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## A HOLISTIC VIEW OF INTEGRATED CARE WITHIN COUNSELOR EDUCATION: A MULTI-MANUSCRIPT DISSERTATION

by

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Submitted in Partial Fulfillment of the Requirements

For the Degree of Doctor of Philosophy in

Counselor Education and Supervision

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## DEDICATION

This dissertation is dedicated to the person that showed me what unconditional love means, Linda Ann McClain, or Mimi. Because of you, I was able to do all of this. I love you more than words can ever express and thank you for giving me the world; I hope to change it because of you. We did it!

-Dr. Dootsie

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## ABSTRACT

The integration of behavioral health into primary care settings, otherwise known as integrated care (IC), is a movement growing in momentum and continues to challenge traditional healthcare occurring in silos. Through an IC modality, healthcare consumers receive all their care through a "one stop shop" approach and previous outcomes have suggested an overall benefit for an individual's holistic health, as well as savings for healthcare settings. Counselors are in a prime position to join IC teams and contribute to consumer healthcare outcomes through a unique professional identity. The aim of this dissertation study, which consisted of three completed manuscripts, was to holistically understand the IC movement through a counseling lens. The three completed manuscripts consist of: (a) a scoping review of IC literature within counseling journals to understand the current state of IC within counselor education and to synthesize implications for future research; (b) a systematic review of training strategies to prepare counselors to work in IC settings, as well as assess the quality of research documenting trainings; and (c) a survey design that explores the relationship between levels of care integration and wellness. Overall, the results suggest that additional scholarship at the consumer level is needed to demonstrate the benefit of IC and counseling scholars must explore assessment strategies to understand the theoretical link between IC and wellness.

*Keywords*: Integrated care, counseling, counselor education, wellness, latent profile analysis

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## CHAPTER 1: INTRODUCTION Introduction to the Study

The Patient Protection and Affordable Care Act (PPACA) ushered in a healthcare reform that values the integration of behavioral health services within primary care settings (Croft & Parish, 2013; Kuramoto, 2014). This movement, commonly referred to as integrated care (IC), is a result of increased physical and mental health symptoms of veterans returning from deployment demonstrating mental health symptoms in addition to their physical health conditions and has continued to evolve as an approach recommended for a variety of populations (Hunter et al., 2017). These include, but are not limited to, individuals with a substance abuse disorder, chronic illness, mood disorders, anxiety disorders, and chronic pain. The IC paradigm moves away from traditional practice in silos, or treatment with no or minimal collaboration, and creates a unified treatment approach that addresses holistic client symptomology (Geise & Waugh, 2017). The Substance Abuse and Mental Health Service Administration's (SAMHSA) model on IC reflected six levels of integration that begins with minimal collaboration at a distance and progresses towards full integration of providers actively collaborating onsite with the client. For the purposes of this study, IC will be defined as levels five and six of the Heath et al. (2013) model that described a level of care integration where there has been a systemic healthcare shift (e.g., sharing billing operations and electronic medical records) and health professionals from differing professional identified are onsite, actively collaborating to provide holistic treatment and a unified treatment plan. This

model was selected as it is the one that is most prevalent in counselor education literature and will be further explored in Chapter Two. Furthermore, the current state of literature for counselors and related fields (i.e., social work and psychology) practicing within IC suggested favorable results (Gerrity et al., 2014; Lenz et al., 2018; Vogel et al., 2014). Through decreased symptom reports and increase in daily functioning, clients frequently claim that IC has resulted in positive lifestyle changes. The introduction of the World Health Organization (WHO) Constitution in 1948 provided a clear definition of how health can be conceptualized and described health through a holistic lens. The WHO (1948) stated that health is not just the absence of illness, but a combination of mental, physical, and social well-being. This definition provided a framework of prevention within healthcare settings and that health must include a wellness component (Ohrt et al., 2018). Wellness is considered a cornerstone of the counseling profession and views the client through a strength-based perspective promoting optimal functioning in multiple aspects of life (e.g., physical, occupational, emotional, social, spiritual, and mental; Brubaker & Sweeney, 2021; Myers & Sweeney, 2008; Ohrt et al., 2018). More specifically, wellness will be defined in this study as the ongoing process of an individual to achieve optimal and holistic health and the means to achieve this level of health (Brubaker & Sweeney, 2021). A common wellness model in counseling literature is the Indivisible Self Model of Wellness (IS-WEL; Sweeney & Myers, 2003). The ISWEL emerged as an evidenced-based approach stemming from the Wheel of Wellness (Witmer & Sweeney, 1992; Witmer et al., 1998) and Adlerian individual psychology. The Indivisible Self is an inclusive model for wellness and addresses multiple aspects of an individual, as well as the environmental impact on wellness (Sweeney & Myers, 2003).

The Indivisible Self will be expanded upon later in this chapter and wellness models will be further explored in Chapter Two. Additionally, Brubaker and Sweeney (2021) claimed that including a wellness component into healthcare settings promotes ideology behind "living long and living well..." (pg. 2) and addresses the client as a holistic living being. When associated with client outcomes, it considers all aspects of the individual and identifies barriers to optimal functioning.

A recommended approach to improve client wellness is through IC (Ohrt et al., 2018). As counselors are trained in approaches that advocate for prevention and wellness (Brubaker & Sweeney, 2021), they are in a prime position to join IC teams and advocate for an individual's holistic health through multiple domains (i.e., physical, mental, spiritual, social, and career). This IC movement is advocated through legislature, such as the PPACA(Croft & Parish, 2013; Kuramato, 2014), and White House initiatives (The White House, 2022). Through these initiviates, agencies and organizations that can demonstrate an IC approach through an onsite, multidisciplinary approach receive greater service reimbursements and funding to hire additional providers (i.e., counselors). Additionally, the Council for Accreditation of Counseling and Related Educational Programs (CACREP) includes aspects of both wellness counseling and IC education in their training requirements for graduate programs (CACREP, 2016). Ultimately, IC serves as an outlet for a counselor to advocate for the wellness of clients and provide services to individuals to reach optimal health, as opposed to just viewing them as an individual with symptomology (Ohrt et al., 2018).

#### **Problem Statement**

Although Ohrt et al. (2018) described IC as a model to enhance a client's wellness, wellness counseling and wellness models are absent from IC literature. In other words, the construct of wellness (i.e., multiple aspects of an individual's holistic health) is rarely explored in IC literature. Individuals experiencing distress in one aspect of their wellness have higher prevalence rates of distress in other aspects of their wellness, contributing to poor health-related outcomes (SAMHSA, 2021), but rarely are these assessed in literature together. Previous research indicated that IC results in a decrease in physical health concerns (Vogel et al., 2014), decrease in mental health symptomology (Archer et al., 2012; Lenz et al., 2018), increase in medication adherence (Lenz et al., 2018), and increase in life satisfaction (Gerrity, 2016). However, these studies have occurred independently and do not investigate the client's healthcare outcomes across multiple wellness domains. Furthermore, IC literature has limited documentation on client outcomes in general. The IS-WEL proposed by Sweeney and Myers (2003) served as a model to conceptualize a client through a holistic lens addressing multiple aspects of the individual. Although this model has been studied with high validity and reliability across multiple populations and settings (Shannonhouse et al., 2020), it remains predominantly for counselors practicing independently. A more in-depth analysis on models of wellness and IC, as well as Heath et al. (2013) levels of integration, will be provided in the literature review outlining the lack of literature on their relationship. With limited understanding on how a client's level of IC impacts their overall wellness and specific domains of wellness, the roles and responsibilities of a counselor within IC are not adequately defined.

#### Nature of the Studies

The three studies in this dissertation serve as a means to study the counseling professional identify within an IC paradigm, specifically how levels of care integration relate to a client's holistic wellness. Study One is a scoping review of existing IC literature within counseling journals that synthesized current results and implications to better understand themes for future research. Study Two is a systematic review completed to better understand the existing evidenced-based training interventions and training themes to prepare counselors to work within IC settings. Study Three is a proposed descriptive, correlational study (Heppner et al., 2015) that will explore client wellness, as studied by the IS-WEL model (Myers & Sweeney, 2003), across levels of care integration, as studied by the Heath et al. (2013) model of care integration. These studies aim to holistically study IC within counselor education to provide implications at client, counselor, and counselor educator levels.

#### **Study One**

Study One is a scoping review of IC literature within counseling journals in order to identify publishing trends, synthesize existing IC literature on client outcomes, counselor level outcomes (i.e., competency development), and implications for future research. This scoping review followed preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews (PRISMA-ScR; Tricco et al., 2018) protocols and inclusion criteria were: (a) written in an IC paradigm; (b) presents IC implications; and (c) published within an ACA, American Mental Health Counselors Association (AMHCA), American School Counseling Association (ASCA), the International Association for Marriage and Family Counselors (IAMFC), National Board

of Certified Counselors (NBCC), or Chi Sigma Iota (CSI) journal. Following identification of the 27 included articles, the research team followed PRISMA-ScR protocols and extracted data based on the article's classification (i.e., conceptual, empirical, or systematic reviews and meta-analyses). As with Study One, a limited number of articles presented client or consumer level data further supporting outcome research at this level. Lastly, the Heath et al. (2013) levels of care integration was discussed in eight articles, which was the only model discussed in multiple articles. Therefore, this model was selected to inform the development of Study Three. Results of this scoping review are presented in Chapter Three A.

#### **Research Question**

"What are the publication trends (i.e., publication years and journals), study characteristics and outcomes, implications, and recommendations for future research from IC literature within counseling journals"

#### **Study Two**

Study Two is a systematic review of literature that systematically explored evidenced-based training interventions to prepare counselors and mental health professionals for IC service delivery. The research team's goal was to identify appropriate training interventions to be included in CACREP programs and clinical settings to promote client outcomes. This systematic review followed preferred reporting items for systematic reviews and meta-analyses protocols (PRISMA-P; Moher et al., 2015) and inclusion criteria were: (a) a training intervention for IC practice at Heath et al.'s (2013) IC level; (b) the training involved at least one mental health professional (i.e., counselors, social workers, psychologists) or mental health graduate student; and (c) the

training intervention needed to be assessed. Following identification of the 18 included articles, the research team completed a quality appraisal of each study using the Mixed Methods Appraisal Tool (MMAT; Hong et al., 2018). Then, data was extracted in accordance with PRISMA-P and synthesized in a consensus process to develop the following four themes: (a) HRSA-funded studies; (b) skill development; (c) self-efficacy; and (d) interprofessional collaboration. However, only two studies included in this review looked at data at the client or consumer level. Thus, additional research is needed to better understand how training programs promote optimal client satisfaction and holistic outcomes. Results of this systematic review are presented in Chapter Three B.

#### **Research Question**

"What are the themes associated with IC training programs for mental health professionals that can be applied broadly to the design of related programs in counselor education?"

#### **Study Three**

The proposed study will follow a descriptive, correlational design (Heppner et al., 2015) to explore the relationship between levels of care integration and a client's wellness across the IS-WEL (Myers & Sweeny, 2003) domains of wellness. These domains include the Creative Self, the Coping Self, the Social Self, the Essential Self, and the Physical Self. An encompassing survey will be designed through Dillman et al. (2014) electronic survey recommendations and provided to participants through an online survey. Purposive sampling procedures will be used, and inclusion criteria will require participants to be 18 years or older and having received counseling or therapy within the last 12 months. The survey will contain the following instruments: (a) a demographic

form consisting of information on their gender identity, race and cultural background, sexuality, SES, and age; (b) a questionnaire assessing for previous mental health and physical health conditions; (c) a questionnaire designed to assess an individual's level of care integration as defined by the Heath et al. (2013) model; and (c) the Five Factor Wellness (5F-WEL; Myers & Sweeney, 2005) inventory based on the Sweeney and Myers (2003) Indivisible Self model consisting of a high order wellness factor (i.e., overall wellness), five second order wellness factors (i.e., the domains outlined earlier), and 17 third order factors (i.e., humor, thinking, emotions, control, work, leisure, realistic beliefs, self-worth, stress management, spirituality, self-care, gender identity, cultural identity, love friendship, nutrition, and exercise). Following data collection, an analysis will be completed through latent profile analysis (LPA), a person-centered statistical procedure that identifies latent groups or profiles of individuals with similar responses and patterns of their shared characteristics (Spurk et al., 2019). Grouping or profiles will be developed to represent the participants' wellness outcomes. LPA will identify shared characteristics of wellness profiles across the IS-WEL model (Myers & Sweeney, 2003), and allow the research team to qualitatively describe the profiles through a theoretical lens (Collins & Lanza, 2010). Following the development of the wellness profiles, the research team will analyze potential correlational relationships between the wellness profiles and levels of care integration. Additionally, LPA all allow the research team to study the relationship between profiles and other participant demographic groups (e.g., SES, rural or urban residents, gender identity, chronic health conditions, and mental illness). External funding for this project was secured through the Chi Sigma Iota (CSI) Excellence in Counseling Grant to assist with recruitment. The awarded funding will be

provided to Qualtrics, an online survey company, and participants will receive a \$3 incentive following completion of the survey.

#### **Research Question and Hypothesis**

*Question 1: What client level wellness profiles will emerge based on the IS-WEL model* (*Myers & Sweeney, 2003*)?

*Question 2: Do participants' reports of Heath et al. (2013) level of care integration differ across wellness profile membership?* 

*Hypothesis: Participants reports of level of care integration will be higher for wellness profiles with higher wellness scores.* 

Question 3: Do client demographic factors (e.g., SES, education, rural or urban residency, gender identity, sexuality, frequency of primary care appointments, mental illness, and chronic health conditions) differ across wellness profile membership? Hypothesis: There will be differences in client demographics across the wellness profile membership.

#### Assumptions, Limitations, Scope, and Delimitations of the Study and Design

Limitations to this study include, but are not limited to, threats to internal and external validity, aspects of LPA, and the recruitment strategy through Qualtrics. A threat to internal validity, or the extent to which variables tested within the study test their intended construct (Heppner et al., 2015), is the instrument used to assess an individual's level of care integration. Scholars have not agreed upon a standardized measure to assess a consumer's level of care integration due to a variety of concerns, such as public's lack of understanding of systemic changes associated with IC and difficulties incorporating questions that encompass models of IC (Lyngsø et al., 2014; Mares et al., 2008). The

level of care integration survey follows constructs outlined in Heath et al.'s (2013) "Patient Experience" description of care integration. This will be further outlined in Chapter Five. Furthermore, a threat to external validity, or the extent to which the results of a study can be generalized to a population (Heppner et al., 2015), will be the demographics of the individuals that received the survey and if their representation appears to be what is expected from individuals that receive mental health services across the levels of care integration. If the data appears to be skewed, additional recruitment efforts will need to be made to represent mental health treatment across levels of integration.

Beyond external and internal validity, a limitation to this study will be the correlational design. Limberg et al. (2021) noted that correlational research does not result in causal relationships. Therefore, any correlational relationships established in this study will not end with casual conclusions. Furthermore, LPA has notable limitations. First, Spurk et al. (2019) reported that there is not a standardized practice for establishing a sample size, thus the researcher must rely on previous studies and statistical procedures to establish the sample size. Additionally, Spurk and colleagues remarked that developing the profiles involves a subjective process that is up to the researcher's discretion with the data. When developing the profiles, I will need to implement strategies, such as consensus through a research team, when establishing the profiles. Lastly, using Qualtrics has noted limitations. Although Walters et al. (2019) concluded that online panel companies provide data comparable to normative sampling procedures, the results should be considered exploratory in nature. Therefore, conclusions about a population should not be made when using the Qualtrics sample.

#### Significance of the Studies

#### **Knowledge Generation**

There are multiple implications and conclusions that can be generated based on the results of each research question. If results indicate that profiles with higher levels of holistic wellness are correlated with higher levels of care integration, this study will suggest that IC is a modality to promote optimal client wellness. Counselors and counselors-in-training can advocate for additional opportunities to practice within IC settings with the understanding that their professional identity rooted in wellness will contribute to positive healthcare outcomes. Additionally, training within CACREP programs can provide education on wellness aspects of IC and provide a deeper understanding on the role of the counselor within an IC team. If results indicate that higher levels of integration result in higher reports on certain domains of wellness, more specific training and healthcare delivery considerations can be gathered. This would provide evidence that the Sweeney and Myers (2003) Indivisible Self model is an appropriate model to incorporate into IC training and settings to improve client outcomes.

If levels of integration do not contribute to client wellness outcomes, implications can still be discussed. The IS-WEL model (Sweeney & Myers, 2003) may not be an appropriate model for the IC modality and an additional wellness model may need to be considered. Additionally, IC may not be the evidenced-based setting for each of the individual wellness domains and implications for referrals for more traditional counseling settings may be more appropriate. Lastly, the developed survey on levels of integration may not be feasible and an additional survey may need to be designed to test a client's level of mental health treatment.

#### **Professional Application**

IC and wellness are both represented in CACREP (2016) standards. Although each of these standards are vague (Brubaker & Sweeney, 2021; Fields et al., 2023), counselor educators have a responsibility to prepare counselors to working within IC models and understand wellness aspects of their clients. Additionally, HRSA's Behavioral Health Workforce Educational Training (BHWET) program has reportedly prepared over 1,300 counselors to work within IC models and deeper understanding of a counselor's role within the model can strengthen the curriculum currently being provided (BHWET, 2018). The proposed study expands counselor educator's understanding of the impact IC has in relation to wellness and can provide a potential bridge for future studies. With data on wellness across multiple domains, counselor educators can advocate for the inclusion of counseling students to be included into IC teams during their development, as well as have evidence to create partnerships with agencies demonstrating IC in their community. Furthermore, the advanced statistical power of LPA can provide multiple relationships to be investigated that relate to IC, wellness, and client demographics. LPA has not been used to study the IS-WEL model and the development of wellness profiles can lead to future studies with different treatment settings.

#### Social Change

The primary focus of Study Three is on client level data and gathering a better understanding of how client wellness is impacted through IC. Results will directly relate to client level implications and provide future directions on how to improve the quality of services counselors can provide their clients in respect to wellness and IC. Furthermore, IC is a noted treatment modality for individuals from multiple cultural identities to get the

care they deserve. Crowe et al. (2018) noted that individuals from traditionally underserved minority groups (TUMG) report higher levels of stigma and mental health distress, as well as lower levels of help-seeking behaviors, as opposed to their white counterparts. With this understanding, Crowe et al. (2018) suggested that IC serves as an opportunity for TUMG to receive holistic care at one location through IC and that IC serves to destigmatize mental health support. Individuals that struggle to receive care due to a lack of resources are more likely to select their primary care needs and Kohn-Wood and Hopper (2014) describe IC as modality that increases the culturally responsive services provides additional opportunities for TUMG to receive mental health care. Through a wellness perspective, IC creates opportunities for clients to receive holistic care and preventative services. With enough data from clients represented in TUMG, implications can be gathered to better address their holistic healthcare needs.

#### Conclusion

In summary, this dissertation will summarize the results of three manuscripts the describe IC within a counselor education paradigm. Study One is a systematic review that aimed to identify the implications of training counselors to practice within IC. Study Two is a scoping review that synthesized existing IC literature within counseling journals to describe counselor and client level implications. Study Three is a proposed explorative, correlational study with LPA analysis that will explore the impact levels of care integration have on an individual's wellness across multiple domains. This study will investigate two research questions. One research question relates to the impact levels care integration will have on IS-WEL domains of wellness and the other research question relates to the participant's demographic characteristics across identified profiles. These

research questions were developed through a review of literature that support IC as a paradigm that enhances holistic health and wellness, however limited investigation has studied these two constructs together. The proceeding chapters will continue to explore the development and results of the proposed study. Chapter Two will provide a deeper investigation of the current literature and provide rationale for the proposed research questions. Chapter Three A will provide the results of Study One. Chapter Three B will provide the results of the Study Two. Chapter Four will provide the prospectus for Study Three. Chapter Five will discuss the implications and future investigation.

# CHAPTER 2: LITERATURE REVIEW Introduction

The following chapter will provide a literature review of the relevant research and definitions of the constructs in the proposed research questions presented in Chapter One. It will begin with an overview of IC. I will condense the literature on IC and describe this method of service delivery through a brief history, definitions of IC, support from government legislature and national organizations, and the development of IC service models. This section will present IC perspectives from counseling, social work, psychology, and medical perspectives. Two subsections further outlining the SAMHSA-HRSA Center for Excellent in Integrated Health Solution's Standard Frameworks for Levels of Integrated Healthcare and IC literature represented in counselor education will be included under IC. Next, I will describe *wellness*. This section will provide a brief history, definitions of wellness proposed by previous wellness researchers, and support from national organizations. Additionally, subsections will be included that outlines the IS-WEL model (Myers & Sweeney, 2003), the theoretical framework for Study Three's proposal, and wellness outcome studies. Lastly, a section that describes the wellness paradigm within IC will be presented and detail implications for future investigation as they relate to the proposed research questions.

The purpose of this literature review will be to provide an overview of how I am operationalizing IC and wellness to address the proposed studies. There are a variety of

studies and publications that demonstrate the relevance of IC and wellness in modern healthcare systems, however IC is rarely a hypothesized model to contribute to

holistic wellness client outcomes. Healthcare outcomes are traditionally studied through a reductionist lens (i.e., separating symptomology into separate entities), as opposed to a holistic or preventative lens (i.e., viewing health as an interconnection between the body and mind) (Fiandaca et al., 2017). The proposed correlational study challenges the reductionist lens by seeking to understand the correlation of individual's holistic wellness outcomes across multiple domains and the level of care integration they received. Throughout this section, wellness will be interwoven as appropriate to demonstrate the rationale for studying integrated care through a wellness lens, as well as the proposed research methodology.

#### **Integrated Care**

IC is the change in traditional healthcare practice by integrating behavioral health providers into a primary care setting, or vice versa (Hunter et al., 2017). IC involves a systematic change of primary and behavioral clinicians working in an interdisciplinary fashion with individuals and families to provide holistic treatment in a cost-effective manner (Peek & the National Integration Academy Council, 2013, as cited by Hunter et al., 2017). This systemic change may include, but is not limited to, simultaneous screening and assessment efforts, shared documentation, and daily collaboration (Giese & Waugh, 2017; Heath et al., 2013). Through this systematic change, holistic treatment involves a treatment approach that addresses the individual's mental health (including substance abuse), health behaviors, physical health, stress-related symptoms, social determents of health, crises, and prevention efforts. IC is commonly used interchangeably with "collaborative care," however there are noted distinctions between the two approaches (Hunter et al., 2017). As opposed to on-site, systematic change of providers

working interdisciplinary through IC, collaborative care describes a continuum of care with clinicians from multiple professional identities working at a distance to address the client's treatment plan. Collaborative care is associated with increased opportunities to infuse behavioral health treatment within a primary care paradigm, but does not provide specific considerations on how to conduct interdisciplinary treatment (Geise & Waugh, 2017; Hunter et al., 2017). Instead, IC is associated with evidenced-based models of coordinating care for individuals and families and provides an outline of how to accomplish this approach. Aspects of collaborative care will be studied in the proposed study, as assessed in the level of care integration questionnaire, but is important to note that IC will be represented separately. Heath et al.'s (2013) model of care integration further delineated the different approaches, and is outlined below.

#### **Standard Frameworks for Levels of Integrated Healthcare**

The Center of Excellence for Integrated Healthcare Solutions (CEIHS), a project jointly funded by SAMHSA and HRSA, conceptualized IC through their model on care integration (Heath et al., 2013). Geise and Waugh (2017) and Hunter et al. (2017) both noted that this model can be used to differentiate between the continuum of care integration, and the practice of IC. In addition to the being the model for SAMHSA and HRSA, two national organizations that fund mental health efforts, Heath and colleagues' model is the most prevalent in counseling literature, appearing in eight of 27 articles (Fields et al., in review). This model outlined six levels of healthcare practice with each ascending level describing practice change with higher levels of care integration with respect to the systems, facilities, communication, client or patient experience, and culture of the providers. Level one and level two are described as "coordinated," with the key

element being communication among providers. In levels one and two, providers are in separate facilities and use separate systems, with the difference of level two having higher frequency of communication and deeper respect amongst providers. Level three and level four are described as "co-located," with the key element being physical proximity. In levels three and four, providers share the same facilities and have a basic understanding of each other's roles, with the difference of level four sharing the same medical record system and more frequent, in-person communication. Level five and level six are described as "integrated," with the key element being practice change of service delivery. In levels five and six, all space and electronic medical systems being shared, with level six containing consistent communication among providers with the client and the culture of providers has blended. Within the "integrated" levels, practice has been fully transformed and the treatment team work interdependently. For the purposes of conceptualization, levels five and six will be considered IC throughout this document. This model is further detailed as an adaptation represented in Appendix A.

In addition to the elements of practice change and client experience, Heath et al. (2013) remarked that there are advantages and disadvantages to each level of care integration. As the level care integration increases, Heath and colleagues noted advantages that clients will begin to experience less proximity barriers to care from multiple providers, receive more holistic screening, and needs are met sooner rather than later. For lower levels (i.e., 1 and 2), client understanding of more traditional silo care are advantages. Furthermore, Hunter et al. (2017) reported that IC is not always feasible or appropriate, and this is represented in Heath and colleagues' model. With ascending levels of care integration, the client disadvantages include the client's potential gap in

knowledge about the IC process, thus not understanding how to engage with IC care. As the level of care descends, there are more proximity barrier, greater likelihood the client will not follow through with a mental or physical health referral, higher average wait times between appointments, and higher potential to have service overlap. This model is further detailed in Appendix B.

#### **Counselor Education and Integrated Care**

Over the last decade, Fields et al. (in review) noted that integrated care has increased in prevalence in counselor education literature. Aitken and Curtis (2004) introduced IC in counselor education literature and described client and healthcare benefits of integrating behavioral health services within traditional primary care settings, such as higher reports of following up with treatment referrals and lower reports of psychosomatic pain. In their introductory article, Aitken and Curtis also described the potential the counselor has to contribute to this evolving healthcare landscape. A decade later, Vogel et al. (2014) further organized literature from multiple perspectives (i.e., social work, psychology, and medical fields) and introduced concepts of IC for counselors and counselor educators. In their report, Vogel and colleagues describe IC as a treatment modality that supports enhancing an individual's holistic health and wellness. From this perspective, counselors have a role within an IC team and provide a professional identity that is rooted in achieving optimal health and wellness (Ohrt et al., 2018; Vogel et al., 2014). Vogel et al. expand upon the Heath et al.'s (2013) model of integration and describe the role a counselor has within the increasing levels. While it may not always be feasible for a counselor to fully operate in a level five or six integrated setting, Vogel et al. (2014) noted that counselors may still benefit from training in IC

modalities as it enhances the potential for collaboration with primary care providers to address holistic concerns. In other words, a counselor trained in IC may better understand the professional identity of different providers and consult and collaborate more effectively to address multiple aspects of their client. Furthermore, Alvarez et al. (2014) interviewed eight mental health professionals working in IC settings that served traditionally underserved and minority populations and completed an exploratory crosscase synthesis on their experiences. Alvarez and colleagues developed themes on the clinical implications of IC for underserved and minority populations and reported the unique graduate education a counselor receives enhances the IC team's culturally responsive services to address aspects of the individual that are atypical in medical settings. Specifically, participants unanimously reported that including a counselor in their IC team enhanced team member's cultural competence and patient-centered care. Moving forward, Vogel and colleagues advocated for increased prevalence of IC literature in counseling journals. With the understanding that over 1,300 counselors have been trained in an IC model between 2014-2018 (BWHET, 2018), detailing the benefits of the counseling identity with respect to appropriate IC treatment will further support the inclusion of counselors within these teams.

#### **Integrated Care and Therapeutic Outcomes**

Although limited, the IC literature in mental health journals with documented outcomes has demonstrated an overall benefit in client reports. Kates et al. (2002) completed an early quasi-experimental study on the impact of adding mental health counselors to a primary care setting and reported an increase in clients following through with physician referrals to counselors, as well as an overall improvement of mental health

symptoms. Physicians in this study were more likely to refer a client to a counselor if one is available on-site and clients (n = 900) completing the Epidemiological Studies Depression (CESD: Devins et al., 1988) rating scale and Short Form-36 (SF-36; Ware, 1993) reported a decrease in their mental health symptoms, primarily depression and anxiety. This is corroborated by Lenz et al. (2018) in a meta-analysis of 36 randomized control trials investigating IC client outcomes. They concluded that clients are more likely to report a decrease in mental health symptoms when receiving IC, as opposed to treatment as usual (TAU) by a medium effect size (-0.31). Additional findings from this meta-analysis suggested that the most significant factors in reducing mental health symptoms in IC relate to the number of distinct providers on the treatment team, as well as the amount of behavioral health sessions the client has at the IC site.

IC has been studied for multiple populations and completed outcome studies suggest different results. Schmit et al. (2018) completed a quasi-experimental study testing the effectiveness of IC (n = 98) vs. TAU (n = 98) for adults with severe mental illness (SMI). Participants in this study were assessed through the Adult Needs and Strengths Assessment (ANSA; Lyons & Walton, 1999), a holistic assessment that includes subscales in Risk Behaviors, Behavioral Health Needs, Life Domain Functioning, Culture, Strengths, Crisis History, and Psychiatric Hospitalization, and data were analyzed through profile analysis. Schmit and colleagues reported statistical significance across all subscales and rejected the null hypothesis in respect to the level, parallelism, and flatness of profiles, which suggested that IC improves holistic functioning for adults with SMI as opposed to TAU. Furthermore, Balkin et al. (2018) conducted a meta-analysis on eight randomized control trials consisting of 1,545

participants with substance use disorders (SUDs) comparing IC treatment vs TAU and reported a low effect (-0.11) in reducing substance use. This suggested that IC may not be the treatment setting to reduce substance use behaviors and that traditional, siloed care may be the preferred modality. Balkin and colleagues noted that their findings should be considered preliminary due to low power. However, Brooks et al. (2015) completed a mixed methods study with 600 individuals randomly assigned two variations of IC treatment, with participants in both treatment groups (one group received the facility's TAU IC care and one group received the novel IC intervention) endorsing that IC resulted in improved treatment satisfaction and personal engagement. Moreover, participants that received the novel IC intervention reported higher treatment satisfaction (p = 0.72). While these results may appear conflicting, it is worth noting that IC may be more appropriate for certain aspects of treatment (i.e., treatment satisfaction for individuals with SUDs and improving holistic functioning for individuals with SMI) than others (i.e., reduction of substance misuse).

Medical literature also supports the positive client outcomes described in mental health journals. Promising results for mental health symptom treatment in the context of IC were described by two systematic reviews of IC literature (Archer et al. 2012; Gerrity, 2016). Archer and colleagues described the reduction in depression and anxiety symptoms through a review of 79 randomized controlled trials with over 24,000 clients in an IC setting. Clients reported significantly greater improvement in their symptoms, ranging from short-term to long-term relief. Additionally, these clients were more likely to adhere to their medication regimen and report higher healthcare satisfaction ratings. Similar results were described in the Gerrity review of 94 randomized controlled trials of

over 25,000 clients with a significant decrease in client mental health symptom reports and an increase in life satisfaction. However, as noted previously, these studies tend to study IC from a reductionist viewpoint and focus on one or two aspects of a client's healthcare. This study breaks from that tradition and explores wellness across additional domains that are less commonly studied, such as aspects of the individual's social and spiritual wellness, across multiple demographics.

#### Wellness

Witmer & Sweeney (1992) introduced concepts of wellness into counselor education literature and proposed that wellness is the interconnectedness between an individual's mind, body, spirit, and community. Myers et al. (2000) expanded upon this interconnectedness and suggested that the individual can live in their "natural" community with ideal holistic health. Myers and colleagues' conceptualization of wellness was derived through their earlier works on identifying characteristics of healthy people through research conducted in medical, developmental psychology, social work, and counseling literature (Sweeney & Witmer, 1991; Witmer & Sweeney, 1992) and led to the development of the Wheel of Wellness, a holistic client conceptualization tool that addresses five aspects, or life tasks, of an individual's wellness (Myers et al., 2000). Myers and colleagues described these life tasks towards optimal wellness as: (a) spirituality (i.e., individual's sense of connectedness to the universe); (b) self-Direction (i.e., individual's ability to regulate and pursue goals); (c) work and Leisure (i.e., individual's balance between accomplishment and pleasurable experience); (d)friendship (i.e., individual's satisfaction with social relationships); and (e) love (i.e., individual's satisfaction with intimate relationships). Following the development of the five life tasks,
Myers et al. (2000) outlined 12 subtasks that resulted from a factor analysis of the original development. These 12 subtasks provide a more in-depth view of an individual's holistic wellness and are operationalized as: (a) sense of worth; (b) sense of purpose; (c) realistic beliefs; (d) emotional awareness and coping; (e) problem solving and creativity; (f) sense of humor; (g) nutrition; (h) exercise; (i) self-care; (j) stress management; (k) gender identity; and (l) cultural identity. Additionally, the life tasks and subtasks should be viewed in the context of Global Events (e.g., war, natural disasters, and pandemics) and more local events (e.g., family, government, media, and education). Myers and colleagues proposed that the five life tasks and 12 subtasks have an interconnected relationship and change in one dimension of the Wheel of Wellness may result in change to another dimension; a view that is considered holistic. The Wheel of Wellness was organized into the Wellness Evaluation of Lifestyle (WEL; Myers et al., 1997) an assessment tool for an individual's wellness. This model has been continuously studied and paved the way for future wellness-based models.

#### **Indivisible-Self Model of Wellness**

Following the development of the Wheel of Wellness, Myers and colleagues continued to refine their conceptualization of wellness. Due to the hypothesized interrelationships between components of the Wheel of Wellness not being supported, Myers and Sweeney reevaluated the results of the WEL factor analysis. Through utilization of Adler's view on individual psychology and structural equational modeling (SEM), Myers and Sweeney (2004) proposed The Indivisible Self: An Evidenced-Based Model of Wellness (IS-WEL). In this model, wellness is viewed more holistically and includes a high-order wellness factor of the individual at the core. Therefore, all aspects

of an individual's wellness should be continuously considered for optimal wellness and conceptualization should view all aspects of wellness contributing to overall health. Furthermore, five second-order factors and 17 third-order factors emerged as a result of the SEM analysis and the corresponding tenets of Adlerian individual psychology. The second-order factors are presented with their corresponding third-order factors: (a) Essential Self (i.e., aspects of an individual that create their meaning making process) with third order factors of spirituality, self-care, gender identity, and cultural identity; (b) Creative Self (i.e., aspects of an individual that make them unique in social interactions) with third order factors of thinking, emotions, control, positive humor, and work; (c) Coping Self (i.e., aspects of an individual that contribute to their responses to life events) with third order factors of realistic beliefs, stress management, self-worth, and leisure; (d) Physical Self (i.e., aspects of an individual's physical health) with third order factors of nutrition and exercise; and (e) Social Self (i.e., aspects of an individual's social health) with third order factors of love and intimacy. Each of these factors should be viewed as a piece of the puzzle that contributes to an individual's overall or holistic wellness. As such, clinicians can target the third-order factors through interventions designed to enhance a certain aspect of an individual's wellness. Myers and Sweeney (2004) note that this is a strengths-based model centered on prevention and holism. The IS-WEL model of client conceptualization was adapted to an assessment tool, the Five-Factor Wellness Inventory (5F-WEL; Myers & Sweeney, 2005), designed to understand a client's holistic health and wellness. The 5F-WEL has been studied across multiple populations and demonstrated that it is a model with high validity and reliability (Shannonhouse et al.,

2020). A more thorough discussion on the 5F-WEL, including psychometrics, will occur in Chapter Five.

#### **Wellness Counseling and Therapeutic Outcomes**

Wellness counseling has been used with a variety of populations with varying results. Typically, wellness counseling is considered a therapeutic process of supporting an individual achieve optimal health and wellness across multiple facets of their life (Brubaker and Sweeney, 2021). This is an approach that moves beyond the medical model of diagnosis and treatment of mental illness and includes tenets of prevention and holistic functioning (Barden et al., 2015). As such, outcomes tend to include reports from multiple measures or subscales. Wellness counseling was included in CACREP (2016) standards and transcends multiple counseling approaches. Brubaker and Sweeney reported that multiple wellness models of counseling exist, with the IS-WEL (Myers & Sweeney, 2004) being the most prominent in literature. Furthermore, Brubaker and Sweeney noted that only two experimental designs studying wellness counseling have been completed and both involved the IS-WEL model. Tanigoshi et al. (2008) studied wellness counseling for law enforcement officers, 24 participants receiving the wellness counseling intervention and 27 participants in the control group that did not receive an intervention. Law enforcement officers that received the wellness counseling intervention reported statistically significant higher scores for the Social Self, Physical Self, Coping Self, and Creative Self. However, there were no statistically significant differences for the Essential Self, which suggests that law enforcement officers may need additional supports and resources to enhance this domain. Additionally, Kwon (2015) studied a wellness counseling intervention for elderly individuals in a Korean nursing home. In this

study, 49 individuals received the wellness counseling intervention and 44 were in the control group that did not receive an intervention. Participants that received the wellness counseling intervention reported statistically significant higher results for their nutrition, exercise, sense of control, self-management, self-care, work, depression management, and overall wellness.

In addition to wellness counseling in silos, Van Beek et al. (2008) completed an early study investigating the effectiveness of wellness counseling through the introduction of counselors and nutritionists into IC teams. Following the integration of 15–30-minute wellness interventions, Van Beek and colleagues reported that mental health hospitalizations decreased by 54%, participants were less likely to need or request a mental or physical health referral, and their hospital system doubled access to services. While the results of wellness counseling are promising, Brubaker and Sweeney (2021) noted there are limited studies that investigate wellness outcomes at the client level. Furthermore, wellness counseling is rarely represented within IC settings. Additional research is needed to understand how counseling across different settings can impact an individual's wellness.

#### **Wellness and Integrated Care**

Although limited scholarship discusses wellness and IC together, wellness is paradigm that has numerous applications in IC settings. Lipman et al. (2017) outlined numerous advantages of applying wellness concepts in IC settings and echoed that wellness promotes optimal functioning for individuals receiving care in traditional primary care settings. These lifestyle factor advantages include, but are not limited to, exercise, nutrition, weight, sleep, and stress reduction. Lipman and colleagues also

described common roles that counselors can fill within IC settings and recommended that counselors be included in initial wellness assessments. Additionally, counselors can provide wellness groups and individualized therapy that focuses on identifying barriers to wellness and promoting healthy lifestyle choices. For example, obesity and weight loss can be associated with feelings of shame or guilt, and counselors can assist clients in identifying that barrier and processing through their feelings to engage in a weight loss program congruent with the client's lifestyle goals (Wadden at al., 2013). Furthermore, the wellness paradigm incorporates prevention strategies. Through screening and attention to an individual's lifestyle factors, the National Prevention Council (2016) estimated that healthcare agencies can save around \$3.27 for every dollar spent on associated diseases, such as cardiovascular disease, diabetes, mood disorders, and anxiety (Lipman et al., 2017). This may be due to the IC team's ability to design prevention strategies that incorporate a counselor to create a wellness plan that addresses common concerns associated with these conditions. However, additional research is needed to best understand wellness considerations in IC settings.

#### Summary

This chapter provides an overview of how constructs in this dissertation study will be operationalized. Existing literature supports continued evaluation at increasing the wellness of individuals and understanding the impact of IC on consumer outcomes. Furthermore, IC has been described as an approach to improve an individual's optimal health and wellness (Ohrt et al., 2018); yet these two constructs are rarely discussed together in literature. Current outcome studies focus on reductionist approaches of reducing symptomology in IC (Archer et al., 2012; Gerritry et al., 2016; Lenz et al.,

2018) and intervention studies tend to target the presence of a specific disease or disorder (Feinstein et al., 2017; Hunter et al., 2017). However, wellness is grounded in prevention and includes all aspects of an individual's health, without the presence of symptoms (Ohrt et al., 2018). From a holistic standpoint, understanding wellness across multiple domains provides clinicians from multiple perspectives insight into understanding the individual they are treating (Myers & Sweeney, 2004). As such, the proposed study aims to explore wellness outcomes across levels of care integration to better understand how IC compares to traditional healthcare practices in silos (i.e., at a distance with minimal collaboration) in addressing an individual's wellness. Chapter 3 will provide the first study of this dissertation, which details the scoping review of IC literature in counselor education. Chapter 4 will provide the second study of this dissertation, which details the systematic review of training strategies to prepare counselors for IC practice. Next, Chapter 5 will provide the third study of this dissertation, which uses a descriptive correlational design to study the relationship between wellness and integrated care. Finally, Chapter 6 will provide the implications of all studies presented in this dissertation.

Referral		Co-Located		Integrated	
Key El Commu	ement: nication	Key Element: Physical Proximity		Key Element: Practice Change	
Level 1 Minimal Collaboration	Level 2 Basic Collaboration at a Distance	Level 3 Basic Collaboration On-site	Level 4 Close Collaboration On-Site	Level 5 Close Collaboration Approaching Full Integrated Practice	Level 6 Full Collaboration in a Transformed/ Merged Integrated Practice
Bel	havioral health,	primary care an	nd other healthco	are providers wo	ork:
In separate facilities	In separate facilities	In same facility, not same space or offices	In same space within the same facility	In same space within the same facility, sharing most space	In same space within the same facility, sharing all space
		Client ex	perience:		
Physical and mental health needs being treated as separate issues; may have to facilitate their own service coordination	Physical and mental health needs being treated as separate issues; however, their files are being shared	Physical and mental health needs treated as separate, but within the same healthcare system; referrals are more successful with less barriers	Physical and mental health needs treated as separate, but within the same healthcare system; referrals are more successful with less barriers; warm handoff typically happens	Physical and mental health needs screened together and treated together if both are present; needs are treated separate if they are not screened during initial visit	All physical and mental health needs are treated together; Care is seamless as needs are present and they received a unified response

Figure 2.1 Adapted Heath et al. (2013) Standard Framework for Levels of Integrated Care for Client Experiences

Referral		Co-Located		Integrated			
Key El Commu	ement: nication	Key Element: Physical Proximity		Key Element: Practice Change			
Level 1 Minimal Collaboration	Level 2 Basic Collaboration at a Distance	Level 3 Basic Collaboration On-site	Level 4 Close Collaboration On-Site	Level 5 Close Collaboration Approaching Full Integrated Practice	Level 6 Full Collaboration in a Transformed/ Merged Integrated Practice		
	Client advantages:						
This traditional model is typically better understood	Shared information makes treatment more holistic	Removal of location barrier and referrals are more successful	Removal of location barrier, receive warm handoff, and client is often seen as shared	Receive holistic screening and access to services with no proximity barriers	True holistic treatment with physical and mental health needs as they arise; true one-stop- shop		
		Client disa	dvantages:				
Long wait times for addressing physical and mental health concerns and services may overlap; Referrals most likely to fail; biggest physical proximity barrier	Shared information may have a barrier if not systematic enough, which may delay services; referrals are not often successful; physical barrier	Collaborative care may still be difficult depending on the setting's size; potential proximity barrier and have more service appointments	Still may have system issues if not in the same office space; potential proximity barrier and have more service appointments	Providers may still need more time to collaborate and may not receive same day services	Due to this being the most nontraditional treatment, may not be readily available and least understood		

Figure 2.2 Adapted Heath et al. (2013) Standard Framework for Levels of Integrated Care Advantages and Disadvantages for Clients

# Chapter 3

The State of Integrated Primary and Behavioral Healthcare Research in Counselor

**Education: A Review of Counseling Journals** 

Fields, A. M., Thompson, C. M., Schneider, K. M., Perez, L. M., Reaves, K., Linich, K., & Limberg, D. To be submitted to a peer-reviewed counseling journal.

# Abstract

The integration of behavioral healthcare within primary care settings, otherwise known as integrated care, has emerged as treatment modality for counselors to reach a wide range of clients. However, previous counseling scholars have noted the lack of integrated care representation in counseling journals. In this scoping review, we identified 27 articles within counseling journals that provide integrated care implications. These articles were represented in 10 unique counseling journals and the publication years ranged from 2004-2022. Articles were classified as either: (a) conceptual; (b) empirical; or (c) meta-analyses and systematic reviews. The data extracted from the articles focused on the implications for IC training and practice for the next generation of counselors, evidence-based treatment approaches, and future research directions.

Keywords: integrated care, scoping review, counselor, counselor education

One in five adults are living with a mental illness and individuals with a mental illness are more likely to have a chronic health condition (Substance Abuse and Mental Health Services Administration [SAMHSA], 2021). Integrated primary and behavioral health, also termed integrated care (IC), has emerged as a noted treatment strategy to meet the holistic needs of individuals with comorbid mental and physical health symptoms. While IC has been operationalized inconsistently by scholars, most definitions describe the integration and coordination of behavioral health services within primary care settings (Giese & Waugh, 2017). The Center of Excellence for Integrated Healthcare Solutions, a SAMHSA and Health Resource and Service Administration (HRSA) collaborative, expanded upon this definition to outline IC on a continuum of healthcare service delivery (Heath et al., 2013). Heath and colleagues described the progressive movement towards IC as: (a) collaborative care: providers from multiple healthcare professions collaborating on holistic healthcare treatment planning at a distance; (b) colocated care: providers from multiple healthcare professions sharing basic system integration, such as sharing physical proximity and more frequent collaboration; and (c) IC: providers from multiple healthcare professions having systematic integration (i.e., sharing electronic medical records and office space) and a high level of collaboration resulting in a unified treatment approach.

Beyond support from the SAMHSA and HRSA, the IC movement has been endorsed through government legislature. The Patient Protection and Affordable Care Act (2010) paved the way for agencies and healthcare systems demonstrating an IC approach to receive additional funding for healthcare providers, as well as increased reimbursements for the services they deliver. Furthermore, the federal government has

recently pledged to double the funding support for IC to be more accessible in hospitals. substance abuse treatment facilities, family care practices, school systems, and other healthcare settings (The White House, 2022). This may be the result of IC showing efficacy in reducing mental health symptoms (Lenz et al., 2018), saving healthcare expenditures (Basu et al., 2017), and promoting overall life satisfaction (Gerrity, 2016). Schmit et al. (2018) demonstrated the effectiveness of IC in a quasi-experimental study with individuals diagnosed with severe mental illness whereas one group received an IC intervention (n = 98) and one group received a treatment-as-usual (TAU; n = 98). Through profile analysis, Schmit and colleagues claimed that the IC intervention group reported positive, holistic client treatment outcomes across the Adult Needs and Strengths Assessment (ANSA; Lyons and Walton, 1999) subscales (Risk Behaviors, Behavioral Health Needs, Life Domain Functioning, and Strengths), as compared to the TAU group. Additionally, IC has been described as a strategy to bridge healthcare gaps for traditionally underserved populations (Kohn-Wood and Hooper, 2014). For example, Alvarez et al. (2014) completed a qualitative analysis on mental health professionals working in IC settings serving individuals from diverse cultural backgrounds and developed a theme that IC is a patient-centered approach for underserved populations. Alvarez and colleagues expanded upon this theme and reported IC provided access for underserved populations to have equitable access to care that included linguistic and cultural competence.

The IC paradigm is not a novel concept, with Aitken and Curtis (2004) introducing IC literature to counseling journals. In this introductory article, Aitken and Curtis provided emerging evidence of IC support and advocated for healthcare settings to

recognize counselors as an asset to IC teams, as well as advocacy for counselors to be prepared for this treatment approach; notions that still exist during this report. Advocacy efforts have been recognized as Brubaker and La Guardia (2020) noted that the Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2016) required IC education in counselor-in-training (CIT) development as follows: (a) introduction to "strategies for interfacing with integrated behavioral healthcare professionals" (Section 5, Standard C.3.d); (b) understanding "the multiple professional roles and functions of counselors across specialty areas, and their relationship with human service and integrated behavioral health care systems, including interagency and interorganizational collaboration and consultation" (Section 2, Standard F. 1.b); and (c) acknowledging their "roles and responsibilities as members of interdisciplinary community outreach and emergency management response team (Section 2, Standard F.1.c)." The 2024 CACREP Task Force have also included these standards for their proposed revisions (CACREP, 2022). Additionally, HRSA has afforded counselor education (CE) programs funding opportunities to train CITs during practicum and internship experiences. HRSA's Behavioral Healthcare Workforce Education and Training (BHWET) Program has funded over 1,300 CITs during 2014-2018 (BHWET, 2018), and continue to fund CITs through unique training programs. While IC training, education, and practice is occurring within CE, IC literature remains scarce in counseling journals (Fields et al., 2022). The lack of representation presents an issue for appropriate training for CITs and future research directions, which leads to sustainability concerns. As such, this scoping review aims to amalgamate current IC literature within counseling journals and provide CITs, counselors, and counselor educators from diverse

backgrounds a resource to inform their education, practice, and scholarship. The guiding research question for this review is: "What are the publication trends (i.e., publication years and journals), study characteristics and outcomes, implications, and recommendations for future research from IC literature within counseling journals?"

#### Method

We conducted a scoping review to identify the publication trends, key characteristics of IC studies (i.e., type of article and study outcomes), implications for future research of IC literature published in counseling journals (Munn et al., 2018). Our methodology followed the PRISMA-ScR (Preferred Reporting Items for Systematicreviews and Meta-Analyses extension for Scoping Reviews; Tricco et al., 2018) checklist to (a) establish eligibility, (b) identify sources of information, (c) conduct screening process to select included articles, (d) identify and chart data items, (e) conduct a critical appraisal of included articles, and (f) synthesize results. We searched the following databases for eligible literature: (a) Alt HealthWatch, (b) APA PsycArticles, (c) APA PsycInfo, (d) Education Source, (e) Health Source - Consumer Edition, (f) Health Source: Nursing/Academic Edition, (g) MEDLINE with Full Text, (h) Science Reference Center, (i) Social Sciences Full Text (H.W. Wilson), and (j) Social Work Abstracts. We used the search terms: "Integrat\* care" OR "integrat\* primary and behavioral healthcare" OR ""integrat\* primary and behavioral care" AND "counsel\* education" OR "counsel\*." Additional criteria for this search were full text-text, peer-reviewed journal articles, and an English translation.

# **Eligibility Criteria**

Eligibility criteria for articles included in this review are articles that are published in a counseling journal, present implications (i.e., recommendations for training and evidenced-based approaches) of IC practice for CITs and counselors through research methodology or conceptual themes, and discuss future research of IC for counselor educators and counseling scholars through research methodology or conceptual themes. Eligible counseling journals included divisions of the American Counselors Association (ACA), American Mental Health Counseling Association (AMHCA), American School Counseling Association (ASCA), the International Association for Marriage and Family Counselors (IAMFC), the National Board of Certified Counselors (NBCC), and Chi Sigma Iota (CSI). Journals connected to international and regional divisions were also included. The initial database search resulted in 222 articles, which we reduced to 125 articles after removing duplicates. An additional two articles were identified through additional sources. These additional sources included references identified through a review of an article and social media post advertising an IC article. We reviewed titles and abstracts for inclusion criteria. This resulted in 28 articles that were given full review. Research team members independently examined articles to summarize information relevant to the research question. During this process, articles were excluded if they did not provide future implications for IC in counseling or CE. Following this process, 27 articles were included. A visual of the eligibility and inclusion process can be found in Figure 1.

# **Data Extraction**

After consensus was reached on the final 27 articles, our research team assessed the available evidence and synthesized the results. The seven-member research team was comprised of four doctoral students in counselor education, an undergraduate student minoring in counselor education, a clinical assistant professor in a counselor education program, and an associate professor in a counselor education program. The initial data extraction process began with identifying journal representation. Then, our research team organized articles based on similar characteristics. This resulted in classifying articles as either (a) conceptual; (b) empirical; or (c) meta-analyses and systematic reviews. Conceptual articles provided an overview of available literature and identified a current gap in IC understanding for counseling or CE. Articles classified as conceptual did not present original data or follow research methodology. Data from these articles were presented in accordance with the authors' population(s) of interest, the identified research gap, implications gathered from existing literature, and recommendations for future research. Next, empirical articles introduced a novel research question and presented results to address their question. Data from these articles were presented in accordance with the authors' study classification (i.e., qualitative, quantitative, or mixed methods), research methodology, the N and profile of participants, research of interest, results from their analysis. Lastly, meta-analyses and systematic reviews organized the previous empirical studies and presented big picture results across multiple studies. Data from these articles were presented in accordance with the authors' article classification (i.e., meta-analysis or systematic review), population of interest, number of included studies and number of total participants (if applicable), results, and implications for future

research. Due to the broad scope and exploratory nature of this review, a quality assessment was not preformed.

#### Results

This scoping review resulted in a wide variety of articles in counseling journals that may inform the future of IC research in counseling and CE. Additionally, articles included in our review have ranging implications at the CIT, counselor, and client level. The results section will begin with an overview of IC publication trends within counseling journals detailing the publication range and specific journals. Next, results for this review were organized based on study outcomes and the classification of the article. The study outcomes sections will further detail included articles that are conceptual, empirical, and meta-analyses and systematic reviews.

# **Publication Trends**

Articles included in this review range in publication from 2004-2022.

Additionally, articles are represented in 10 unique journals. Specifically, the following journals are represented in this review: (a) *Counseling Outcome and Research Evaluation* (n = 2); (b) *International Journal for the Advancement of Counselling* (n = 2); (c) *Journal of Addictions & Offender Counseling* (n = 2); (d) *Journal of College Counseling* (n = 1); (e) *Journal of Counseling & Development* (n = 7); (f) *Journal of Creativity in Mental Health* (n = 1); (g) *Journal of LGBT Issues in Counseling* (n = 1); (h) *Journal of Mental Health Counseling* (n = 9); (i) *The Family Journal* (n = 1); and (j) *The Professional Counselor* (n = 1). Most articles are within counseling organizations' flagship journal (i.e., ACA and AMHCA) and describe CIT and counselor level implications. These results are represented in Table 1.

#### **Study Outcomes**

# **Conceptual Articles**

Our review comprised 11 conceptual articles. Of these studies, four studies focus on underserved populations, specifically looking at clients in chronic pain and are chemically dependent (Jacobson & Hatchett, 2014), family counselors in rural areas and their clients (Johnson & Mahan, 2020), self-identified lesbian, gay, bisexual, transgender, and queer (LGBTQ+) individuals (Moe et al., 2018), and patients in medical settings with adverse childhood experiences (Regal et al., 2020). Six studies focus on current licensed counselors in primary care settings, counselor educators, counselors in training in a Council for Accreditation of Counseling and Related Educational Programs (CACREP), and counselors interested in IC (Aitken & Curtis, 2004; Johnson & Freeman, 2014; Kohn-Wood & Hooper, 2014; Lloyd-Hazlett et al., 2020; Sheesley, 2016; Vogel et al., 2014). One study focuses on IC counseling within an institute of higher education (IHE), specifically describing an IC treatment approach for an international graduate student (Tucker et al., 2008). Of the 11 conceptual articles, common implications include advocacy, education, communication, networking, and teamwork (Aitken & Curtis, 2004; Jacobson & Hatchett, 2014; Johnson & Freeman, 2014; Johnson & Mahan, 2020; Kohn-Wood & Hooper, 2014; Lloyd-Hazlett et al., 2020; Moe et al., 2018; Regal et al., 2020; Sheesley, 2016; Vogel et al., 2014).

Eight studies described how additional research could empirically investigate their IC model. The authors of these conceptual articles recommended continued investigation of the current medical model and national recognition of gaps of care for both the chronic pain and substance abuse population (Jacobson & Hatchett, 2014),

integrating the interprofessional education collaborative (IPEC) into the curriculum of mental health counselors (Johnson & Freeman, 2014), interprofessional telehealth collaboration (IPTC) through cognitive-behavioral therapy (CBT) for rural communities (Johnson & Mahan, 2020; Vogel et al., 2014), treatments aligned with cultural tailoring (Kohn-Wood & Hooper, 2014), implementation of IC for those in the LGBTQ community (Moe et al., 2018), trauma-informed IC (Regal et al., 2020), the role of counselors in an IC team treating obesity (Sheesley, 2016). Two studies highlighted different approaches to IC, Johnson & Mahan (2020) have identified the IPTC model which allows health professionals to use technology to increase access to services for rural communities. The Chronic Care Model has been shown to improve the quality of care for clients with chronic medical conditions by increasing communication between healthcare professionals (Sheesley, 2016). Training programs have also been studied as two studies focused on the impact of two identified training programs. Johnson & Freeman (2014) identified the Interprofessional Education Collaborative Expert Panel and their efforts to effectively train health professionals to collaborate. Lloyd-Hazlett et al., (2020) focused on the Program for the Integrated Training of Counselors in Behavioral Health (PITCH) which is a training program for master's level counseling students in a CACREP program aimed at training students to supply IC to rural, vulnerable, and underserved communities. These results are represented in Table 2. **Empirical** Articles

Our review resulted in 13 empirical studies. These studies adhered to the following designs: Three mixed-methods designs (Agaskar et al., 2021; Johnson et al., 2015; Lenz & Watson, 2022); three quasi-experimental (Brubaker & La Guardia, 2020;

Schmit et al., 2018; Ulupinar et al., 2021); two cross-sectional surveys (Crowe et al., 2017; Wood et al., 2020); two pre-post designs (Ulupinar et al., 2021; Veach et al., 2018); three phenomenological studies (Glueck, 2015; Johnson et al., 2021; Vereen et al., 2018); and one exploratory cross-case synthesis (Alvarez et al., 2014). The studies were completed in a variety of settings, such as university clinics, trauma centers, and hospital settings. Participant profiles varied across studies, with nine representing CITs or practicing counselors, three representing clients, and one representing both. In addition to counselors, studies with client level data included service providers from social workers, as well as speech language pathology, dental hygiene, nursing, physical therapy, and undergraduate students (Johnson et al., 2015; Vereen et al., 2018; Wood et al., 2020). Furthermore, three studies in this article used Heath et al.'s (2013) conceptualization of IC. This was the most common model cited.

Most study outcomes were reported as positive benefits for IC. For CIT and counselor level studies, six described a theme of increased ability and desirability to work with a collaborative approach on IC teams (Agaskar et al., 2021; Alvarez et al., 2014; Brubaker & La Guardia, 2020; Johnson et al., 2015; Lenz & Watson, 2022; Vereen et al., 2018). Participants also reported an increase in professional identity and self-efficacy (Brubaker & La Guardia, 2020; Johnson et al., 2015; Lenz & Watson, 2022). Participants in studies by Agaskar et al. (2021), Alvarez et al. (2014), and Lenz and Watson (2022) further demonstrated that working with underserved populations in IC settings increased their multicultural competence, specifically around areas of acceptance, advocacy, and awareness (Lenz & Watson, 2022). IC awareness amongst service providers (Lenz & Watson, 2022; Vereen et al., 2018) and organizational constraints (Alvarez et al., 2014;

Lenz & Watson, 2022) were noted as potential barriers to IC care. Johnson et al. (2021) found interprofessional supervision as a potential barrier to remaining within a provider's scope of practice and leaves implications for future research and graduate level training in the classroom and field experience (Glueck, 2015). All four of the studies completed with client level data were quantitative (Crow et al., 2017; Schmit et al., 2018; Ulupinar et al., 2021; Veach et al., 2018) accounting for 2,378 client participants. Results of these studies suggested improvement in holistic client functioning (Ulipinar et al., 2021), a decrease in crisis events (Schmit et al., 2018, decrease in risking drinking behaviors for individuals receiving IC trauma care (Veach, et al., 2018) and the self-stigma of mental illness and of seeking help had an inverse relationship with mental health literacy amongst patients who received treatment in an IC setting (Crowe et al., 2017). These results are represented in Table 3.

#### Systematic Reviews and Meta-Analyses

Three articles in this review were meta-analyses or systematic reviews. Specifically, two articles were meta-analyses (Balkin et al., 2019; Lenz et al., 2018) and one a systematic review (Fields et al., 2022). Participants within these studies included adults with substance use disorders, mental health professionals receiving training to practice within IC, and individuals receiving mental health care in traditional primary care settings. All three articles described benefits of IC. Additionally, the authors differed on the number of studies and participants included in their analysis. Fields et al. (2022) completed a review of 18 articles that studied training interventions for mental health professionals to work on IC teams and developed the following themes: (a) HRSAfunded studies; (b) trainee skill development; (c) enhancement of self-efficacy; and (d)

increased understanding of interprofessional collaboration. Furthermore, Fields and colleagues noted that there is a lack of training efficacy studies that report outcomes at the client or consumer level. Balkin et al. (2019) concluded no statistical significance between IC treatment and TAU to decrease frequency of substance use. Balkin et al. also remarked that their study, including 1,545 participants, did not reach statistical power and results should be considered preliminary. Furthermore, Lenz et al. (2018) reported a decrease in mental health symptoms with a greater effect when a larger treatment team and number of behavioral health sessions are increased, compared to TAU. Lenz and colleagues generated their results from 14,764 participants. Lastly, Fields et al. (2022) and Lenz et al. (2018) both used Heath et al.'s (2013) model of IC for conceptualization. Throughout all three of these studies, additional research is needed to understand how IC benefits different populations as well as how different variables affect the treatment process. These results are represented in Table 4.

#### Discussion

## Limitations

Completing this scoping review resulted in limitations. First, the methodology of a scoping review has noted limitations. Due to the nature of a scoping review, the data extraction process and results section are broad (Munn et al., 2018). Articles were not systematically evaluated to assess the study quality and the reader is encouraged to review a specific study before interpreting the results. In addition to study quality, scoping reviews include articles from a variety of article classifications, thus the results and implications should be considered exploratory. Second, the search terms and inclusion criteria may have resulted in limitations. This search focused on IC, therefore

concepts such as interprofessional collaboration and interprofessional education may have been excluded. These concepts are discussed in the Heath et al. (2013) model, but they do not directly result in IC practice. Counseling and CE were also search terms, which may have excluded articles written by counseling scholars in journals outside of counseling and CE journals. Third, this review resulted in four studies that empirically investigated IC at the client level. With limited data at the client level, there are funding and advocacy sustainability concerns for IC within counseling and CE. Lastly, nine studies specifically provided implications for minority populations and multicultural competency development through an IC lens. While Kohn-Wood and Hooper (2014) and Vogel et al. (2014) concluded that IC is a modality that advocates for the treatment of minority populations that have traditionally received services at unequal rates to their white, cis-gendered counterparts, it has limited representation in counseling IC literature. As with the implications discussed by Fields et al. (2022), this review demonstrates the need for a deeper understanding on how the counseling professional identity rooted in social justice and advocacy may contribute to the advancement of IC services.

# **Implications and Future Research Directions**

The results of this scoping review have implications that may inform training and clinical practice for CITs and counselors. CITs and counselors that are interested or currently working in IC settings may be encouraged at the CIT and counselor level training intervention outcomes. More specifically, CITs that have received training in IC have commonly reported an increase in their professional identity understanding, multicultural competence, self-efficacy for clinical practice, ability to work on interprofessional teams, and implement evidence-based practices (Agaskar et al., 2021;

Brubaker & La Guardia, 2020; Johnson et al., 2015; Lenz & Watson, 2022; Vereen et al., 2018). Counselors that are working in IC settings or received IC training beyond their graduate education have corroborated these reports and noted that IC is a unique setting that should be introduced to CITs during development (Glueck, 2015). Typically, IC training for CITs and counselors involved structured lessons and experiential opportunities to learn about collaboration with other professional helpers, brief assessments in primary care settings, prevention and wellness concepts, and considerations for specific populations (e.g., at-risk youth). These trainings can also occur as hybrid or in-person formats, providing flexibility for counselor educators and clinical administrative staff. Additionally, clinical implications are described with ranging results. Most results suggested clinical benefits for individuals receiving counseling services through an IC setting. Clients or consumers that received IC treatment reported a reduction of mental health symptoms (Lenz et al., 2018): Ulupinar et al., 2021), mental health stigma (Crowe et al., 2017), and crisis events (Schmit et al., 2018). Articles that were classified as conceptual also suggested that IC treatment has the potential to enhance service delivery for clients from diverse populations, such as LGBTQ+ and medically underserved communities (Kohn-Wood & Hooper, 2014; Moe et al., 2018). However, Balkin et al. (2018) concluded that IC may not result in a decrease in frequency of substance misuse. Professionals preparing to work with clients through IC settings are encouraged to review the provided literature to inform their service delivery.

In addition to clinical practice and training, this review resulted in implications that may inform future research directions. Conceptual articles included in this review

synthesized literature on the importance of CITs and counselors understanding applications of IC, as well as potential treatment approaches to treat a variety of marginalized communities and clinical practices. Our research team recommends that counseling scholars reviewing the included conceptual articles consider how they can use the implications and future research directions to inform future research studies. These articles can also serve as support for counseling scholars that are applying for internal and external funding. Furthermore, the empirical, systematic reviews, and meta-analyses included in our review present data that can inform future research. For example, Balkin et al. (2018) and Veach et al. (2018) concluded contrasting results about IC in reducing substance abuse behaviors. Future research studies can continue researching substance misuse within IC settings to better understand evidence-based approaches to treat this populations. 21 articles included recommendations for continued research at the client or consumer level, specifically for clients from marginalized communities. Counseling scholars are encouraged to stay up to date with program evaluation scholarship and implement a variety of methodical procedures to document the impact of IC on the clients they are treating. This may also include targeted education to counselors within their graduate training to encourage them track data at their practices. Lastly, counseling scholars must continue to advocate for continued IC literature within counseling and CE journals.

# Conclusions

Our scoping review identified IC literature within counseling journals. Specifically, this review followed PRISMA-ScR protocols (Tricco et al., 2018) and identified 27 articles across 10 unique counseling journals. Most articles were within

national flagship journals (i.e., ACA and AMHCA) and publication years ranged from 2004-2022. The articles in this review were organized according to their classification, and were described as either conceptual, empirical, or meta-analyses and systematic reviews. Implications for CITs, counselors, and clients were represented across each classification. Overall, IC implications from each article were positive for training and practice perceptions for CITs and counselors, as well as clinical outcomes for clients. Moving forward, authors unanimously encouraged counseling educators and counseling scholars to continue studying IC. Future scholarship would benefit from a deeper understanding of client level implications, with an emphasis on how IC can benefit marginalized communities.



Figure 3.1 Article Screening Flowchart

Table 3.1 IC Publication Trends

Journal Title	Number of Included Articles	
Counseling Outcome Research and Evaluation	2	
International Journal for the Advancement of	2	
Counselling		
Journal of Addictions & Offender Counseling	2	
Journal of College Counseling	1	
Journal of Counseling & Development	7	
Journal of Creativity in Mental Health	1	
Journal of LGBT Issues in Counseling	1	
Journal of Mental Health Counseling	9	
The Family Journal	1	
The Professional Counselor	1	

Author(s)	Population(s)	<b>Research Gap</b>	Implications and Future
	of Interest	Identified	Directions
Aitken &	Counselor	Lack of IC	Increased training for counselors
Curtis,	educators and	literature in CE	to work competently in IC;
2004	counselors	journals	increased advocacy efforts to be
			on insurance panels; build
			relationships with other healthcare
			professionals; more literature is
<b>T</b> 1		<b>T</b> 1 011	needed in CE journals
Jacobson	Clients that	Lack of literature	Clients that have co-occurring
&	are	for clients that are	chemical dependence and chronic
Hatchett,	chemically	chemically	pain have reported benefits when
2014	dependent	dependent with	their symptoms are treated by
		chronic pain	mental and physical health
	pam		providers, additional research is
			strategy effectiveness
Johnson &	Healthcare	Lack of literature	Provides a framework for IC
Freeman	undergraduate	documenting IC	training across multiple disciplines
2014	and graduate	training across	in accordance with SAMHSA IC
	students	multiple	competency standards; additional
	(including	disciplines,	research is needed to understand
	CITs)	specifically	the effectiveness for each
	learning IC	including CITs	discipline and as a whole
	strategies		
Johnson &	Family	Family counselors	Emphasis on interprofessional
Mahan,	counselors in	leading connection	collaboration (IPC) and use of
2020	rural and	between rural	telehealth options where family
	underserved	tamilies and other	counselors use systemic training to
	areas	providers of health	advocate for rural, marginalized
		cale services	connect families to health care
			providers when family members
			have unmet medical health needs
			or need specialized mental health
			care treatment: additional research
			is needed to understand this
			phenomenon
Kohn-	Mental health	How culturally	Cultural tailoring of treatments
Wood &	professionals	tailoring evidence-	should be a primary factor that is
Hooper,	working in	based treatment	evaluated in future research
2014	primary care	models can reduce	studies; future researchers should
	settings	mental health	consult existing literature on
		disparities	cultural tailoring treatment to

Table 3.2 Conceptual Articles

Lloyd- Hazlett et al., 2020	CITs	Need for a replicable model to train CITs in IC	increase engagement and improve outcomes for diverse groups The Program for the Integrated Training of Counselors in Behavioral Health (PITCH) model creates community partnerships, introduces CITs to applications of IC, and awards CITs a graduate certificate; Additional research is needed to demonstrate sustainability
Moe et al., 2018	LGBTQ+ clients	Lack of LGBTQ+ literature pertaining to IC	CITs, counselors, and other healthcare professionals working with LGBTQ clients may benefit from additional training and supervision in collaborative and IC; additional research is needed to understand the impact IC has with the LGBTQ+ population
Regal et al., 2020	Clients with cancer that are survivors of childhood sexual abuse	Lack of trauma- informed care literature pertaining to IC, specifically for individuals with Adverse Childhood Experiences (ACEs)	IC offers opportunities for appropriate assessments to identify ACEs for holistic care, as represented in the case study; Additional research is needed to understand universal screening for ACEs and the integration of trauma informed practices within traditional primary care settings
Tucker et al., 2008	An international student's experience receiving IC on a college campus	The effect of an IC program and mindfulness-based cognitive therapy (MCBT) approach	As reported by the multidisciplinary team using medication, individual, and group therapy improved from the first time they had met; the authors emphasized the use of MCBT in treatment; additional research is needed for IC on college campuses
Sheesley, 2016	Counselor educators, counselors, and primary care settings	Elaborate on the role of mental health counselors within the Chronic Care Model (CCM)	Counselors influencing the future of obesity treatment within the CCM; additional research is needed to understand evidence- based practices for counselors within the CCM for the treatment of obesity

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Counselors	Access issues,	Increased training in evidence-
considering	adherence, and the	based culturally tailored practices;
IPC	effectiveness of	increased education for counselors
	IPC with particular	regarding IPC to help determine if
	attention to	primary care is a good fit;
	culturally diverse	additional research is needed on
	groups	various aspects of successful IPC
		execution
(	PC	adherence, and the effectiveness of IPC with particular attention to culturally diverse groups

Author(s)	Methodology	N and Participant Profile	Research of Interest	Results
Agaskar et al., 2021	Mixed-Methods; Quantitative uses single-group design and Qualitative uses thematic analysis	12 CITs	The effect of an IPC and evidenced-based practices (EBPs) curriculum to enhance students' ability to work with at- risk youth in IC settings	CITs reported an increase in multicultural competence, ability to work on IC teams, utilize EBPs, and implement suicide interventions
Alvarez et al., 2014	Qualitative; Exploratory cross- case synthesis	8 service providers in an IC setting	The experiences IC service providers working with culturally and linguistic diverse populations	Three major themes: (a) patient-centered care benefits underserved populations; (b) desirability of a multidisciplinary team; and (c) importance of the organization to change with circumstances
Brubaker & La Guardia, 2020	Quantitative; Single case and quasi- experimental	11 CITs	The effect of an IC training intervention, Serving At-Risk Youth Fellowship Experience for Counselors (SAFE-C)	CITs reported an increase in understanding professional identity, self- efficacy, and interprofessional socialization
Crowe et al., 2017	Quantitative; Cross-sectional survey design	102 clients from an IC medical facility	To examine the relationship between mental health self- stigmas, mental health literacy, and healthcare outcomes	Self-stigma of mental illness and self-stigma of seeking help had an inverse relationship with mental health literacy

# Table 3.3 Empirical Articles

Glueck 2015	Qualitative; Phenomenological	10 mental health professionals (MHPs) working in IC settings	Roles and attitudes of MHPs working in IC and perceived training needs	MHPs reported that they were involved in brief interventions and assessments, administrative work, and consultation and that additional graduate training is needed in classroom and field experiences
Johnson et al., 2015	Mixed methods; Qualitative: the pre- and post- survey design; Qualitative: Thematic analysis	22 CITs, as well as dental hygiene, nursing, and physical therapy students.	CITs attitudes toward interprofessional learning and collaboration following an interdisciplinary course on IPC	Perceptions about learning together and collaboration improved, negative professional identity scores decreased, and higher reports of positive professional identity
Johnson et al., 2021	Qualitative; phenomenology	11 counselors in hospital setting	Explore experiences of counselors working on IPTs in a hospital setting	Four themes emerged: (a) counselors rely on common factors and foundational principles; (b) must have interprofessional supervision; (c) counselors must remember their scope of practice; (d) counselors must adhere to ethical codes and advocacy standards

Lenz & Watson, 2022	Mixed-methods; Quantitative: non- experimental pre- and-posttest; Qualitative: thematic analysis	45 CITs	The impact an IC training program has on CITs' self- efficacy, interprofessional socialization, and multicultural competence, as well as barriers to student growth.	Increase in self- efficacy, interprofessional socialization, aspects of multicultural competence. Most reported barriers were IC awareness and organizational constraints.
Schmit et al., 2018	Quantitative; Quasi- experimental	196 clients; 98 received IC and 98 received treatment as usual (TAU)	The effect of IC for individuals with severe mental illness compared to TAU.	Group that received the IC intervention demonstrated an improvement in overall functioning, including a decrease in crisis events.
Ulupinar et al., 2021	Quantitative; quasi- experimental	1,747 clients and 10 counselors	To examine the therapeutic outcomes and client dropout rates of adults experiencing mental disorders in an IC center.	The addition of counselors resulted in a decrease in client symptom reports
Veach et al., 2018	Quantitative; Pre- and post-test survey	333 clients in a trauma- based IC center	A brief IC counseling intervention for risky alcohol behavior	The IC counseling intervention resulted in reduced risky alcohol behaviors
Vereen et al., 2018	Qualitative; Phenomenological Inquiry	13 graduate students; CITs (5) and speech language pathologists (8)	The effect of interprofessional education (IPE) on the development of collaborative practice for both CITs and speech	5 themes emerged: (a) benefits of IPE; (b) expectations of collaborative practice; (c) benefits of

			language pathologists-in- training	experienced IC providers; (d) challenges of IC practice; (e) optimization of IC practice
Wood et al., 2020	Quantitative; Cross-sectional survey design	155 undergraduate students studying psychology and aspects of counseling	How factors related to prevention and wellness relate to topics that counselors are adept at addressing, such as optimism, social support, and resilience.	Results indicated that health anxiety was positively correlated with fear of cancer, but that psychosocial variables either had no relationship or were not significant moderators between health anxiety and fear of cancer.

Author(s)	Article Classification	Population of Interest	Number of Included Studies and	Results and Implications
			Participants	
Balkin et al., 2019	Meta-analysis	Adults with substance use disorders	8 studies with 1,545 participants; 722 received IC and 823 receive alternative	Effects of IC was small with this sample (i.e., small effect in decrease in substance use). Authors recommended additional research to understand substance use disorders within an IC context and variables beyond use of substances.
Fields et al., 2023	Systematic Review	Mental health professionals and mental health professionals- in-training receiving education on IC	18 studies	Four themes emerged: (a) HRSA-funded studies; (b) trainee skill development; (c) enhancement of self- efficacy; and (d) increased understanding of interprofessional collaboration. Authors recommended increased more studies focusing on client level data and more multicultural competencies.
Lenz et al., 2018	Meta-analysis	Individuals receiving mental health care in traditional primary care settings	36 studies with 14,764 participants	Effects of IC, as compared to alternative treatments, resulted in a decrease in mental health symptoms. A greater effect is shown with a larger treatment team and number of behavioral health sessions.

Table 3.4 Systematic Reviews and Meta-Analyses
# Chapter 4

A Systematic Review of Training Strategies to Prepare Counselors for Integrated

Primary and Behavioral Healthcare

Fields, A. M., Linich, K., Thompson, C. M., Saunders, M., Gonzales, S. K., and Limberg, D., 2023. *Counseling Outcome Research and Evaluation*. 14:1-4. Reprinted here with permission from the publisher.

### Abstract

Objective: Our systematic review aimed to identify evidenced-based training interventions to prepare counselors and mental health professionals to work in integrated care settings. Method: We utilized the preferred reporting items for systematic reviews and meta-analyses protocols (PRISMA-P; Mohen et al., 2015). Search terms were created that specifically investigated integrated care training interventions involving mental health professionals within the years 2000-2021 from peer-reviewed journals and academic databases. Results: 18 articles were included for our final analysis. A quality analysis on our included studies followed the Mixed Methods Appraisal (MMAT; Hong et al., 2018). Following the quality analysis, we developed the following themes from the study results: (a) HRSA-funded studies; (b) skill development; (c) self-efficacy; and (d) interprofessional collaboration. Conclusions: Further investigation is needed to demonstrate the sustainability of integrated care training for counselors. Specifically, how training impacts client therapeutic outcomes and addresses multicultural and social justice competencies.

*Keywords*: integrated care, behavioral health, training, competency development, counselor education

The integration of primary and behavioral healthcare, referred to as integrated care (IC), has emerged as a preferred model of treatment as the healthcare industry evolves to meet expectations of managed care. The IC paradigm is intended to mitigate common issues associated with traditional healthcare treatment occurring in silos by offering a continuum of care of providers from multiple disciplines, such as primary care and mental health providers, delivering services together in one setting (Goodwin, 2016). Furthermore, the Center of Excellence for Integrated Healthcare Solutions, jointly funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) and Health Resource and Service Administration (HRSA), has adopted Heath et al.'s (2013) model of IC that outlined six levels of primary and behavioral healthcare integration, with each ascending level describing key elements for higher integration of service delivery. Heath and colleagues described the key element of IC in levels five and six as real-time collaboration between medical and mental health providers to create a unified treatment plan addressing holistic needs that moves beyond referral (i.e., levels one and two with communication among providers) and co-located (i.e., levels three and four with physical proximity of providers) care modalities. This collaboration has afforded counselors opportunities to practice within IC, providing services to an estimated 49% of individuals with self-reported poor mental health who solely receive treatment from their primary care provider (Peterson et al., 2014). Support for trained professionals in an IC environment is also evident in legislature, such as the Patient Protection and Affordable Care Act (2010) which provided additional funding opportunities for healthcare systems that adapt to this model (Croft & Parish, 2013; Kuramoto, 2014). Counselors are in a

prime position to join IC teams and contribute to interprofessional teams, though competency requires adequate training.

A necessary consideration for counselor educators when looking at the future of IC in counselor development is the notion that this modality will result in positive consumer or client outcomes. Although limited, the IC literature in counseling journals with documented outcomes has demonstrated an overall benefit in client reports. From a meta-analysis of 36 randomized control trials, Lenz et al. (2018) concluded that IC increased access to mental health professionals and created additional opportunities for consultation on treatment teams and behavioral health sessions for a client. Additionally, the results suggested a decrease in client-reported mental health symptoms when receiving treatment at a site that provides IC, as opposed to solely receiving care through a primary care or mental health provider. Glueck (2015) provided a potential explanation of these findings through their thematic analysis that suggested IC settings increased access to care for traditionally underserved individuals, reduced the stigma surrounding mental health care, and created opportunities to provide preventative treatment for individuals experiencing distress.

The Council for Accreditation of Counseling and Related Programs (CACREP) and SAMHSA have included IC language in their core competencies and training requirements to increase related provider knowledge and skills (CACREP, 2016; Hoge et al., 2014). However, Johnson (2016) suggested that only one third of counselors have prior interprofessional education before entering professional practice. HRSA's Behavioral Workforce Education and Training (BHWET) Program has provided external funding to graduate programs nationwide to increase the amount of trained mental health

providers in IC settings. Counselor education programs have trained over 1,300 graduatelevel counselors from 2014-2018 through partnerships with other healthcare graduate programs and community agencies (BHWET, 2018). While counselors are introduced to IC and accrediting standards incorporate IC language, literature on best practices for preparing counselors for this unique modality is limited. Therefore, our systematic review aimed to identify recent literature on evidenced-based IC training interventions at the Heath et al. (2013) integrated level for mental health professionals and create themes based on the training program characteristics to inform future IC trainings within counselor education. Our related activities were guided by the omnibus research question, *"What are the themes associated with IC training programs for mental health professionals that can be applied broadly to the design of related programs in counselor education?"* 

### Method

We conducted a systematic review to identify current empirical training interventions (e.g.., workshops, courses, and modules) for mental health professionals to practice within IC settings. Our methodology followed the preferred reporting items for systematic reviews and meta-analyses protocols (PRISMA-P; Moher et al., 2015): (a) selection of the eligibility criteria; (b) identified informational sources; (c) created of a search strategy; (d) completed a search based on our eligibility criteria; (e) completed a quality assessment on each of our selected studies; and (f) developed themes based on our selected studies. Articles included in our review must describe an intervention study (i.e., pre/post, controlled, and non-controlled). Articles were retrieved from the following informational sources or databases: (a) Academic Search Complete; (b) APA Pysch

Articles; (c) APA PyschINFO; and (d) Psychology and Behavioral Sciences Collection. Additionally, our search terms included: (a) Integrat\* care OR Integrat\* behavioral healthcare OR Integrat\* healthcare; AND (b) counselor educat\* OR mental health OR clinical counseling OR counselor; AND (c) training. Search results were filtered to the years 2000-2021, as well as full text articles, journals, and academic journals.

## **Eligibility Criteria**

Our initial search yielded 1,927 articles. After deleting 273 duplicate articles, a total of 1654 articles remained for review. The remaining articles were split among the six team members for an in-depth review to ensure they met inclusion criteria. Specific requirements for inclusion were: (a) a training intervention for IC practice at the Heath et al. (2013) integrated levels fix and six (i.e., onsite, full collaboration of providers); (b) at least one mental health professional (i.e., counselors, social workers, psychologists, or related field) or mental health graduate student; and (c) reported in English or have an English translation. Due to the unique scope of a medical provider, studies that involved a training intervention solely for medical providers were excluded. Although the professional identity of our team reflects counselor education, training interventions for related fields were included for analysis. Lastly, studies were excluded if they were regarded as preliminary examinations. After the team came to consensus on articles that met all three criteria, 18 articles were officially included in our review. Figure 1 outlines our inclusion process.

## **Quality Appraisal**

To assess the 18 articles, we utilized the Mixed Methods Appraisal Tool (MMAT) to determine the quality of each study (Hong et al., 2018). The MMAT provided

definitions for the various types of studies (quantitative, qualitative, and mixed methods) while offering criteria to assess the quality of each individual study. For every study, two members of the research team first reviewed each article separately and once their individual assessment was complete, the pair came to consensus on the quality using the MMAT. If there were disagreements, the study was brought to a third research team member to reach consensus.

## **Data Extraction**

After our team came to consensus on the included articles and quality appraisal, we extracted data from the final articles and represented the data with tables. The first round of data extraction involved the research methodology and participants. The articles were split among team members and each team member summarized aspects of the study design, use of a control group, characteristics of participants receiving the training intervention, setting the training intervention occurred, and sample size. Information on the study design was described through language consistent with the MMAT (Hong et al., 2018). This information can be found in Table 1. Furthermore, the second round of data extraction focused on each of the training interventions being studied. Each member of the team revisited their article and summarized the training intervention provided to participants, the time frame of the training intervention, and results after the participants received the training. As each training intervention is different, results varied across the studies. This information can be found in Table 2. Lastly, the first and second author served as a second reviewer for studies they were not previously assigned and confirmed the extracted data.

## **Theme Development**

Our team reviewed the training elements and key findings from each study and developed themes following PRISMA-P (Mohen et al., 2015). Each member of the team had the opportunity to propose training characteristic themes and we utilized a consensus process of having at least four team members agree on the included themes. Themes for the training characteristics were proposed because they influenced the intervention development or appeared in the results most often. The following four themes were developed through a consensus process: (a) HRSA-funded studies; (b) skill development; (c) self-efficacy; and (d) interprofessional collaboration. Additionally, themes reflected the preparation of counselors due to the professional identity of our research team being rooted in counseling and counselor education.

#### Results

Out of the 18 studies included in our review, 11 followed a mixed-methods design (Askagar et al., 2021; Alexander et al., 2018; Boland et al., 2016; Brooks et al., 2016; DeBonis et al., 2015; Johnson et al., 2015; O'Brien et al., 2015; Possis et al., 2016; Rishel & Hartnett, 2017; Sherwood et al., 2019; Washburn et al., 2020). The other studies included one post-intervention survey (Momotaz et al., 2019), two one-group posttest designs (Dobmeyer et al., 2016; Funderburk & Fielder, 2013), one matched-pairs preand-posttest design (Funderburk et al., 2021), two multiple cohort posttest-only design (Brubaker & La Guardia, 2020; Putney et al., 2017), and one single group pre-andposttest design (Kearney et al., 2020). Two of the studies used a control group (Brooks et al., 2016; Washburn et al., 2020). The studies took place over a variety of settings such as hospitals, university counseling centers, government facilities, and healthcare centers. Participants included licensed social workers, psychologists, counselors, psychiatric nurse practitioners, dental hygienists, occupational therapists, and students of these disciplines. The trainings varied in concept and deployment. The duration of the trainings ranged from one day to over the course of multiple years. Nine trainings involved working with real clients and shadowing providers after receiving didactic instruction. Two trainings used virtual or standardized patients. The remaining seven trainings included some form of immersive lecture or workshop for professional development. Almost all trainings were in-person, with only two offered virtually. The primary content of the trainings focused integrated care skills and competencies, professional identity development, and interprofessional collaboration and consultation. Participants were trained in best practices in integrated care, therapeutic interventions, assessments, referral processes, teamwork and collaboration, and diagnostic accuracy.

## **Study Outcomes**

The majority of the study outcomes were significant and positive. Most reported an increase in self-efficacy and professional identity for the participants. Participants also showed increased knowledge and competency in IC techniques and practices, which led to more positive client outcomes. Many of the participants across studies reported an increase in understanding the roles of other IC professionals, as well as expressed recognition of the importance of training in this specific area. For example, participants in the studies by Brubaker and La Guardia (2020), Funderburk & Fielder (2013), and Washburn et al. (2020) increased their sense of self-efficacy when it came to working in an IC setting with other providers. In addition, Brooks et al. (2016), Funderburk et al. (2020), and Funderburk and Fielder (2013) found that IC training directly improved

client outcomes in the form of increased client satisfaction in treatment, increased functioning, and decreased symptoms of depression respectively. However, Alexander et al. (2018), did not find any significant changes in professional identity, knowledge of community resources, or interprofessional collaboration. Overall, researchers found that IC training is beneficial for professional identity development, teamwork, collaboration, evidence-based practices, and client outcomes.

## **Quality Appraisal**

A quality appraisal was completed utilizing the MMAT (Hong et al., 2018) and consensus was reached on every article. Our initial consensus among ratings was approximately 98% and the results are reported in Table 3. Seven articles were quantitative non-randomized studies and 11 articles were mixed methods studies. Using the MMAT criteria a "yes," "no," or "can't tell" answer was given. Of the quantitative non-randomized studies, one was marked as "no" under providing complete outcome data, three were labeled as "no" under accounted for cofounders in the study design and analysis, and two were rated as "no" under the intervention was administered as intended. Within the mixed methods studies included, one study was marked as "no" under outputs of the integration of qualitative and quantitative components being adequately interpreted, one was labeled as "no" under consistencies between qualitative and quantitative results adequately addressed, and three were rated as "no" for the different components of the study adhering to the quality criteria of each tradition of the methods involved.

### **Training Characteristic Themes**

## **HRSA-Funded Studies**

Four studies meeting inclusion criteria were sponsored through the HRSA-BHWET Program. Two of the studies were from CACREP programs and two were from Council on Social Work Education's (CSWE) programs. Each study organized the participants (i.e., graduate students) in cohort models that received various training interventions related to integrated care at similar periods over the same timeframe, as well as a stipend to support the additional training time requirements. Three studies in our review are focused on the treatment of children and adolescents through targeted internship placements, trainings on evidenced-based interventions, and strategies for interprofessional collaboration at the integrated level specifically for children and adolescents (Agaskar et al. 2021; Brubaker & La Guardia, 2020; Putney et al., 2017). Authors from these studies reported an increase in the graduate student participants' selfreported ability to treat children and adolescents in an IC setting, as well as an increase to address multicultural considerations when working with at-risk youth. Furthermore, Rishel and Hertnett (2017) developed a one-year graduate certificate program with HRSA-BHWET funding to enhance IC competencies for social work graduate students. As opposed to the previous studies that focused on children and adolescents, Rishel and Hertnett (2017) provided training opportunities for their students across an individual's lifespan.

### Skill Development

The most commonly reported area of improvement across the included studies was the participants' skill development with 12 studies. Due to the unique professional

identities of the participants and nature of the training intervention, skill development varied. When the training was specifically for graduate education, the student participants generally reported an increase in the development of their interpersonal clinical skills necessary to demonstrate competence for graduation, as well as practice within IC settings (Agaskar et al, 2021; Boland et al. 2016; DeBonis et al., 2015; Funderburk & Fielder, 2013; Johnson et al., 2015; Rishel & Hertnett, 2017). Additionally, participants across multiple studies reported an increase in their ability to conduct assessments and screen for various mental health concerns (Agaskar et al., Brooks et al., 2016; DeBonis et al., Dobmever et al., 2016, Funderburk & Fielder; Momotaz et al., 2019; O'Brien et al, 2018; Possis et al., 2016; Sherwood et al., 2019; Washburn et al., 2020). Lastly, training interventions that targeted specific interventions suggested an increase in skills for participants to practice a certain intervention or modality. These included the screening, brief intervention, and referral to treatment (SBIRT) model (Agaskar et al., 2021, Brooks et al., 2016, Sherwood et al., 2019) ability to conduct brief sessions (Funderburk & Fielder, 2013; Kearney et al., 2020) crisis intervention and suicide assessments (Agaskar et al., 2021), and problem-solving therapy (Funderburk et al, 2021).

### Self-Efficacy

Themes within the reviewed literature suggest a relationship between participants that are trained in IC and their self-efficacy for practice. (Brubaker & La Guardia, 2020; Putney et al., 2017; Momotaz et al., 2019; Washburn et al., 2020). Self-efficacy was termed by Bandura (1995) as an individual's belief they are able to accomplish a certain task. Mullen et al. (2015) suggest that self-efficacy for counselor education students is correlated with training opportunities and four studies included in our review provide

similar results for their trainees (Brubaker & La Guardia, 2020; Putney et al., 2017; Momotaz et al., 2019; Washburn et al., 2020). In addition to the self-efficacy participants reported for IC clinical practice, Momotaz et al. (2019) reported an increase in selfefficacy as it related to interprofessional collaboration and readiness to work with a multidisciplinary team.

### Interprofessional Collaboration

Rather than a focus on treatment in silos, IC calls for interprofessional collaboration, where professionals from multiple healthcare arenas collaborate to impact client outcomes. Five studies indicated positive results specifically related to increasing understanding of the importance of collaborating with health professionals in other fields to provide comprehensive treatment for patients or clients (Agaskar et al., 2021; Brubaker & La Guardia, 2020; Dobmeyer et al., 2016; Johnson et al., 2015; Kearney et al., 2020). Johnson et al. (2015) reported that if members on an IC team feel understood and valued by their team members, collaboration can allow for creative and comprehensive solutions to client problems. Instead of viewing each member of a treatment team as a stand-alone professional, Agaskar et al. (2021) suggests IC allows counselors and other health professionals to see each other as members of a cohesive team working toward a unified goal. Furthermore, counselors who are trained in IC have a better understanding of what services are available to their clients as well as the unique roles that each professional plays in each area of client wellness, and this leads to an increase in self-efficacy which encourages interprofessional collaboration (Agaskar et al., 2021; Brubaker & La Guardia, 2020). Including other healthcare providers in counselor training for IC not only increases confidence in asking questions, seeking guidance, and delivering interventions

in all team members, but also relieves strain on other team members who may not feel qualified to provide more intensive services (Funderburk & Fielder, 2013; Kearney et al., 2020).

### Discussion

### Limitations

Although our systematic review included a considerable number of studies with ranging results, it is important to note limitations. First, our review was limited to only peer-reviewed studies in academic journals, eliminating commercialized training programs and dissertations. Second, studies meeting our inclusion criteria may have been excluded due to search terms used. We focused on studies that prepared professionals for the Heath et al. (2013) "integrated" levels five and six, as well as studies that included counselors. Therefore, articles that studied interprofessional education or related fields may have not been included in the original analysis. Third, our review was limited to two studies with outcomes at the client or consumer level. While we can draw conclusions from the outcomes of the participants that received the training, little is known about how it will improve therapeutic outcomes for the clients or consumers receiving IC treatment.

### Implications

There are a variety of options for training a counselor to work within IC settings. In adjunct with the traditional training provided within a graduate program, studies included in our review suggest training in IC can improve professional identity development and interpersonal communication skills. Additionally, counselor education programs have flexibility in meeting CACREP standards by incorporating IC into curricula. For example, programs could adapt the Rishel and Hertnett (2017) graduate

certificate program with multiple IC-based courses or provide the Sherwood et al. (2019) one-day immersion training on a SBIRT intervention in IC settings. Training can also be delivered to counselors currently in the field. Agencies or hospitals moving towards IC may choose a training curriculum from a study included in our systematic review to create a sustainable training model. Lastly, COVID-19 exposed the notion that training may need to be adaptable as O'Brien et al. (2018) demonstrated favorable results can be attained from face-to-face, hybrid, and asynchronous learning approaches.

Moving forward, additional research is needed to advance our understanding of the impact training has on preparing counselors to work in IC. Although the HRSA-BHWET program has provided funding for over 1,300 counselors-in-training (BHWET, 2018), only three of the studies represented in our review were from counseling journals (Agaskar et al., 2021; Brubaker et al., 2020; Johnson et al., 2015). Therefore, programs that are developing training models for their students to work in IC settings should consider data collection to increase understanding of training effectiveness in counseling literature. Additionally, Kohn-Wood and Hopper (2014) noted that researchers have studied IC as a method to bridge healthcare gaps and reach minority populations, yet researchers rarely reported multicultural considerations in the included studies. Targeted scholarship will further multicultural competencies within IC training to address mental and physical health disparities for underserved populations. Furthermore, investigating client level outcomes is essential to demonstrate effectiveness in preparing counselors competent in IC. This will require researchers to create partnerships with community agencies that provide IC and examine long-term impacts of trained counselors on improving therapeutic outcomes.

## Conclusions

Our systematic review includes a variety of approaches with ranging results to inform training for the next generation of counselors working within IC settings. Utilizing the PRISMA-P approach (Moher et al., 2015) and MMAT quality analysis tool (Hong et al., 2018), we identified and analyzed 18 studies that trained mental health professionals to work within IC settings. From the included studies, we created themes from the training modalities and results. Themes included HRSA-funded studies, development of clinical skills, enhanced self-efficacy, increased capacity for interprofessional collaboration, and deeper understanding of professional identity. Moving forward, we recommend that counselor educators continue to track data from IC training approaches and identify opportunities to study the impact that IC training has at the client or consumer level. Additionally, training interventions that focus on multicultural competency development are needed to enhance our understanding of IC training.



Figure 4.1 Article Screening Flowchart

Article	Study Design and Control	Participants and Setting	N
Agaskar et al. (2021)	Mixed methods; no control	Counselor education graduate students; CACREP program in a University using a hybrid (face-to-face and online) model	12
Alexander et al. (2018)	Mixed methods; no control	Educators, healthcare providers, and community social workers; various healthcare settings across the UK	202
Boland et al. (2016)	Mixed methods; no control	Family medicine and pharmacy residents, doctoral students in counseling psychology and nursing; University	24
Brooks et al. (2016)	Mixed methods; control group	LCSWs and PsyDs received training intervention and patients with substance use disorder received intervention; Federally Qualified Healthcare Centers	6 (BHCs in training); 600 (clients in intervention)
Brubaker & La Guardia (2020)	Multiple cohort pre-and- posttest; no control	Counselor education graduate students; CACREP program at a University	37
DeBonis et al. (2015)	Mixed methods; no control	Social work graduate students; CSWE programs at two Universities	58
Dobmeyer et al. (2016)	One-group posttest only design; no control	Clinical social workers, psychologists, and a small number of psychiatric nurse practitioners in the Department of Defense	268
Funderburk et al. (2021)	Matched pairs pre-and- posttest; no control	Licensed psychologists, social workers as PCMHI providers in primary care	174
Funderburk & Fielder (2013)	Multiple cohort posttest only; no control	Clinical psychology doctoral students at university clinic serving private midsized university, separate from university	8 students, 347 patients
Johnson et al. (2015)	Mixed methods; no control	Counselor education graduate students; CACREP program at a University	22

Table 4.1 Study Characteristics: Design, Control, Participants, and Setting

Kearney et al. (2020)	One-group pre- and-posttest; no control	Regional and facility-level trainers who were majority psychologists in VA settings	26 regional trainers, 122 facility-level trainers
Momotaz et al. (2019)	Post-intervention survey; no control	Physicians and counselors from government facilities and NGOs serving Bangla and Rohingya populations Cox's Bazar in Bangladesh (Rohingya	21
		refugee settlement)	
O'Brien et al. (2018)	Mixed methods; no control	Social workers, physicians, nurses, administrators, and research fellows; Community-based organizations and hospitals in New York City through multiple modalities (i.e., face-to-face, hybrid, virtual, and asynchronous)	63
Possis et al. (2016)	Mixed methods; no control	Psychology practicum students, interns, and postdoc residents, psychiatry residents, internal medicine residents, psychologists, and social workers; Primary care clinics within a VA	24
Putney et al. (2017)	Multiple cohort pre-and- posttest; no control	Social work graduate students; CSWE programs at a University	37
Rishel & Hartnett (2017)	Mixed methods; no control	Social work graduate students; CSWE programs at a University	12
Sherwood et al. (2019)	Mixed methods; no control	Dental hygiene, social work, physical therapy, nursing, dental medicine, and occupational therapy students; University	897
Washburn et al. (2020)	Mixed methods; control	Psychology and social work graduate students; University	22

Article	<b>Training Intervention</b>	Intervention Time Frame	Results
Agaskar et al. (2021)	Structured trainings on evidenced-based practices (EBPs) within IC: treating at-risk youth, education on counselor identity	4 weeks (one summer semester)	Increase in knowledge on EPBs for at-risk youth, multicultural competencies, and attitudes towards interprofessional collaboration
Alexander et al. (2018)	Three workshop series on treatment of children and youth covering professional identity, community resources, and collaboration	2 months; workshops were 1.5 hours for total of 4.5 hours	No significant long-term changes in understanding professional identities, knowledge of resources, or collaboration
Boland et al. (2016)	Interprofessional immersion training based off IPEC competencies	32 hours over 1 week	Increase in social work students' professional identity development, skills and confidence with IC
Brooks et al. (2016)	SBIRT + Toolkit <sup>TM</sup> : structured counseling intervention for treatment of substance use disorders appearing in primary care setting	24 hours (6 workshops); 4 hours practice with patient; bi- weekly 45-min supervision	Patients/clients receiving intervention from trained BHC reported significantly higher treatment satisfaction; Trained BHCs reported overall satisfaction
Brubaker & La Guardia (2020)	Serving At-Risk Youth Fellowship Experience for Counselors (SAFE- C), an internship-based IC training	6 months (1 semester)	Increase in counseling student's self-efficacy, professional identity development, and interprofessional socialization
DeBonis et al. (2015)	Didactic lectures and experiential exercises about clinical and professional practice within IC	15 weeks (1 semester)	Significantly higher satisfaction in participant knowledge and skills in IC and understanding of professional identity

Table 4.2 Study Characteristics: Intervention and Results

Dobmeyer et al. (2016)	Three-phase training consisting of orientation, classroom training, site visits, and sustainment training of behavioral health consultation (BHC) in hospital systems	Pre-training: 1-2 months Phase I: 3-4 days Phase II: 1-2 days Sustainment: once/month	Increased motivation for delivering behavioral health consultation, met their training needs, indicated that information or skills learned would be useful in working with their patients
Funderburk et al., (2021)	Problem-Solving Therapy training program for primary care mental health workers	19 weeks	Improvement in consumer symptoms/functioning; providers reported intervention helpful
Funderburk & Fielder (2013)	Shadowing BHPs, supervision with psychologist and primary care provider, mock sessions and review of mock sessions, and reviewing a training manual	3 semesters	Patients: decreased depressive symptoms, sleep problems; students: more confidence, opportunities to learn brief assessments/interventions, communicate/collaborate with PCPs, learn brief sessions and problem- focused assessments
Johnson et al. (2015)	An interprofessional distance education course on interdisciplinary collaboration	14 weeks (1 semester)	Perceptions improved on learning together, teamwork, collaboration, positive professional identity
Kearney et al. (2020)	Competency Training Program in Primary Care Mental Health Integration	6 months	Improved practice, session management; referral management, care continuity; clinical scope, interventions, patient education; management support; supervision, care coordination; measurement-based care, protocol adherence
Momotaz et al. (2019)	WHO's Mental Health Gap Action Programme (mhGAP)	3 days (+ refresher workshop, supervision)	Increase in overall reports of confidence for interprofessional practice

O'Brien et al. (2018)	Advanced Certificate in Primary and Behavioral Health Care	80 hours	Significant self-reported beliefs that program is necessary, increased knowledge in areas: person-centered planning, desire to implement change
Possis et al. (2016)	Brief immersion training program in the Primary Care-Mental Health Integration model (PCMHI)	Ranged from <sup>1</sup> / <sub>2</sub> day to 5 days based on needs	Significant improvement from pre- to posttraining in subscales of General Practice and PCMHI practice
Putney et al. (2017)	Behavioral Health Workforce Initiative (BHWI), training program including field placements in IC settings, interprofessional events, and clinical electives specifically for children and adolescents	Approximately 1 year of academic coursework	Increase in knowledge of IC competencies pertaining to coursework, confidence to practice in IC setting
Rishel & Hertnett (2017)	Integrated Mental and Behavioral Health Training Program (IMBTP), graduate program incorporating field placements, IC coursework, mentorship, IC workshops	Approximately 1 year of academic coursework	Students and instructors reported a student increase in competence across all IMBTP IC practice behaviors
Sherwood et al. (2019)	Curriculum training intervention for SBIRT in IC settings	Varied: 1-day training	Viewed as favorable by the participants to conduct brief assessments and interventions
Washburn et al. (2020)	Computer training using virtual simulation patients	2 weekly training sessions	Increase students' self- efficacy in brief clinical assessment, diagnostic accuracy

Article	Quantitative Non-Randomized					
_	3.1	3.2	3.3	3.4	3.5	
Brubaker & La Guardia (2020)	Yes	Yes	Yes	No	Yes	
Dobmeyer et al. (2016)	Yes	Yes	Yes	No	No	
Funderburk et al. (2021)	Yes	Yes	Yes	Yes	Yes	
Funderburk & Fielder (2013)	Yes	Yes	Yes	Yes	Yes	
Kearney et al. (2020)	Yes	Yes	Yes	Yes	Yes	
Momotaz et al. (2019)	Yes	Yes	No	No	No	
Putney et al. (2017)	Yes	Yes	Yes	Yes	Yes	
-	Mixed Methods					
-	5.1	5.2	5.3	5.4	5.5	
Agaskar et al. (2021)	Yes	Yes	Yes	Yes	Yes	
Alexander et al. (2018)	Yes	Yes	Yes	Yes	Yes	
Boland et al. (2016)	Yes	Yes	Yes	Yes	Yes	
Brooks et al. (2016)	Yes	Yes	Yes	Yes	Yes	
DeBonis et al. (2015)	Yes	Yes	No	Yes	No	
Johnson et al. (2015)	Yes	Yes	Yes	Yes	Yes	
O'Brien et al. (2018)	Yes	Yes	Yes	Yes	Yes	
Possis et al. (2016)	Yes	Yes	Yes	No	No	
Rishel & Hertnett (2017)	Yes	Yes	Yes	Yes	Yes	
Sherwood et al. (2019)	Yes	Yes	Yes	Yes	No	
Washburn et al. (2020)	Yes	Yes	Yes	Yes	Yes	

Table 4.3 MMAT (Hong et al., 2018) Quality Appraisal

# Chapter 5

## Exploring the Relationship Between Levels of Integrated Behavioral and Primary

## Healthcare and Wellness

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Fields, A. M., Limberg, D., & Starrett, A. To be submitted to a peer-reviewed counseling journal.

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### Abstract

This descriptive, correlational study to explores relationship between integrated care (IC) and wellness. Specifically, it aimed to describe a potential relationship to an adult's wellness and the level of care (LOC) they received their counseling services. This sample (N = 466) was recruited through an online survey panel and participated in counseling over the last 12 months. Participants responded to a survey containing questions on their demographics, health and mental health history, the LOC for their counseling or therapy, and 5F-WEL (Myers & Sweeney, 2005). Data were analyzed through LPA, a personcentered, mixture modeling approach that identifies latent subgroups of individuals based on their shared responses and characteristics. Profiles were developed based on their responses to the 5F-WEL second order factors. Continuous and categorical variables were also compared to the profiles. Results suggested that four profiles were an appropriate solution and profiles had significant differences in age, sexuality, race and ethnicity, degree, work status, marriage status, and mental health diagnoses. The LOC was not found as significant. Results have the potential to inform future research on the relationship between wellness and IC, as well as inform practitioners, counselor educators, and policy makers on the impact IC has on an individual's wellness.

Keywords: integrated care, wellness, latent profile analysis, counselor education

The World Health Organization (WHO) recommended a shift in the healthcare landscape in 1948 by defining health as a combination of mental, physical, and social wellness (WHO, 1948). This challenged the traditional view of health as the absence of illness and encouraged providers to view health through a prevention and wellness lens. However, Greene and Loscalzo (2017) noted that the medical model still widely remains reductionistic, the viewpoint that an individual can be broken into separate parts and symptoms should be treated individually. This opposes the wellness paradigm, which views individuals through a holistic lens and that all aspects (i.e., mind, body, and spirit) of an individual should be considered during treatment (Ohrt et al., 2018). Wellness is the interconnectedness between the body, mind, and spirit for an individual to achieve optimal health and well-being (Myers et al., 2000) and is viewed as a cornerstone of the counseling profession (Brubaker and Sweeney, 2021). This is supported in the Council for Accreditation of Counseling and Related Educational Programs wellness counseling standards (CACREP, 2016). Furthermore, the wellness paradigm is preventative in nature and seeks to help individuals prevent future disease (Brubaker and Sweeney, 2021). To date, multiple wellness models are described in literature and provide holistic definitions of individuals. For example, Myers and Sweeney (2004) proposed The Indivisible Self: An Evidenced-Based Model of Wellness (IS-WEL), which views an individual through a high-order wellness factor at the individual's core, and includes five second order factors, 17 third order factors, and environmental factors. These factors are outlined later. No matter the preferred wellness model, counselors have a responsibility to promote optimal functioning in their clients and treat their clients through a holistic lens.

Integrated care (IC) has emerged as a treatment approach to promote client wellness (Ohrt et al., 2018), and is a systemic shift in traditional healthcare practice by integrating behavioral health providers into a primary care setting, or vice versa (Hunter et al., 2017). Hunter and colleagues remarked that IC is commonly used interchangeably with "collaborative care," however there are noted distinctions between the two approaches. As opposed to on-site, systematic change of providers working interdisciplinary through IC, collaborative care describes a continuum of care with clinicians from multiple professional identities working at a distance to address the client's treatment plan. Collaborative care is associated with increased opportunities to infuse behavioral health treatment within a primary care paradigm, but does not provide specific considerations on how to conduct interdisciplinary treatment (Geise & Waugh, 2017; Hunter et al., 2017). Instead, IC is associated with evidenced-based models of coordinating care for individuals and families and provides an outline of how to accomplish this approach. The Center of Excellence for Integrated Healthcare Solutions (CEIHS), a project jointly funded by SAMHSA and HRSA, expanded upon this notion and described ascending levels of care integration. In their model, CEISH outlined six levels of care integration with each ascending level having high levels of practice integration (Heath et al., 2013). Level one and level two are described as "coordinated," with the key element being communication among providers. In these levels, the client experiences their symptoms being treated as separate and receive care at separate locations. Level three and level four are described as "co-located," with the key element being physical proximity. The client experiences less proximal barriers and may receive a warm hand-off from their providers. Level five and level six are described as

"integrated," with the key element being practice change of service delivery. The client experiences simultaneous treatment for their physical and mental health needs and meets with their providers at one time. This model, including the systemic differences, is further detailed as an adaptation represented in Figure 2.1.

A wellness paradigm and IC modalities are represented in government legislature. The Patient Protection and Affordable Care Act (2010) ushered in a new wave of healthcare reform and provided incentives to healthcare agencies that can demonstrate approaches that support wellness and IC. Croft and Parish (2013) described the importance of the Patient Protection and Affordable Care Act in creating funding opportunities to develop IC practices and additional reimbursements for healthcare agencies that are demonstrating an approach that incorporates prevention and wellness through an IC approach. Furthermore, The White House (2022) released a plan to continue supporting IC efforts by doubling the current funding and encouraged healthcare agencies to identify strategies to adapt to IC practices and promote holistic wellness. However, limited empirical investigations study the relationship between these two constructs. Lipman et al. (2017) outlined numerous advantages of applying wellness concepts in IC settings and echoed that wellness promotes optimal functioning for individuals receiving care in traditional primary care settings. These lifestyle factor advantages include, but are not limited to, exercise (Pendo & Dahn, 2005), nutrition (Walzer et al., 2019), weight (Carvajal et al., 2013), sleep (McQuillan et al., 2021), and stress reduction (Crawford et al., 2013). Lipman and colleagues also described common roles that counselors can fill within IC settings and recommended that counselors be included in initial wellness assessments. Additionally, counselors can provide wellness

groups and individualized therapy that focuses on identifying barriers to wellness and promoting healthy lifestyle choices. For example, sleep disturbances are commonly reported symptoms in primary care settings and have high correlations with a variety of diseases (Lipman et al., 2017). McQuillan et al. (2021) described brief interventions counselors can deliver in primary care settings, such as sleep-specific deep breathing and mindfulness exercises. Furthermore, the National Prevention Council (2016) estimated that healthcare agencies can save around \$3.27 for every dollar spent on associated diseases, such as cardiovascular disease, diabetes, mood disorders, and anxiety when applying a preventative approach (Lipman et al., 2017). This may be due to the IC team's ability to design prevention strategies that incorporate a counselor to create a wellness plan that addresses common concerns associated with these conditions. However, additional research is needed to best understand wellness considerations in IC settings.

The present study investigates the relationship of clients' wellness and levels of care integration in order enhance the counseling profession's understanding of the characteristics of individuals that receive IC and the potential relationship between wellness and IC. This will serve to enhance the counseling profession's understanding of the characteristics of individuals that receive IC and the potential relationship between wellness and IC. Moreover, counselors and counselor educators will have a deeper understanding about the theoretical link between IC and wellness.

### **Research Question and Hypothesis**

*Question 1: What client level wellness profiles will emerge based on the IS-WEL model* (Myers & Sweeney, 2003)?

*Question 2: Do participants' reports of Heath et al. (2013) level of care integration differ across wellness profile membership?* 

*Hypothesis: Participants reports of level of care integration will be higher for wellness profiles with higher wellness scores.* 

Question 3: Do client demographic factors (e.g., SES, education, rural or urban residency, gender identity, sexuality, mental illness, and chronic health conditions) differ across wellness profile membership?

*Hypothesis: There will be differences in client demographics across the wellness profile membership.* 

## Methodology

The proposed research questions were addressed through a descriptive, correlational design (Heppner et al., 2015). Correlational research examines the relationship between variables without researcher manipulation (Heppner et al., 2015), and descriptive correlational designs seek to understand and estimate characteristics about a select population (Dang & Sangganjanavanich, 2022). Correlational designs allow the researcher to understand directionality and strength of a relationship without providing causation (Heppner et al., 2015; Limberg et al., 2021). By understanding the aforementioned factors, counseling researchers are better able to generate conclusions and describe potential cause-and-effect relationships between constructs of interest (Agresti, 2018). In the present study, the variables of interest are wellness and levels of care integration. Specifically, levels of care integration is the independent variable and wellness is the dependent variable.

## **Participant Characteristics**

This participants in this study were adults (18 years or older) in the United States (N = 466). Participants received at least one counseling or therapy service from a trained mental health professional within the last 12 months to be included. The Center for Disease Control (CDC, 2021) differentiated counseling or therapy from mental health services and classified mental health services as visits with a provider that were for medication management for mental illness and/or counseling or therapy. The final sample included 308 (66.1%) females, 145 (31.1%) males, 5 (1.1%) non-binary individuals, 5 (1.1%) transgender individuals, and 3 (0.6%) did not disclose (DND). Beyond gender identities, individuals indicated they are asexual (1, 0.2%), bisexual (50, 10.7%), gay (12, 2.6%), heterosexual or straight (374, 80.3%), lesbian (14, 3.0%), pansexual (11, 2.4%), or DND (4, 0.8%). Most participants indicated they are single (208, 44.6%), followed by married (133, 28.5%), divorced (54, 11.6%), in a domestic partnership (46, 9.9%), widowed (14, 3.0%), and DND (11, 2.3%). Participants in this study also identified as African American or Black (83, 17.8%), Asian American or Pacific Islander (5, 1.1%), Hispanic or Latino/a/x (30, 6.4%), multiple racial identities (16, 3.4%), Native American (10, 2.1%), White (316, 67.8%), or DND (6, 1.3%). Participants in this study represent multiple age demographics, including 18-24 years old (75, 16.3%), 25-34 years old (114, 24.5%), 35-44 years old (142, 30.5%), 45-54 years old (62, 13.3%), 55-64 years old (37, 7.9%), and 65 years or older (35, 7.5%). The majority of the participants reported having at least a high school education or GED equivalent (229, 49.1%), followed by an associate's degree (93, 20.0%), bachelor's degree (80, 17.2%), graduate degree (40, 8.6%), less than a high school diploma (20, 4.3%), and DND (4, 0.9%). In addition to

degree, participants most commonly reported their employment status as full-time (218, 46.8%), followed by unemployed (120, 25.8%), part-time (58, 12.4%), other (43, 9.2%), student (22, 4.7), and DND (5, 1.1%), as well as household incomes of less than \$25,000 (123, 26.4%), \$25,000-\$50,000 (148, 31.8%), \$50,001-\$100,000 (130, 27.9%), over \$100,000 (50, 10.7%), or DND (15, 3.2%). Lastly, participants shared demographic details on their rural status and demographic region. Participants reported being from rural areas (113, 24.2%), non-rural areas (343, 73.6%), or DND (10, 2.1%), and represented every region of the United States, including the Midwest (103, 22.1%), Northeast (82, 17.6%), Southeast (147, 31.5%), Southwest (64, 13.7%), West (61, 13.1%), or DND (9, 1.9%).

### Physical Health

Participants in this study reported aspects of their physical health. When asked how many physical health appointments they had over the last 12 months, participants indicated either 0 (25, 5.4%), 1-3 (228, 48.9%), 3-5 (125, 26.8%), 6-8 (38, 8.2%), more than 8 (49, 10.5%), or DND (1, 0.2%). A subsample of participants also disclosed that they have been previously diagnosed with a chronic health condition (161, 34.5%), such as respiratory diseases, heart diseases, digestive diseases, cancer, or HIV. Lastly, 153 (32.8%) participants reported having a physical disability.

### Mental Health

Participants in this study also responded to questions concerning their mental health. The majority of participants reported receiving counseling or therapeutic services from a counselor (188, 40.3%), followed by psychologists (167, 35.8%), social workers (79, 17.0%), and unsure (32, 6.9%). Participants were asked if they have been diagnosed

with a mental health condition and responded accordingly: anxiety disorder (293, 62.9%), bipolar disorder (104, 22.3%), depressive disorder (235, 50.4%), eating disorder (37, 7.9%), intellectual or developmental disability (30, 6.4%), personality disorder (28, 6.0%), posttraumatic stress disorder (82, 17.6%), schizophrenia or another psychotic disorder (24, 5.2%), and substance use disorder (68, 14.6%). In this sample, 268 (57.5%) indicated they have co-occurring mental health conditions. In the last 12 months, the majority of participants (308, 66.1%) reported taking a prescription medication for a mental health condition. Lastly, 75 (16.1%) reported being hospitalized and 60 (12.9%) reported receiving court mandated counseling because of mental health or substance abuse concerns.

## Procedures

After receiving approval from the university's institutional review board (IRB), participant recruitment started. The final survey was administered through Qualtrics and followed tenets of the Dillman et al. (2014) *Tailored Design Method* for internet surveys. Examples of Dillman and colleagues' method used in this survey included: (a) a format that could be used on computer, tablet, and smartphone; (b) grouping similar questions; (c) limiting wording of questions; and (d) clearly outlining survey expectations, such as incentives and estimated length, at the beginning. Recruitment occurred through a Qualtrics online survey panel and followed simple random sampling procedures. Qualtrics' online survey panel assists researchers in locating a target sample based on a population of interest (Qualtrics, n.d.). Furthermore, Mullen et al. (2021) noted that online panel companies, such as Qualtrics, are useful in counseling research when the researcher wants to survey clinical populations that are traditionally difficult to reach.

Qualtrics was provided with eligibility criteria and surveyed individuals that met the inclusion criteria. Each participant that met inclusion criteria and completed the survey received an incentive provided by Qualtrics. Qualtrics also reported a final reCAPTCHA score of 0.95, indicating a very high likelihood of human participants, and response rate of 30.30%.

## Instrumentation

A random sample of adult participants that engaged in counseling or therapeutic services within the last 12 months participated in a cross-sectional survey design through Qualtrics. This survey included: (a) a health and mental health questionnaire (Appendix B); (b) *Standard Framework for Levels of Integrated Healthcare* (Heath et al., 2013) assessment (Appendix C); (c) Five Factor Wellness (5F-WEL; Myers & Sweeney, 2005; Appendix D); and (d) demographic questionnaire (Appendix A). The survey had 97 questions with an average completion time of around nine minutes.

### Health and Mental Health Questionnaire

Participants started with a questionnaire pertaining to their health and mental health history, specifically the frequency of physical and mental health appointments. Furthermore, this questionnaire collected data on chronic health conditions, physical disabilities, intellectual and developmental disabilities, mental illness, and substance use disorders. Participants also answered questions regarding crisis hospitalizations, court mandated treatment, and use of prescription medication. These questions were designed to learn more about prior conditions that may impact their wellness, as certain conditions and histories may influence wellness reports (Anderson et al, 2013; Basu et al., 2021; Clarke et al., 2020; Lipman et al., 2017; Schmit et al., 2018).

## Standard Framework for Levels of Integrated Healthcare Assessment

Participants answered three questions pertaining to their level of care (LOC) integration. This was researcher developed as there is no standard assessment to understand IC from the client or consumer perspective (Lyngsø et al., 2014). However, we utilized the *Standard Framework for Levels of Integrated Healthcare's* (Heath et al., 2013) client level perspective as a framework for question development. These perspectives are outlined in Figure 2.2. Questions were developed with Qualtrics split logic. For example, question one asked participants, "To the best of your understanding, please select the option that BEST describes the treatment setting you received the majority of your counseling or therapy services." Participants were given a unique follow-up response depending on answering either, "You received your counseling or therapy services at the same location as your primary care provider(s)." Each question resulted in the participant being assigned a level between 1-6. Participant scores were averaged across the three question areas.

## Five Factor Wellness

To assess wellness outcomes, the research team utilized the Five Factor Wellness (5F-WEL) Inventory (Myers & Sweeney, 2005). The 5F-WEL was developed through the indivisible self-model (IS-WEL; Myers and Sweeney, 2003) and encompasses aspects of Adlerian individual psychology to understand an individual's holistic wellness (Ohrt et al., 2018). The 5F-WEL currently contains 75 items and was validated through structural equational modeling (SEM). Participants respond to likert scale questions ranging from A to D, with A representing "Strongly Agree" and D representing "Strongly Disagree." The

5F-WEL inventory also contains multiple scales for assessment, including a high order factor of wellness, five second order factors, and 17 third order factors. As this study aims to understand how levels of care integration differ across domains of wellness, second order factors will the variables of interest. The 5F-WEL second and third order scales are *Coping Self* (realistic beliefs, stress management, self-worth, and leisure), Essential Self (spirituality, self-care, gender identity, and cultural identity), Physical Self (nutrition and exercise), Creative Self (thinking, emotions, control, positive humor, and work), and *Social Self* (platonic and intimate relationships). Shannonhouse et al. (2020) reviewed 59 studies of individuals from varying cultural identities and reported Cronbach's alphas for the second order factors follows: (a) Coping Self, 19 questions = 0.83; (b) Essential Self, 16 questions = 0.83; (c) Physical Self, 10 questions = 0.86; (d) Creative Self, 21 questions = 0.85; and (e) Social Self, 8 questions = 0.83. In addition to the second order factors, the 5F-WEL contains one question on life satisfaction. Lastly, Shannonhouse and colleagues reported convergent validity was reported through Pearson's r with instruments that test similar constructs.

## Demographic Questionnaire

The demographic questions asked participants about their age, gender identity, sexual orientation, ethnicity, education, household annual income, employment status, geographic location, residential setting (e.g., rural), and marital status.

### **Statistical Analyses**

After collecting data, researchers used MPlus version 8.8 to conduct the analysis. The chosen analysis, LPA, is a person-centered, multivariate analysis that identifies latent populations within a sample and groups them according to their shared characteristics
(Spurk et al., 2020). Previous scholars have debated over the minimum sample size to achieve statistical power and suggest comparison to studies in related fields (Weller et al., 2020). Within the social sciences, previous literature has suggested a sample size between 300-500 is sufficient to establish differentiated profiles (Nylund-Gibson & Chui, 2018; Spurk et al., 2020). As 466 participants fell between the suggested sample size, researchers determined it was appropriate to run the analysis. In this study, profiles were grouped according to 5F-WEL (Myers and Sweeney, 2005) second order wellness factors. The first step in the LPA was determining the appropriate number of differentiated profiles with the given sample, which started with a one-class model and re-run with an increase of one class until there were no improvements in the model (Collins & Lanza, 2010; Lubke & Muthén, 2007). Nylund et al. (2007) noted that there is not a universally agreed upon method for selecting the final number of classes; however, Ram and Grimm's (2009) described an evidenced based, "road map" for determining appropriate model selection. Ram and Grimm's outlined: (1) review data to ensure parameter estimates are in bounds and appropriate; (2) compare fit information criteria; (3) compare entropy scores; and (4) examine likelihood ratio tests. This model has been used for similar growth mixture modeling studies in counseling literature (Villares et al., 2022). As suggested by Spurk et al. (2020, we increased the random start value in MPlus (set at 1,000) to avoid local maximum likelihood and using multiple starting values supports a global solution, or maximum likelihood estimation. This aids in avoiding at Type I error.

After confirming the model met initial criteria and the parameters were not out-ofbounds, we continued comparing class solutions. Next, we examined differences in the

Bayesian Information Criteria (BIC) statistic. The BIC is posteriori approximation statistic that utilizes log-likelihood computations to support researcher understanding of model fit (Neath & Cavanaugh, 2012), and is widely regarded as a superior measure for determining the number of classes (Spurk et al., 2020). When analyzing the BIC, previous researchers have supported that a smaller value, or the value that results in a plateau, indicate a stronger model fit (Neath & Cavanaugh, 2012; Nylund et al., 2007). These researchers noted that a visual analysis may also reveal an "elbow" that further supports model selection. Then, we reviewed entropy values. The entropy value ranges between 0-1 and evaluates the accuracy, or confidence, that members have been assigned to the correct group, with higher entropy values (>0.80) supporting model selection (Ram & Grimm, 2009; Spurk et al., 2020). Additionally, we examined likelihood ratio tests, which compare a model of interest (k) with a model with one fewer class (k-1). We documented both the bootstrap likelihood ratio test (BLRT) and Lo-Mendell-Rubin test (LMR), with literature generally supporting the BLRT over LMR (Nylund et al., 2007). The BLRT and LMR are represented through *p*-values and report statistical significance of a class solution. Lastly, we reviewed statistics on profile sample sizes and average probabilities of class membership (APCM). Bauer and Curran (2003) recommended that profile sample sizes should be >1% of the overall sample or be rejected. In addition, Bauer (2022) noted that probabilities of class membership should be considered, with higher probabilities suggesting model fit. These additional analyses supported the Ram and Grimm (2009) "road map" of model selection.

Once we determined the appropriate class solution, we tested significance of participants LOC and individual characteristics with the established profiles. Given that

these are auxiliary values, there are unique considerations for researchers when comparing to profiles. Asparouhov and Muthén (2014) provided a three-step approach for comparing latent class predictor variables, which was considered in addition to the Lanza et al. (2013) method for auxiliary variables. A participant's LOC was a continuous variable, and we used the BCH approach to examine significance (Asparouhov and Muthén, 2014). Furthermore, individual characteristics (demographic, physical health, and mental health information) were categorical variables and followed Lanza's method (Lanza et al., 2013). These comparisons are reported through chi-squared statistics ( $X^2$ ) and *p*-values.

#### Results

Table 4.1 provides general results for the 5F-WEL second order subscales (Myers & Sweeney, 2005), including descriptive statistics, Cronbach alphas, and bivariate correlations between the subscales. All subscale alphas were in the ideal range (Tavakol & Dennick, 2011). Table 4.2 details the LPA model fit selection process. We report the log-likelihood, BIC, entropy, likelihood ratio test (LMR and BLRT), and mean APCM outputs. Following Ram and Grimm's (2009) four-step model selection process, we conclude that the four-class solution was most appropriate. In the four-class solution, no parameters were reported out-of-bounds and completed the specified number of replications. The BIC value begins to plateau after adding a fifth class and a visual analysis resulted in an "elbow" at the fourth class. Additionally, the entropy value is highest with the four-class solution and is superior to 0.80. Furthermore, the likelihood ratio tests yielded significance at the four-class solution at p < 0.05, but not at the five or six-class solution. Lastly, the four-class solution passes the profile sample size and

APCM tests. The smallest percentage of participants in a profile was 4.3% (>1.0%) and the APCM was 0.923, which suggests a high probability of detecting class membership.

Table 4.3 outlines the profile allocation, including information on the profile sample size, probability of participant membership, and the average scores and standard deviations for the five 5F-WEL (Myers & Sweeney, 2005) subscales. Scores for the 5F-WEL were calculated through averages of participant reports, as recommended by the authors (Myers & Sweeney, 2014). Figure 4.1 provides a visual illustration of the fourclass solution, detailing the breakdown of 5F-WEL subscale scores for each profile. The profiles are labeled as follows:

- (a) Disconnected Well (DW) Individuals in this profile were most likely to have the lowest reports on all subscales of wellness. On average, individuals in this profile reported higher scores on the *Essential Self* subscale, followed by *Social Self, Creative Self, Coping Self,* and *Physical Self*. This was this only profile of individuals that did not have the *Social Self* subscale as the highest report. This profile also represented around 4.3% of participants in this study, which was noticeably lower than the other three profiles.
- (b) Approaching Well (AW) Individuals in this profile reported scores below the overall average for all participants. On average, individuals scored highest on the *Social Self* subscale, followed by *Creative Self*, *Essential Self*, *Coping Self*, and *Physical Self*.
- (c) Managed Well (MW) Individuals in this profile has mean scores for all subscales above the average for all participants. On average, these individuals score highest on the *Social Self* subscale, followed by *Creative Self, Essential*

*Self, Physical Self,* and *Coping Self.* This profile also had the largest proportion of individuals, with around 44.8%.

(d) Comfortably Well (CW) – Individuals in this profile were most likely to have the highest reports on all subscales of wellness. On average, these individuals scored highest on the *Social Self* subscale, followed by *Creative Self*, *Essential Self*, *Physical Self*, and *Coping Self*. The subscale means scores for this profile were all higher than the Shannonhouse et al. (2020) review.

Table 4.4 reports the results of the continuous and categorical variable analyses. The first report details the relationship between profile membership and the self-reported LOC of counseling or therapeutic services. Following LOC, we present the relationships between profile membership and demographic, mental health, and physical health characteristics. Omnibus statistics are reported through chi-square ( $X^2$ ) tests and p < 0.05 for significance. Pairwise statistics are reported through chi-square ( $X^2$ ) tests and Bonferroni-corrected p < 0.008 for significance.

The average LOC a participant received is 2.35 (SD = 1.09), and LOC reports ranged from 2.28 – 2.41 across the profiles. While there are descriptive differences among the profiles, the relationship between LOC and wellness did not result statistical significance. The three-question LOC questionnaire also resulted in a Cronbach alpha of 0.60 ( $\alpha = 0.60$ ), which is considered questionable ((Tavakol & Dennick, 2011).

Three omnibus tests (age, sexual orientation, and race) for individual characteristics resulted in statistical significance. Although pairwise connections did not result in statistical significance for age or sexual orientation, there are descriptive differences between profiles. There are higher proportions of individuals group membership for profiles with lower wellness scores for individuals that are aged 18-24 and 45-54, with the highest proportion in the DW profile. Similarly, individuals that selfreported they are part of the LGBTQIA+ have higher proportions in the DW profile; however, we note that this pairwise correlation was not significant. In addition to statistical significance for the omnibus test, there are statistically different pairwise correlations regarding race. The DW profile did not have representation from AA/Black, AAPI, or Native American individuals, and had a higher proportion of white individuals, as compared to the CW profile that had higher proportions of ethnic and racial minority groups ( $X^2(5) = 45.31$ , p < 0.001). The AW profile ( $X^2(5) = 40.22$ , p < 0.001) and MW profile ( $X^2(5) = 22.89$ , p < 0.001) also have a greater representation of ethnic and racial minority individuals than the DW profile. Lastly, while there was a higher proportion of individuals from the transgender and non-binary community in the DW profile, as compared to the other profiles, the omnibus test or pairwise correlations for gender did not result in statistical significance.

With regard to aspects of SES, the omnibus tests for work and degree resulted in statistical significance. Although the pairwise correlations for work did not result in statistical significance, there is a higher proportion of individuals that are unemployed in the DW profile than the other profiles. Furthermore, a significant pairwise correlation occurred between the DW and CW profiles ( $X^2(4) = 20.26, p < 0.001$ ). Individuals with a high school degree or less than a high school degree are more represented in the DW profile, compared to a higher proportion of individuals with an associate's degree or higher in the CW profile. Lastly, income differences did not result in statistical significance for the omnibus tests or pairwise correlations. However, we note that there

are descriptive differences with the DW profile having higher proportions of household incomes below \$50,000.

Marriage was the only characteristic of residence that resulted in statistical significance; both omnibus and pairwise correlations ( $X^2(4) = 23.23, p < 0.001$ ). Individuals that are single, divorced, or in a domestic partnership are more likely to belong to the DW profile, as compared to the CW profile. Additionally, we note that there are descriptive differences across profile membership, but neither test resulted in statistical significance for region of the country or rural residence status.

When considering background on participants' mental and physical health, only one test resulted in statistical significance. The omnibus test and pairwise correlation tests for mental health diagnoses resulted in differences across the profiles. The MW profile had a higher proportion of individuals with more than three diagnoses, as compared to the SA ( $X^2(3) = 17.56$ , p = 0.001) and AW ( $X^2(3) = 20.96$ , p < 0.001) profiles. Furthermore, the DW profile had the highest proportion of individuals with more than three mental health diagnoses; however, the pairwise correlations were not significant compared to other profiles. Beyond mental health diagnoses, the tests for mental health sessions, prescription medication for mental health symptoms, hospitalizations, court mandated treatment, physical health appointments, chronic health diagnoses, and physical disabilities did not result in statistical significance for either of the tests.

#### Discussion

The purpose of this study was to explore the relationship between IC and wellness, as well as characteristics of individuals that have various wellness scores. Through the exploratory nature of this study, our research team was able to identify

profiles of individuals with predictable wellness scores and understand factors that contribute to their wellness. More specifically, we were able to better understand potential protective factors that support an individual's holistic wellness, as well as potential risk factors that may create barriers for optimal wellness. These results may inform counselors in the field working with individuals across the Heath et al. (2013) LOC framework, counselor educators training counselors, and future research as it pertains to IC and wellness.

To answer RQ1, we proposed four latent profiles and identified patterns of common characteristics shared between participants in each profile with respect to the second order 5F-WEL (Myers and Sweeney, 2005) subscales. The four latent profiles have distinct average wellness scores that are significantly correlated, and a visual analysis reveals that the profiles are grouped with similar wellness scores across the subscales in an ascending order. When considering the IS-WEL model (Myers & Sweeney, 2004), there is a theoretical link as an individual's overall wellness is comprised of multiple aspects of wellness (i.e., the second and third order 5F-WEL factors) that must receive attention simultaneously. This is further corroborated by Shannonhouse et al. (2020), who concluded that individuals with similar characteristics tend to have similar reports across the 5F-WEL. Thus, our latent profiles provide insight into the shared experiences and characteristics of individuals with various wellness scores. Lastly, the three profiles with the highest scores (AW, MW, and CW) all have the same order of subscales; Social Self, Creative Self, Essential Self, Physical Self, and Coping Self. The profile with the lowest scores (DW) was the only profile that did not have the Social Self as the highest subscale, suggesting that aspects of social

connectedness support higher overall wellness reports. However, we caution readers interpreting the DW profile as it had the smallest sample (4.3%).

While Cronbach alphas for the second order subscales for the 5F-WEL (Myers and Sweeney, 2005) are similar to Shannonhouse et al.'s (2020) review of 59 studies to examine the psychometrics, the average mean of the subscale scores are noticeably different. Moreover, the mean scores of our study are around one standard deviation lower than Shannonhouse and colleague's report. However, these results are expected as the majority of participants self-reported pre-existing mental and physical health conditions, which are correlated with lower reports of wellness (Lenz et al., 2018; Lipman et al., 2017). Furthermore, the mean differences of 5F-WEL subscale scores across profiles represents noted wellness disparities for individuals from medically underserved populations. For example, Basu et al. (2021) noted that individuals with disabilities and chronic health conditions are less likely to receive wellness services and are typically subjected to reactive care. Basu and colleagues also concluded that the Patient Protection and Affordable Care Act advocated for this population to receive preventative, wellness care through IC modalities.

Our RQ2 hypothesis was not confirmed through data analysis. Although previous scholars have described IC as an approach to enhance an individual's wellness (Basu et al., 2021; Lipman et al., 2017), participants in our study had similar on the *Standard Framework for Levels of Integrated Healthcare* (Heath et al., 2013) questionnaire across the four latent profiles. Lyngsø et al. (2014) completed a systematic review of 23 articles that outlined studies assessing for IC and/or LOC and concluded that assessments at the consumer or client level have validity and reliability concerns. This was evident in the

researcher developed questionnaire designed to assess Heath et al.'s model which resulted in a questionable Cronbach alpha ( $\alpha = 0.60$ ). Additionally, Heath and colleagues' model outlined disadvantages across the LOC continuum. With ascending LOC, the client disadvantages include the client's potential gap in knowledge about the IC process, thus not understanding how to engage with true IC. Hunter et al. (2017) also remarked that IC is not always feasible or appropriate. For example, previous scholars have suggested that IC is not the most efficacious treatment for substance use disorders for reducing risky substance use behaviors, substance consumption, or overall life satisfaction (Balkin et al., 2018; Saitz et al., 2013). While our findings did not result in statistical significance, previous scholars have noted that IC is a modality that enhances an individual's wellness (Basu et al., 2021; Lipman et al., 2017). Potential explanations for the disconnect with this theoretical link will be further explored in the "limitations and future research directions" section.

When considering RQ3, we found significant differences in individual characteristics for participant in the four latent profiles, as well as differences in their mental and physical health backgrounds. Aspects of SES were some of the strongest predictors of profile membership. Stepleman et al. (2009) outlined wellness implications for individuals from a lower SES background and noted that this population tends to have lower wellness scores, compared to individuals from higher SES communities. Stepleman and colleagues also recommended that providers look for opportunities to enhance these individuals' resilience, as resilience may support their optimal health and wellness. Furthermore, previous scholars have concluded that postsecondary degrees have a correlation with full-time employment and higher salaries, which has a strong correlation

with life satisfaction and wellness across multiple domains (Baum et al., 2013; Parkinson, 2020). Differences among our latent profiles contributed similar results in respect to salary and degree. Alvarez et al. (2014) advocated for IC as a modality to address this concern and an average score of 2.35 for LOC in the DW profile suggest care was primarily occurring in silos.

In addition to SES, our latent profiles had differences in age. Specifically, individuals aged 18-24 years old (Generation Z and young Millennials) and 45-54 years old (older Generation X) had higher proportions in the DW profile. Individuals from Generation Z and Millennial generations frequently report lower wellness scores, compared to older generations (McCloughen et al., 2012), which was further exacerbated by the COVID-19 pandemic (Birditt et al., 2021; Copeland et al., 2021). Generation X also has noted wellness concerns. Compared to Baby Boomers, Generation X are more likely to report dissatisfaction in their healthcare appointments and lower wellness scores (Carter & Kelly, 2013; Vogenberg & Santilli, 2018). Vogenberg and Santilli expanded on this and noted that Generation X is going through a time of career transitions, empty nesting, and increase in technological demands that create stressors and barriers that impact wellness. Our wellness profiles illustrate these differences in generational wellness.

Individuals from ethnic and racial minority populations were less likely to be in the DW profile, which had no representation from the African American/Black, Asian American/Pacific Islander, or Native American communities. This was a surprising result for our team as an overwhelming majority of research centers on low wellness outcomes for individuals from ethnic and racial minority groups (Gamby et al., 2021; McDonald,

2011; Oliver et al., 2019; Spurgeon & Myers, 2010). One potential explanation is that a higher proportion of White individuals receive counseling services that racial and ethnic minorities (SAMHSA, 2015) and may have been overly represented in this counseling sample. Furthermore, the low sample (around 20 individuals) in the profile may not be fully representation of this population. However, Brubaker and Sweeney (2021) noted that a wellness and IC framework is centered on prevention and proactive care, and our results provide insight into potential factors to promote wellness for these traditionally underserved populations. Green and Loscalzo (2017) remarked that healthcare is typically viewed through a reductionistic, or deficit, viewpoint and this can create barriers for minority individuals to be viewed holistically. With the majority of racial and ethnic minority individuals being represented in the CW and MW profiles, it is suggested that consumers of this report consider the exploratory nature of this study and identify potential risk and protective factors. For example, social connectedness was correlated with higher wellness reports in our latent profiles and may serve as an approach to serve this community. Brown (2008) echoed this finding and suggested that social support and community are protective factors for Black individuals' wellness and recommended that providers find opportunities to help their marginalized clients find social connectedness.

Furthermore, differences in mental health diagnoses were found across the latent profiles. The highest proportion of individuals with three or more diagnoses was represented in the DW profile. This closely parallels Priester et al.'s (2016) review of literature, who concluded that individuals with co-occurring mental illnesses are at a greater risk of low wellness reports. This report expands on the notion that individuals with multiple mental health diagnoses are at a greater risk of receiving care that does not

address all of their concerns and not having equitable access to care, which create barriers to optimal wellness. Interestingly, the MW profile had higher proportions of individuals with three or more mental health diagnoses as compared to the AW profile. When comparing the two profiles in other areas, they are nearly identical. However, they have descriptive differences in prescription medications, age, gender, and sexual orientation. These differences provide a framework for continued exploration and give indication of potential risk or protective factors that can be better understood. Beyond mental health diagnoses, our latent profiles had minor differences in aspects of mental and physical health. When considering the average LOC score (2.35), it is plausible that individuals were more likely to be receiving care that involved collaboration from multiple providers. Heath et al.'s (2013) model noted that individuals receiving collaborative care are more likely to be impacting their wellness.

Lastly, higher proportions of individuals from the LGBTQIA+ community were represented in profiles with lower wellness scores. Previous scholars noted that the LGBTQIA+ community are more likely to receive reactive services for their wellness and less likely to find competent providers to manage their unique presenting concerns (Henry et al., 2020; Hunt et al., 2018; Moe, 2016). For example, Moe (2016) completed a meta-analysis of 25 studies examining the wellness of individuals from the LGBTQIA+ community and concluded that wellness scores tend to be lower than non-sexual minority individuals. Similar to scholarship with other traditionally underserved populations, Moe (2016) noted that social connectedness serves as a protective factor for this population. Moe et al. (2018) further expanded on the unique healthcare considerations for the

LGBTQIA+ population and documented IC as an ideal approach to meet their unique needs.

#### **Implications for Counselors and Counselor Educators**

Our results have ranging implications for counselors working across the Heath et al. (2013) Standard Framework for Levels of Integrated Healthcare. Although our results did not have statistical significance for the LOC variable and wellness, it is worth noting that the average LOC score indicates that counselors and related helping professionals are working collaboratively with other healthcare providers. Heath and colleagues noted that IC is not always plausible, or even the preferred, modality of treatment and collaboration skills are still necessary when treating a client holistically. Counselors are encouraged to identify opportunities to enhance the collaborative nature of their practice (even if it is not full IC), as higher levels of integration have been previously correlated with enhancing client healthcare outcomes (Lenz et al., 2018; Lipman et al., 2017). Moreover, counselors that work in collaborative practices tend to have a stronger sense of the counseling professional identity (Klein & Beeson, 2022; Mellin et al., 2011). With recent government legislature, such as the Patient Protection and Affordable Care Act (2010) and inclusion of licensed professional counselors in the Medicaid program (H.R.2617, 2022), opportunities for counselors to work in IC settings will continue to increase and provide additional treatment options for their clients from diverse backgrounds. With an increased prevalence of IC and additional opportunities for counselors to apply a wellness paradigm, results of this study may be different in the future.

Additionally, the differences in participant characteristics across the profiles have clinical implications. First, latent profiles with lower wellness reports provide insight into

potential risk factors across the LOC spectrum. The low wellness reports for low SES (Stepleman et al., 2009), different generations (Z, Millennials, X; McCloughen et al., 2012; Vogenberg & Santilli, 2018), LGBTQIA+ (Moe, 2016), and co-occurring mental illnesses (Priester et al., 2016) have been well documented in literature and our results continue studying these traditionally underserved groups. With this knowledge, counselors and related professionals through the LOC spectrum have a responsibility to conduct assessments through a biopsychosocial model to have a holistic understanding of their clients' potential wellness needs. For example, Sherwood et al. (2019) documented the development of a screening, brief intervention, and referral to treatment (SBIRT) model to facilitate quick assessment and treatment options within IC settings and multidisciplinary teams to ensure clients are receiving appropriate care for all their needs. The SBIRT model can also be used with clients from various cultural backgrounds and settings (Nunes et al., 2017). Next, counselors may take note of potential protective factors by examining the latent profiles with higher wellness reports. Social connectedness is a well-documented protective factor of wellness (Ohrt et al., 2018), especially for racial and ethnic minorities (Brown, 2009), and appeared in our latent profiles. The COVID-19 pandemic further highlighted the importance of social connectedness for optimal wellness (Dailey et al., 2023). Social Self was the subscale that had the highest scores, except for the DW profile. Considering that there were low proportions racial and ethnic minorities in the DW profile, a plausible link for social connectedness and overall wellness for these underserved communities is suggested. Counselors and related professionals are encouraged to identify interventions that support social connectedness (e.g., group therapy) and/or identify opportunities for their clients to

find social support (e.g., community resources). Steady employment and individuals with financial resources reported higher wellness scores.

In addition to wellness, counselors have a professional identity rooted in career development and are encouraged to apply their career competencies in interprofessional settings to support their clients' optimal wellness. Aspects of physical and mental health (appointment frequency, prescription medication, hospitalizations, court mandations, chronic health diagnoses, and physical disability status) were fairly consistent across the latent profiles. Although previous literature has suggested that these aspects would result in differing wellness reports (Lenz et al., 2018; Lipman et al., 2017), it is promising that individuals receiving across the LOC spectrum have opportunities to achieve holistic wellness. Thus, we conclude that helpers are encouraged to review the Heath et al. (2013) model to best understand the strengths of their LOC treatment setting to best serve their clients.

The results of this study also have ranging scholarly and training implications. As noted by Fields et al. (2022), there is a dearth of client focused studies in IC settings. This study compares counseling services within levels of care integration and contributes to this documented gap. Moreover, IC is rarely studied from the client or consumer perspective and provides a novel approach to studying this phenomenon. In addition to IC specific conclusions, this study expands our understanding of wellness. To date, no studies have used LPA to create wellness profiles in respect to the IS-WEL model (Myers and Sweeney, 2003) and 5F-WEL (Myers and Sweeney, 2005). As this model and instrument are recommended for a variety of clinical settings (Bart et al., 2018), the person-centered nature of LPA provides practitioners, counselor educators, and scholars

predictive results on shared characteristics of their potential clients. This can contribute to identifying appropriate evidenced-based interventions and resources for their clients to assist in prevention and optimal wellness across multiple domains. Lastly, studying wellness within an IC paradigm will continue to add to our understanding about the relationship between these two constructs.

## **Limitations and Future Research Directions**

It is important to note potential limitations of our study. First, our data collection and recruitment strategies come with limitations. As there are no widely accepted instruments to assess IC from a client perspective (Lyngsø et al. 2014), the researcher developed assessment ( $\alpha = 0.60$ ) raises concerns about the reliability of the LOC results. Previous scholars have noted that IC may not be well understood at the client consumer level (Heath et al., 2013; Lyngsø et al. 2014), thus future researchers are encouraged to continue developing our scale (e.g., development of additional questions and subscales) and/or identify alterative assessments (e.g., provider reports or electronic medical records). Recruiting through Qualtrics, or other online survey panels, should also be noted. Our research team cannot guarantee that every data point is from a human participant. We also conducted this survey during the COVID-19 pandemic and future similar studies may have different results.

Our sample has a low percentage of individuals from medically underserved populations (e.g., rural, non-white, and low SES). Thus, there disproportionate individuals from these populations that could have impacted the omnibus test and pairwise test. Similar studies with IC and counselor education would benefit from intentionally surveying these individuals. Furthermore, the study design and analysis

create potential limitations. Correlational studies do not result in information on causal relationships (Limberg et al., 2021). A greater representation of IC intervention research would support future causal relationships. The cross-sectional nature of the survey also has documented limitations for our study's wellness component. Wellness results were taken at one point in time and confounding variables may influence wellness reports and previous scholars have noted that wellness Also, LPA is not intended to be generalizable and there is a subjective nature when labeling the profiles (Collins & Lanza, 2010). Our results should be interpreted as exploratory, and future scholars are encouraged to explore the relationship between IC and wellness through other methodologies and analyses. Lastly, the design and analysis created difficulties in understanding relationships between LOC, wellness, and specific diagnoses and conditions. As the correlational nature of this study does not produce causality (Limberg et al., 2021), readers should use caution when interpreting the generalizability of results. Moreover, LPA does not account for individual differences and describes profile membership through general demographic features. We recommend future studies account for wellness outcomes of individuals receiving treatment for specific diagnoses and conditions while receiving care across the Heath et al. (2013) model, as well as the intersectionality of the participant's cultural backgrounds.

#### Conclusion

This report documents a novel approach to understand the relationship between IC and client wellness. Moreover, it provided client level data through a person-centered, mixture modeling approach that provided insight into factors that support enhanced wellness. Our team concluded that there were four distinct latent profiles for a sample of

adult individuals that have received at least one counseling service within the last 12 months. The four latent profiles had significant differences in 5F-WEL (Myers and Sweeney, 2005) second order factor wellness scores. Following the development of the four latent profiles, scores across the Heath et al. (2013) Standard Framework for Levels of Integrated Healthcare did not reveal a statistically significant difference in the LOC a person received and their wellness scores. However, there were noted differences between individual participant differences (i.e., age, race, SES status), as well as their mental and physical health backgrounds. Our results provide insight for counselors working with clients across the LOC spectrum to better understand potential risk and protective factors for wellness, specifically how they can support their clients in enhancing their resiliency. For example, counselors should consider the role of social connectedness in enhancing wellness and aspects of IC that promote social connectedness (Hunter et al., 2017). Additionally, counselor educators and scholars are provided with recommendations to continue studying the potential relationship between IC and wellness. As there are limited studies that document IC at the client or consumer level in counseling literature (Fields et al., 2022), future scholarship should consider using the professional counseling lens to understand this modality.

	Mean (SD)	Skewness	Kurtosis	α	1	2	3	4	5
1.) Creative Self	72.64 (11.97)	-0.32	0.34	0.89	1				
2.) Coping Self	67.14 (10.56)	-0.48	0.26	0.82	0.750*	1			
3.) Essential Self	72.81 (12.34)	-0.26	-0.38	0.83	0.638*	0.517*	1		
4.) Physical Self	67.51 (16.07)	-0.30	-0.31	0.87	0.667*	0.612*	0.575*	1	
5.) Social Self	77.56 (15.34)	-0.77	0.58	0.86	0.697*	0.678*	0.395*	0.565*	1

Table 5.1 Descriptive Statistics of 5F-WEL (Myers & Sweeney, 2005)

\* *p* < 0.001

Table 5.2 Model Fit Statistics

No. of	Log-likelihood (number of	BIC	Entropy	LMR <i>p</i>	BLRT p	Mean APCM
Classes	replications)			_	-	
1	-9295.947 (100/100)	18653.34	-	-	-	-
2	-8896.068 (100/100)	17890.44	0.830	<.001	<.001	0.949
3	-8755.294 (100/100)	17645.76	0.822	0.024	<.001	0.918
4	-8663.285 (100/100)	17498.61	0.857	0.007	<.001	0.923
5	-8637.260 (94/100)	17465.34	0.850	0.056	<.001	0.908
6	-8617.922 (83/100)	17452.01	0.813	0.064	<.001	0.885

Bold indicates the selected model fit

	Ν	%	Average Probability	Creative Self	Coping Self	Social Self	Essential Self	Physical Self
Comfortably Well	104	22.3%	0.88	86.97 (1.04)	77.75 (0.89)	91.66 (1.15)	86.46 (1.06)	83.88 (1.56)
Managed Well	209	44.8%	0.94	74.54 (0.88)	69.67 (0.86)	78.65 (1.25)	73.62 (1.13)	70.17 (1.34)
Approaching Well	113	28.6%	0.93	62.30 (1.20)	58.22 (1.07)	69.37 (1.30)	63.71 (1.07)	54.44 (1.58)
Disconnected Well	20	4.3%	0.94	45.80 (2.89)	43.99 (1.58)	46.18 (5.81)	52.95 (2.35)	40.14 (2.83)

Table 5.3 Latent Profile Allocation Statistics

	Comfortably	Managed Well	Approaching	Disconnected		
	well	N(D) = 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1 + 1		well	- · · ·	1
	M / Probability	M / Probability	M / Probability	M / Probability	Omnibus $V^2$ (10)	<i>p</i> -value
	(SE)	(SE)	(SE)	(SE)	$X^2(df)$	
Level of Care	2.37 (0.24)	2.31 (0.11)	2.41 (0.08)	2.28 (0.11)	1.00	0.802
Demographic Information						
Age					27.63	0.006
					(12)	
18-24	0.08 (0.03)	0.17 (0.03)	0.19 (0.08)	0.22 (0.38)		
25-34	0.24 (0.05)	0.25 (0.04)	0.26 (0.05)	0.19 (0.13)		
35-44	0.36 (0.05)	0.30 (0.04)	0.28 (0.06)	0.20 (0.13)		
45-54	0.09 (0.03)	0.12 (0.02)	0.17 (0.04)	0.37 (0.18)		
55+	0.22 (0.05)	0.17(0.03)	0.10(0.03)	0.03 (0.08)		
Gender					8.98 (6)	0.175
Male	0.35 (0.05)	0.35 (0.04)	0.24 (0.04)	0.24 (0.11)		
Female	0.64 (0.05)	0.64 (0.04)	0.72 (0.04)	0.64 (0.12)		
Transgender and Non-	0.01 (0.01)	0.01 (0.01)	0.04(0.02)	0.12 (0.08)		
binary individuals						
LGBTOIA+	0 11 (0 03)	0 19 (0 03)	0 23 (0 05)	0 38 (0 23)	8 41 (3)	0.038
Race	a	b	c (0.000)	a,b,c	140.95	< 0.001
1					(15)	0.001
African American /	0.28 (0.05)	0.16 (0.03)	0 16 (0 04)	_	(10)	
Black	0.20 (0.00)	0.10 (0.05)	0.10 (0.01)			
Asian American /	0.02(0.02)	0.01 (0.01)	0.01(0.01)	_		
Dacific Islander	0.02(0.02)	0.01 (0.01)	0.01 (0.01)	-		
Hispania / Latina /	0.05(0.02)	0.00(0.02)	0.04(0.02)	0.10 (0.08)		
Lating / Latiny	0.03(0.02)	0.09(0.02)	0.04(0.02)	0.10 (0.00)		
Launa / Launx	0.01 (0.01)	0.05(0.02)	0.02(0.02)	0.0(0.05)		
Multiple racial identifies	0.01 (0.01)	0.05 (0.02)	0.03 (0.02)	0.06 (0.05)		

Table 5.4 Continuous and Categorical Variable Statistics

		0.04.(0.04)				
Native American	0.02 (0.01)	0.04 (0.01)	0.01 (0.01)	-		
White / Caucasian	0.62 (0.05)	0.66 (0.04)	0.76 (0.05)	0.84 (0.10)		
Degree	a			a	26.72	0.008
					(12)	
Less than high school	0.05 (0.03)	0.03 (0.02)	0.03 (0.02)	0.07 (0.03)		
High School or	0.40 (0.05)	0.47 (0.13)	0.47 (0.13)	0.66 (0.05)		
equivalent						
Associate's Degree	0.25 (0.04)	0.22 (0.06)	0.22 (0.06)	0.11 (0.03)		
Bachelor's Degree	0.19 (0.04)	0.19(0.12)	0.19 (0.12)	0.13 (0.03)		
Graduate Degree	0.12 (0.03)	0.10(0.04)	0.09 (0.04)	0.04(0.02)		
Income				× /	12.97 (9)	0.164
<\$25,000	0.16 (0.04)	0.30 (0.25)	0.30 (0.25)	0.34 (0.05)		
\$25,001 - \$50,000	0.34 (0.05)	0.31 (0.09)	0.31 (0.09)	0.36 (0.05)		
\$50,001 - \$100,000	0.36 (0.05)	0.27 (0.24)	0.27(0.24)	0.23 (0.05)		
>\$100.000	0.13 (0.03)	0.12 (0.10)	0.12 (0.10)	0.07 (0.03)		
Work	()			()	22.53	0.032
					(12)	
Full-time	0.58 (0.05)	0.48 (0.17)	0.48 (0.16)	0.33 (0.05)	()	
Part-time	0.09(0.03)	0.16 (0.16)	0.16 (0.16)	0.10(0.03)		
Student	0.04(0.02)	0.06 (0.10)	0.06 (0.09)	0.05 (0.02)		
Unemployed	0.24 (0.04)	0.20(0.24)	0.20 (0.24)	0.42 (0.05)		
Other	0.06 (0.02)	0.10 (0.15)	0.10 (0.15)	0.10 (0.03)		
Region			( )		9.89 (12)	0.626
West	0.17 (0.04)	0.14 (0.03)	0.10 (0.03)	0.11 (0.07)	( )	
Southwest	0.17 (0.04)	0.12(0.03)	0.14(0.03)	0.11 (0.08)		
Midwest	0.18 (0.04)	0.23 (0.03)	0.23 (0.04)	0.37(0.12)		
Northeast	0.20 (0.04)	0.20 (0.03)	0.14 (0.03)	0.11 (0.08)		
Southeast	0.28 (0.05)	0.31 (0.04)	0.39 (0.05)	0.30 (0.12)		
Rural Residence	0.23 (0.05)	0.34 (0.04)	0.21 (0.03)	0.20 (0.10)	5.93 (3)	0.115
Marriage	a			a	25 25	0.014
O-					(12)	·····

Single	0.37 (0.05)	0.49 (0.16)	0.49 (0.16)	0.49 (0.05)		
Married	0.44 (0.05)	0.27 (0.09)	0.27 (0.09)	0.18 (0.04)		
Divorced	0.06 (0.02)	0.13 (0.05)	0.13 (0.05)	0.16 (0.04)		
Domestic Partnership	0.08 (0.03)	0.09 (0.09)	0.09 (0.09)	0.15 (0.04)		
Widowed	0.05 (0.02)	0.03 (0.03)	0.03 (0.03)	0.02 (0.01)		
Mental Health	· · · · · ·		, , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , ,		
Sessions					2.84(1)	0.970
1-3	0.46 (0.05)	0.48 (0.13)	0.48 (0.13)	0.43 (0.06)		
3-5	0.21 (0.04)	0.20 (0.17)	0.20 (0.17)	0.20 (0.04)		
6-8	0.14 (0.04)	0.09 (0.15)	0.09 (0.15)	0.13 (0.03)		
>8	0.19 (0.04)	0.23 (0.10)	0.23 (0.10)	0.25 (0.05)		
Diagnoses	a	a, b	b		34.61 (9)	< 0.001
None	0.12 (0.04)	0.10 (0.03)	0.17 (0.03)	0.05 (0.05)		
1	0.37 (0.05)	0.16 (0.04)	0.34 (0.04)	0.20 (0.10)		
2	0.23 (0.05)	0.20 (0.04)	0.21 (0.03)	0.13 (0.09)		
>3	0.28 (0.05)	0.54 (0.05)	0.28 (0.04)	0.62 (0.12)		
Rx Meds	0.69 (0.05)	0.63 (0.04)	0.74 (0.04)	0.70 (0.11)	3.64 (3)	0.303
Hospitalizations	0.20 (0.05)	0.15 (0.03)	0.15 (0.03)	0.27 (0.11)	1.90 (3)	0.594
Court Mandated	0.16 (004)	0.14 (0.03)	0.10 (0.03)	0.11 (0.08)	2.54 (3)	0.468
Physical Health						
Appointments					7.35 (9)	0.601
0	0.03 (0.02)	0.04 (0.02)	0.09 (0.03)	0.05 (0.05)		
1-3	0.43 (0.05)	0.51 (0.05)	0.52 (0.05)	0.41 (0.13)		
3-5	0.34 (0.05)	0.25 (0.03)	0.22 (0.04)	0.35 (0.11)		
>5	0.19 (0.04)	0.20 (0.03)	0.17 (0.04)	0.20 (0.10)		
Chronic Health Diagnosis	0.40 (0.05)	0.37 (0.04)	0.32 (0.05)	0.34 (0.12)	1.66 (3)	0.646
Physical Disability	0.40 (0.05)	0.29 (0.06)	0.29 (0.06)	0.36 (0.05)	3.64 (3)	0.303



Figure 5.1 Visual Representation of Latent Profiles

# **CHAPTER 6: DISCUSSION**

This multi-manuscript dissertation presented the results of three studies exploring IC and the counseling field. Study One was a scoping review that identified IC literature within counseling journals. Study Two involved a systematic review to identify training programs to prepare counselors and related mental health professionals to work in IC settings. Study three used a descriptive, correlational design through a cross-sectional survey to understand a potential relationship between the LOC a person received their counseling services and their wellness reports. The goal of these three studies was to better understand how the counseling professional identity can be applied to the IC modality in an attempt to better understand how counselors can improve client outcomes, as well as effective training strategies to prepare counselors to keep pace with this growing movement. This chapter will further detail the results of the three studies, implications for counselors and counselor educators, limitations, and future research suggestions.

# Results

## **Study One**

This review followed PRISMA-ScR protocols (Tricco et al., 2018) and identified 27 articles across 10 unique counseling journals. Most articles were within national flagship journals (i.e., ACA and AMHCA) and publication years ranged from 2004-2022. To be included, the article must have been within a counseling or counselor educator journal housed within a national, regional, or state organization. The articles were

organized according to their format, and were described as either conceptual, empirical, or meta-analyses and systematic reviews. There were 11 conceptual articles, 13 empirical articles, and three systematic review and meta-analyses. Implications for CITs, counselors, counselor educators, and clients were represented across each classification. Overall, IC implications from each article were positive for training and practice perceptions for CITs and counselors, as well as clinical outcomes for clients. Moving forward, authors encouraged counseling educators and counseling scholars to continue studying IC. Future scholarship would benefit from a deeper understanding of client level implications, with an emphasis on how IC can benefit marginalized communities.

# **Study Two**

We used the PRISMA-P approach (Moher et al., 2015) and MMAT quality analysis tool (Hong et al., 2018), we identified and analyzed 18 studies that trained counselors and related mental health professionals to work within IC settings. From the included studies, we created themes through a thematic analysis from the training modalities and results. These themes were intended to inform counselor educators and professionals involved in training CITs and counselors. The four themes were: (a) HRSA-funded studies; (b) skill development; (c) self-efficacy; and (d) interprofessional collaboration. In addition to the themes, this systematic review included two articles that had client level outcomes that resulted from training the counselors and related mental health professionals. Lastly, our quality analysis concluded that six criteria for quantitative non-randomized studies and five criteria for mixed methods resulted in a "no." The research team also noted that no studies included followed a pure randomized control design.

# **Study Three**

Results were analyzed through LPA, a person-centered, mixture modeling approach. The profiles were group according to participant scores on the 5F-WEL (Myers & Sweeney, 2005) second order factor subscales. When considering RQ1, a four-class solution was deemed most appropriate, and the research team reported four distinct latent profiles. For RQ2, the LOC a person received their counseling services was not found to be statistically significant across the four latent profiles. Thus, we concluded that IC was not correlated with wellness reports. For RQ3, the four latent profiles had significant differences between individual participant differences (i.e., age, race, SES status), as well as their mental and physical health backgrounds. Our results provide insight for counselors working with clients across the LOC spectrum to better understand potential risk and protective factors for wellness, specifically how they can support their clients in enhancing their resiliency. As there are limited studies that document IC at the client or consumer level in counseling literature (Fields et al., 2022), future scholarship should consider using the professional counseling lens to understand this modality.

## Overall

The three dissertation studies provide a holistic view of IC within counseling and counselor education. Hunter et al. (2017) remarked that IC results in holistic care where individuals receive all their services at one location. An IC paradigm has been a noted strategy to work with a variety of clients, such as medically underserved populations (Kohn-Wood & Hopper, 2014; Moe et al., 2018), severe and persistent mental illness (Schmit et al., 2018), and clients with co-occurring physical and mental health symptoms (Lenz et al., 2018). In addition to literature at the client level, Fields et al. (2022)

reviewed 18 studies that prepare counselors or related mental health professionals and concluded that preparing counselors to work in IC can occur through a variety of strategies that are tailored to the needs of the healthcare setting, training program, client, and/or counselor's needs. As a growing number of counselors are being trained to work in IC (BHWET, 2018) and CACREP (2016) required IC education within CIT training, it is promising that training models can be adapted. Fields and colleagues also noted that IC training further develops CITs' ability to engage in interprofessional collaboration, selfefficacy, and interpersonal skills. Lastly, IC has been a documented approach to support an individual's wellness (Lipman et al., 2017). While the results of study three did not result in statistical significance with respect to wellness and LOC integration, it is worth noting that the results provide insight into potential risk and protective factors that can support client wellness across the Heath et al. (2013) model. For example, Social Self was the highest reported subscale for the profiles with higher wellness (AW, MW, and CW), which implied that social connectedness was a protective factor to support higher levels of holistic wellness. Therefore, counselors are encouraged to help their clients, no matter the setting of care, to explore social connectedness and proactively support their client in developing their social wellness.

# Implications

#### Counseling

The cumulative results provide implications for ongoing counselor development. Counselors or CITs that have received training in IC have commonly reported an increase in their professional identity understanding, multicultural competence, self-efficacy for clinical practice, ability to work on interprofessional teams, and implement evidence-

based practices (Agaskar et al., 2021; Brubaker & La Guardia, 2020; Johnson et al., 2015; Lenz & Watson, 2022; Vereen et al., 2018). These trainings ranged from general IC practice to specific considerations, techniques, and interventions for medically underserved communities. Furthermore, these results have been studied across multiple modalities (e.g., in-person, hybrid, virtual, asynchronous), which gives counselors and CITs flexibility in how they want to receive training in IC modalities. This is a promising result as the COVID-19 pandemic highlighted the need for flexible training options for counselors and CITs. Lastly, it is worth noting that counselors and CITs being trained in IC modalities do not need to work in IC to use these interprofessional skills. Heath et al. (2013) remarked that IC is not always a feasible option and helping professionals can still apply collaborative approaches to enhance their client's holistic outcomes.

In addition to counselor and CIT development, the three studies have implications to improve holistic client wellness outcomes across the Heath et al. (2013) *Standard Framework for Levels of Integrated Healthcare*. Studies One and Two reviewed existing literature and previous scholars have concluded that the more integrated the LOC, the better the client's outcomes (Lenz et al., 2018). Moreover, IC modalities have been described as the ideal approach to treat medically underserved communities as they reduce barriers (e.g., wait times and physical proximity), treat symptoms simultaneously, ensure providers are all on the same page, and reduce service costs (Croft & Parish, 2013; Vickers et al., 2013; Vogel at al., 2014). Additionally, Kohn-Wood and Hopper (2014) reported that the addition of a counselor on IC teams increases the culturally competent care provided to clients.

Although Study Three did not result in statistical significance for IC and wellness, the results highlighted potential risk and protective factors that may impact client wellness reports across the LOC spectrum. The latent profiles with lower wellness reports documented potential risk factors for client wellness. These risk factors include aspects of low SES, sexual minority groups, co-occurring mental illnesses, and individuals in generation X, Millennial, and Z. Counselors are encouraged to continue using a biopsychosocial model to better understand their client. For example, the SBIRT model can be used for clients to identify these potential risk factors to provide appropriate services across the LOC spectrum (Sherwood et al., 2019). Furthermore, the latent profiles with higher wellness reports highlight protective factors. Social connectedness was among the biggest predictors of higher wellness in this study and counselors are encouraged to explore options for their clients to enhance this component of wellness. Brown (2009) echoed this notion and reported that social connectedness is a critical component of care for minority groups, especially Black or African American clients. In addition to social connectedness, full-time employment and higher salaries were correlated with higher wellness scores. Having extensive training in career development, counselors can apply this knowledge to support clients across the LOC spectrum in employment to promote wellness. Lastly, we recommend that helpers review the Heath et al. (2013) model to best understand the strengths of their LOC treatment setting to best serve their clients.

### **Counselor Education**

The results from these three studies also have implications for counselor educators and counselor education programs. As CACREP (2016) required counselor

education programs to incorporate education on IC within CIT training programs, Study One and Study Two highlight potential literature to incorporate throughout the syllabus. It is promising that the literature represents scholarship for clients from traditionally underserved backgrounds, as well as scholarship written diverse voices in the field, to support syllabus decolonization efforts. Additionally, counselor education programs have flexibility in meeting CACREP standards by incorporating IC into curricula. For example, programs could adapt the Rishel and Hertnett (2017) graduate certificate program with multiple IC-based courses or provide the Sherwood et al. (2019) one-day immersion training on a SBIRT intervention in IC settings. In addition to direct training efforts, Fields et al. (2022) concluded that HRSA-funded opportunities have contributed to IC training and counselor educators should be encouraged at the funding opportunities through external funding sources. In addition to IC specific conclusions, Study Three explored client-level wellness implications. To date, no studies have used LPA to create wellness profiles in respect to the IS-WEL model (Myers and Sweeney, 2003) and 5F-WEL (Myers and Sweeney, 2005). As this model and instrument are recommended for a variety of clinical settings (Bart et al., 2018), the person-centered nature of LPA provides practitioners, counselor educators, and scholars predictive results on shared characteristics of their potential clients. This can contribute to identifying appropriate evidenced-based interventions and resources for their clients to assist in prevention and optimal wellness across multiple domains.

## Limitations

## **Study One**

The scoping review completed for study one had limitations. First, scoping review methodology has documented limitations. Due to the nature of a scoping review, the data extraction process and results section are broad (Munn et al., 2018). As such, articles were not systematically evaluated to assess the study quality (i.e., quality analysis) and the reader is encouraged to review a specific study before interpreting the results. In addition to study quality, scoping reviews include articles from a variety of article classifications, thus the results and implications should be considered exploratory. Second, the search terms and inclusion criteria may have resulted in limitations. This search focused on IC, therefore concepts such as interprofessional collaboration and interprofessional education may have been excluded. These concepts are discussed in the Heath et al. (2013) model, but they do not directly result in IC practice. Third, this review resulted in four studies that empirically investigated IC at the client level. With limited data at the client level, advocacy efforts for counselors to be included in IC settings may be difficult if outcomes are not documented through a counseling lens. Lastly, nine studies specifically provided implications for minority populations and multicultural competency development through an IC lens. As a pillar of counseling is multicultural counseling and social justice, understanding of the impact of IC for diverse clients needs to be further explored.

### Study Two

Study two had limitations from the review of empirical articles. First, the systematic review was limited to only peer-reviewed studies in academic journals,

eliminating commercialized training programs and dissertations. Second, studies meeting our inclusion criteria may have been excluded due to search terms used. We focused on studies that prepared professionals for the Heath et al. (2013) "integrated" levels five and six, as well as studies that included counselors. Therefore, articles that studied interprofessional education or related fields may have not been included in the original analysis. Third, our review was limited to two studies with outcomes at the client or consumer level. While it is plausible to draw conclusions from the outcomes of the participants that received the training, little is known about how it will improve therapeutic outcomes for the clients or consumers receiving IC treatment.

### **Study Three**

Study three had unique limitations. First, the recruitment and data collection strategies come with noted limitations. As there are no widely accepted instruments to assess IC from a client perspective (Lyngsø et al. 2014), the researcher developed assessment ( $\alpha = 0.60$ ) raises concerns about the reliability of the LOC results. Recruiting through Qualtrics, or other online survey panels, should also be noted. Our research team cannot guarantee that every data point is from a human participant. The survey was also administered in 2022, thus aspects of the COVID-19 pandemic may have influenced participant responses. Second, the sample has a low percentage of individuals from medically underserved populations. As such, there are there is an overrepresentation of straight, White, cis-gender individuals from middle to high SES communities. Third, the study design and analysis create potential limitations. Correlational studies do not result in information on causal relationships (Limberg et al., 2021) and the cross-sectional nature of the survey also has documented limitations for our study's wellness component.

Wellness results were taken at one point in time and confounding variables may influence wellness reports and previous scholars have noted that wellness Also, LPA is not intended to be generalizable and there is a subjective nature when labeling the profiles (Collins & Lanza, 2010). Lastly, the design and analysis created difficulties in understanding relationships between LOC, wellness, and specific diagnoses and conditions.

# Overall

The three studies presented in this dissertation highlighted a variety of limitations that readers must note with respect to the counseling field and IC. As there is a dearth of studies within counseling journals documenting IC, there is a limited understanding about the counseling professional identity when working in an IC modality. This is for both client and counselor/CIT level outcomes. When considering that over 1,300 counselors have been trained in an IC modality (BHWET, 2018), it is concerning that a lack of documentation supports sustained efforts to train counselors to practice within a model that will continue to influence the healthcare landscape. Moreover, both Study One and Study Two noted that studies with client level data are even more scarce and further complicate sustainability efforts within the counseling. Study three attempted to apply the counseling professional identity through a wellness paradigm to further explore a potential theoretical link between IC wellness. However, the proposed framework may have not been the most ideal model to explore this relationship, as there were reliability concerns with the researcher developed assessment with individuals receiving counseling sessions. Individuals receiving counseling across the Heath et al. (2013) model may need additional assessments to account for their healthcare experiences and wellness
outcomes. To support sustained efforts to keep pace with the IC movement, counselors and counselor educators will need to continue addressing the noted limitations to demonstrate the need for counselors to be included within IC settings.

#### **Suggestions for Future Research**

The three studies in this dissertation highlight potential research directions for counseling and related fields. Overall, these three studies concluded that there is a relative dearth of client-level data with respect to the LOC spectrum, specifically the IC level, and scholars are encouraged to identify approaches to better understand how integrating counseling services within traditional primary care settings can enhance their clients' holistic wellness. By using Study Three as a framework, counseling scholars are encouraged to further develop the Heath et al. (2013) *Standard Framework for Levels of Integrated Healthcare* assessment and/or identify alternative assessment strategies. For example, future scholars may consider surveying clients within the settings across the LOC spectrum or using data from electronic medical records. Additionally, future scholars may consider alternative approaches to conceptualizing wellness. While the IS-WEL model (Myers & Sweeney, 2004) is one of the most widely used in counseling literature, alternative approaches may be necessary to understand the relationship between IC and wellness.

Beyond client focused scholarship, additional research is needed to advance the counseling field's understanding of the impact training has on preparing counselors to work in IC. Although the HRSA-BHWET program has provided funding for over 1,300 counselors-in-training (BHWET, 2018), Study One and Study Two only resulted in four IC training interventions in counseling journals (Agaskar et al., 2021; Brubaker et al.,

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2020; Johnson et al., 2015; Lenz & Watson, 2022). Therefore, programs that are developing training models for their students to work in IC settings should consider data collection to increase understanding of training effectiveness in counseling literature. Additionally, Kohn-Wood and Hopper (2014) noted that researchers have studied IC as a method to bridge healthcare gaps and reach minority populations, yet researchers rarely reported multicultural considerations in the included studies. Targeted scholarship will further multicultural competencies within IC training to address mental and physical health disparities for underserved populations.

#### Conclusions

The three studies in this dissertation provide a holistic overview of IC implications within counseling and counselor education. Ultimately, the goal of this dissertation was to provide a framework that future IC and counseling scholars can continue to build off. The studies include a broad scoping review of all counseling literature between 2004-2022, a systematic review of training strategies to prepare counselors and mental health professionals to work in IC settings, and an exploratory survey design to understand the potential relationship between IC and wellness. Although the exploratory study did not result in statistical significance between IC and wellness, there is a theoretical link that counseling scholars should continue examining. It is well established that IC training is occurring in counselor education (BHWET, 2018), however counseling educators are encouraged to document their training programs to help establish evidenced-based models that can be replicated. Furthermore, all three studies noted that there is a dearth of client focused literature with respect to IC in counseling journals. As government legislature (H.R.2617, 2022) and funding

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opportunities continue to appear (White House, 2022), the counseling field has an opportunity to continue studying IC and advocate for counselors to work in this modality that meets clients where they are.

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## APPENDIX A

### DEMOGRAPHIC QUESTIONS

- 1. Within the last 12 months, have you received counseling or therapy from a trained provider (e.g., counselor, social worker, and psychologist)? *Please note: This excludes visits with a psychiatrist and appointments solely for medication management.* 
  - a. Yes
  - b. No
- 2. What is your age?
  - a. Under 18
  - b. 18-24 years old
  - c. 25-34 years old
  - d. 35-44 years old
  - e. 45-55 years old
  - f. Over 55
- 3. What is your gender identity?
  - a. Male
  - b. Female
  - c. Transgender Male
  - d. Transgender Female
  - e. Non-binary
  - f. Another identity not listed
  - g. I prefer not to say
- 4. How do you describe your sexual orientation?
  - a. Straight (heterosexual)
  - b. Gay
  - c. Lesbian
  - d. Bisexual
  - e. Pansexual
  - f. Asexual
  - g. Another identity not listed
  - h. I prefer not to say

- 5. What is your ethnicity?
  - a. White / Caucasian
  - b. Hispanic / Latino
  - c. Black / African American
  - d. Native American / American Indian
  - e. Asian / Pacific Islander
  - f. Multiple ethnic identities
  - g. Another identity not listed
  - h. I prefer not to say
- 6. What is the highest degree or level of school you have completed?
  - a. Less than a high school diploma
  - b. High school degree or equivalent (e.g., GED)
  - c. Associate's Degree
  - d. Bachelor's degree (e.g., BS, BA)
  - e. Master's or specialist's degree (e.g., MA, MS, EdS, MEd)
  - f. Doctorate (e.g., MD, DO, DDS, DVM, PhD, PsyD, JD, EdD)
  - g. I prefer not to say
- 7. What is your household's annual income?
  - a. Less than \$25,000
  - b. \$25,000 \$50,000
  - c. \$50,000 \$100,000
  - d. \$100,000 \$200,000
  - e. More than \$200,000
  - f. I prefer not to say
- 8. What is your current employment status?
  - a. Full-time
  - b. Part-time
  - c. Contract or Temporary
  - d. Unemployed
  - e. Unable to work
  - f. Other
  - g. I prefer not to say
- 9. Which region of the country do you live in?
  - a. Midwest (IA, IL, IN, KS, MI, MN, MO, ND, NE, OH, SD, WI)
  - b. Northeast (CT, DC, DE, MA, MD, ME, NH, NJ, NY, PA, RI, VT)
  - c. Southeast (AL, AR, FL, GA, KY, LA, MS, NC, SC, TN, VA, WV)
  - d. Southwest (AZ, NM, OK, TX)
  - e. West (AK, CA, CO, HI, ID, MT, NV, OR, UT, WA, WY)
  - f. I prefer not to say

- 10. Which of these options best describes your current residence?
  - a. Urban
  - b. Suburban
  - c. Rural
  - d. I prefer not to say
- 11. What is your marital status?a. Single (never married)b. Married

  - c. In a domestic partnership
  - d. Divorced
  - e. Widowed
  - f. I prefer not to say

## APPENDIX B

### HEALTH AND MENTAL HEALTH HISTORY QUESTIONS

- 1. In the past 12 months, how many physical health appointments have you had?
  - a. 0
  - b. 1-3
  - c. 3-5
  - d. 6-8
  - e. More than 8
- 2. Have you been diagnosed with a chronic health condition (e.g., respiratory diseases, heart diseases, digestive diseases, cancer, HIV)?
  - a. Yes
  - b. No
  - c. I prefer not to say
- 3. Would you consider yourself to have a physical disability?
  - a. Yes
  - b. No
  - c. I prefer not to say
- 4. Have you been diagnosed with any of the following conditions? Please check all that apply.
  - a. Intellectual or Developmental Disability
  - b. Schizophrenia or Schizoaffective
  - c. Bipolar Disorder
  - d. Depressive Disorder
  - e. Anxiety Disorder
  - f. Posttraumatic Stress Disorder
  - g. Personality Disorder
  - h. Substance Use Disorder
  - i. None of these

- 5. In the last 12 months, how many counseling or therapy sessions have you had from a trained provider (e.g., counselor, social worker, and psychologist)? *Please note: This excludes visits with a psychiatrist and appointments solely for medication management.* 
  - a. 1-3
  - b. 3-5
  - c. 6-8
  - d. More than 8
- 6. In the last 12 months, have you taken prescription medication for feelings of anxiety, for depression, or to help with any other emotions or with their concentration, behavior, or mental health?
  - a. Yes
  - b. No
  - c. I prefer not to say
- 7. In the last 12 months, have you been hospitalized for mental health or substance related concerns?
  - a. Yes
  - b. No
  - c. I prefer not to say
- 8. In the last 12 months, have you been court ordered or participated in mandated mental health or substance abuse counseling?
  - a. Yes
  - b. No
  - c. I prefer not to say
- 9. What is the professional identity of your mental health service provider? (*Please note: If your provider is provisionally licensed, please select the option that reflects their future licensure*)
  - a. Counselor (LPC, LMFT, LMHC)
  - b. Social Worker (MSW, LICSW)
  - c. Psychologist (PsyD, LPP)
  - d. Unsure

# APPENDIX C

## STANDARD FRAMEWORK FOR LEVELS OF INTEGRATED HEALTHCARE QUESTIONS

- 1. To the best of your understanding, please select the option that BEST describes the treatment setting you received the majority of your counseling or therapy services. *Please note that that primary care provider refers to medical doctors, physical therapists, nutritionists, nurses, occupational therapists, and related medical professionals.* 
  - a. You received your counseling or therapy services at a place separate from your primary care provider(s) and your providers did not consult with each other on your treatment.
  - b. You received your counseling or therapy services at a place separate from your primary care provider(s) and your providers did consult with each other on your treatment (e.g., asked to share records or speak to each other)
  - c. You received your counseling or therapy services at the same location as your primary care provider(s), but your needs were treated separately.
  - d. You received your counseling or therapy services at the same location as your primary care provider(s) and you were given a warm hand-off (i.e., one provider introduced you to the other provider).
  - e. You received your counseling or therapy services at the same location as your primary care provider(s) and they occasionally met with you together or on the same day.
  - f. You received your counseling or therapy services at the same location as your primary care provider(s) and they almost always met with you together or on the same day.
- 2. Please review the following options and choose the option that BEST describes the treatment setting you received the majority of your counseling or therapy services.
  - a. You received your counseling or therapy services at a place separate from your primary care provider(s) and your providers did not consult with each other.
  - b. You received your counseling or therapy services at a place separate from your primary care provider(s) and your providers did consult with each other.

- c. You received your counseling or therapy services at the same location as your primary care provider(s), but your needs were treated separately.
- d. You received your counseling or therapy services at the same location as your primary care provider(s) and you were given a warm hand-off (i.e., one provider introduced you to the other provider).
- e. You received your counseling or therapy services at the same location as your primary care provider(s) and they occasionally met with you together or on the same day.
- f. You received your counseling or therapy services at the same location as your primary care provider(s) and they almost always met with you together or on the same day.
- 2. To the best of your understanding, please select the option that BEST describes the treatment approach you received the majority of your counseling or therapy services.
  - a. Your mental and physical health needs were treated separately, and your providers did not request to speak to one another.
  - b. Your mental and physical health needs were treated separately, but your mental health provider shared records or asked to speak with your other provider(s). Your provider(s) were at separate physical locations.
  - c. Your mental and physical health needs were treated separately, but your mental health provider shared records or asked to speak with your other provider(s). Your provider(s) were at the same physical location.
  - d. Your mental and physical health needs were treated separately, but z
  - e. Your mental and physical health needs were treated simultaneously, with your providers concessionally meeting with you together.
  - f. Your mental and physical health needs were treated simultaneously, with your providers frequently meeting with you together.

## APPENDIX D

### FIVE FACTOR WELLNESS (5F-WEL; MYERS & SWEENEY 2005)

**Directions**: The items are statements that describe you. Answer each item in a way that is true for you most of the time. Think about how you most often see yourself, feel or behave. Answer all the items. Do not spend too much time on any one item. Your honest answers will make your scores more useful.

<u>Strongly Agree</u>: If it is true for you most or all of the time If it is true for you some of the time

<u>Agree:</u> If it is true for you most or all of the time If it is true for you some of the time <u>Disagree</u>: If it is usually not true for you

Strongly Disagree: If it is almost or never true for you

#### A. Strongly Agree B. Agree C. Disagree D. Strongly Disagree

1	I engage in a leisure activity in which I lose myself and feel	А	В	С	D
	like time stands still				
2	I am satisfied with how I cope with stress.	А	В	С	D
3	I eat a healthy amount of vitamins, minerals, and fiber each	Α	В	С	D
	day.				
4	I often see humor even when doing a serious task.	A	В	С	D
5	I am satisfied with the quality and quantity of foods in my	Α	В	С	D
	diet.				
6	Being a male/female is a source of satisfaction and pride to	А	В	С	D
	me.				
7	When I have a problem, I study my choices and possible	Α	В	С	D
	outcomes before acting.				
8	I do not drink alcohol or drink less than two drinks per day.	A	В	С	D

9	I get some form of exercise for 20 minutes at least three	Α	В	С	D
	times a week.				
10	I value myself as a unique person.	Α	В	С	D
11	I have friends who would do most anything for me if I were	Α	В	С	D
	in need.				
12	I feel like I need to keep other people happy.	Α	В	С	D
13	I can express both my good and bad feelings appropriately.	Α	В	С	D
14	I eat a healthy diet.	Α	В	С	D
15	I do not use tobacco.	Α	В	С	D
16	My cultural background enhances the quality of my life.	Α	В	С	D
17	I have a lot of control over conditions affecting the work or	Α	В	С	D
	schoolwork I do.				
18	I am able to manage my stress.	Α	В	С	D
19	I regularly get enough sleep.	Α	В	С	D
20	I can take charge and manage a situation when it is	A	В	С	D
	appropriate.				
21	I can laugh at myself.	Α	В	С	D
22	Being male / female has a positive effect on my life.	Α	В	С	D
23	My free time activities are an important part of my life.	Α	В	С	D
24	My work or schoolwork allows me to use my abilities and	Α	В	С	D
	skills.				
25	I have friends and/or relatives who would provide help for	Α	В	С	D
	me if I were in need.				
26	I have at least one close relationship that is secure and	Α	В	С	D
	lasting.				
27	I seek ways to stimulate my thinking and increase my	Α	В	С	D
	learning.				
28	I am often unhappy because my expectations are not met.	Α	В	С	D
29	I look forward to the work or schoolwork I do each day.	Α	В	С	D
30	I usually achieve the goals I set for myself.	Α	В	С	D
I		1			

31	I have sources of support with respect to my race, color, or	Α	В	С	D
	culture.				
32	I can find creative solutions to hard problems.	Α	В	С	D
33	I think I am an active person.	Α	В	С	D
34	I take part in leisure activities that satisfy me.	Α	В	С	D
35	Prayer or spiritual study is a regular part of my life.	А	В	С	D
36	I accept how I look even though I am not perfect.	А	В	С	D
37	I take part in organized religious or spiritual practices.	Α	В	С	D
38	I am usually aware of how I feel about things.	А	В	С	D
39	I jump to conclusions that affect me negatively, and that turn	А	В	С	D
	out to be untrue.				
40	I can show my feelings anytime.	А	В	С	D
41	I make time for leisure activities that I enjoy.	А	В	С	D
42	Others say I have a good sense of humor.	А	В	С	D
43	I make it a point to seek the views of others in a variety of	А	В	С	D
	ways.				
44	I believe that I am a worthwhile person.	А	В	С	D
45	I feel support from others for being a male/female.	Α	В	С	D
46	It is important for me to be liked or loved by everyone I	Α	В	С	D
	meet.				
47	I have at least one person who is interested in my growth and	А	В	С	D
	well-being.				
48	I am good at using my imagination, knowledge, and skills to	Α	В	С	D
	solve problems.				
49	I can start and keep relationships that are satisfying to me.	А	В	С	D
50	I can cope with the thoughts that cause me stress.	А	В	С	D
51	I have spiritual beliefs that guide me in my daily life.	A	В	С	D
52	I have at least one person with whom I am close emotionally.	А	В	С	D
53	I am physically active most of the time.	Α	В	С	D
54	I use humor to gain new insights on the problems in my life.	Α	В	С	D

55	I can put my work or schoolwork aside for leisure without	Α	В	С	D
	feeling guilty.				
56	I have to do all things well in order to feel worthwhile.	Α	В	С	D
57	I feel a positive identity with others of my gender.	Α	В	С	D
58	I am appreciated by those around me at work or school.	Α	В	С	D
59	I plan ahead to achieve the goals in my life.	Α	В	С	D
60	I like myself even through I am not perfect.	А	В	С	D
61	I am satisfied with my free time activities.	А	В	С	D
62	I do some form of stretching activity at least three times a	А	В	С	D
	week.				
63	I eat at least three meals a day including breakfast.	А	В	С	D
64	I do not use illegal drugs.	А	В	С	D
65	I believe in God or a spiritual being greater than myself.	А	В	С	D
66	I can experience a full range of emotions, both positive and	Α	В	С	D
	negative.				
67	I view change as an opportunity for growth.	А	В	С	D
68	I eat fruits, vegetables, and whole grains daily.	А	В	С	D
69	My spiritual growth is essential to me.	Α	В	С	D
70	When I need information, I have friends whom I can ask for	Α	В	С	D
	help.				
71	I am proud of my cultural heritage.	А	В	С	D
72	I like to be physically fit.	А	В	С	D
73	I have at least one person in whom I can confide my thoughts	Α	В	С	D
	and feelings.				
74	I am satisfied with my life.	Α	В	С	D
75	I have enough money to do the things I need to do.	А	В	С	D