2014). Professional identity development: A grounded theory of transformational tasks of counselors. *Journal of Counseling & Development*, 92, 3-12. Doi: 10.1002/j.1556-6676.2014.00124.x

Research design

Qualitative grounded theory study

Total N

N = 26 (15 school counselors, 11 community-based counselors; 21 females, five males; 22 Caucasians, four African Americans)

Selection criteria

Stratified purposeful sampling

Research question(s)/ purpose

Explore the process of professional identity development

Mentoring definition

N/A

Results/Key findings

Six influential themes to counselors' professional identity development: (a) adjustment to expectations (i.e., counselors' expectations and expectations of others); (b) confidence and freedom; (c) separation versus integration; (d) experienced guide; (e) continuous learning; and (f) work with clients. Three transformational tasks: idealism toward realism, burnout toward rejuvenation, and compartmentalization toward congruency (i.e., merging of professional and personal self)

Conclusions and implications

The professional identity development process changes during professional life

(continued)

Major theme(s)

Supervisors influence the new counselors' adjustment to the profession (at all experience levels).
The professional identity process changes during the lifespan

Citation

Murdoch, J. L., Stipanovic, N., & Lucas, K. (2012). Fostering connections between graduate students and strengthening professional identity through co-mentoring. *British Journal of Guidance & Counseling*, 41(5), 487-503. doi: 10.1080/03069885.2012.75972

Research design

Mixed method approach using focus group, interviews, and letters and/or emails

Total N

N = 28 (16 master's students, 12 doctoral students)

Selection criteria

Master's and doctoral level counselors from a counselor education program at a mid-size western US university

Research question(s)/ purpose

To measure the effectiveness in promoting identity development of a co-mentoring program pairing master's and doctoral level counselors

Mentoring definition

In a mentoring relationship, the mentor and protégé provide reciprocal support; the more experienced partner strives to increase the chances of career success for the less experienced partner

Results/Key findings

Themes derived from doctoral level students: they viewed the co-mentoring experience as enhancing their professional experience; similarities between mentoring and the counseling process; giving back; collegial relationship and friendship; themes derived from master's level students: professional identity development; personal growth; culture matching was helpful

Conclusions and implications

Professional identity development was a valued outcome for both master's level and doctoral level students

Major theme(s)

Co-mentoring relationships were linked to professional identity development

(continued)

Citation

O'Neil, J., Chaison, A., Cuellar, A., Nguyen, Q., Brown, W., & Teng, E. (2015). Development and implementation of a mentoring program for Veterans Affairs trainees. *Training and Education in Professional Psychology, 9*(2), 113-120.
doi: 10.1037/tep0000065

Research design

Qualitative case study: year-end evaluation questionnaire focused on two domains: (a) program structure and process, and (b) the mentoring relationship

Total N

N = 1

Selection criteria

N/A

Research question(s)/ purpose

Examine a mentoring program for clinical psychology postdoctoral fellows and predoctoral interns in a one-year APA accredited training program at a large Veterans Affairs Medical Center; review differences between mentoring and clinical supervision; highlight the benefits of a mentoring relationship independent of clinical supervision

Mentoring definition

In a professional setting, mentoring is a relationship where an individual with expertise helps the development of a less experienced individual by providing both professional and psychosocial functions

Results/Key findings

Overlap between the duties of a supervisor and mentor; the evaluation aspect of supervision may prevent trainees from sharing non-clinical issues; benefits of mentoring: more satisfaction and commitment to the profession, higher salaries, faster career progress than non-mentored individuals; more likely to become mentors; mentors gain both intrinsic and extrinsic rewards; mentoring facilitates the recruitment and retention of trainees and faculty of diverse backgrounds; risks of mentoring: Four potential types of dysfunctional relationships: (a) negative relations (e.g., bullies, enemies); (b) sabotage (e.g., revenge, silent treatment, career damage); (c) difficulty (e.g., conflicts, binds); and (d) spoiling (e.g., betrayal, regret); Dysfunctional mentoring leads to negative outcomes for mentees (e.g., decreased learning, lower career and psychosocial support, depressed mood, lower job satisfaction, higher stress in workplace)

Conclusions and implications

Program received positive feedback from both partners in terms of structure, process, and quality of the relationship

(continued)

Major theme(s)

The major difference between supervision and mentoring is the lack of conflict of interest in mentoring where there is no evaluator function; importance of flexibility and choice in matching mentors and protégés (i.e., both participate in choice); mentoring benefits not only the participants but also the organization/program (e.g., facilitates the retention of culturally diverse students and faculty)

Citation

Parent, M.C., & Oliver, J. (2015). Mentoring the earliest-career psychologists: Role models, knowledge of internship issues, and attitudes toward research and science. *Professional Psychology: Research and Practice*, 46(1), 55-61. doi: 10/1037/a0038839

Research design

Cross-sectional study; questionnaires using the Influence of Others on Academic and Career Decision Scale, the Attitude Toward Research Scale, the Value of Science for Therapy subscale and questions about participants' knowledge of internship issues

Total N

$N = 223$; 36 identified as men, 180 as women, four as transgender or genderqueer, three did not report their gender; age range 23-50 years old; White/Caucasian (153; 70%), Hispanic/Latino (20; 9%), African American/Black (13; 6%), Asian American/Pacific Islander (10; 5%), biracial or multiracial (10; 5%), American Indian/Native American (three; 1%), different race/ethnicity (nine; 4%); SES: lower class/lower middle class (70; 32%), middle class (82; 37%), upper middle/upper class (67; 31%)

Selection criteria

Undergraduate psychology students in their third or fourth year or beyond who intended to apply to graduate school in clinical or counseling psychology within the next five years

Research question(s)/ purpose

Examine the influence of role models for psychology undergraduate students

Mentoring definition

Mentors are individuals with more experience (relative to the protégé) who form a relationship with and who act as guides or role models for the protégé

Results/Key findings

The influence of the role model was not different by gender or racial-ethnic majority or minority status; differences emerged with perceived SES: lower SES was related to less influence of role models than higher SES (suggested: due to disparity in opportunities)

(continued)

Conclusions and implications

The influence of mentors was unrelated to knowledge of internship-related issues therefore mentors may want to discuss these issues with their protégés

Major themes

Mentors may want to specifically address issues relevant to mentees' training and career choices

Citation

Pfund, C. (2014). Training mentors of clinical and translational research scholars: A randomized control trial. *Academic Medicine*, 89(5), 774-782. ISSN 1040-2446

Research design

Mixed method approach: randomized control trial (RCT) conducted at 16 academic health centers with pre- and posttest self-reports using the Mentoring Competency Assessment (MCA) measuring mentors' awareness (i.e., change in MCA score), protégés' ratings of their mentors' competency, and mentors and protégés' mentoring behaviors

Total N

N = 283; 144 mentors randomized to intervention group and 139 to control group

Selection criteria

Faculty and trainees conducting clinical/translational research 50% of the time or more

Research question(s)/ purpose

Determine whether or not a structured mentoring curriculum improves research mentoring skills

Mentoring definition

N/A

Results/Key findings

Positive influence of mentoring on research career

Conclusions and implications

A competency-based research mentor training program can improve mentor's skills

Major theme(s)

Effective mentoring is important to the success of early career researchers (e.g., improved productivity, self-efficacy, and career satisfaction); competency-based research training

(continued)

Citation

Prouty, A., Helmeke, K., & Fischer, J. (2016). Development of the "Mentorship in Clinical Training Scale" (MiCTS). *Contemporary Family Therapy*, 38, 140-158.
doi:10.1007/s10591-015-9351-9

Research design

Online survey

Total N

N = 223, mostly White American (n = 181), female (n = 187, and heterosexual (n = 207); most had become clinicians after graduation (n=185); the majority received a master's degree (n = 166); 34 came from doctoral program; mean age 35.16 years old

Selection criteria

New family therapists who had completed or nearly completed their preliminary systemic training

Research question(s)/ purpose

Examine new family therapists' experiences of four types of professional mentoring during their recently or nearly completed family therapy training programs
Identify measurable mentorship behaviors representing four important types of mentorships: psychosocial, career, clinical, and research mentorships

Mentoring definition

Mentoring is a short or long-term relationship in which a more experienced mentor teaches skills and provides career help, professional socializing, and psychosocial support to the protégé and provides career help, professional socializing, and psychosocial support to the protégé

Results/Key findings

Four types of mentoring: psychosocial, career, clinical, and research
Participants endorsed all four types of mentorship as having occurred within their training program; psychosocial mentorship is the foundation of the relationship (e.g., safety, acceptance, friendship); career mentorship was more important for LGB and non-white participants' satisfaction; clinical mentorship: protégés endorsed mentors helping them navigate ethical issues and their training program; research mentorship: interest in a research rather than clinical career predicted a higher score in this type of mentorship

Conclusions and implications

76% of participants reported having been mentored during training and of those 82% were satisfied with the experience; the more hours spent in mentoring activities and having a program with a culture of mentoring (e.g., having a mentor within the program, access to mentoring resources such as networking events) predicted satisfaction

(continued)

Major theme(s)

Importance of mentoring culture within training program
More time spent in mentoring activities predicted satisfaction with program

Citation

Remaker, D., Gonzales, M., Houston-Armstrong, T., & Sprague-Connors, G. (2009). Women of color and mentorship in graduate training. *Training and Education in Professional Psychology*, 1-5. doi: 10.1037/tep0000297

Research design

Group differences tests, logistic regressions, multivariate analyses

Total N

N = 220 undergraduate students from across the United States and Canada

Selection criteria

Undergraduate female students of color in third or fourth year intending to pursue graduate training in clinical or counseling psychology within the next five years

Research question(s)/purpose

Explore the benefits and barriers of mentorship for women of color (WOCs) who had supervisors as mentors; investigate the influence of role models among psychology undergraduates, attitude toward research, and knowledge of internship-related issues; inform future research

Mentoring definition

Mentoring involves a more experienced and a less experienced individuals in a professional setting where the more experience individual provides guidance and role modeling

Results/Key findings

In recent years, there has been an increase in enrolment of women of color (WOCs) and mentoring has been shown to enhance the training of WOCs
Barriers for WOCs are lack of representation, culture of academia, gender discrimination, sexual harassment, occupational segregation, and exclusion from mentoring opportunities

Conclusions and implications

Need for more research on undergraduate training in psychology, in particular on the role of modeling and expanding undergraduate knowledge of training issues (e.g., internship)
Women of Color (WOCs) need mentoring that is culturally sensitive and supports their professional growth; academic institutions and supervisors in the field need to provide both professional and personal development to WOCs

(continued)

Major theme(s)

Unique mentoring challenges and needs of women of color (WOCs)
Importance of role modeling and imparting knowledge about training to promote research attitude

Citation

Sanders, K. A., & Steinberg, H. R. (2012). Supervision and mentoring of clinical psychology predoctoral interns and postdoctoral residents. *Journal of Cognitive Psychotherapy, 26*(3), 226-235. doi: 10.1891/0889-8391.26.3.226

Research design

Qualitative case study

Total N

N = 1; description of author's experience with mentoring during her cognitive behavioral therapy (CBT) training

Selection criteria

N/A

Research question(s)/ purpose

Discuss issues related to evidence-based mentoring at the predoctoral, internship, and postdoctoral level
Discuss possible reasons for the lack of empirical research
Suggest future research to promote quality supervision

Mentoring definition

N/A

Results/Key findings

At the internship, predoctoral, and postdoctoral level, supervision entails more and more mentoring functions as the trainee is approaching the end of formal training

Conclusions and implications

Progress will be made with increased attention to issues of supervision, what makes a good psychologist, and whether or not trainees are gaining skills that will promote becoming a good psychologist

Major theme(s)

Mentoring functions need to focus on issues related to professional identity development

(continued)

Citation

Taylor, J. M., & Neimeyer, G. J. (2009). Graduate school mentoring in clinical, counseling, and experimental academic training programs: An exploratory study. *Counseling Psychology Quarterly*, 22(2), 257-266. doi: 10.1080/09515070903157289

Research design

Correlation research using nationwide survey

Total N

$N = 336$; 252 (75% females, 78 (23.2% males, six (1.8%) did not indicate gender; age range 21-55 years old; 269 (80.1%) Caucasians, 22 (6.5%) Asians, 16 (4.8%) multi-racial, 10 (3.0%) Spanish, Hispanic, or Latinos, five (1.5%) others, and four (1.2%) who did not indicate their ethnicities; 73 (21.7%) participants from clinical psychology programs, 92 (27.4%) from counseling psychology programs, 167 (49.7%) from experimental programs

Selection criteria

Graduate students who had mentors

Research question(s)/ purpose

Explore the mentoring relationship between faculty mentors and students

Mentoring definition

A mentoring relationship involves a mentor and a protégé in which the latter is exposed to and earns things that he or she would have learned less effectively otherwise

Results/Key findings

Counseling students perceived higher amounts of socioemotional support and satisfaction with mentoring than clinical students; experimental students reported more instrumental support than counseling students; differences in socioemotional levels of support may be due to counseling psychology's emphasis on personal development; differences in instrumental levels of support may be due to experimental psychology programs lack of a professional practice component

Conclusions and implications

Levels of satisfaction differed among the three types of programs: counseling students reported greater satisfaction with mentoring; satisfaction with mentoring decreased for more advanced students; this may be due to the fact that protégés' expectations may not become fulfilled across time or that protégés need their mentors less as they progress through the mentoring process (e.g., gaining autonomy)

(continued)

Major theme(s)

It is about the relationship: the better, more socioemotional support the relationship provided, the more satisfied the protégés were.

Citation

Tompkins, K., Bretch, K., Tucker, B., & Swift, J. (2016). Who matters most? The contribution of faculty, student-peers, and outside support in predicting graduate student satisfaction. *Training and Education in Professional Psychology, 10*(2), 102-108. doi: 10.1037/tep0000115

Research design

Online surveys measuring life and training program satisfaction and questionnaires measuring social and academic support from program faculty, student-peers, and family and/or friends

Total N

$N = 228$ graduate students in clinical, counseling, or combined professional psychology APA doctoral programs; mostly females (83.5%) and Caucasians (81.5%), Asian American (3.1%), Latino(a) American (3.1%), and African American (2.6%); average age 27.16 years old ($SD=4.65$), ranging from 21 to 27 years old; 55.3% were seeking a PhD, 70.0% were in a clinical program, 27.3% were in a counseling program

Selection criteria

Graduate students enrolled in clinical, counseling, or combined professional psychology APA accredited doctoral programs

Research question(s)/ purpose

Examine the link between three different types of support (i.e., faculty mentors, student-peers, and family/friends) and satisfaction with training programs and life in general

Mentoring definition

N/A

Results/key findings

Family/friends outside the program and student-peers within the program were perceived by the participating graduate students as providing more academic socioemotional support than faculty members within the program; this may be due to pre-existing relationships with family/friends over many domains of life versus the evaluative functions of faculty

Conclusions and implications

All three sources of support (family/friends, faculty, peers) played a role in life satisfaction; program satisfaction; program satisfaction was related to life satisfaction; suggested further research: other variables(s) involved in program satisfaction

(continued)

Major theme(s)

Family/friends and student-peers were perceived by graduate students as providing more academic/socioemotional support than faculty members within the training program; perceived levels of faculty and peer support predicted satisfaction with the program and life satisfaction

Citation

Wagner, C., & du Toit, J. (2018, October 4). A qualitative study of interdisciplinary near-peer research mentoring in professional training. *Training and Education in Professional Psychology*. Advanced online publication. <http://dx.doi.org/10.1037/tep0000213>

Research design

Qualitative stud using a phenomenological approach: six psychology research students were required to mentor urban planning students

Total N

$N = 16$ divided into three focus groups: urban planning students (the mentees), research psychology students (the mentors), and a random selection of half planning and half psychology students

Selection criteria

Random sampling of 50% of the members from each group using MS Excel

Research question(s)/ purpose

Describe the experience of psychology and urban planning students who participated in a near-peer interdisciplinary research mentoring program to understand how psychology trainees could benefit from interdisciplinary cooperation

Mentoring definition

N/A

Results/key findings

Challenges regarding disciplinary roles (i.e., lack of ownership of psychology students who mentored urban planning students but did not participate in the design of the study); challenges regarding the clarity of interdisciplinary collaboration; value of interdisciplinary mentoring for academic outcomes; value of interdisciplinary mentoring for professional identity

Conclusions and implications

Interdisciplinary collaboration broadens the participants' networks and their learning of new techniques and increased their confidence about research skills

(continued)

Major theme(s)

Interdisciplinary mentoring positively affects the development of professional identity; interdisciplinary mentoring enhances communication skills, problem solving, project management skills, and teamwork, but each discipline can feel side-lined

Citation

Watts-Jones, D., Ali, R., Alfano, J., & Frederick, A. (2007). The role of a mentoring group for family therapy trainees and therapists of color. *Family Process, 46*(4), 437-450. doi: 10.1111/j.1545-5300.2007.00224.x

Research design

Qualitative case study

Total N

$N = 1$ group of family therapists (African Americans, Latinos, South Asian and East Asian Americans, and bi-racial Americans)

Selection criteria

A list of trainees or graduate students of color

Research question(s)/ purpose

Examine a mentoring group of family therapists of color; examine how this mentoring group promotes the effectiveness of the protégés as well as social justice and diversity

Mentoring definition

In a mentoring relationship, the multidimensional role of a mentor includes being a coach, advocate, counselor, and role model for a less experienced protégé; mentoring is traditionally a one-on-one relationship

Results/key findings

Support and validation met the main need of trainees including a safe place to speak freely, an escape from racism, and an opportunity for collaboration on projects; internal tensions occurred due to different experiences of oppression as well as different personalities

Conclusions and implications

The mentoring group would have been more effective if agreement on expectations for dealing with conflict and experiences had been developed at the start of the program

(continued)

Major theme(s)

Discuss expectations for dealing with conflict within the group from the onset; obtain funding and resources from training program

Citation

Williams-Nickelson, C. (2009). Mentoring women graduate students: A model for professional psychology. *Professional Psychology: Research and Practice*, 40(3), 284-291.
doi: 10.1037/a0012450

Research design

Nationwide pilot survey of 55 graduate students followed by grounded theory approach by conducting interviews with eight eminent women psychologists

Total N

$N = 63$ (55 women graduate students and eight women psychologists)

Selection criteria

Women graduate students in professional psychology and eminent women psychologists

Research question(s)/ purpose

Examine a mentoring model developed using a pilot survey of women graduate protégées

Mentoring definition

Mentoring describes a relationship in which an individual in a professional field actively facilitates the integration of a new person into the profession following a developmentally appropriate process; the relationship changes over time

Results/Key findings

Roles and functions of a mentor: guide the protégé into the profession through a broad range of career and psychosocial functions; roles and functions of a protégé: maintain a positive attitude toward work and career and be eager to learn; functions of the mentoring relationship: have a positive impact on career, personal growth, and quality of life

Conclusions and implications

Mentoring is highly regarded yet can be challenging in environments where it is not a priority

Major theme(s)

Mentoring is essential to the future of the profession; universities and institutions can promote a culture of mentoring by providing support for mentoring (e.g., events, resources, training)

(continued)

Citation

Yager, J., Waitzkin, H., Parker, T., & Duran, B. B. (2007). Educating, training, and mentoring minority faculty and other trainees in mental health services research. *Academic Psychiatry*, 31(2), 146-151. <http://ap.psychiatryonline.org>

Research design

Qualitative case studies

Total N

N = 2 (mentoring programs consisting of Hispanic and American Indian junior faculty members)

Selection criteria

Members of departments of Psychiatry and Family and Community Medicine at the University of New Mexico

Research question(s)/ purpose

Examine the evolution of support programs funded to develop the research careers of minority faculty for mental health services

Mentoring definition

N/A

Results/Key findings

The MRISP focused on planning, project review, supervision of the funded projects, and presentations by MRISP members; the MEP offered several yearly intensive one-week training institutes to teach basic research that were linked to long-term mentorship

Conclusions and implications

Despite challenges, many junior faculty researchers have obtained K awards and other grants within two years after joining the program

Major themes

Successful training programs must not only offer high tech standards, but also provide mentoring within social networks that address social prejudice and minority discrimination; funding requires sustained support by the National Institute of Mental Health (NIMH)

APPENDIX C

Coding Frequency Table

Category	Code	Sub-code 1	Sub-code 2	Cases
Benefits of Mentoring				
			Advocacy	1
			Bidirectional benefits	6
			Career benefits	5
			Importance of mentoring	13
			Psychosocial benefits	4
			For field at large	4
			For institutions/ universities	
		Recruitment/retention of minority students		4
			For mentors	
		Career productivity		2
		Career satisfaction		3
		Leadership qualities		1
		Pride/commitment to profession		1
		Personal satisfaction/rejuvenation		4
		Professional recognition		1
	For protégés	Academic success		1
		Advice/guidance/career support		3
		Career success/promotions/higher salary		11
		Clinical identity development		4
		Confidence/motivation/attitude		7
		Decision to pursue career in academia		2
		Emotional/psychosocial support		5
		Faster dissertation/degree completion		1
		Feedback		1
		Health-related benefits		2
		Help reaching goals		1
		Interest in research		3
		Knowledge about field/career path		2
		Leadership qualities		2
		Learning		2
		More connections to professional network		6
		More likely to become mentor		1
		Opened doors (e.g., introductions)		1
		Personal growth		7
		Presentations/publications/research		9
		Professional identity development		9
		Satisfaction with career choice		5
		Satisfaction with training program		9
		Self-efficacy		2
Cultural awareness				
			Challenges for first generation students	2
			Challenges for international students	1

(continued)

Category	Code	Sub-code 1	Sub-code 2	Cases
		Challenges for LGBTQ students		1
		Challenges for low SES students		1
		Challenges for students of color/minorities		12
			Cross-cultural mentoring issues	2
			Dearth of similar identity mentors	2
		Challenges for women		5
		Challenges for women of color (WOCs)		6
		Multicultural mentoring		
			Awareness of protégé's contexts	6
			Culture of Academia	6
			Demographic shifts/increase in Minority students and faculty	6
			Importance of multicultural mentoring	6
			Mentor multicultural education/awareness	13
<hr/>				
Evidence-based mentoring				
		Competence-based mentoring		6
		Need for more research		18
		Outcome	Lack of available mentors	1
<hr/>				
Guidelines/recommendations				
		For mentors	Clarify expectations/boundaries	1
			Develop collaborative mentorship plan	1
			Understand cultural socialization process	1
			Understand protégé's conceptualization of mentoring	1
			Understand the influence of culture, race, ethnicity, gender, and sexual orientation	4
		For universities	Address need to provide mentoring to all	2
			Appoint faculty mentoring program coordinator	1
			Build-in regular contacts between program Coordinator and participants	1
			Clear exit strategy for negative relationships	1
			Consider Multilevel mentoring	1
			Create brochures about mentoring and mentors/ post information on website	1
			Eliminate assigned pairings	1
			Establish mentoring program independent of supervision	1
			Have a large pool of mentors	2
			Highlight mentoring in hiring process	1
			Identify reasons why people don't participate	1
			Make mentoring program flexible	1
			Obtain regular feedback/evaluations	2

(continued)

Category	Code	Sub-code 1	Sub-code 2	Cases
		Offer different mentors to meet needs of students at different training stages		1
		Offer mentorship opportunities with mentors with similar basic identity		1
		Organize mentoring networking events		1
		Provide mentoring early in training		3
		Provide education, resources, and rewards		5
		Streamline matching process		1
<hr/>				
Mentoring functions				
	Career mentoring Functions	Academic growth and investment		1
		Being proactive/working on goals		6
		Clinical identity/skills development		1
		Coaching/role modeling/advice		12
		Connections/networking/sponsoring/protection/letters of recommendation		13
		Giving gifts/financial assistance		3
		Help with grants/publications/presentations research		4
		Help with salary negotiations		1
		Identify protégé's potential		3
		Model behaviors in different roles		2
		Professional development/identity		8
		Promote independence		1
		Provide knowledge/challenging assignments/feedback		10
		Research opportunities		1
		Research skills development		2
		Teaching unwritten rules		6
	Psychosocial Mentoring functions	Acceptance/encouragement/validation/advocacy		9
		Emotional support/trust/sharing stories/humor/friendship/advice		11
		Giving time/responsiveness/communication/flexibility		6
		Help develop confidence, self-reliance, and initiative		2
		Importance of emotional/psychosocial support		6
		Maintaining/enhancing protégé's quality of life		1
		Role modeling/work-life balance		10
		Talking about race		6
	Mentors' mentoring Training			2

(continued)

Category	Code	Sub-code 1	Sub-code 2	Cases
Mentoring relationships				
	Factors affecting mentoring received	Gender		2
		Race/ethnicity		1
		SES		2
		Similar rates of perceived mentoring for men and women		1
	Matching in formal mentoring	Matching factors	Matching by gender	1
			Matching by race/ethnicity is Important	13
			Matching by race/gender is not Important as long as partners learn from cultural differences	3
			Matching research inconclusive	2
			Partners' input in matching process	1
	Mentor categories	Matching process issues		1
		Advisor mentor		1
		APA/APAGS/CECP leadership mentors		1
		Faculty mentors		3
		Multilevel mentoring		2
		Multiple mentors/ Mentoring constellation	Primary mentors	1
			Secondary mentors	1
			Mentoring exosphere	1
			No single guru	4
		Peer mentor		5
		Supervisor mentor		1
	Mentoring relationships and mentors' characteristics	Career mentors (more experience/power)		1
		Effective mentors		6
		Importance of quality of the relationship		1

(continued)

Category	Code	Sub-code 1	Sub-code 2	Cases
		Interpersonal relatedness/ reciprocity/friendship/trust		6
		Lack of acknowledgement of informal mentoring vs. explicit/formal mentoring		2
		Lack of formal leadership mentoring in psychology		1
		Parallel with counseling process		2
		Reciprocity/mutuality/ collegiality		3
		Mentoring vs. supervision	Imprecise use of term mentor	2
			Informal mentoring not time-constrained	2
			Mentoring focused on both personal and career development	1
			Mentoring is defined by character of the Relationship	1
			Mentoring less hierarchical/not evaluator/provides more psychosocial support/more shared intent and involvement from both partners	1
			Better outcome for trainee when mentoring- based supervision becomes more transformational	3
		Mentoring vs. advising		2
	Types of mentoring	Co-mentoring		1
		Formal mentoring		3
		Informal mentoring		1
		Informal vs. formal mentoring	Duration	2
			Effectiveness of formal leadership mentoring	1

(continued)

Category	Code	Sub-code 1	Sub-code 2	Cases
			Effectiveness of formal mentoring programs	1
			Effectiveness of informal mentoring programs	3
			Focus	1
			Informal mentors provide more psychosocial than career support	2
			Informal mentoring's Natural pairing leads to more successful relationships	3
			Informal relationships develop more slowly	1
			Informal mentoring associated with higher salary/promotions	1
			Intensity	1
			Protection	1
			Visibility	1
<hr/>				
Mentoring support				
			Need for more mentoring	3
			Support from APA and organizations	5
			Support from institutions/ universities	8
<hr/>				
Predicting mentorship satisfaction				
			Faculty mentor vs. Supervisor mentor (no answer/need research)	1
			Gender matching (no answer/need research)	1
			Informal vs. formally assigned mentor	1

(continued)

Category	Code	Sub-code 1	Sub-code 2	Cases
	Internal vs. external mentor to training program			1
	Mentoring in Clinical Training Scale	Career mentorship		1
		Clinical mentorship		1
		Psychosocial mentorship		1
		Research mentorship		1
	Number of hours mentored			
	Percentage of peers mentored			1
	Protégé's ethnicity			1
	Sexual orientation (no answer/need research)			1
<hr/>				
Prevalence/kind of mentoring in psychology training programs				
	Differences in mentoring in PsyD vs. PhD programs			4
	Prevalence of mentoring in psychology training			2
	Reasons for more mentoring in PhD vs. PsyD programs	Greater focus on mentoring in research-oriented programs		3
		Higher student-to-faculty Ratio in professional psychology programs		1
		More part-time/adjunct Faculty in professional psychology programs		1
	Students interested in having a mentor			2
	Unclear definition of mentoring			
	Impacts estimates of mentoring			

(continued)

Category	Code	Sub-code 1	Sub-code 2	Cases
			Lower psychosocial and career support	1
		Negative relations		2
		Sabotage		2
		Spoiling (e.g., betrayal, regret)		2
<hr/>				
The mentoring process				
		Ways mentors and protégés connect		2
		Bonding		1
		Goals/expectations/format		2
	Maintaining/transformation/ending of relationship			1
	Definition of mentorship/mentor			11
<hr/>				
Benchmark for evaluating success/redefinition/ending relationship				
	Mentor's pride in contributing to protégé's achievement			1
	Partners have become friends and colleagues			1
	Protégé is confident and more independent			1
	Protégé's goals have been met			1
<hr/>				
What students want from mentorship				
	Emotional and career support			3
	Help applying for grants			1
	Help starting a career			1
	Help understanding how to be a mentor			1
	What students of color/minorities want	Age difference between mentor/protégé		1
		Confidence/personal Interpersonal relationship/friendship		1
		Mutual respect		2

(continued)

Category	Code	Sub-code 1	Sub-code 2	Cases
		Spirituality		1
		Teacher-student/guide relationship		1
		Trust/honesty/comfort		1

APPENDIX D

Process Notes

The Google Scholar search was abandoned since it yielded articles already found through PsycINFO and PsycARTICLES.

After each lot of ten articles were entered in individual analysis tables, Dr. Tuttle and I discussed emerging themes in view of developing codes and categories to be used in the QDA Miner Lite text analysis software program for a more in-depth analysis of the literature.

Themes were pulled from the analysis tables (Appendix A).

Total documents: 60 (34 empirical studies, 26 theoretical articles); waiting for five requested articles.

Date	Empirical studies	Theoretical articles
12/17/19	<p>Unique challenges and mentoring needs of students of color/minorities</p> <p>Needs of students of color/minorities require additional expertise from mentors</p> <p>Underrepresented minorities need mentors</p> <p>Lack of empirical research on Mentoring during graduate training</p> <p>Importance of mentoring to form Future advocates for the profession</p> <p>Mentoring as access to “inside story”</p>	<p>Unique challenges to mentoring students in PsyD programs (practitioner-focused)</p> <p>Graduate peer mentors are more accessible and approachable than faculty mentors, but they lack expertise (still in training) and there may be conflicts of interest (competition for positions)</p> <p>Mentoring must match the developmental needs of mentees</p> <p>Benefits of mentoring for minorities and women</p> <p>Goal of mentoring is to help mentee become an independent practitioner and researcher</p> <p>There are not enough minority mentors</p> <p>Use outcome measures to evaluate effectiveness and competence of mentors</p>

(continued)

Date	Empirical studies	Theoretical articles
12/17/20		<p>Need for appropriate compensation for mentors</p> <p>Graduate peer mentors may be in a better position to meet the needs of Minorities with little access to mentors due to underrepresentation</p> <p>Need for mentors to be educated about minorities issues</p> <p>Unique needs of women and older students require a tailored approach to mentoring</p> <p>Mentoring benefits both mentor and Mentee</p> <p>Importance of attention to needs of culturally diverse students</p> <p>Need for more evidence-based research</p>
1/7/20	<p>Importance of mentors being multiculturally aware and competent (specific needs of minorities)</p> <p>Mentoring requires respectful and humble stance in approaching cultural differences</p> <p>Mentoring should be rewarded by counseling and clinical psychology Departments and be part of hiring process discussion</p> <p>Mentoring is primordial for the future of counseling and clinical psychology and psychology as a field</p> <p>Importance of matching in formal mentoring; specifically, both participants need to have a say in matching process and be committed (pressure does not work)</p> <p>Need to recruit, train, and retain diverse trainees and faculty who are under-represented</p> <p>Need for more institutionalized formal Diversity mentoring</p>	<p>Importance of making more explicit the difference between advising and mentoring; mentoring relationships are reciprocal, mutually beneficial, and beneficial to institutions and profession as a whole</p> <p>Students in health service psychology are less likely to be mentored than students in research-focused programs and would benefit from mentoring</p> <p>Role of formal research training program in providing mentoring to graduate students and postdoctoral fellows</p> <p>Importance for students and fellows of cultivating a network of mentors to develop and sustain a research career</p> <p>Mentoring is critical to the next generation of psychologists</p>

(continued)

Date	Empirical studies	Theoretical articles
1/7/20	<p>Importance of mentoring students and early career psychologists for leadership in health service psychology at the national level</p> <p>Peer mentoring for leadership have a unique value</p> <p>Mentoring in clinical geropsychology occurs frequently, is valued, and seen as long-term efforts to expand mentoring is likely to help meet the needs for clinical geropsychologists psychosocial support and networking help were the most value mentoring functions</p>	
1/14/20	<p>Black women are underrepresented and need mentoring to palliate the lack of role models</p> <p>Strong mentoring is a predictor of students' satisfaction with a training Program, doctoral degree completion, career opportunities, professional success</p> <p>Suggestion: consider mentoring competence when hiring new clinical supervisors; supervisors will be more inclined to mentor within a training program that empowers, equips for, and rewards mentoring</p> <p>Black students and faculty are still Underrepresented in doctoral programs And need mentoring</p> <p>Mentors must strive for multicultural Competence to mentor minority Students</p> <p>It is important to hire culturally diverse Faculty</p> <p>Need for institutions to reward mentoring</p> <p>Need for more research about informal</p>	<p>Mentoring early career psychologists is essential as today's ECPs will shape psychology's future</p> <p>Mentoring strengthens and enhances the profession</p> <p>Mentoring is an instrument for social change and social justice</p> <p>Discrepancy between the growing numbers of minority groups in the US population and the shortage of minority researchers in the mental health field</p> <p>Need for research on training and mentoring</p> <p>Universities, medical schools, and funding agencies need to implement national and local programs to help develop and reward mentors of junior scientists from ethnic minority groups</p> <p>Unique role of mentoring vs. transformational supervision</p> <p>Mentoring is unique and different From other relationships</p> <p>Transformational supervision is not The same as mentoring but Geropsychology trainees could benefit from a transformational</p>

(continued)

Date	Empirical studies	Theoretical articles
1/14/20		<p>approach that integrates mentoring Mentoring functions by a Geropsychologist Mentoring relationships are reciprocal and interns and fellows can actively participate in meeting Their supervision and mentoring Needs Importance of respecting diversity Need to create a mentoring culture: Procedures, resources, and rewards Must be developed to reinforce the Personal investment required from Both mentor and mentee</p>
1/21/20	<p>Supervisor training should include Information about mentoring and And mentoring functions (e.g., Assigning challenging tasks, Sponsoring, and demonstrating trust) Supervisors may have difficulty Differentiating between supervisory And mentoring functions Mentoring leads to more satisfaction With advisor, more publications, and Faster progress with degree milestones While the friendship aspect of mentoring Is usually emphasized, more career Support may be helpful for students in The “soft” disciplines (e.g., social Sciences) Most students viewed mentoring Positively and perceived they had a Mentor Importance of starting mentoring early In a training program Importance of matching mentor and Mentee in race and ethnicity Access to multiple mentors (for different Areas) provides more support than single Mentoring relationships</p>	<p>Importance of mentoring for the future of the profession Importance of work/life balance Junior faculty members lead the mentoring relationship and mentors need to be receptive to their needs and expectations Importance of a good fit between mentor and mentee Mentorship is at the core of career satisfaction and success The individualized feedback provided through mentoring cannot be imparted in the classroom Mentorship is a vehicle by which students are socialized into the larger profession of clinical psychology</p>

(continued)

Date	Empirical studies	Theoretical articles
1/28/20	<p>Importance of personal connections (e.g., yearly dinner)</p> <p>Studies found supervisors to be Important to the new counselors' Adjustment to the profession (at all Experience levels)</p> <p>The professional identity process Changes during the lifespan</p> <p>Co-mentoring relationships (between Master's and doctoral level students)</p> <p>Helped with professional identity Development</p> <p>There is overlap between supervision And mentoring, but one major difference Is the evaluator nature of supervision</p> <p>Importance of flexibility and choice in Matching mentors and mentees (i.e., both participate in choice)</p> <p>Mentored individuals were more Satisfied and more successful in theirci Career</p> <p>Mentoring benefits both mentor and mentee</p> <p>Mentoring benefits the organization/ Program (e.g., facilitate the retention of Culturally diverse students and faculty</p> <p>Importance of mentoring culture with Training program</p> <p>More time spent in mentorship activities</p> <p>Predicted satisfaction</p> <p>Unique mentoring challenges and needs Of women of color (WOCs)</p> <p>Importance of role modeling and imparting Knowledge about training to promote Research attitude</p>	<p>Importance of culturally sensitive mentoring</p> <p>Ethical issues (e.g., dual relationships, suing/abuse of power, exploitation): need for the mentor to be vigilant about personal motivation and to be open to consider multiple viewpoints</p>
2/3/20	<p>Professional identity development</p> <p>It is about relationships: the better, More socioemotional support the Relationship provided, the more Satisfied the mentees were</p> <p>Family/friends and student-peers were perceived by graduate students as</p>	<p>Ethical issues</p> <p>Need for formalized, evidence-based mentor training and mentoring resources</p> <p>On a systemic level, psychologists should advocate for home institutions and clinical agencies'</p>

(continued)

Date	Empirical studies	Theoretical articles
2/3/20	<p>providing more academic socioemotional support than faculty members within the training program</p> <p>Perceived level of faculty and peer support</p> <p>Predicted satisfaction with the training Program and life satisfaction</p> <p>Interdisciplinary mentoring positively Affects the development of professional Identity</p> <p>Mentoring students from other Disciplines may promote interdisciplinary Literacy and problem solving and build Communication skills, project Management skills, project management Skills, and teamwork, but each Discipline can feel side-lined</p> <p>Discuss expectations for dealing with Conflict within the group from the onset</p> <p>Obtain funding and resources from Training program</p> <p>Mentoring is essential to the future of The profession</p> <p>Administrators, directors, university Presidents, deans, etc. can promote Mentoring by providing more vocal And financial support</p> <p>Successful training programs must not Only offer high technical standards, but Also provide mentoring within social Networks that address social prejudice and Minority discrimination</p> <p>Funding requires sustained support by the National Institute of Mental Health (NIMH)</p>	<p>support for an ethical mentoring culture and collaborate to exchange resources across institutions and disciplines</p> <p>Unique needs and challenges of Beyond the rewards of effective mentoring and developing friendships with international students, mentors may be contributing to the amelioration of larger societal trends (i.e., as the United States population becomes more diverse, international students may be well-equipped to work with diverse clients/patients</p> <p>There is a high demand for geropsychologists who will require qualified geropsychologists mentors at all levels of professional development</p> <p>Both mentors and trainees would benefit from information on effective mentoring practices</p>

Provisional categories

Subcategories

Professional identity development

Reward mentors

(continued)

Provisional categories	Subcategories
Mentoring minorities	Challenges and unique needs of ethnic/racial Minorities, women, LGBT, international Students Access to “inside story” Need for additional expertise for mentors (multiculturally aware, respectful, humble Stance)
Benefits of mentoring	Informal mentoring Formal mentoring Instrument of social change/social justice For mentees (satisfaction with training Program, career, work-life balance) For mentor
Challenges of mentoring	Mismatch Time
Interactive process/relationships	
Ethical issues	
Mentoring for benefit of profession	Future of counseling and clinical psychology
Benefits for institutions/organizations	Less staff turnover Students satisfied with program
Unique needs of PsyD students	Large faculty to student ratio Need to work, no time (expensive programs)
Peer-mentors	Benefits (more accessible/approachable; Better suited to work with minorities) Barriers (competition, not experts)
Match	Mentor-mentee (need to have input in Match, equally committed to relationship) Developmental needs of mentee

(continued)

Provisional categories

Subcategories

Dearth of evidence-based mentoring research

Competency-based mentoring

Differences between supervision and mentoring

Formal/institutionalized mentoring vs. Informal mentoring

Mentoring in geropsychology

Mentoring in research

Encourage culture of mentoring

Rewards
Resources (organize events)
Consider mentoring competence when hiring

On 2/10/20, Dr. Tuttle and I decided to focus the QDA Miner Lite analysis on empirical articles and include the theoretical articles in the literature review. After carefully rereading the empirical articles, six of them were removed as they pertained to mentoring junior faculty or early career psychologists past licensure rather than graduate students going through the training process or pre-licensure professionals. This resulted in a total of 29 empirical studies. The following color-coded list was developed on QDA Miner Lite. New categories will be added as needed.

Category	Code	Subcode
Benefits of mentoring (aqua)	Advocacy (for community and psychologists Bidirectional benefits Career benefits For field at large	

(continued)

Category	Code	Subcode
	For institutions/ universities	Prestige (research/presentations/ publications/leadership)
	For mentors	Students retention and satisfaction
	For protégés	Help with research Increased leadership qualities
		Satisfaction with training program
		Satisfaction with career choice
		Career success/promotions/ higher salary
		Presentations/publications/ research
		Professional identity development
		Clinical identity development
		Attitudinal/motivational benefits
		Health-related benefits
	Psychosocial benefits	
Cultural awareness (purple)	Challenges for first Generation students	
	Challenges for international students	
	Challenges for LGBTQ students	
	Challenges for students of color/minorities	
	What students want from mentorship	Age difference (older mentors command respect for Asian students)
		Interpersonal relationship/ friendship
		Personal growth
		Respect

(continued)

Category	Code	Subcode
	Challenges for women Importance of multicultural Mentoring	Teacher-student guide relationship Trust/comfort/honesty Awareness of protégé' s contexts (family, university, profession, community, culture) Demographic shifts/need to increase minority students and faculty Mentor multicultural education/awareness/humility "Other-mothering"/"invisible work"/"cultural taxation" The "Inside Story"/culture of academia/organizational socialization
Empirical design (red)	Qualitative Quantitative	Case study Grounded theory Interview Cross-sectional survey Longitudinal survey Survey Mixed methods
Evidence-based mentoring (teal)	Competency-based mentoring Need for empirical research	
Guidelines/recommendations (orange)	For mentors	Clarify expectations/ boundaries Understand influence of culture, race, ethnicity, gender, sexual orientation Understand parameters of mentoring

(continued)

Category	Code	Subcode
	For universities/institutions	<p>Appoint a faculty mentoring program coordinator</p> <p>Build-in more regular contacts between program coordinator and participants</p> <p>clear exit strategies for negative relationships at outset of program</p> <p>Consider multilevel mentoring (invite all faculty and postdoctoral fellows to mentor (e.g., questionnaire about interest in mentoring/areas of expertise)</p> <p>Create brochures about mentoring and potential mentors and provide information on website</p> <p>Eliminate assigned pairings that do not include input from both partners</p> <p>Establish mentoring program independent of supervision (limit use of direct supervisors as mentors)</p> <p>Have a large pool of mentors to choose from</p> <p>Highlight mentoring in hiring process</p> <p>Identify reasons why faculty and trainees elect not to participate in mentoring</p> <p>Make mentoring program flexible so as not to compete with mentors' other responsibilities</p> <p>Obtain regular feedback/ Evaluations</p>

(continued)

Category	Code	Subcode
		Offer mentorship opportunities with mentors with similar identity (race/ethnicity) Organize mentoring networking events Organize practice mentoring sessions between mentors and proteges Provide mentoring and co-mentoring opportunities early in training (e.g., networking events) Provide mentoring process and multicultural education for mentors Provide resources and rewards Streamline matching process
Mentoring functions (green and lime)	Career mentoring functions Clinical mentoring functions Expectation of both psychosocial and career support Mentor's mentorship training Professional mentoring Functions	Academic identity/skills development Being proactive/working on goal Clinical identity development Coaching/role modeling/advice Connections/networking/sponsoring/protection Gifts/financial assistance/other resources Helping with grants/publications/presentations/research

(continued)

Category	Code	Subcode
	Professional development/ Professional identity Research opportunities Research skills development Teaching unwritten rules/ “Inside Story”	Knowledge/challenging assignments/feedback
Psychosocial mentoring functions (lime)	Acceptance/encouragement/ validation Emotional support/trust/sharing Stories/humor/friendship/advice Giving time/responsiveness/ communication/flexibility Psychosocial/emotional support Role modeling/work-life balance Talking about race Psychosocial mentoring functions Research mentoring functions	
Mentoring relationship (light blue)	Factors affecting mentoring Received Lack of acknowledgement of informal mentoring vs. Explicit/formal mentoring Matching in formal mentoring programs	Gender Race/ethnicity SES Factors linked to successful match Matching matters Matching research inconclusive Mentor preparation/cultural awareness Partners had input in matching process

(continued)

Category	Code	Subcode
		Learning from cultural differences
	Matching by race/minority group/gender is important	
	Matching by race/minority group/gender is not important	
	Matching process issues	
	Mentor categories	Advisor mentor Faculty mentor Multilevel mentoring (e.g., faculty>postdoctoral fellow>intern) Multiple mentors Peer mentor Supervisor Mentor
	Mentoring relationship and mentors' characteristics	
	Effective mentors	
	Giving back	
	Interpersonal relatedness/ mutuality/reciprocity/ friendship/trust	
	Parallel with counseling process	
	Reciprocity/mutuality/collegiality	
	Ways mentors-protoges connect	
	Mentoring vs advising	
	Mentoring vs supervision	
	Informal mentoring	Not time-constrained Focused on both personal and professional development Less hierarchical Not evaluative More mutual/reciprocal Provides more psychosocial support More shared intent and involvement from partners More transformational
	Settings and times in training when students want a mentor	

(continued)

Category	Code	Subcode
	Types of mentoring	Formal Informal Informal vs. formal
	Duration	
	Effectiveness of formal mentoring	
	Effectiveness of informal mentoring	
	SES	
	Intensity	
	Lack of acknowledgement of informal mentoring	
	Protection	
	Visibility	
Mentoring support (dark grey))	From APA and organizations From institutions/universities Need for more support	
Prevalence of mentoring in psychology training programs (pink)	Prevalence of mentoring in psychology training Prevalence of mentoring in PsyD vs PhD programs Prevalence of mentoring in geropsychology programs Students interested in having a mentor (who did not have one)	
Risks/challenges/ethical issues (brown)	For mentors	Bad protégés Boundaries issues Dual roles (evaluator function as supervisor) Time investment
	For protégés	Cognitive clash with mentor Lack of emotional connection with mentor Lack of mentor's cultural awareness

(continued)

Category	Code	Subcode
	Negative outcomes of dysfunctional mentoring	Mentor's lack of experience/bad advice Mentor's personal issues Mentor's unresponsiveness Mismatch Need for independence Decreased learning Depressed mood Long-term effect of increased job turnover Long-term effect of lower job satisfaction Lower psychological and career support Negative relations (e.g., bullies, enemies) Sabotage (e.g., revenge, silent treatment, career damage) Spoiling (e.g., betrayal, regret)

After careful third and fourth examinations of the empirical studies, a final list of codes and categories was developed (see Appendix C, Coding Frequency Table). Due to the current paucity of research on mentoring in the training cycle of clinical and counseling psychology graduate students, some categories (e.g., benefits of mentoring for women of color) were included even if they were the focus of a single chapter or article. By contrast, some categories one would expect to see included (e.g., to balance mentors' challenges and risks with those of protégés) are not on the table if they are not mentioned in the articles. As a note, QDA Miner Lite is potentially a good program, albeit one not previously used by Pepperdine students, which meant that the library technical support team was not familiar with it. Learning how to use it was challenging. I trust that with practice, it could be a great tool.

APPENDIX E

Data Bases Search Results

Database/ Search #	Searches by key terms and combinations thereof	# of results	Running totals
PsycINFO			
Search #1	“mentoring”	9902	
	Limit to scholarly (peer reviewed) journals	5898	
	AND “psychology”	1947	
	AND “training”	612	
	Limit date to 2007-2019	465	
	Appear to meet document criteria	40	
	With removal of duplicates	39	39
Search#2	“mentor”	12273	
	Limit to scholarly (peer reviewed) journals	7607	
	AND “psychology”	2373	
	AND “training”	691	
	Limit date to 2007-2019	508	
	Appear to meet document criteria	40	
	With removal of duplicates	9	46
Search #3	“gender”	220,539	
	Limit to scholarly (peer reviewed) journals	167,813	
	AND “mentoring”	401	
	AND “psychology”	174	
	Limit date to 2007-2019	100	
	Appear to meet document criteria	1	
	With removal of duplicates	0	46
Search #4	“minorities”	56,249	
	Limit to scholarly (peer reviewed) journals	39,784	
	AND “mentoring”	254	
	AND “psychology”	97	
	Limit date to 2007-2019	71	
	Appear to meet document criteria	4	
	With removal of duplicates	1	47
Search #5	“disabilities”	176,494	
	Limit to scholarly (peer reviewed) journals	139,334	
	AND “mentoring”	135	
	AND “psychology”	32	
	Limit date to 2007-2019	26	
	Appear to meet document criteria	1	
	With removal of duplicates	1	48

(continued)

Database/ Search #	Searches by key terms and combinations thereof	# of results	Running totals
PsycINFO			
Search#6	“sexual orientation” or “LGBTQ”	37,620	
	Limit to scholarly (peer reviewed) journals	28,737	
	AND “mentoring”	28	
	AND “training”	14	
	Limit date to 2007-2019	8	
	Appear to meet document criteria	1	
	With removal of duplicates	1	49
Search #7	“culture”	206,240	
	Limit to scholarly (peer reviewed) journals	136,947	
	AND “mentoring”	413	
	AND “psychology”	142	
	Limit date to 2007-2019	110	
	Appear to meet document criteria	0	
	With removal of duplicates	0	49
Search #8	“multicultural relationships”	369	
	Limit to scholarly (peer reviewed) journals	160	
	AND “mentoring”	6	
	AND “psychology”	3	
	Limit date to 2007-2019	2	
	Appear to meet document criteria	1	
	With removal of duplicates	0	49
Search #9	“cultural competence” or “cultural awareness”	14,492	
	Limit to scholarly (peer reviewed) journals	9,167	
	AND “mentoring”	73	
	AND “psychology”	30	
	Limit date to 2007-2019	23	
	Appear to meet document criteria	1	
	With removal of duplicates	0	49
Search # 10	“multicultural factors”	227	
	Limit to scholarly (peer reviewed) journals	105	
	AND “psychology”	48	
	AND “training”	23	
	AND “mentoring”	0	49

(continued)

Database/ Search #	Searches by key terms and combinations thereof	# of results	Running totals
PsycINFO			
Search# 11	“cultural humility”	252	
	Limit to scholarly (peer reviewed) journals	154	
	AND “psychology”	58	
	AND “mentoring”	0	49
Search # 12	“ethnicity”	56,404	
	Limit to scholarly (peer reviewed) journals	37,911	
	AND “mentoring or mentorship or mentor or mentor program	4	
	Limit date to 2007-2019	1	
	With removal of duplicates	0	49
Search # 13	“mentoring”	9902	
	Limit to scholarly (peer reviewed) journals	5898	
	AND “clinical training”	126	
	Limit date to 2007-2019	98	
	Appear to meet document criteria	14	
	With removal of duplicates	4	53
Search # 14	“mentoring”	9902	
	Limit to scholarly (peer reviewed) journals	5898	
	AND “psychology graduate students”	39	
	Limit date to 2007-2019	20	
	Appear to meet document criteria	5	
	With removal of duplicates	2	55
Search # 15	“mentoring”	9902	
	Limit to scholarly (peer reviewed) journals	5898	
	AND “psychology”	1947	
	AND “practicum or internship or Fellowship”	49	
	Limit date to 2007-2019	32	
	Appear to meet document criteria	4	
	With removal of duplicates	1	56
	With removal of duplicates	4	53

(continued)

Database/ Search #	Searches by key terms and combinations thereof	# of results	Running totals
PsycINFO			
Search # 16	“mentoring benefits”	390	
	Limit to scholarly (peer reviewed) journals	237	
	AND “clinical training”	3	
	Limit date to 2007-2019	2	
	Appear to meet document criteria	1	
	With removal of duplicates	0	56
Search # 17	“mentoring risks”	175	
	Limit to scholarly (peer reviewed) journals	96	
	AND “clinical training”	0	56
Search # 18	“mentor-protégé” or “mentor-mentee”	250	
	Limit to scholarly (peer reviewed) journals	250	
	AND “matching”	10	
	AND “clinical training”	0	56
PsycARTICLES			
Search # 1	“mentoring”	255	
	Limit to scholarly (peer reviewed) journals	221	
	AND “psychology”	183	
	AND “training”	92	
	Limit date to 2007-2019	63	
	Appear to meet document criteria	20	
	With removal of duplicates	2	2
Search # 2	“mentor”	455	
	Limit to scholarly (peer reviewed) journals	429	
	AND “psychology”	344	
	AND “training”	138	
	Limit date to 2007-2019	104	
	Appear to meet document criteria	18	
	With removal of duplicates	2	4
Search # 3	“gender”	8,471	
	Limit to scholarly (peer reviewed) journals	8,099	
	AND “mentoring”	21	
	AND “psychology”	19	

(continued)

Database/ Search #	Searches by key terms and combinations thereof	# of results	Running totals
PsycARTICLES			
Search # 3	Limit date to 2007-2019	7	
	Appear to meet document criteria	1	
	With removal of duplicates	1	5
Search # 4	“minorities”	5,084	
	Limit to scholarly (peer reviewed) journals	3,825	
	AND “mentoring”	29	
	AND “psychology”	26	
	Limit date to 2007-2019	19	
	Appear to meet document criteria	5	
	With removal of duplicates	0	5
Search # 5	“disabilities”	4,793	
	Limit to scholarly (peer reviewed) journals	4,793	
	AND “mentoring”	14	
	AND “psychology”	11	
	Limit date to 2007-2019	9	
	Appear to meet document criteria	1	
	With removal of duplicates	1	6
Search # 6	“sexual orientation”	1,976	
	Limit to scholarly (peer reviewed) journals	1,703	
	AND “mentoring”	2	
	AND “psychology”	2	
	Limit date to 2007-2019	1	
	Appear to meet document criteria	1	
	With removal of duplicates	1	7
Search # 7	“culture”	7,836	
	Limit to scholarly (peer reviewed) journals	7,332	
	AND “mentoring”	18	
	AND “psychology”	16	
	Limit date to 2007-2019	14	
	Appear to meet document criteria	2	
	With removal of duplicates	0	7
Search #8	“multicultural relationships”	19	
	Limit to scholarly (peer reviewed) journals	19	
	AND “mentoring”	0	

(continued)

Database/ Search #	Searches by key terms and combinations thereof	# of results	Running totals
PsycARTICLES			
Search # 8	AND “psychology”	18	
	Limit date to 2007-2019	11	
	With Appear to meet document criteria	0	7
Search # 9	“cultural competence”	165	
	Limit to scholarly (peer reviewed) journals	165	
	AND “mentoring”	1	
	AND “psychology”	1	
	Limit date to 2007-2019	1	
	Appear to meet document criteria	1	
	With removal of duplicates	1	8
Search # 10	“multicultural factors”	13	
	Limit to scholarly (peer reviewed) journals	13	
	AND “psychology”	13	
	AND “training”	7	
	AND “mentoring”	0	8
Search # 11	“cultural humility”	26	
	Limit to scholarly (peer reviewed) journals	26	
	AND “clinical training”	2	
	AND “mentoring”	0	
	Limit date to 2007-2019	0	8
Search # 12	“ethnicity”	2,429	
	Limit to scholarly (peer reviewed) journals	2,429	
	AND “clinical training”	16	
	AND “mentoring or mentorship or mentor or mentor program”	2	
	Limit date to 2007-2019	2	
	Appear to meet document criteria	2	
	With removal of duplicates	0	8
Search #13	“mentoring”	255	
	Limit to scholarly (peer reviewed) journals	221	
	AND “clinical training”	15	
	Limit date to 2007-2019	11	
	Appear to meet document criteria	6	
	With removal of duplicates	1	9

(continued)

Database/ Search #	Searches by key terms and combinations thereof	# of results	Running totals
PsycARTICLES			
Search # 14	“mentoring”	255	
	Limit to scholarly (peer reviewed) journals	220	
	AND “psychology graduate students”	12	
	Limit date to 2007-2019	7	
	Appear to meet document criteria	3	
	With removal of duplicates	0	9
Search # 15	“mentoring”	255	
	Limit to scholarly (peer reviewed) journals	220	
	AND “psychology”	183	
	AND “practicum or internship or fellowship”	16	
	Limit date to 2007-2019	10	
	Appear to meet document criteria	3	
	With removal of duplicates	0	9
Search # 16	“mentoring benefits”	9	
	Limit to scholarly (peer reviewed) journals	9	
	AND “clinical training”	1	
	Limit date to 2007-2019	1	
	Appear to meet document criteria	1	
	With removal of duplicates	0	9
Search # 17	“mentoring risks”	1	
	Limit to scholarly (peer reviewed) journals	1	
	AND “clinical training”	0	9
Search # 18	“mentor-protégé or mentor-mentee”	7	
	Limit to scholarly (peer reviewed) journals	7	
	AND “matching”	0	
	AND “clinical training”	0	9
			Total: 65

APPENDIX F

NHS Approval for Non-Human Subject Research

January 26, 2021

Protocol #: **12621**

Project Title: Mentoring in the Training Cycle of Clinical and Counseling Psychology Doctoral Students: A Critical Review of the Literature

Dear Helene:

Thank you for submitting a "GPS IRB Non-Human Subjects Notification Form" for *Mentoring in the Training Cycle of Clinical and Counseling Psychology Doctoral Students: A Critical Review of the Literature* project to Pepperdine University's Institutional Review Board (IRB) for review. The IRB has reviewed your submitted form and all ancillary materials. Upon review, the IRB has determined that the above titled project meets the requirements for *non-human subject research* under the federal regulations 45 CFR 46.101 that govern the protection of human subjects.

Your research must be conducted according to the form that was submitted to the IRB. If changes to the approved project occur, you will be required to submit *either* a new "GPS IRB Non-Human Subjects Notification Form" or an IRB application via the eProtocol system (<http://irb.pepperdine.edu>) to the Institutional Review Board.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the IRB and documenting the adverse event can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* at <https://community.pepperdine.edu/irb/policies/>.

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval.

On behalf of the IRB, we wish you success in this scholarly pursuit.

Sincerely,

Institutional Review Board (IRB)
Pepperdine University

cc: Mrs. Katy Carr, Assistant Provost for Research
Dr. Judy Ho, Graduate School of Education and Psychology IRB Chair